

# AirInv

## 1.00.1

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- [Users Guide](#)
- [Tutorials](#)
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- [Project page](#)
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### 1.3 AirInv Development

- [Git Repository](#) (Subversion is deprecated)
- [Coding Rules](#)
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### 1.4 External Libraries

- [Boost](#) (C++ STL extensions)
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- [MySQL client](#)
- [SOI](#) (C++ DB API)

### 1.5 Support AirInv

### 1.6 About AirInv

AirInv is a C++ library of airline inventory management classes and functions, mainly targeting simulation purposes. [N](#)

AirInv makes an extensive use of existing open-source libraries for increased functionality, speed and accuracy. In particular the [Boost](#) (C++ *Standard Extensions*) library is used.

The AirInv library originates from the department of Operational Research and Innovation at [Amadeus](#), Sophia Antipolis, France. AirInv is released under the terms of the [GNU Lesser General Public License](#) (LGPLv2.1) for you to enjoy.

AirInv should work on [GNU/Linux](#), [Sun Solaris](#), Microsoft Windows (with [Cygwin](#), [MinGW/MSYS](#), or [Microsoft Visual C++ .NET](#)) and [Mac OS X](#) operating systems.

#### Note:

(N) - The AirInv library is **NOT** intended, in any way, to be used by airlines for production systems. If you want to report issue, bug or feature request, or if you just want to give feedback, have a look on the right-hand side of this page for the preferred reporting methods. In any case, please do not contact Amadeus directly for any matter related to AirInv.

## 2 People

### 2.1 Project Admins

- Denis Arnaud <[denis\\_arnaud@users.sourceforge.net](mailto:denis_arnaud@users.sourceforge.net)> (N)
- Anh Quan Nguyen <[quannaus@users.sourceforge.net](mailto:quannaus@users.sourceforge.net)> (N)

### 2.2 Developers

- Anh Quan Nguyen <[quannaus@users.sourceforge.net](mailto:quannaus@users.sourceforge.net)> (N)
- Denis Arnaud <[denis\\_arnaud@users.sourceforge.net](mailto:denis_arnaud@users.sourceforge.net)> (N)
- Son Nguyen Kim <[snguyenkim@users.sourceforge.net](mailto:snguyenkim@users.sourceforge.net)> (N)
- Nicolas Bondoux <[nbondoux@users.sourceforge.net](mailto:nbondoux@users.sourceforge.net)> (N)

### 2.3 Retired Developers

- Patrick Grandjean <[pgrandjean@users.sourceforge.net](mailto:pgrandjean@users.sourceforge.net)> (N)
- Ngoc-Thach Hoang <[hoangngocthach@users.sourceforge.net](mailto:hoangngocthach@users.sourceforge.net)> (N)

### 2.4 Contributors

- Emmanuel Bastien <[ebastien@users.sourceforge.net](mailto:ebastien@users.sourceforge.net)> (N)
- Christophe Lacombe <[ddtoif@users.sourceforge.net](mailto:ddtoif@users.sourceforge.net)> (N)

### 2.5 Distribution Maintainers

- **Fedora/RedHat**: Denis Arnaud <[denis\\_arnaud@users.sourceforge.net](mailto:denis_arnaud@users.sourceforge.net)> (N)
- **Debian**: Emmanuel Bastien <[ebastien@users.sourceforge.net](mailto:ebastien@users.sourceforge.net)> (N)

#### Note:

(N) - **Amadeus** employees.

## 3 Coding Rules

In the following sections we describe the naming conventions which are used for files, classes, structures, local variables, and global variables.

### 3.1 Default Naming Rules for Variables

Variables names follow Java naming conventions. Examples:

- `lNumberOfPassengers`
- `lSeatAvailability`



## 3.2 Default Naming Rules for Functions

Function names follow Java naming conventions. Example:

- `int myFunctionName (const int& a, int b)`

## 3.3 Default Naming Rules for Classes and Structures

Each new word in a class or structure name should always start with a capital letter and the words should be separated with an under-score. Abbreviations are written with capital letters. Examples:

- `MyClassName`
- `MyStructName`

## 3.4 Default Naming Rules for Files

Files are named after the C++ class names.

Source files are named using `.cpp` suffix, whereas header files end with `.hpp` extension. Examples:

- `FlightDate.hpp`
- `SegmentDate.cpp`

## 3.5 Default Functionality of Classes

All classes that are configured by input parameters should include:

- default empty constructor
- one or more additional constructor(s) that takes input parameters and initializes the class instance
- setup function, preferably named `'setup'` or `'set_parameters'`

Explicit destructor functions are not required, unless they are needed. It shall not be possible to use any of the other member functions unless the class has been properly initiated with the input parameters.

# 4 Copyright and License

## 4.1 GNU LESSER GENERAL PUBLIC LICENSE

### 4.1.1 Version 2.1, February 1999

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```
<one line to give the library's name and a brief idea of what it does.>
Copyright (C) <year> <name of author>
```

```
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version 2.1 of the License, or (at your option) any later version.
```

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```
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library 'Frob' (a library for tweaking knobs) written by James Random Hacker.

<signature of Ty Coon>, 1 April 1990
Ty Coon, President of Vice
```

That's all there is to it!

[Source](#)

## 5 Documentation Rules

### 5.1 General Rules

All classes in AirInv should be properly documented with Doxygen comments in include (.hpp) files. Source (.cpp) files should be documented according to a normal standard for well documented C++ code.

An example of how the interface of a class shall be documented in AirInv is shown here:

```
/*!
 * \brief Brief description of MyClass here
 *
 * Detailed description of MyClass here. With example code if needed.
 */
class MyClass {
public:
    /*! Default constructor
     * MyClass(void) { setup_done = false; }
     */

    /*!
     * \brief Constructor that initializes the class with parameters
     *
     * Detailed description of the constructor here if needed
     *
     * \param[in] param1 Description of \a param1 here
     * \param[in] param2 Description of \a param2 here
     */
    MyClass(TYPE1 param1, TYPE2 param2) { setup(param1, param2); }

    /*!
     * \brief Setup function for MyClass
     *
     * Detailed description of the setup function here if needed
     *
     * \param[in] param1 Description of \a param1 here
     * \param[in] param2 Description of \a param2 here
     */
    void setup(TYPE1 param1, TYPE2 param2);

    /*!
     * \brief Brief description of memberFunction1
     *
     * Detailed description of memberFunction1 here if needed
     *
     * \param[in] param1 Description of \a param1 here
     * \param[in] param2 Description of \a param2 here
     * \param[in,out] param3 Description of \a param3 here
     * \return Description of the return value here
     */
}
```



```

    TYPE4 memberFunction1(TYPE1 param1, TYPE2 param2, TYPE3 &param3);

private:

    bool _setupDone;          /*!< Variable that checks if the class is properly
                               initialized with parameters */
    TYPE1 _privateVariable1; /*!< Short description of _privateVariable1 here
    TYPE2 _privateVariable2; /*!< Short description of _privateVariable2 here
};

```

## 5.2 File Header

All files should start with the following header, which include Doxygen's `\file`, `\brief` and `\author` tags, `$Date$` and `$Revisions$` CVS tags, and a common copyright note:

```

/!!
* \file
* \brief Brief description of the file here
* \author Names of the authors who contributed to this code
* \date Date
*
* Detailed description of the file here if needed.
*
* -----
* AirInv - C++ Airline Inventory Management Library
*
* Copyright (C) 2009-2010 (\see authors file for a list of contributors)
*
* \see copyright file for license information
*
* -----
*/

```

## 5.3 Grouping Various Parts

All functions must be added to a Doxygen group in order to appear in the documentation. The following code example defines the group `'my_group'`:

```

/!!
* \defgroup my_group Brief description of the group here
*
* Detailed description of the group here
*/

```

The following example shows how to document the function `myFunction` and how to add it to the group `my_group`:

```

/!!
* \brief Brief description of myFunction here
* \ingroup my_group
*
* Detailed description of myFunction here
*
* \param[in] param1 Description of \a param1 here
* \param[in] param2 Description of \a param2 here
* \return Description of the return value here
*/
TYPE3 myFunction(TYPE1 param1, TYPE2 &param2);

```

## 6 Main features

A short list of the main features of AirInv is given below sorted in different categories. Many more features and functions exist and for these we refer to the reference documentation.

### 6.1 Network generation

- Network/graph generation

### 6.2 Inventory generation

- Inventory generation

### 6.3 Finding travel solutions

- Matching of travel solutions with user requests

### 6.4 Distributed inventories

- Inventory independent partitions
- MPI-based distribution

### 6.5 Other features

- CSV input file parsing
- Memory handling

## 7 Make a Difference

**Do not ask what AirSched can do for you. Ask what you can do for AirSched.**

You can help us to develop the AirSched library. There are always a lot of things you can do:

- Start using AirSched
- Tell your friends about AirSched and help them to get started using it
- If you find a bug, report it to us. Without your help we can never hope to produce a bug free code.
- Help us to improve the documentation by providing information about documentation bugs
- Answer support requests in the AirSched discussion forums on SourceForge. If you know the answer to a question, help others to overcome their AirSched problems.
- Help us to improve our algorithms. If you know of a better way (e.g. that is faster or requires less memory) to implement some of our algorithms, then let us know.
- Help us to port AirSched to new platforms. If you manage to compile AirSched on a new platform, then tell us how you did it.

- Send us your code. If you have a good AirSched compatible code, which you can release under the LGPLv2.1, and you think it should be included in AirSched, then send it to us.
- Become an AirSched developer. Send us an e-mail and tell what you can do for AirSched.

## 8 Make a new release

### 8.1 Introduction

This document describes briefly the recommended procedure of releasing a new version of AirInv using a Linux development machine and the SourceForge project site.

The following steps are required to make a release of the distribution package.

### 8.2 Initialisation

Clone locally the full [Git project](#):

```
cd ~
mkdir -p dev/sim
cd ~/dev/sim
git clone git://airinv.git.sourceforge.net/gitroot/airinv/airinv airinvgit
cd airinvgit
git checkout trunk
```

### 8.3 Branch creation

Create the branch, on your local clone, corresponding to the new release (say, 0.5.0):

```
cd ~/dev/sim/airinvgit
git checkout trunk
git checkout -b 0.5.0
```

Update the version in the various build system files, replacing 99.99.99 by the correct version number:

```
vi CMakeLists.txt
vi autogen.sh
```

Update the version and add a change-log in the ChangeLog and in the RPM specification files:

```
vi ChangeLog
vi airinv.spec
```

### 8.4 Commit and publish the release branch

Commit the new release:

```
cd ~/dev/sim/airinvgit
git add -A
git commit -m "[Release 0.5.0] Release of version 0.5.0."
git push
```

## 8.5 Update the change-log in the trunk as well

Update the change-log in the ChangeLog and RPM specification files:

```
cd ~/dev/sim/airinvgit
git checkout trunk
vi ChangeLog
vi airinv.spec
```

Commit the change-logs and publish the trunk (main development branch):

```
git commit -m "[Doc] Integrated the change-log of the release 0.5.0."
git push
```

## 8.6 Create distribution packages

Create the distribution packages using the following command:

```
cd ~/dev/sim/airinvgit
git checkout 0.5.0
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=/home/user/dev/deliveries/airinv-0.5.0 \
-DWITH_STDAIR_PREFIX=/home/user/dev/deliveries/stdair-stable \
-DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ..
make check && make dist
```

This will configure, compile and check the package. The output packages will be named, for instance, `airinv-0.5.0.tar.gz` and `airinv-0.5.0.tar.bz2`.

## 8.7 Generation the RPM packages

Optionally, generate the RPM package (for instance, for [Fedora/RedHat](#)):

```
cd ~/dev/sim/airinvgit
git checkout 0.5.0
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=/home/user/dev/deliveries/airinv-0.5.0 \
-DWITH_STDAIR_PREFIX=/home/user/dev/deliveries/stdair-stable \
-DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ..
make dist
```

To perform this step, `rpm-build`, `rpmlint` and `rpmdevtools` have to be available on the system.

```
cp airinv.spec ~/dev/packages/SPECS \
&& cp airinv-0.5.0.tar.bz2 ~/dev/packages/SOURCES
cd ~/dev/packages/SPECS
rpmbuild -ba airinv.spec
rpmlint -i ../SPECS/airinv.spec ../SRPMS/airinv-0.5.0-1.fc15.src.rpm \
../RPMS/noarch/airinv-* ../RPMS/i686/airinv-*
```

## 8.8 Update distributed change log

Update the NEWS and ChangeLog files with appropriate information, including what has changed since the previous release. Then commit and push the changes into the [AirInv's Git repository](#).

## 8.9 Create the binary package, including the documentation

Create the binary package, which includes HTML and PDF documentation, using the following command:

```
make package
```

The output binary package will be named, for instance, `airinv-0.5.0-Linux.tar.bz2`. That package contains both the HTML and PDF documentation. The binary package contains also the executables and shared libraries, as well as C++ header files, but all of those do not interest us for now.

## 8.10 Upload the files to SourceForge

Upload the distribution and documentation packages to the SourceForge server. Check [SourceForge help page on uploading software](#).

## 8.11 Upload the documentation to SourceForge

In order to update the Web site files, either:

- [synchronise them with rsync and SSH](#):

```
cd ~/dev/sim/airinvgit
git checkout 0.5.0
rsync -aiv doc/html/ doc/latex/refman.pdf joe,airinv@web.sourceforge.net:htdocs/
```

where `-aiv` options mean:

- `-a`: archive/mirror mode; equals `-rlptgoD` (no `-H`, `-A`, `-X`)
  - `-v`: increase verbosity
  - `-i`: output a change-summary for all updates
  - Note the trailing slashes (/) at the end of both the source and target directories. It means that the content of the source directory (`doc/html`), rather than the directory itself, has to be copied into the content of the target directory.
- or use the [SourceForge Shell service](#).

## 8.12 Make a new post

- submit a new entry in the [SourceForge project-related news feed](#)
- make a new post on the [SourceForge hosted WordPress blog](#)
- and update, if necessary, [Trac tickets](#).

## 8.13 Send an email on the announcement mailing-list

Finally, you should send an announcement to [airinv-announce@lists.sourceforge.net](mailto:airinv-announce@lists.sourceforge.net) (see <https://lists.sourceforge.net/lists/listinfo/airinv-announce> for the archives)

## 9 Installation

### 9.1 Table of Contents

- [Fedora/RedHat Linux distributions](#)
- [Airinv Requirements](#)
- [Basic Installation](#)
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- [Optional Features](#)
- [Particular systems](#)
- [Specifying the System Type](#)
- [Sharing Defaults](#)
- [Defining Variables](#)
- [‘cmake’ Invocation](#)

### 9.2 Fedora/RedHat Linux distributions

Note that on [Fedora/RedHat](#) Linux distributions, RPM packages are available and can be installed with your usual package manager. For instance:

```
yum -y install airinv-devel airinv-doc
```

RPM packages can also be available on the [SourceForge download site](#).

### 9.3 Airinv Requirements

Airinv should compile without errors or warnings on most GNU/Linux systems, on UNIX systems like Solaris SunOS, and on POSIX based environments for Microsoft Windows like Cygwin or MinGW with MSYS. It can be also built on Microsoft Windows NT/2000/XP/Vista/7 using Microsoft's Visual C++ .NET, but our support for this compiler is limited. For GNU/Linux, SunOS, Cygwin and MinGW we assume that you have at least the following GNU software installed on your computer:

- GNU Autotools:
  - [autoconf](#),
  - [automake](#),
  - [libtool](#),
  - [make](#), version 3.72.1 or later (check version with `'make --version'`)
- [GCC](#) - GNU C++ Compiler (g++), version 4.3.x or later (check version with `'gcc --version'`)
- [Boost](#) - C++ STL extensions, version 1.35 or later (check version with `'grep "define BOOST_LIB_VERSION" /usr/include/boost/version.hpp'`)

- **MySQL** - Database client libraries, version 5.0 or later (check version with ``mysql --version``)
- **SOCI** - C++ database client library wrapper, version 3.0.0 or later (check version with ``soci-config --version``)

Optionally, you might need a few additional programs: **Doxygen**, **LaTeX**, **Dvips** and **Ghostscript**, to generate the HTML and PDF documentation.

We strongly recommend that you use recent stable releases of the GCC, if possible. We do not actively work on supporting older versions of the GCC, and they may therefore (without prior notice) become unsupported in future releases of Airinv.

## 9.4 Basic Installation

Briefly, the shell commands ``./cmake .. && make install`` should configure, build, and install this package. The following more-detailed instructions are generic; see the ``README`` file for instructions specific to this package. Some packages provide this ``INSTALL`` file but do not implement all of the features documented below. The lack of an optional feature in a given package is not necessarily a bug. More recommendations for GNU packages can be found in the info page corresponding to "Makefile Conventions: (standards)Makefile Conventions".

The ``cmake`` shell script attempts to guess correct values for various system-dependent variables used during compilation. It uses those values to create a ``Makefile`` in each directory of the package. It may also create one or more ``h`` files containing system-dependent definitions. Finally, it creates a ``CMakeCache.txt`` cache file that you can refer to in the future to recreate the current configuration, and a file ``CMakeFiles`` containing compiler output (useful mainly for debugging ``cmake``).

It can also use an optional file (typically called ``config.cache`` and enabled with ``--cache-file=config.cache`` or simply ``-C``) that saves the results of its tests to speed up reconfiguring. Caching is disabled by default to prevent problems with accidental use of stale cache files.

If you need to do unusual things to compile the package, please try to figure out how ``configure`` could check whether to do them, and mail diffs or instructions to the address given in the ``README`` so they can be considered for the next release. If you are using the cache, and at some point ``config.cache`` contains results you don't want to keep, you may remove or edit it.

The file ``CMakeLists.txt`` is used to create the ``Makefile`` files.

The simplest way to compile this package is:

1. ``cd`` to the directory containing the package's source code and type ``./cmake ..`` to configure the package for your system. Running ``cmake`` is generally fast. While running, it prints some messages telling which features it is checking for.
2. Type ``make`` to compile the package.
3. Optionally, type ``make check`` to run any self-tests that come with the package, generally using the just-built uninstalled binaries.
4. Type ``make install`` to install the programs and any data files and documentation. When installing into a prefix owned by root, it is recommended that the package be configured and built as a regular user, and only the ``make install`` phase executed with root privileges.
5. You can remove the program binaries and object files from the source code directory by typing ``make clean``. To also remove the files that ``configure`` created (so you can compile the package for

a different kind of computer), type `'make distclean'`. There is also a `'make maintainer-clean'` target, but that is intended mainly for the package's developers. If you use it, you may have to get all sorts of other programs in order to regenerate files that came with the distribution.

6. Often, you can also type `'make uninstall'` to remove the installed files again. In practice, not all packages have tested that uninstallation works correctly, even though it is required by the GNU Coding Standards.

## 9.5 Compilers and Options

Some systems require unusual options for compilation or linking that the `'cmake'` script does not know about. Run  `'./cmake --help'` for details on some of the pertinent environment variables.

You can give `'cmake'` initial values for configuration parameters by setting variables in the command line or in the environment. Here is an example:

```
./cmake CC=c99 CFLAGS=-g LIBS=-lposix
```

**See also:**

[Defining Variables](#) for more details.

## 9.6 Compiling For Multiple Architectures

You can compile the package for more than one kind of computer at the same time, by placing the object files for each architecture in their own directory. To do this, you can use GNU `'make'`. `'cd'` to the directory where you want the object files and executables to go and run the `'configure'` script. `'configure'` automatically checks for the source code in the directory that `'configure'` is in and in `'..'`. This is known as a `"VPATH"` build.

With a non-GNU `'make'`, it is safer to compile the package for one architecture at a time in the source code directory. After you have installed the package for one architecture, use `'make distclean'` before reconfiguring for another architecture.

On MacOS X 10.5 and later systems, you can create libraries and executables that work on multiple system types--known as `"fat"` or `"universal"` binaries--by specifying multiple `'-arch'` options to the compiler but only a single `'-arch'` option to the preprocessor. Like this:

```
./configure CC="gcc -arch i386 -arch x86_64 -arch ppc -arch ppc64" \
           CXX="g++ -arch i386 -arch x86_64 -arch ppc -arch ppc64" \
           CPP="gcc -E" CXXCPP="g++ -E"
```

This is not guaranteed to produce working output in all cases, you may have to build one architecture at a time and combine the results using the `'lipo'` tool if you have problems.



## 9.7 Installation Names

By default, `'make install'` installs the package's commands under `'/usr/local/bin'`, include files under `'/usr/local/include'`, etc. You can specify an installation prefix other than `'/usr/local'` by giving `'configure'` the option `'--prefix=PREFIX'`, where `PREFIX` must be an absolute file name.

You can specify separate installation prefixes for architecture-specific files and architecture-independent files. If you pass the option `'--exec-prefix=PREFIX'` to `'configure'`, the package uses `PREFIX` as the prefix for installing programs and libraries. Documentation and other data files still use the regular prefix.

In addition, if you use an unusual directory layout you can give options like `'--bindir=DIR'` to specify different values for particular kinds of files. Run `'configure --help'` for a list of the directories you can set and what kinds of files go in them. In general, the default for these options is expressed in terms of `'${prefix}'`, so that specifying just `'--prefix'` will affect all of the other directory specifications that were not explicitly provided.

The most portable way to affect installation locations is to pass the correct locations to `'configure'`; however, many packages provide one or both of the following shortcuts of passing variable assignments to the `'make install'` command line to change installation locations without having to reconfigure or recompile.

The first method involves providing an override variable for each affected directory. For example, `'make install prefix=/alternate/directory'` will choose an alternate location for all directory configuration variables that were expressed in terms of `'${prefix}'`. Any directories that were specified during `'configure'`, but not in terms of `'${prefix}'`, must each be overridden at install time for the entire installation to be relocated. The approach of makefile variable overrides for each directory variable is required by the GNU Coding Standards, and ideally causes no recompilation. However, some platforms have known limitations with the semantics of shared libraries that end up requiring recompilation when using this method, particularly noticeable in packages that use GNU Libtool.

The second method involves providing the `'DESTDIR'` variable. For example, `'make install DESTDIR=/alternate/directory'` will prepend `'/alternate/directory'` before all installation names. The approach of `'DESTDIR'` overrides is not required by the GNU Coding Standards, and does not work on platforms that have drive letters. On the other hand, it does better at avoiding recompilation issues, and works well even when some directory options were not specified in terms of `'${prefix}'` at `'configure'` time.

## 9.8 Optional Features

If the package supports it, you can cause programs to be installed with an extra prefix or suffix on their names by giving `'cmake'` the option `'--program-prefix=PREFIX'` or `'--program-suffix=SUFFIX'`.

Some packages pay attention to `'--enable-FEATURE'` options to `'configure'`, where `FEATURE` indicates an optional part of the package. They may also pay attention to `'--with-PACKAGE'` options, where `PACKAGE` is something like `'gnu-as'` or `'x'` (for the X Window System). The `'README'` should mention any `'--enable-'` and `'--with-'` options that the package recognizes.

For packages that use the X Window System, `'configure'` can usually find the X include and library files automatically, but if it doesn't, you can use the `'configure'` options `'--x-includes=DIR'` and `'--x-libraries=DIR'` to specify their locations.

Some packages offer the ability to configure how verbose the execution of `'make'` will be. For these packages, running `./configure --enable-silent-rules` sets the default to minimal output, which can be overridden with `'make V=1'`; while running `./configure --disable-silent-rules` sets the default to verbose, which can be overridden with `'make V=0'`.

## 9.9 Particular systems

On HP-UX, the default C compiler is not ANSI C compatible. If GNU CC is not installed, it is recommended to use the following options in order to use an ANSI C compiler:

```
./configure CC="cc -Ae -D_XOPEN_SOURCE=500"
```

and if that doesn't work, install pre-built binaries of GCC for HP-UX.

On OSF/1 a.k.a. Tru64, some versions of the default C compiler cannot parse its `'<wchar.h>'` header file. The option `'-nodtk'` can be used as a workaround. If GNU CC is not installed, it is therefore recommended to try

```
./configure CC="cc"
```

and if that doesn't work, try

```
./configure CC="cc -nodtk"
```

On Solaris, don't put `'/usr/ucb'` early in your `'PATH'`. This directory contains several dysfunctional programs; working variants of these programs are available in `'/usr/bin'`. So, if you need `'/usr/ucb'` in your `'PATH'`, put it `_after_` `'/usr/bin'`.

On Haiku, software installed for all users goes in `'/boot/common'`, not `'/usr/local'`. It is recommended to use the following options:

```
./cmake -DCMAKE_INSTALL_PREFIX=/boot/common
```

## 9.10 Specifying the System Type

There may be some features `'configure'` cannot figure out automatically, but needs to determine by the type of machine the

package will run on. Usually, assuming the package is built to be run on the `_same_` architectures, `'configure'` can figure that out, but if it prints a message saying it cannot guess the machine type, give it the `'--build=TYPE'` option. TYPE can either be a short name for the system type, such as `'sun4'`, or a canonical name which has the form CPU-COMPANY-SYSTEM

where SYSTEM can have one of these forms:

- OS
- KERNEL-OS

See the file `'config.sub'` for the possible values of each field. If `'config.sub'` isn't included in this package, then this package doesn't need to know the machine type.

If you are `_building_` compiler tools for cross-compiling, you should use the option `'--target=TYPE'` to select the type of system they will produce code for.

If you want to `_use_` a cross compiler, that generates code for a platform different from the build platform, you should specify the "host" platform (i.e., that on which the generated programs will eventually be run) with `'--host=TYPE'`.

## 9.11 Sharing Defaults

If you want to set default values for `'configure'` scripts to share, you can create a site shell script called `'config.site'` that gives default values for variables like `'CC'`, `'cache_file'`, and `'prefix'`. `'configure'` looks for `'PREFIX/share/config.site'` if it exists, then `'PREFIX/etc/config.site'` if it exists. Or, you can set the `'CONFIG_SITE'` environment variable to the location of the site script. A warning: not all `'configure'` scripts look for a site script.

## 9.12 Defining Variables

Variables not defined in a site shell script can be set in the environment passed to `'configure'`. However, some packages may run `'configure'` again during the build, and the customized values of these variables may be lost. In order to avoid this problem, you should set them in the `'configure'` command line, using `'VAR=value'`. For example:

```
./configure CC=/usr/local2/bin/gcc
```

causes the specified `'gcc'` to be used as the C compiler (unless it is overridden in the site shell script).

Unfortunately, this technique does not work for `'CONFIG_SHELL'` due to an Autoconf bug. Until the bug is fixed you can use this workaround:

```
CONFIG_SHELL=/bin/bash /bin/bash ./configure CONFIG_SHELL=/bin/bash
```

## 9.13 'cmake' Invocation

'cmake' recognizes the following options to control how it operates.

- '--help', '-h' print a summary of all of the options to 'cmake', and exit.
- '--help=short', '--help=recursive' print a summary of the options unique to this package's 'configure', and exit. The 'short' variant lists options used only in the top level, while the 'recursive' variant lists options also present in any nested packages.
- '--version', '-V' print the version of Autoconf used to generate the 'configure' script, and exit.
- '--cache-file=FILE' enable the cache: use and save the results of the tests in FILE, traditionally 'config.cache'. FILE defaults to '/dev/null' to disable caching.
- '--config-cache', '-C' alias for '--cache-file=config.cache'.
- '--quiet', '--silent', '-q' do not print messages saying which checks are being made. To suppress all normal output, redirect it to '/dev/null' (any error messages will still be shown).
- '--srcdir=DIR' look for the package's source code in directory DIR. Usually 'configure' can determine that directory automatically.
- '--prefix=DIR' use DIR as the installation prefix.

**See also:**

[Installation Names](#) for more details, including other options available for fine-tuning the installation locations.

- '--no-create', '-n' run the configure checks, but stop before creating any output files.

'cmake' also accepts some other, not widely useful, options. Run 'cmake' --help' for more details.

The 'cmake' script produces an output like this:

```
export LIBSUFFIX_4_CMAKE="-DLIB_SUFFIX=64"
export INSTALL_BASEDIR=/home/user/dev/deliveries
cmake -DCMAKE_INSTALL_PREFIX=${INSTALL_BASEDIR}/airinv-0.5.0 \
  -DWITH_STDAIR_PREFIX=${INSTALL_BASEDIR}/stdair-stable \
  -DWITH_AIRAC_PREFIX=${INSTALL_BASEDIR}/airac-stable \
  -DWITH_RMOL_PREFIX=${INSTALL_BASEDIR}/rmol-stable \
  -DCMAKE_BUILD_TYPE:String=Debug -DINSTALL_DOC:BOOL=ON ${LIBSUFFIX_4_CMAKE} ..
-- The C compiler identification is GNU
-- The CXX compiler identification is GNU
-- Check for working C compiler: /usr/lib64/ccache/gcc
-- Check for working C compiler: /usr/lib64/ccache/gcc -- works
-- Detecting C compiler ABI info
-- Detecting C compiler ABI info - done
-- Check for working CXX compiler: /usr/lib64/ccache/c++
-- Check for working CXX compiler: /usr/lib64/ccache/c++ -- works
-- Detecting CXX compiler ABI info
```

```

-- Detecting CXX compiler ABI info - done
-- Requires Git without specifying any version
-- Current Git revision name: 0ee8dcc3e3dd1d1d442c4054fbfa4cacc1182e6a trunk
-- Requires Boost-1.41
-- Boost version: 1.46.0
-- Found the following Boost libraries:
--   regex
--   program_options
--   date_time
--   iostreams
--   serialization
--   filesystem
--   unit_test_framework
--   python
-- Found Boost version: 1.46.0
-- Found BoostWrapper: /usr/include (Required is at least version "1.41")
-- Requires Readline without specifying any version
-- Found Readline: /usr/include
-- Found Readline version: 6.2
-- Requires MySQL without specifying any version
-- Using mysql-config: /usr/bin/mysql_config
-- Found MySQL: /usr/lib64/mysql/libmysqlclient.so
-- Found MySQL version: 5.5.14
-- Requires SOCI-3.0
-- Using soci-config: /usr/bin/soci-config
-- SOCI headers are buried
-- Found SOCI: /usr/lib64/libsoci_core.so (Required is at least version "3.0")
-- Found SOCIMySQL: /usr/lib64/libsoci_mysql.so (Required is at least version "3.0")
-- Found SOCI with MySQL back-end support version: 3.0.0
-- Requires StdAir-0.37
-- Found StdAir version: 0.38.0
-- Requires Doxygen without specifying any version
-- Found Doxygen: /usr/bin/doxygen
-- Found DoxygenWrapper: /usr/bin/doxygen
-- Found Doxygen version: 1.7.4
-- Had to set the linker language for 'airraclib' to CXX
-- Had to set the linker language for 'rmolllib' to CXX
-- Had to set the linker language for 'airinvlib' to CXX
-- Test 'InventoryTestSuite' to be built with 'InventoryTestSuite.cpp'
--
-- =====
-- ---      Project Information      ---
-- ---
-- PROJECT_NAME ..... : airinv
-- PACKAGE_PRETTY_NAME ..... : AirInv
-- PACKAGE ..... : airinv
-- PACKAGE_NAME ..... : AIRINV
-- PACKAGE_BRIEF ..... : C++ Simulated Airline Inventory Management System library
-- PACKAGE_VERSION ..... : 0.5.0
-- GENERIC_LIB_VERSION ..... : 0.5.0
-- GENERIC_LIB_SOVERSION ..... : 0.5
--
-- -----
-- ---      Build Configuration      ---
-- ---
-- Modules to build ..... : airrac;rmol;airinv
-- Libraries to build/install ..... : airraclib;rmolllib;airinvlib
-- Binaries to build/install ..... : airrac;rmol;airinv_parseInventory;airinv
-- Modules to test ..... : airinv
-- Binaries to test ..... : InventoryTestSuite
--
-- * Module ..... : airrac
--   + Layers to build ..... : .;basic;bom;factory;command;service
--   + Dependencies on other layers :
--   + Libraries to build/install . : airraclib
--   + Executables to build/install : airrac

```

```

-- + Tests to perform ..... :
-- * Module ..... : rmol
-- + Layers to build ..... : .;basic;bom;factory;command;service
-- + Dependencies on other layers : airaclib
-- + Libraries to build/install . : rmolib
-- + Executables to build/install : rmol
-- + Tests to perform ..... :
-- * Module ..... : airinv
-- + Layers to build ..... : .;basic;bom;factory;command;service
-- + Dependencies on other layers : airaclib;rmolib
-- + Libraries to build/install . : airinvlib
-- + Executables to build/install : airinv_parseInventory;airinv
-- + Tests to perform ..... : InventoryTestSuitetst
--
-- BUILD_SHARED_LIBS ..... : ON
-- CMAKE_BUILD_TYPE ..... : Debug
-- * CMAKE_C_FLAGS ..... :
-- * CMAKE_CXX_FLAGS ..... : -Wall -Werror
-- * BUILD_FLAGS ..... :
-- * COMPILE_FLAGS ..... :
-- CMAKE_MODULE_PATH ..... : /home/dan/dev/sim/airinv/airinvgithub/config/
-- CMAKE_INSTALL_PREFIX ..... : /home/dan/dev/deliveries/airinv-0.5.0
--
-- * Doxygen:
-- - DOXYGEN_VERSION ..... : 1.7.4
-- - DOXYGEN_EXECUTABLE ..... : /usr/bin/doxygen
-- - DOXYGEN_DOT_EXECUTABLE ..... : /usr/bin/dot
-- - DOXYGEN_DOT_PATH ..... : /usr/bin
--
-- -----
-- --- Installation Configuration ---
-- -----
-- INSTALL_LIB_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/lib64
-- INSTALL_BIN_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/bin
-- INSTALL_INCLUDE_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/include
-- INSTALL_DATA_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/share
-- INSTALL_SAMPLE_DIR ..... : /home/dan/dev/deliveries/airinv-0.5.0/share/airinv/samples
-- INSTALL_DOC ..... : ON
--
-- -----
-- --- Packaging Configuration ---
-- -----
-- CPACK_PACKAGE_CONTACT ..... : Denis Arnaud <denis_arnaud - at - users dot sourceforge dot net>
-- CPACK_PACKAGE_VENDOR ..... : Denis Arnaud
-- CPACK_PACKAGE_VERSION ..... : 0.5.0
-- CPACK_PACKAGE_DESCRIPTION_FILE . : /home/dan/dev/sim/airinv/airinvgithub/README
-- CPACK_RESOURCE_FILE_LICENSE .... : /home/dan/dev/sim/airinv/airinvgithub/COPYING
-- CPACK_GENERATOR ..... : TBZ2
-- CPACK_DEBIAN_PACKAGE_DEPENDS .... :
-- CPACK_SOURCE_GENERATOR ..... : TBZ2;TGZ
-- CPACK_SOURCE_PACKAGE_FILE_NAME . : airinv-0.5.0
--
-- -----
-- --- External libraries ---
-- -----
--
-- * Boost:
-- - Boost_VERSION ..... : 104600
-- - Boost_LIB_VERSION ..... : 1_46
-- - Boost_HUMAN_VERSION ..... : 1.46.0
-- - Boost_INCLUDE_DIRS ..... : /usr/include
-- - Boost required components .. : regex;program_options;date_time;iostreams;serialization;filesystem;u
-- - Boost required libraries ... : optimized;/usr/lib64/libboost_regex-mt.so;debug;/usr/lib64/libboost_
--
-- * Readline:
-- - READLINE_VERSION ..... : 6.2
-- - READLINE_INCLUDE_DIR ..... : /usr/include

```

```
-- - READLINE_LIBRARY ..... : /usr/lib64/libreadline.so
--
-- * MySQL:
-- - MYSQL_VERSION ..... : 5.5.14
-- - MYSQL_INCLUDE_DIR ..... : /usr/include/mysql
-- - MYSQL_LIBRARIES ..... : /usr/lib64/mysql/libmysqlclient.so
--
-- * SOCI:
-- - SOCI_VERSION ..... : 3.0.0
-- - SOCI_INCLUDE_DIR ..... : /usr/include/soci
-- - SOCI_MYSQL_INCLUDE_DIR ..... : /usr/include/soci
-- - SOCI_LIBRARIES ..... : /usr/lib64/libsoci_core.so
-- - SOCI_MYSQL_LIBRARIES ..... : /usr/lib64/libsoci_mysql.so
--
-- * StdAir:
-- - STDAIR_VERSION ..... : 0.38.0
-- - STDAIR_BINARY_DIRS ..... : /home/dan/dev/deliveries/stdair-0.38.0/bin
-- - STDAIR_EXECUTABLES ..... : stdair
-- - STDAIR_LIBRARY_DIRS ..... : /home/dan/dev/deliveries/stdair-0.38.0/lib64
-- - STDAIR_LIBRARIES ..... : stdairlib;stdairuicllib
-- - STDAIR_INCLUDE_DIRS ..... : /home/dan/dev/deliveries/stdair-0.38.0/include
-- - STDAIR_SAMPLE_DIR ..... : /home/dan/dev/deliveries/stdair-0.38.0/share/stdair/samples
--
-- Change a value with: cmake -D<Variable>=<Value>
-- =====
--
-- Configuring done
-- Generating done
-- Build files have been written to: /home/dan/dev/sim/airinv/airinvgithub/build
```

It is recommended that you check if your library has been compiled and linked properly and works as expected. To do so, you should execute the testing process 'make check'. As a result, you should obtain a similar report:

```
[ 0%] Built target hdr_cfg_airinv
[ 0%] Built target hdr_cfg_airrac
[ 13%] Built target airraclib
[ 13%] Built target hdr_cfg_rmol
[ 38%] Built target rmolllib
[ 98%] Built target airinvlib
[100%] Built target InventoryTestSuitetst
Scanning dependencies of target check_airinvtst
Test project /home/dan/dev/sim/airinv/airinvgithub/build/test/airinv
Start 1: InventoryTestSuitetst
1/1 Test #1: InventoryTestSuitetst ..... Passed    0.08 sec

100% tests passed, 0 tests failed out of 1

Total Test time (real) = 0.35 sec
[100%] Built target check_airinvtst
Scanning dependencies of target check
[100%] Built target check
```

Check if all the executed tests PASSED. If not, please contact us by filling a [bug-report](#).

Finally, you should install the compiled and linked library, include files and (optionally) HTML and PDF documentation by typing:

```
make install
```

Depending on the PREFIX settings during configuration, you might need the root (administrator) access to perform this step.

Eventually, you might invoke the following command

```
make clean
```

to remove all files created during compilation process, or even

```
cd ~/dev/sim/airinvgit
rm -rf build && mkdir build
cd build
```

to remove everything.

## 10 Linking with Airinv

### 10.1 Table of Contents

- [Introduction](#)
- [Dependencies](#)
- [Using the pkg-config command](#)
- [Using the airinv-config script](#)
- [M4 macro for the GNU Autotools](#)
- [Using Airinv with dynamic linking](#)

### 10.2 Introduction

There are two convenient methods of linking your programs with the Airinv library. The first one employs the 'pkg-config' command (see <http://pkgconfig.freedesktop.org/>), whereas the second one uses 'airinv-config' script. These methods are shortly described below.

### 10.3 Dependencies

The Airinv library depends on several other C++ components.

#### 10.3.1 StdAir

Among them, as for now, only StdAir has been packaged. The support for StdAir is taken in charge by a dedicated M4 macro file (namely, 'stdair.m4'), from the configuration script (generated thanks to 'configure.ac').





Figure 1: Airinv Dependencies

## 10.4 Using the pkg-config command

'pkg-config' is a helper tool used when compiling applications and libraries. It helps you insert the correct compiler and linker options. The syntax of the 'pkg-config' is as follows:

```
pkg-config <options> <library_name>
```

For instance, assuming that you need to compile an Airinv based program 'my\_prog.cpp', you should use the following command:

```
g++ `pkg-config --cflags airinv` -o my_prog my_prog.cpp `pkg-config --libs airinv`
```

For more information see the 'pkg-config' man pages.

## 10.5 Using the airinv-config script

Airinv provides a shell script called 'airinv-config', which is installed by default in '\$prefix/bin' ('/usr/local/bin') directory. It can be used to simplify compilation and linking of Airinv based programs. The usage of this script is quite similar to the usage of the 'pkg-config' command.

Assuming that you need to compile the program 'my\_prog.cpp' you can now do that with the following command:

```
g++ `airinv-config --cflags` -o my_prog_opt my_prog.cpp `airinv-config --libs`
```

A list of `'airinv-config'` options can be obtained by typing:

```
airinv-config --help
```

If the `'airinv-config'` command is not found by your shell, you should add its location `'$prefix/bin'` to the `PATH` environment variable, e.g.:

```
export PATH=/usr/local/bin:$PATH
```

## 10.6 M4 macro for the GNU Autotools

A M4 macro file is delivered with Airinv, namely `'airinv.m4'`, which can be found in, e.g., `'/usr/share/aclocal'`. When used by a `'configure'` script, thanks to the `'AM_PATH_Airinv'` macro (specified in the M4 macro file), the following Makefile variables are then defined:

- `'Airinv_VERSION'` (e.g., defined to 0.23.0)
- `'Airinv_CFLAGS'` (e.g., defined to `'-I${prefix}/include'`)
- `'Airinv_LIBS'` (e.g., defined to `'-L${prefix}/lib -lairinv'`)

## 10.7 Using Airinv with dynamic linking

When using static linking some of the library routines in Airinv are copied into your executable program. This can lead to unnecessary large executables. To avoid having too large executable files you may use dynamic linking instead. Dynamic linking means that the actual linking is performed when the program is executed. This requires that the system is able to locate the shared Airinv library file during your program execution. If you install the Airinv library using a non-standard prefix, the `'LD_LIBRARY_PATH'` environment variable might be used to inform the linker of the dynamic library location, e.g.:

```
export LD_LIBRARY_PATH=<Airinv installation prefix>/lib:$LD_LIBRARY_PATH
```

# 11 Test Rules

This section describes rules how the functionality of the IT++ library should be verified. In the `'tests'` subdirectory test files are provided. All functionality should be tested using these test files.

## 11.1 The Test File

Each new IT++ module/class should be accompanied with a test file. The test file is an implementation in C++ that tests the functionality of a function/class or a group of functions/classes called modules. The test file should test relevant parameter settings and input/output relations to guarantee correct functionality of the corresponding classes/functions. The test files should be maintained using version control and updated whenever new functionality is added to the IT++ library.

The test file should print relevant data to a standard output that can be used to verify the functionality. All relevant parameter settings should be tested.

The test file should be placed in the `'tests'` subdirectory and should have a name ending with `'__test.cpp'`.

## 11.2 The Reference File

Consider a test file named `'module_test.cpp'`. A reference file named `'module_test.ref'` should accompany the test file. The reference file contains a reference printout of the standard output generated when running the test program. The reference file should be maintained using version control and updated according to the test file.

## 11.3 Testing IT++ Library

One can compile and execute all test programs from `'tests'` subdirectory by typing

```
% make check
```

after successful compilation of the IT++ library.

# 12 Users Guide

## 12.1 Table of Contents

- [Introduction](#)
- [Get Started](#)
  - [Get the AirInv library](#)
  - [Build the AirInv project](#)
  - [Build and Run the Tests](#)
  - [Install the AirInv Project \(Binaries, Documentation\)](#)
- [Input file of AirInv Project](#)
- [The schedule BOM Tree](#)
  - [Build of the schedule BOM tree](#)
  - [Display of the schedule BOM tree](#)
- [Exploring the Predefined BOM Tree](#)
  - [Airline Network BOM Tree](#)
  - [Airline Schedule BOM Tree](#)
- [Extending the BOM Tree](#)
- [The travel solution calculation procedure](#)

## 12.2 Introduction

The `AirInv` library contains classes for airline business management. This document does not cover all the aspects of the `AirInv` library. It does however explain the most important things you need to know in order to start using `AirInv`.

## 12.3 Get Started

### 12.3.1 Get the AirInv library

Clone locally the full [Git project](#):

```
cd ~
mkdir -p dev/sim
cd ~/dev/sim
git clone git://airinv.git.sourceforge.net/gitroot/airinv/airinv airinvgit
cd airinvgit
git checkout trunk
```

### 12.3.2 Build the AirInv project

Link with StdAir, create the distribution package (say, 0.5.0) and compile using the following commands:

```
cd ~/dev/sim/airinvgit
rm -rf build && mkdir -p build
cd build
cmake -DCMAKE_INSTALL_PREFIX=~/dev/deliveries/airinv-0.5.0 \
      -DWITH_STDAIR_PREFIX=~/dev/deliveries/stdair-stable \
      -DCMAKE_BUILD_TYPE:STRING=Debug -DINSTALL_DOC:BOOL=ON ..
make
```

### 12.3.3 Build and Run the Tests

After building the AirInv project, the following commands run the tests:

```
cd ~/dev/sim/airinvgit
cd build
make check
```

As a result, you should obtain a similar report:

```
[ 0%] Built target hdr_cfg_airinv
[ 96%] Built target airinvlib
[100%] Built target AirlineScheduleTestSuitetst
Scanning dependencies of target check_airinvtst
Test project /home/dan/dev/sim/airinv/airinvgithub/build/test/airinv
Start 1: AirlineScheduleTestSuitetst
1/1 Test #1: AirlineScheduleTestSuitetst ..... Passed    0.15 sec

100% tests passed, 0 tests failed out of 1

Total Test time (real) = 0.40 sec
[100%] Built target check_airinvtst
Scanning dependencies of target check
[100%] Built target check
```

### 12.3.4 Install the AirInv Project (Binaries, Documentation)

After the step [Build the AirInv project](#), to install the library and its header files, type:

```
cd ~/dev/sim/airinvgit
cd build
make install
```

You can check that the executables and other required files have been copied into the given final directory:

```
cd ~dev/deliveries/airinv-0.5.0
```

To generate the AirInv project documentation, the commands are:

```
cd ~/dev/sim/airinvgit
cd build
make doc
```

The AirInv project documentation is available in the following formats: HTML, LaTeX. Those documents are available in a subdirectory:

```
cd ~/dev/sim/airinvgit
cd build
cd doc
```

## 12.4 Input file of AirInv Project

The schedule input file structure should look like the following sample:

Each line, beyond the header, represents a schedule entry, i.e., the specification of a given flight-period (see [AIRINV::FlightPeriodStruct](#)). The fields are as follows:

- Flights section
  - AirlineCode (e.g., BA)
  - FlightNumber (e.g., 9)
  - Start of the flight departure period (e.g., 2007-04-20)
  - End of the flight departure period (e.g., 2007-06-30)
  - Day-Of-the-Week for the flight departure period (DOW) (e.g., 0000011)
  - Leg section
  - Segment section
- Leg section
  - BoardPoint (e.g., LHR)
  - OffPoint (e.g., BKK)
  - BoardTime (e.g., 22:00)
  - ArrivalTime (e.g., 15:15)
  - ArrivalDateOffSet (e.g., +1)
  - ElapsedTime (e.g., 11:15)
  - Leg-cabin section
- Leg-cabin section
  - Cabin code (e.g., F, J, W or Y)
  - Capacity (e.g., respectively 5, 12, 20 or 300)
- Segment section

- Specificity flag:
  - \* 0 means that all the segments behave the same way, i.e., have got the same dressing (distribution and order of the booking classes per cabin)
  - \* 1 means that each segment behave differently. The full specification of each of those segments must therefore be given.
- Segment-cabin section
- Fare family section
- Segment-cabin section
  - Cabin code (e.g., F, J, W or Y)
  - List of (one-letter-code) booking classes for the cabin (e.g, respectively FA, JC DI, WT or YBHKMLSQ)
- Fare family section
  - Fare family code (e.g., 1)
  - List of (one-letter-code) booking classes for the fare family (e.g, respectively FA, JC DI, WT or YBHKMLSQ)

Some fare input examples (including the example above named `schedule03.csv`) are given in the `StdAir` project.

## 12.5 The schedule BOM Tree

The schedule-related Business Object Model (BOM) tree is a structure allowing to store all the `AIRINV::FlightPeriodStruct` objects of the simulation. That is why parsing an input file, containing the specification for all the flight-periods, is more convenient (

### See also:

the previous section [Input file of AirInv Project](#)).

As it may be time consuming, and it for sure requires some know-how, to first build such a schedule input file, a small sample BOM tree is provided by default when needed.

### 12.5.1 Build of the schedule BOM tree

First, a BOM root object (i.e., a root for all the classes in the project) is instantiated by the `stdair::STDAIR_ServiceContext` context object, when the `stdair::STDAIR_Service` is itself instantiated (during the instantiation of the `AIRINV::AIRINV_Service` object).

The corresponding type (class) `stdair::BomRoot` is defined in the `StdAir` library.

Then, the BOM root can be either constructed thanks to the `AIRINV::AIRINV_Service::buildSampleBom()` method:

```
\textcolor{keywordtype}{void} buildSampleBom();
```

or can be constructed using the schedule input file described above thanks to the `AIRINV::AIRINV_Service::parseAndLoad` (`const stdair::Filename_T&`) method:

```
\textcolor{keywordtype}{void} parseAndLoad (\textcolor{keyword}{const} \hyperlink{classAIRINV_1_1Inver
```

### 12.5.2 Display of the schedule BOM tree

#### Note:

That feature (of BOM tree display) has not been implemented yet. Do not hesitate to [open a ticket](#) if you would like to have it implemented more quickly.

The schedule BOM tree can be displayed as done in the `batches::airinv.cpp` program:

When the default BOM tree is used (`-b/--builtin` option of the main program `airinv.cpp`), the schedule BOM tree display (for now, corresponding to `schedule01.csv` parsed by `AIRINV::parseInventory`) should look like:

```
=====
BomRoot:  -- ROOT --
=====
+++++
Inventory: SQ
+++++
*****
FlightDate: SQ11, 2010-Jan-15
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-15, SIN-BKK, 2010-Jan-15, 08:20:00, 2010-Jan-15, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 2, 298,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 1, 0, 0, 0, 2, 298, 0,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 2, 0, 0, 0, 2, 298, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 1, Y, 300 (0), 0, 0, 0, 2, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Jan-15, SIN-BKK 2010-Jan-15, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-16
*****
```

```

*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-16, SIN-BKK, 2010-Jan-16, 08:20:00, 2010-Jan-16, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 1.83244e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Jan-16, SIN-BKK 2010-Jan-16, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-17
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-17, SIN-BKK, 2010-Jan-17, 08:20:00, 2010-Jan-17, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 1.58896e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 1, 0, 0, 0, 0, 300, 0,

```



```

SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Jan-17, SIN-BKK 2010-Jan-17, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-18
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Jan-18, SIN-BKK, 2010-Jan-18, 08:20:00, 2010-Jan-18, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Jan-18, SIN-BKK 2010-Jan-18, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-19
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Jan-19, SIN-BKK, 2010-Jan-19, 08:20:00, 2010-Jan-19, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----

```

```

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQL1 2010-Jan-19, SIN-BKK 2010-Jan-19, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQL1, 2010-Jan-20
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
    apsed, Distance, Capacity,
SQL1 2010-Jan-20, SIN-BKK, 2010-Jan-20, 08:20:00, 2010-Jan-20, 11:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 1, 0, 0, 0, 0, 300, 0,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQL1 2010-Jan-20, SIN-BKK 2010-Jan-20, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,

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*****
FlightDate: SQ11, 2010-Jan-21
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-21, SIN-BKK, 2010-Jan-21, 08:20:00, 2010-Jan-21, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Jan-21, SIN-BKK 2010-Jan-21, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-22
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-22, SIN-BKK, 2010-Jan-22, 08:20:00, 2010-Jan-22, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****

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SegmentCabins:

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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,  
 SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 1, 0, 0, 0, 0, 300, 0,  
 SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 2, 0, 0, 0, 0, 300, 0,

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Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

SQ11 2010-Jan-22, SIN-BKK 2010-Jan-22, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

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FlightDate: SQ11, 2010-Jan-23

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Leg-Dates:

-----

Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
 apsed, Distance, Capacity,

SQ11 2010-Jan-23, SIN-BKK, 2010-Jan-23, 08:20:00, 2010-Jan-23, 11:00:00, 07:40:00  
 , 0, -05:00:00, 6300, 0,

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LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
 Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,

SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 300, 300, 0, 0, 0, 0, 0, 6.64029e-31  
 9, 0, 300, 9, 0, 0, 0, 0, 0,

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Buckets:

-----

Flight, Leg, Cabin, Yield, AU/SI, SS, AV,

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SegmentCabins:

-----

Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,

SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 1, 0, 0, 0, 0, 300, 0,

SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 2, 0, 0, 0, 0, 300, 0,

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Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

SQ11 2010-Jan-23, SIN-BKK 2010-Jan-23, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

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FlightDate: SQ11, 2010-Jan-24

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Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
 apsed, Distance, Capacity,

SQ11 2010-Jan-24, SIN-BKK, 2010-Jan-24, 08:20:00, 2010-Jan-24, 11:00:00, 07:40:00  
 , 0, -05:00:00, 6300, 0,

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*****
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LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ11 2010-Jan-24, SIN-BKK 2010-Jan-24, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-25
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
    apsed, Distance, Capacity,
SQ11 2010-Jan-25, SIN-BKK, 2010-Jan-25, 08:20:00, 2010-Jan-25, 11:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
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SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ11 2010-Jan-25, SIN-BKK 2010-Jan-25, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-26
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, 08:20:00, 2010-Jan-26, 11:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ11 2010-Jan-26, SIN-BKK 2010-Jan-26, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-27
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, 08:20:00, 2010-Jan-27, 11:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:

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-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Jan-27, SIN-BKK 2010-Jan-27, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-28
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-28, SIN-BKK, 2010-Jan-28, 08:20:00, 2010-Jan-28, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Jan-28, SIN-BKK 2010-Jan-28, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-29
*****
*****
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-29, SIN-BKK, 2010-Jan-29, 08:20:00, 2010-Jan-29, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Jan-29, SIN-BKK 2010-Jan-29, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Jan-30
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Jan-30, SIN-BKK, 2010-Jan-30, 08:20:00, 2010-Jan-30, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 2, 0, 0, 0, 0, 300, 0,
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*****

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Subclasses:

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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,  
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,  
SQ11 2010-Jan-30, SIN-BKK 2010-Jan-30, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,

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\*\*\*\*\*  
FlightDate: SQ11, 2010-Jan-31

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\*\*\*\*\*  
Leg-Dates:

-----

Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
apsed, Distance, Capacity,  
SQ11 2010-Jan-31, SIN-BKK, 2010-Jan-31, 08:20:00, 2010-Jan-31, 11:00:00, 07:40:00  
, 0, -05:00:00, 6300, 0,

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LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,  
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,  
9, 0, 0, 0, 0, 0,

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Buckets:

-----

Flight, Leg, Cabin, Yield, AU/SI, SS, AV,  
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\*\*\*\*\*  
SegmentCabins:

-----

Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,  
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 1, 0, 0, 0, 0, 300, 0,  
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 2, 0, 0, 0, 0, 300, 0,

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\*\*\*\*\*  
Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,  
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,  
SQ11 2010-Jan-31, SIN-BKK 2010-Jan-31, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,

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\*\*\*\*\*  
FlightDate: SQ11, 2010-Feb-01

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Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
apsed, Distance, Capacity,  
SQ11 2010-Feb-01, SIN-BKK, 2010-Feb-01, 08:20:00, 2010-Feb-01, 11:00:00, 07:40:00  
, 0, -05:00:00, 6300, 0,

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LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,  
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,

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          9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-01, SIN-BKK 2010-Feb-01, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-02
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Feb-02, SIN-BKK, 2010-Feb-02, 08:20:00, 2010-Feb-02, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-02, SIN-BKK 2010-Feb-02, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-03

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Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-03, SIN-BKK, 2010-Feb-03, 08:20:00, 2010-Feb-03, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Feb-03, SIN-BKK 2010-Feb-03, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-04
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-04, SIN-BKK, 2010-Feb-04, 08:20:00, 2010-Feb-04, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,

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SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-04, SIN-BKK 2010-Feb-04, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-05
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Feb-05, SIN-BKK, 2010-Feb-05, 08:20:00, 2010-Feb-05, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-05, SIN-BKK 2010-Feb-05, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-06
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Feb-06, SIN-BKK, 2010-Feb-06, 08:20:00, 2010-Feb-06, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
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LegCabins:

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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ11 2010-Feb-06, SIN-BKK 2010-Feb-06, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-07
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
    apsed, Distance, Capacity,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, 08:20:00, 2010-Feb-07, 11:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ11 2010-Feb-07, SIN-BKK 2010-Feb-07, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,

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0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-08
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-08, SIN-BKK, 2010-Feb-08, 08:20:00, 2010-Feb-08, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Feb-08, SIN-BKK 2010-Feb-08, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-09
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-09, SIN-BKK, 2010-Feb-09, 08:20:00, 2010-Feb-09, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-09, SIN-BKK 2010-Feb-09, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-10
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Feb-10, SIN-BKK, 2010-Feb-10, 08:20:00, 2010-Feb-10, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-10, SIN-BKK 2010-Feb-10, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-11
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Feb-11, SIN-BKK, 2010-Feb-11, 08:20:00, 2010-Feb-11, 11:00:00, 07:40:00

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, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Feb-11, SIN-BKK 2010-Feb-11, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-12
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-12, SIN-BKK, 2010-Feb-12, 08:20:00, 2010-Feb-12, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks

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      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-12, SIN-BKK 2010-Feb-12, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-13
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, 08:20:00, 2010-Feb-13, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-13, SIN-BKK 2010-Feb-13, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-14
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, 08:20:00, 2010-Feb-14, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
      9, 0, 0, 0, 0, 0,
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*****

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Buckets:

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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,  
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SegmentCabins:

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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,  
 SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 1, 0, 0, 0, 0, 300, 0,  
 SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 2, 0, 0, 0, 0, 300, 0,  
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 \*\*\*\*\*

Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,  
 SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
 SQ11 2010-Feb-14, SIN-BKK 2010-Feb-14, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
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FlightDate: SQ11, 2010-Feb-15

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Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
 apsed, Distance, Capacity,  
 SQ11 2010-Feb-15, SIN-BKK, 2010-Feb-15, 08:20:00, 2010-Feb-15, 11:00:00, 07:40:00  
 , 0, -05:00:00, 6300, 0,  
 \*\*\*\*\*  
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LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
 Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,  
 SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 300,  
 9, 0, 0, 0, 0, 0,  
 \*\*\*\*\*  
 \*\*\*\*\*

Buckets:

-----

Flight, Leg, Cabin, Yield, AU/SI, SS, AV,  
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SegmentCabins:

-----

Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,  
 SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 1, 0, 0, 0, 0, 300, 0,  
 SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 2, 0, 0, 0, 0, 300, 0,  
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 \*\*\*\*\*

Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,  
 SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
 SQ11 2010-Feb-15, SIN-BKK 2010-Feb-15, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
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FlightDate: SQ11, 2010-Feb-16

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Leg-Dates:

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-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, 08:20:00, 2010-Feb-16, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Feb-16, SIN-BKK 2010-Feb-16, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-17
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, 08:20:00, 2010-Feb-17, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 2, 0, 0, 0, 0, 300, 0,
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Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-17, SIN-BKK 2010-Feb-17, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-18
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Feb-18, SIN-BKK, 2010-Feb-18, 08:20:00, 2010-Feb-18, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-18, SIN-BKK 2010-Feb-18, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-19
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Feb-19, SIN-BKK, 2010-Feb-19, 08:20:00, 2010-Feb-19, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,

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SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ11 2010-Feb-19, SIN-BKK 2010-Feb-19, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-20
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
    apsed, Distance, Capacity,
SQ11 2010-Feb-20, SIN-BKK, 2010-Feb-20, 08:20:00, 2010-Feb-20, 11:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OfferedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ11 2010-Feb-20, SIN-BKK 2010-Feb-20, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
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FlightDate: SQ11, 2010-Feb-21
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-21, SIN-BKK, 2010-Feb-21, 08:20:00, 2010-Feb-21, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Feb-21, SIN-BKK 2010-Feb-21, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-22
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-22, SIN-BKK, 2010-Feb-22, 08:20:00, 2010-Feb-22, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 2, 0, 0, 0, 0, 300, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Feb-22, SIN-BKK 2010-Feb-22, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-23
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-23, SIN-BKK, 2010-Feb-23, 08:20:00, 2010-Feb-23, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ11 2010-Feb-23, SIN-BKK 2010-Feb-23, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-24
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-24, SIN-BKK, 2010-Feb-24, 08:20:00, 2010-Feb-24, 11:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****

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LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,

SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,  
9, 0, 0, 0, 0, 0,

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Buckets:

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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,

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SegmentCabins:

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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,

SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 1, 0, 0, 0, 0, 300, 0,

SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 2, 0, 0, 0, 0, 300, 0,

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Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,

SQ11 2010-Feb-24, SIN-BKK 2010-Feb-24, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,

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FlightDate: SQ11, 2010-Feb-25

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Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
apsed, Distance, Capacity,

SQ11 2010-Feb-25, SIN-BKK, 2010-Feb-25, 08:20:00, 2010-Feb-25, 11:00:00, 07:40:00  
, 0, -05:00:00, 6300, 0,

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LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,

SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,  
9, 0, 0, 0, 0, 0,

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Buckets:

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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,

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SegmentCabins:

-----

Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,

SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 1, 0, 0, 0, 0, 300, 0,

SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 2, 0, 0, 0, 0, 300, 0,

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Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,



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SQ11 2010-Feb-25, SIN-BKK 2010-Feb-25, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-26
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-26, SIN-BKK, 2010-Feb-26, 08:20:00, 2010-Feb-26, 11:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ11 2010-Feb-26, SIN-BKK 2010-Feb-26, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-27
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ11 2010-Feb-27, SIN-BKK, 2010-Feb-27, 08:20:00, 2010-Feb-27, 11:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,

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*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-27, SIN-BKK 2010-Feb-27, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ11, 2010-Feb-28
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ11 2010-Feb-28, SIN-BKK, 2010-Feb-28, 08:20:00, 2010-Feb-28, 11:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 300, 300, 0, 0, 0, 0, 0, 0, 0, 0, 300,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 1, 0, 0, 0, 0, 300, 0,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 2, 0, 0, 0, 0, 300, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 1, Y, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ11 2010-Feb-28, SIN-BKK 2010-Feb-28, Y, 2, M, 300 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-15
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,

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SQL12 2010-Jan-15, SIN-HND, 2010-Jan-15, 09:20:00, 2010-Jan-15, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 200, 200, 2.082e+121, 5.53287e-48, 5.20
268e-90, 0, 1.31346e-47, 1.05119e-153, 2.78986e+179, 0, 200, 9, 3.66962e-62, 1.08
54e-71, 6.74783e-67, 6.9835e-77, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 1, 0, 0, 0, 0, 200, 0,
SQL12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 1, Y13856, 200 (0), 0, 0, 0, 0, 0 (0),
0, 0, 0, 0, 0, 0,
SQL12 2010-Jan-15, SIN-HND 2010-Jan-15, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQL12, 2010-Jan-16
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQL12 2010-Jan-16, SIN-HND, 2010-Jan-16, 09:20:00, 2010-Jan-16, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 2.63638e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 1, 0, 0, 0, 0, 200, 0,
SQL12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
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-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Jan-16, SIN-HND 2010-Jan-16, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-17
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Jan-17, SIN-HND, 2010-Jan-17, 09:20:00, 2010-Jan-17, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 2.39291e-319, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Jan-17, SIN-HND 2010-Jan-17, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-18
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Jan-18, SIN-HND, 2010-Jan-18, 09:20:00, 2010-Jan-18, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 2.14469e-319, 0, 0, 0, 0,
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Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Jan-18, SIN-HND 2010-Jan-18, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-19
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Jan-19, SIN-HND, 2010-Jan-19, 09:20:00, 2010-Jan-19, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Jan-19, SIN-HND 2010-Jan-19, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-20
*****

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*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Jan-20, SIN-HND, 2010-Jan-20, 09:20:00, 2010-Jan-20, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Jan-20, SIN-HND 2010-Jan-20, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-21
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Jan-21, SIN-HND, 2010-Jan-21, 09:20:00, 2010-Jan-21, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 1, 0, 0, 0, 0, 200, 0,

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SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Jan-21, SIN-HND 2010-Jan-21, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-22
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Jan-22, SIN-HND, 2010-Jan-22, 09:20:00, 2010-Jan-22, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Jan-22, SIN-HND 2010-Jan-22, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-23
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Jan-23, SIN-HND, 2010-Jan-23, 09:20:00, 2010-Jan-23, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ12 2010-Jan-23, SIN-HND 2010-Jan-23, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-24
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
    apsed, Distance, Capacity,
SQ12 2010-Jan-24, SIN-HND, 2010-Jan-24, 09:20:00, 2010-Jan-24, 12:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ12 2010-Jan-24, SIN-HND 2010-Jan-24, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,

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*****
FlightDate: SQ12, 2010-Jan-25
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Jan-25, SIN-HND, 2010-Jan-25, 09:20:00, 2010-Jan-25, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Jan-25, SIN-HND 2010-Jan-25, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-26
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Jan-26, SIN-HND, 2010-Jan-26, 09:20:00, 2010-Jan-26, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****

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SegmentCabins:

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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,  
 SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 1, 0, 0, 0, 0, 200, 0,  
 SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 2, 0, 0, 0, 0, 200, 0,

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Subclasses:

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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

SQ12 2010-Jan-26, SIN-HND 2010-Jan-26, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

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FlightDate: SQ12, 2010-Jan-27

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Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
 apsed, Distance, Capacity,

SQ12 2010-Jan-27, SIN-HND, 2010-Jan-27, 09:20:00, 2010-Jan-27, 12:00:00, 07:40:00  
 , 0, -05:00:00, 6300, 0,

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LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
 Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,

SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,  
 9, 0, 0, 0, 0, 0,

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Buckets:

-----

Flight, Leg, Cabin, Yield, AU/SI, SS, AV,

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SegmentCabins:

-----

Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,

SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 1, 0, 0, 0, 0, 200, 0,

SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 2, 0, 0, 0, 0, 200, 0,

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Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

SQ12 2010-Jan-27, SIN-HND 2010-Jan-27, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

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FlightDate: SQ12, 2010-Jan-28

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Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
 apsed, Distance, Capacity,

SQ12 2010-Jan-28, SIN-HND, 2010-Jan-28, 09:20:00, 2010-Jan-28, 12:00:00, 07:40:00  
 , 0, -05:00:00, 6300, 0,

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*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ12 2010-Jan-28, SIN-HND 2010-Jan-28, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-29
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
    apsed, Distance, Capacity,
SQ12 2010-Jan-29, SIN-HND, 2010-Jan-29, 09:20:00, 2010-Jan-29, 12:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

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SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ12 2010-Jan-29, SIN-HND 2010-Jan-29, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-30
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, 09:20:00, 2010-Jan-30, 12:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ12 2010-Jan-30, SIN-HND 2010-Jan-30, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Jan-31
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, 09:20:00, 2010-Jan-31, 12:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:

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-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Jan-31, SIN-HND 2010-Jan-31, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-01
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-01, SIN-HND, 2010-Feb-01, 09:20:00, 2010-Feb-01, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-01, SIN-HND 2010-Feb-01, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-02
*****
*****
Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-02, SIN-HND, 2010-Feb-02, 09:20:00, 2010-Feb-02, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-02, SIN-HND 2010-Feb-02, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-03
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-03, SIN-HND, 2010-Feb-03, 09:20:00, 2010-Feb-03, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 2, 0, 0, 0, 0, 200, 0,
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Subclasses:

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Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,  
 SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
 SQ12 2010-Feb-03, SIN-HND 2010-Feb-03, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

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 FlightDate: SQ12, 2010-Feb-04

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 Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
 apsed, Distance, Capacity,  
 SQ12 2010-Feb-04, SIN-HND, 2010-Feb-04, 09:20:00, 2010-Feb-04, 12:00:00, 07:40:00  
 , 0, -05:00:00, 6300, 0,

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 LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
 Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,  
 SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,  
 9, 0, 0, 0, 0, 0,

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 Buckets:

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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,  
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SegmentCabins:

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Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,  
 SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 1, 0, 0, 0, 0, 200, 0,  
 SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 2, 0, 0, 0, 0, 200, 0,

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 Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,  
 SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
 SQ12 2010-Feb-04, SIN-HND 2010-Feb-04, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,

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 \*\*\*\*\*  
 FlightDate: SQ12, 2010-Feb-05

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 Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
 apsed, Distance, Capacity,  
 SQ12 2010-Feb-05, SIN-HND, 2010-Feb-05, 09:20:00, 2010-Feb-05, 12:00:00, 07:40:00  
 , 0, -05:00:00, 6300, 0,

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 LegCabins:

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Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
 Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,  
 SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,

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          9, 0, 0, 0, 0, 0,
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*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-05, SIN-HND 2010-Feb-05, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-06
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Feb-06, SIN-HND, 2010-Feb-06, 09:20:00, 2010-Feb-06, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-06, SIN-HND 2010-Feb-06, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-07

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Leg-Dates:
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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-07, SIN-HND, 2010-Feb-07, 09:20:00, 2010-Feb-07, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-07, SIN-HND 2010-Feb-07, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-08
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-08, SIN-HND, 2010-Feb-08, 09:20:00, 2010-Feb-08, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,

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SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-08, SIN-HND 2010-Feb-08, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-09
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Feb-09, SIN-HND, 2010-Feb-09, 09:20:00, 2010-Feb-09, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-09, SIN-HND 2010-Feb-09, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-10
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Feb-10, SIN-HND, 2010-Feb-10, 09:20:00, 2010-Feb-10, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:

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-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQL2 2010-Feb-10, SIN-HND 2010-Feb-10, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQL2, 2010-Feb-11
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
    apsed, Distance, Capacity,
SQL2 2010-Feb-11, SIN-HND, 2010-Feb-11, 09:20:00, 2010-Feb-11, 12:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQL2 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQL2 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 1, 0, 0, 0, 0, 200, 0,
SQL2 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQL2 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQL2 2010-Feb-11, SIN-HND 2010-Feb-11, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
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0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-12
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-12, SIN-HND, 2010-Feb-12, 09:20:00, 2010-Feb-12, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-12, SIN-HND 2010-Feb-12, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-13
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-13, SIN-HND, 2010-Feb-13, 09:20:00, 2010-Feb-13, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
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*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-13, SIN-HND 2010-Feb-13, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-14
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Feb-14, SIN-HND, 2010-Feb-14, 09:20:00, 2010-Feb-14, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-14, SIN-HND 2010-Feb-14, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-15
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Feb-15, SIN-HND, 2010-Feb-15, 09:20:00, 2010-Feb-15, 12:00:00, 07:40:00

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, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-15, SIN-HND 2010-Feb-15, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-16
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-16, SIN-HND, 2010-Feb-16, 09:20:00, 2010-Feb-16, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks

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      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-16, SIN-HND 2010-Feb-16, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-17
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, 09:20:00, 2010-Feb-17, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-17, SIN-HND 2010-Feb-17, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-18
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, 09:20:00, 2010-Feb-18, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 0, 0, 0, 0, 0,
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*****

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Buckets:

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Flight, Leg, Cabin, Yield, AU/SI, SS, AV,  
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SegmentCabins:

-----

Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,  
 SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 1, 0, 0, 0, 0, 200, 0,  
 SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 2, 0, 0, 0, 0, 200, 0,  
 \*\*\*\*\*  
 \*\*\*\*\*

Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,  
 SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
 SQ12 2010-Feb-18, SIN-HND 2010-Feb-18, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
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FlightDate: SQ12, 2010-Feb-19

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Leg-Dates:

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Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El  
 apsed, Distance, Capacity,  
 SQ12 2010-Feb-19, SIN-HND, 2010-Feb-19, 09:20:00, 2010-Feb-19, 12:00:00, 07:40:00  
 , 0, -05:00:00, 6300, 0,  
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LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
 Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,  
 SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 200,  
 9, 0, 0, 0, 0, 0,  
 \*\*\*\*\*  
 \*\*\*\*\*

Buckets:

-----

Flight, Leg, Cabin, Yield, AU/SI, SS, AV,  
 \*\*\*\*\*  
 \*\*\*\*\*

SegmentCabins:

-----

Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,  
 SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 1, 0, 0, 0, 0, 200, 0,  
 SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 2, 0, 0, 0, 0, 200, 0,  
 \*\*\*\*\*  
 \*\*\*\*\*

Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
 (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,  
 SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
 SQ12 2010-Feb-19, SIN-HND 2010-Feb-19, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
 0, 0, 0, 0,  
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FlightDate: SQ12, 2010-Feb-20

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Leg-Dates:



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-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-20, SIN-HND, 2010-Feb-20, 09:20:00, 2010-Feb-20, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-20, SIN-HND 2010-Feb-20, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-21
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-21, SIN-HND, 2010-Feb-21, 09:20:00, 2010-Feb-21, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
```

```

*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-21, SIN-HND 2010-Feb-21, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-22
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Feb-22, SIN-HND, 2010-Feb-22, 09:20:00, 2010-Feb-22, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
      9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
      (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
SQ12 2010-Feb-22, SIN-HND 2010-Feb-22, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
      0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-23
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
      apsed, Distance, Capacity,
SQ12 2010-Feb-23, SIN-HND, 2010-Feb-23, 09:20:00, 2010-Feb-23, 12:00:00, 07:40:00
      , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
      Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,

```

```

SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ12 2010-Feb-23, SIN-HND 2010-Feb-23, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-24
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
    apsed, Distance, Capacity,
SQ12 2010-Feb-24, SIN-HND, 2010-Feb-24, 09:20:00, 2010-Feb-24, 12:00:00, 07:40:00
    , 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OfferedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
    Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
    9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
    (pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
SQ12 2010-Feb-24, SIN-HND 2010-Feb-24, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
    0, 0, 0, 0,
*****
*****

```

```

FlightDate: SQ12, 2010-Feb-25
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-25, SIN-HND, 2010-Feb-25, 09:20:00, 2010-Feb-25, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 1, 0, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 2, 0, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-25, SIN-HND 2010-Feb-25, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-26
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-26, SIN-HND, 2010-Feb-26, 09:20:00, 2010-Feb-26, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----

```

```
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 2, 0, 0, 0, 0, 200, 0,
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-26, SIN-HND 2010-Feb-26, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-27
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-27, SIN-HND, 2010-Feb-27, 09:20:00, 2010-Feb-27, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
LegCabins:
-----
Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,
9, 0, 0, 0, 0, 0,
*****
*****
Buckets:
-----
Flight, Leg, Cabin, Yield, AU/SI, SS, AV,
*****
*****
SegmentCabins:
-----
Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 1, 0, 0, 0, 0, 200, 0,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 2, 0, 0, 0, 0, 200, 0,
*****
*****
Subclasses:
-----
Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
SQ12 2010-Feb-27, SIN-HND 2010-Feb-27, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,
0, 0, 0, 0,
*****
*****
FlightDate: SQ12, 2010-Feb-28
*****
*****
Leg-Dates:
-----
Flight, Leg, BoardDate, BoardTime, OffDate, OffTime, Date Offset, Time Offset, El
apsed, Distance, Capacity,
SQ12 2010-Feb-28, SIN-HND, 2010-Feb-28, 09:20:00, 2010-Feb-28, 12:00:00, 07:40:00
, 0, -05:00:00, 6300, 0,
*****
*****
```

LegCabins:

-----

Flight, Leg, Cabin, OffedCAP, PhyCAP, RgdADJ, AU, UPR, SS, Staff, WL, Group, Comm  
Space, AvPool, Avl, NAV, GAV, ACP, ETB, BidPrice,

SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 200, 200, 0, 0, 0, 0, 0, 0, 0, 0, 200,  
9, 0, 0, 0, 0, 0,

\*\*\*\*\*

\*\*\*\*\*

Buckets:

-----

Flight, Leg, Cabin, Yield, AU/SI, SS, AV,

\*\*\*\*\*

\*\*\*\*\*

SegmentCabins:

-----

Flight, Segment, Cabin, FF, Bkgs, MIN, UPR, CommSpace, AvPool, BP,

SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 1, 0, 0, 0, 0, 200, 0,

SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 2, 0, 0, 0, 0, 200, 0,

\*\*\*\*\*

\*\*\*\*\*

Subclasses:

-----

Flight, Segment, Cabin, FF, Subclass, MIN/AU (Prot), Nego, NS%, OB%, Bkgs, GrpBks  
(pdg), StfBkgs, WLBkgs, ETB, ClassAvl, RevAvl, SegAvl,

SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 1, Y, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,

SQ12 2010-Feb-28, SIN-HND 2010-Feb-28, Y, 2, M, 200 (0), 0, 0, 0, 0, 0 (0), 0, 0,  
0, 0, 0, 0,

\*\*\*\*\*

## 12.6 Exploring the Predefined BOM Tree

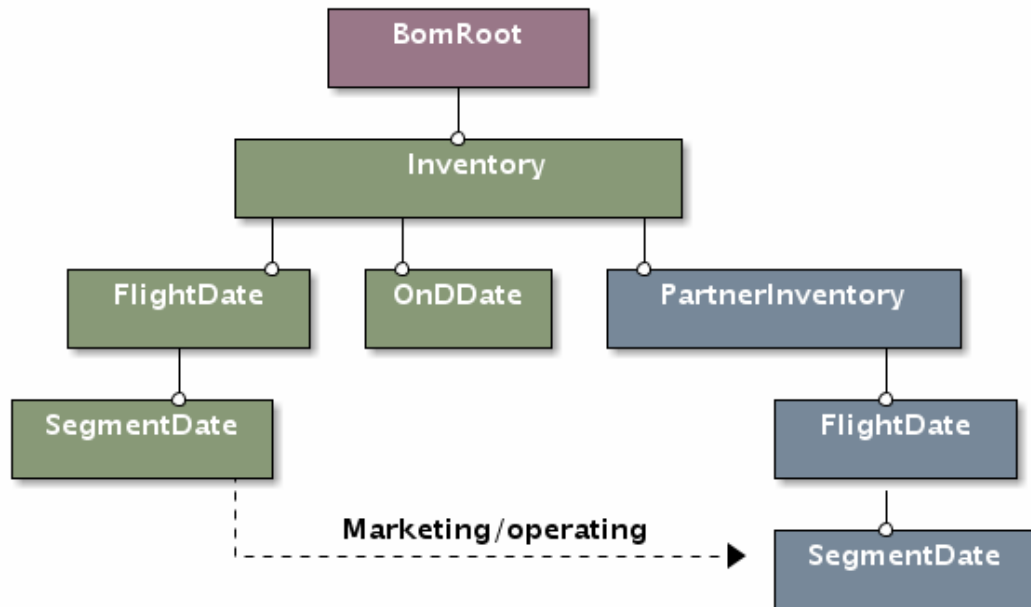


Figure 2: AirInv BOM tree

`AirInv` predefines a BOM (Business Object Model) tree specific to the airline IT arena.

### 12.6.1 Airline Network BOM Tree

- `AIRINV::ReachableUniverse`
- `AIRINV::OriginDestinationSet`
- `AIRINV::SegmentPathPeriod`

### 12.6.2 Airline Schedule BOM Tree

- `stdair::Inventory`
- `stdair::FlightPeriod`
- `stdair::SegmentPeriod`
- `stdair::OnDPeriod`

## 12.7 Extending the BOM Tree

### 12.8 The travel solution calculation procedure

The project AirInv aims at calculating a list of `travel solutions` for every incoming `booking request`.

## 13 Supported Systems

### 13.1 Table of Contents

- [Introduction](#)
- [.1 AirInv 0.1.x.1](#)
  - [Linux Systems](#)
    - \* [Fedora Core 4 with ATLAS](#)
    - \* [Gentoo Linux with ACML](#)
    - \* [Gentoo Linux with ATLAS](#)
    - \* [Gentoo Linux with MKL](#)
    - \* [Gentoo Linux with NetLib's BLAS and LAPACK](#)
    - \* [Red Hat Enterprise Linux with AirInv External](#)
    - \* [SUSE Linux 10.0 with NetLib's BLAS and LAPACK](#)
    - \* [SUSE Linux 10.0 with MKL](#)
  - [Windows Systems](#)
    - \* [Microsoft Windows XP with Cygwin](#)
    - \* [Microsoft Windows XP with Cygwin and ATLAS](#)
    - \* [Microsoft Windows XP with Cygwin and ACML](#)
    - \* [Microsoft Windows XP with MinGW, MSYS and ACML](#)
    - \* [Microsoft Windows XP with MinGW, MSYS and AirInv External](#)
    - \* [Microsoft Windows XP with MS Visual C++ and Intel MKL](#)
  - [Unix Systems](#)
    - \* [SunOS 5.9 with AirInv External](#)
- [AirInv 3.9.1](#)
- [AirInv 3.9.0](#)
- [AirInv 3.8.1](#)

### 13.2 Introduction

This page is intended to provide a list of AirInv supported systems, i.e. the systems on which configuration, installation and testing process of the AirInv library has been successful. Results are grouped based on minor release number. Therefore, only the latest tests for bug-fix releases are included. Besides, the information on this page is divided into sections dependent on the operating system.

Where necessary, some extra information is given for each tested configuration, e.g. external libraries installed, configuration commands used, etc.

If you manage to compile, install and test the AirInv library on a system not mentioned below, please let us know, so we could update this database.



## 14 AirInv Supported Systems (Previous Releases)

### 14.1 AirInv 3.9.1

### 14.2 AirInv 3.9.0

### 14.3 AirInv 3.8.1

## 15 Tutorials

### 15.1 Table of Contents

- [Preparing the AirSched Project for Development](#)
- [Your first networkBuilde](#)
  - [Summary of the different steps](#)
  - [Result of the Batch Program](#)
- [Network building with an input file](#)
  - [How to build a network input file?](#)
  - [Building the BOM tree with an input file](#)
  - [Result of the Batch Program](#)

### 15.2 Preparing the AirSched Project for Development

The source code for these examples can be found in the `batches` and `test/airsched` directories. They are compiled along with the rest of the `AirSched` project. See the [Users Guide](#) for more details on how to build the `AirSched` project.

### 15.3 Your first networkBuilde

#### 15.3.1 Summary of the different steps

All the steps below can be found in the same order in the batch `AirSched.cpp` program.

First, we instantiate the `AIRSCHEd_Service` object:

Then, we construct a default sample list of travel solutions and a default booking request (as mentionned in `ug_procedure_bookingrequest` and `ug_procedure_travelsolution` parts):

For basic use, the default BOM tree can be built using:

The main step is the network building (see [The travel solution calculation procedure](#)):

### 15.3.2 Result of the Batch Program

When the `AirSched.cpp` program is run (with the `-b` option), the log output file should look like:

What is interesting is to compare the travel solution list (here reduced to a single travel solution) displayed before:

and after the network building:

Between the two groups of dashes, we can see that a network option structure has been added by the network builder: the price is 450 EUR for the Y class, the ticket is refundable but there are exchange fees and the customer must stay over on saturday night.

Let's return to our default BOM tree display: the only network rule stored was a match for the travel solution into consideration (same origin airport, same destination airport, flight date included in the network rule date range, same airline "BA", ...).

By looking at the network rule trip type "RT", we can guess we face a round trip network: that means the price given in the default bom tree construction in `stdair::CmdBomManager.hpp` has been divided by 2 because we are considering either an inbound trip or an outbound one.

## 15.4 Network building with an input file

### 15.4.1 How to build a network input file?

The objective here is to build a network input file to network build the default travel solution list built using:

This travel solution list, reduced to a singleton, can be displayed as done before:

We deduce:

- we need a network rule whose origin-destination couple is "LHR, SYD".
- the date range must include the date "2011-06-10".
- the time range must include the time "21:45".
- the airline operating is "BA", so it must be the airline pricing.

We can deduce a part of our network rule file :

We have no information about stay duration and advance purchase (such information are contained into the booking request): so let us put "0" to embrace all the requests possible.

No information for the point-of-sale and the channel too: let us consider all the channels ("IN", "DN", "IF" and "DF") and all the points of sale (the origin "LHR", the destination "SYD" and the rest-of-the-world "ROW") existing. To access this information, we could look into the default booking request.

The input file is now:

Let us say we have just the Economy cabin "Y" and British Airways prices ticket for class "Y".

No information about the trip type, so we duplicate all the network rules for both type: one-way "OW" and round-trip "RT" (to access this information, we could look to the default booking request).

The network options are all set to a default value "T" (meaning true) and the network values are chosen to be all distinct.

We obtain:

#### 15.4.2 Building the BOM tree with an input file

The steps are the same as before [Summary of the different steps](#) except the bom tree must be built using the network input file :

#### 15.4.3 Result of the Batch Program

When the `AirSched.cpp` program is run with the `-f` option linking with the file built just above:

```
~/AirSched -f ~/<YourFileName>.csv
```

the last lines of the log output should look like:

```
[D]~/AirSchedgit/AirSched/batches/AirSched.cpp:223: Travel solutions:
[0] [0] BA, 9, 2011-06-10, LHR, SYD, 21:45 --- Y, 145, 1 1 1 ---
```

We have just one network option added to the travel solution. We can deduce from the price value 145 that the network builder used the network rule number 15 to price the travel solution. We have an inbound or outbound trip of a round trip: the total price 290 has been divided by 2.

## 16 Command-Line Test to Demonstrate How To Test the AirInv Project

```
*/
// //////////////////////////////////////
// Import section
// //////////////////////////////////////
// STL
#include <sstream>
```

```

#include <fstream>
#include <string>
// Boost Unit Test Framework (UTF)
#define BOOST_TEST_DYN_LINK
#define BOOST_TEST_MAIN
#define BOOST_TEST_MODULE InventoryTestSuite
#include <boost/test/unit_test.hpp>
// StdAir
#include <stdair/basic/BasLogParams.hpp>
#include <stdair/basic/BasDBParams.hpp>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/TravelSolutionStruct.hpp>
#include <stdair/bom/BookingRequestStruct.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/stdair_exceptions.hpp>
// Airinv
#include <airinv/AIRINV_Types.hpp>
#include <airinv/AIRINV_Master_Service.hpp>
#include <airinv/config/airinv-paths.hpp>

namespace boost_utf = boost::unit_test;

// (Boost) Unit Test XML Report
std::ofstream utfReportStream ("InventoryTestSuite_utfresults.xml");

struct UnitTestConfig {
    UnitTestConfig() {
        boost_utf::unit_test_log.set_stream (utfReportStream);
        boost_utf::unit_test_log.set_format (boost_utf::XML);
        boost_utf::unit_test_log.set_threshold_level (boost_utf::log_test_units);
        //boost_utf::unit_test_log.set_threshold_level (boost_utf::log_successful_tests);
    }

    ~UnitTestConfig() {
    }
};

// //////////////////////////////////////
bool testInventoryHelper (const unsigned short iTestFlag,
                        const stdair::Filename_T& iInventoryInputFilename,
                        const stdair::Filename_T& iScheduleInputFilename,
                        const stdair::Filename_T& iODInputFilename,
                        const stdair::Filename_T& iFRAT5InputFilename,
                        const stdair::Filename_T& iFFDisutilityInputFilename,
                        const stdair::Filename_T& iYieldInputFilename,
                        const bool isBuiltin,
                        const bool isForSchedule) {

    // Output log File
    std::ostream oStr;
    oStr << "InventoryTestSuite_" << iTestFlag << ".log";
    const stdair::Filename_T lLogFilename (oStr.str());

    // Set the log parameters
    std::ofstream logOutputFile;
    // Open and clean the log outputfile
    logOutputFile.open (lLogFilename.c_str());
    logOutputFile.clear();

    // Initialise the AirInv service object
    stdair::BasLogParams lLogParams (stdair::LOG::DEBUG,
                                    logOutputFile);

    // Initialise the inventory service
    AIRINV::AIRINV_Master_Service airinvService (lLogParams);

```

```

// Parameters for the sale
std::string lSegmentDateKey;
stdair::ClassCode_T lClassCode;
const stdair::PartySize_T lPartySize (2);

// Check whether or not a (CSV) input file should be read
if (isBuiltin == true) {

    // Build the default sample BOM tree (filled with inventories) for AirInv
    airinvService.buildSampleBom();

    // Define a specific segment-date key for the sample BOM tree
    lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
    lClassCode = "Q";

} else {

    if (isForSchedule == true) {
        // Build the BOM tree from parsing a schedule file (and O&D list)
        stdair::ScheduleFilePath lScheduleFilePath (iScheduleInputFilename);
        stdair::ODFilePath lODFilePath (iODInputFilename);
        stdair::FRAT5FilePath lFRAT5FilePath (iFRAT5InputFilename);
        stdair::FFDisutilityFilePath lFFDisutilityFilePath (iFFDisutilityInputFilename);
        AIRRAC::YieldFilePath lYieldFilePath (iYieldInputFilename);
        airinvService.parseAndLoad (lScheduleFilePath, lODFilePath,
                                   lFRAT5FilePath, lFFDisutilityFilePath,
                                   lYieldFilePath);

        // Define a specific segment-date key for the schedule-based inventory
        lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
        lClassCode = "Y";

    } else {

        // Build the BOM tree from parsing an inventory dump file
        AIRINV::InventoryFilePath lInventoryFilePath (iInventoryInputFilename);
        airinvService.parseAndLoad (lInventoryFilePath);

        // Define a specific segment-date key for the inventory parsed file
        //const std::string lSegmentDateKey ("SV, 5, 2010-03-11, KBP, JFK, 08:00:00");
        lSegmentDateKey = "SV, 5, 2010-03-11, KBP, JFK, 08:00:00";
        lClassCode = "J";

    }

}

// Make a booking
const bool hasSaleBeenSuccessful =
    airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);

// DEBUG: Display the list of travel solutions
const std::string& lCSVDump = airinvService.csvDisplay();
STDAIR_LOG_DEBUG (lCSVDump);

// Close the log file
logOutputFile.close();

if (hasSaleBeenSuccessful == false) {
    STDAIR_LOG_DEBUG ("No sale can be made for '" << lSegmentDateKey
                     << "'");
}

return hasSaleBeenSuccessful;
}

```

```
// ////////////////////////////////// Main: Unit Test Suite //////////////////////////////////

// Set the UTF configuration (re-direct the output to a specific file)
BOOST_GLOBAL_FIXTURE (UnitTestFixture);

// Start the test suite
BOOST_AUTO_TEST_SUITE (master_test_suite)

BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell) {

    // Input file name
    const stdair::Filename_T lInventoryInputFilename (STDAIR_SAMPLE_DIR
                                                    "/invdump01.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead of
    // from an inventory dump)
    const bool isForSchedule = false;

    // Try sell a default segment.
    bool hasTestBeenSuccessful = false;
    BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
                          testInventoryHelper (0, lInventoryInputFilename,
                                              " ", " ", " ", " ", " ", isBuiltin,
                                              isForSchedule));
    BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
}

BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_built_in) {

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = true;
    // State whether the BOM tree should be built from a schedule file (instead of
    // from an inventory dump)
    const bool isForSchedule = false;

    // Try sell a default segment.
    bool hasTestBeenSuccessful = false;
    BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
                          testInventoryHelper (1, " ", " ", " ", " ", " ", " ", " ",
                                              isBuiltin, isForSchedule));
    BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
}

BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_schedule) {

    // Input file names
    const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                    "/schedule01.csv");
    const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                              "/ond01.csv");
    const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
                                                  "/frat5.csv");
    const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
                                                         "/ffDisutility.csv");
    const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                  "/yieldstore01.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead of
    // from an inventory dump)

```

```

const bool isForSchedule = true;

// Try sell a default segment.
bool hasTestBeenSuccessful = false;
BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
    testInventoryHelper (2, " ",
                        lScheduleInputFilename,
                        lODInputFilename,
                        lFRAT5InputFilename,
                        lFFDisutilityInputFilename,
                        lYieldInputFilename,
                        isBuiltin, isForSchedule));
BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
}

BOOST_AUTO_TEST_CASE (airinv_error_inventory_input_file) {

    // Inventory input file name
    const stdair::Filename_T lMissingInventoryFilename (STDAIR_SAMPLE_DIR
                                                         "/missingFile.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead of
    // from an inventory dump)
    const bool isForSchedule = false;

    // Try sell a default segment.
    BOOST_CHECK_THROW (testInventoryHelper (3, lMissingInventoryFilename,
                                           " ", " ", " ", " ", " ", isBuiltin, isF
                                           orSchedule),
                      AIRINV::InventoryInputFileNotFoundException);
}

BOOST_AUTO_TEST_CASE (airinv_error_schedule_input_file) {

    // Schedule input file name
    const stdair::Filename_T lMissingScheduleFilename (STDAIR_SAMPLE_DIR
                                                         "/missingFile.csv");
    const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
                                                    "/frat5.csv");
    const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
                                                          "/ffDisutility.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead of
    // from an inventory dump)
    const bool isForSchedule = true;

    // Try sell a default segment.
    BOOST_CHECK_THROW (testInventoryHelper (4, " ", lMissingScheduleFilename,
                                           " ", lFRAT5InputFilename,
                                           lFFDisutilityInputFilename, " ",
                                           isBuiltin, isForSchedule),
                      AIRINV::ScheduleInputFileNotFoundException);
}

BOOST_AUTO_TEST_CASE (airinv_error_yield_input_file) {

    // Input file names
    const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                       "/schedule01.csv");
    const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR

```

```

                                "/ond01.csv");
const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
                                                "/frat5.csv");
const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
                                                        "/ffDisutility.csv");
const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                "/missingFile.csv");

// State whether the BOM tree should be built-in or parsed from an input file
const bool isBuiltin = false;
// State whether the BOM tree should be built from a schedule file (instead of
    from an inventory dump)
const bool isForSchedule = true;

// Try sell a default segment.
BOOST_CHECK_THROW (testInventoryHelper (5, " ",
                                        lScheduleInputFilename,
                                        lODInputFilename,
                                        lFRAT5InputFilename,
                                        lFFDisutilityInputFilename,
                                        lYieldInputFilename,
                                        isBuiltin, isForSchedule),
                    AIRRAC::YieldInputFileNotFoundException);
}

BOOST_AUTO_TEST_CASE (airinv_error_flight_date_duplication) {

    // Input file names
    const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                        "/scheduleError01.csv");
    const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                                "/ond01.csv");
    const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
                                                "/frat5.csv");
    const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
                                                        "/ffDisutility.csv");
    const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                                "/missingFile.csv");

    // State whether the BOM tree should be built-in or parsed from an input file
    const bool isBuiltin = false;
    // State whether the BOM tree should be built from a schedule file (instead of
        from an inventory dump)
    const bool isForSchedule = true;

    // Try sell a default segment.
    BOOST_CHECK_THROW (testInventoryHelper (6, " ",
                                            lScheduleInputFilename,
                                            lODInputFilename,
                                            lFRAT5InputFilename,
                                            lFFDisutilityInputFilename,
                                            lYieldInputFilename,
                                            isBuiltin, isForSchedule),
                        AIRINV::FlightDateDuplicationException);
}

BOOST_AUTO_TEST_CASE (airinv_error_schedule_parsing_failed) {

    // Input file names
    const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
                                                        "/scheduleError02.csv");
    const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
                                                "/ond01.csv");
    const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
                                                "/frat5.csv");

```



```

const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
                                                    "/ffDisutility.csv");
const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
                                              "/yieldstore01.csv");

// State whether the BOM tree should be built-in or parsed from an input file
const bool isBuiltin = false;
// State whether the BOM tree should be built from a schedule file (instead of
// from an inventory dump)
const bool isForSchedule = true;

// Try sell a default segment.
BOOST_CHECK_THROW (testInventoryHelper (7, " ",
                                        lScheduleInputFilename,
                                        lODInputFilename,
                                        lFRAT5InputFilename,
                                        lFFDisutilityInputFilename,
                                        lYieldInputFilename,
                                        isBuiltin, isForSchedule),
                  AIRINV::ScheduleFileParsingFailedException);

}

// End the test suite
BOOST_AUTO_TEST_SUITE_END()

/*!

```

## 17 Directory Hierarchy

### 17.1 Directories

This directory hierarchy is sorted roughly, but not completely, alphabetically:

<b>airinv</b>	<b>120</b>
<b>basic</b>	<b>120</b>
<b>batches</b>	<b>121</b>
<b>bom</b>	<b>121</b>
<b>command</b>	<b>122</b>
<b>vault</b>	<b>124</b>
<b>config</b>	<b>122</b>
<b>factory</b>	<b>123</b>
<b>server</b>	<b>123</b>
<b>service</b>	<b>123</b>
<b>ui</b>	<b>124</b>
<b>cmdline</b>	<b>122</b>
<b>test</b>	<b>124</b>

<b>airinv</b>	<b>120</b>
---------------	------------

## 18 Namespace Index

### 18.1 Namespace List

Here is a list of all namespaces with brief descriptions:

<b>AIRINV</b>	<b>124</b>
<b>AIRINV::DCPParserHelper</b>	<b>132</b>
<b>AIRINV::FFDisutilityParserHelper</b>	<b>134</b>
<b>AIRINV::FRAT5ParserHelper</b>	<b>135</b>
<b>AIRINV::InventoryParserHelper</b>	<b>135</b>
<b>AIRINV::ScheduleParserHelper</b>	<b>140</b>
<b>stdair (Forward declarations )</b>	<b>144</b>

## 19 Class Index

### 19.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

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<b>AIRINV::AIRINV_Service</b>	<b>153</b>
std::basic_fstream< char >	
std::basic_fstream< wchar_t >	
std::basic_ifstream< char >	
std::basic_ifstream< wchar_t >	
std::basic_ios< char >	
std::basic_ios< wchar_t >	
std::basic_iostream< char >	
std::basic_iostream< wchar_t >	
std::basic_istream< char >	
std::basic_istream< wchar_t >	
std::basic_istreamstream< char >	
std::basic_istreamstream< wchar_t >	
std::basic_ofstream< char >	
std::basic_ofstream< wchar_t >	
std::basic_ostream< char >	
std::basic_ostream< wchar_t >	
std::basic_ostreamstream< char >	
std::basic_ostreamstream< wchar_t >	
std::basic_string< char >	
std::basic_string< wchar_t >	

std::basic_stringstream< char >	
std::basic_stringstream< wchar_t >	
<b>AIRINV::BomAbstract</b>	<b>164</b>
<b>stdair::BomPropertyTree</b>	<b>166</b>
<b>AIRINV::BomRootHelper</b>	<b>167</b>
<b>AIRINV::BookingClassHelper</b>	<b>168</b>
<b>CmdAbstract</b>	<b>175</b>
<b>AIRINV::DCPEventGenerator</b>	<b>177</b>
<b>AIRINV::DCPParser</b>	<b>185</b>
<b>AIRINV::DCPRuleFileParser</b>	<b>186</b>
<b>AIRINV::FFDisutilityFileParser</b>	<b>236</b>
<b>AIRINV::FFDisutilityParser</b>	<b>238</b>
<b>AIRINV::FlightPeriodFileParser</b>	<b>253</b>
<b>AIRINV::FRAT5FileParser</b>	<b>270</b>
<b>AIRINV::FRAT5Parser</b>	<b>272</b>
<b>AIRINV::InventoryBuilder</b>	<b>277</b>
<b>AIRINV::InventoryFileParser</b>	<b>278</b>
<b>AIRINV::InventoryGenerator</b>	<b>280</b>
<b>AIRINV::InventoryParser</b>	<b>290</b>
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<b>AIRINV::DefaultMap</b>	<b>193</b>
<b>AIRINV::ScheduleParserHelper::FlightPeriodParser::definition&lt; ScannerT &gt;</b>	<b>194</b>
<b>AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition&lt; ScannerT &gt;</b>	<b>201</b>
<b>AIRINV::FRAT5ParserHelper::FRAT5Parser::definition&lt; ScannerT &gt;</b>	<b>203</b>
<b>AIRINV::InventoryParserHelper::InventoryParser::definition&lt; ScannerT &gt;</b>	<b>206</b>
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<b>AIRINV::Connection</b>	<b>176</b>
<b>AIRINV::FacBomAbstract</b>	<b>227</b>
<b>FacServiceAbstract</b>	<b>229</b>
<b>AIRINV::FacAirinvMasterServiceContext</b>	<b>223</b>

<b>AIRINV::FacAirinvServiceContext</b>	<b>225</b>
<b>AIRINV::FacServiceAbstract</b>	<b>229</b>
<b>AIRINV::FacSupervisor</b>	<b>231</b>
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<b>AIRINV::FRAT5InputFileNotFoundException</b>	<b>271</b>
<b>AIRINV::InventoryInputFileNotFoundException</b>	<b>283</b>
<b>AIRINV::ScheduleInputFileNotFoundException</b>	<b>315</b>
<b>AIRINV::FlightDateHelper</b>	<b>243</b>
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<b>AIRINV::FRAT5ParserHelper::FRAT5Parser</b>	<b>273</b>
<b>AIRINV::InventoryParserHelper::InventoryParser</b>	<b>288</b>
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<b>grammar</b>	<b>276</b>
<b>AIRINV::DCPParserHelper::DCPRuleParser</b>	<b>187</b>
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<b>AIRINV::InventoryNotFoundException</b>	<b>288</b>
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<b>AIRINV::SegmentDateNotFoundException</b>	<b>322</b>
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## 22 Directory Documentation

### 22.1 test/airinv/ Directory Reference

#### Files

- file [InventoryTestSuite.cpp](#)
- file [InventoryTestSuite.hpp](#)

### 22.2 airinv/ Directory Reference

#### Directories

- directory [basic](#)
- directory [batches](#)
- directory [bom](#)
- directory [command](#)
- directory [config](#)
- directory [factory](#)
- directory [server](#)
- directory [service](#)
- directory [ui](#)

#### Files

- file [AIRINV\\_Master\\_Service.hpp](#)
- file [AIRINV\\_Service.hpp](#)
- file [AIRINV\\_Types.hpp](#)
- file [FlightRequestStatus.hpp](#)

### 22.3 airinv/basic/ Directory Reference

#### Files

- file [BasConst.cpp](#)
- file [BasConst\\_AIRINV\\_Service.hpp](#)
- file [BasConst\\_Curves.hpp](#)
- file [BasConst\\_General.hpp](#)
- file [BasParserTypes.hpp](#)
- file [FlightRequestStatus.cpp](#)
- file [FlightTypeCode.cpp](#)
- file [FlightTypeCode.hpp](#)
- file [FlightVisibilityCode.cpp](#)
- file [FlightVisibilityCode.hpp](#)

## 22.4 airinv/batches/ Directory Reference

### Files

- file [airinv\\_parseInventory.cpp](#)
- file [parseInventory.cpp](#)

## 22.5 airinv/bom/ Directory Reference

### Files

- file [AirportList.hpp](#)
- file [BomAbstract.cpp](#)
- file [BomAbstract.hpp](#)
- file [BomRootHelper.cpp](#)
- file [BomRootHelper.hpp](#)
- file [BookingClassHelper.cpp](#)
- file [BookingClassHelper.hpp](#)
- file [BookingClassStruct.cpp](#)
- file [BookingClassStruct.hpp](#)
- file [BucketStruct.cpp](#)
- file [BucketStruct.hpp](#)
- file [DCPEventStruct.cpp](#)
- file [DCPEventStruct.hpp](#)
- file [FareFamilyStruct.cpp](#)
- file [FareFamilyStruct.hpp](#)
- file [FFDisutilityStruct.cpp](#)
- file [FFDisutilityStruct.hpp](#)
- file [FlightDateHelper.cpp](#)
- file [FlightDateHelper.hpp](#)
- file [FlightDateStruct.cpp](#)
- file [FlightDateStruct.hpp](#)
- file [FlightPeriodStruct.cpp](#)
- file [FlightPeriodStruct.hpp](#)
- file [FRAT5Struct.cpp](#)
- file [FRAT5Struct.hpp](#)
- file [InventoryHelper.cpp](#)
- file [InventoryHelper.hpp](#)
- file [LegCabinHelper.cpp](#)
- file [LegCabinHelper.hpp](#)
- file [LegCabinStruct.cpp](#)
- file [LegCabinStruct.hpp](#)
- file [LegStruct.cpp](#)
- file [LegStruct.hpp](#)
- file [SegmentCabinHelper.cpp](#)
- file [SegmentCabinHelper.hpp](#)
- file [SegmentCabinStruct.cpp](#)
- file [SegmentCabinStruct.hpp](#)
- file [SegmentDateHelper.cpp](#)
- file [SegmentDateHelper.hpp](#)

- file [SegmentSnapshotTableHelper.cpp](#)
- file [SegmentSnapshotTableHelper.hpp](#)
- file [SegmentStruct.cpp](#)
- file [SegmentStruct.hpp](#)

## 22.6 airinv/ui/cmdline/ Directory Reference

### Files

- file [airinv.cpp](#)

## 22.7 airinv/command/ Directory Reference

### Directories

- directory [vault](#)

### Files

- file [FFDisutilityParser.cpp](#)
- file [FFDisutilityParser.hpp](#)
- file [FFDisutilityParserHelper.cpp](#)
- file [FFDisutilityParserHelper.hpp](#)
- file [FRAT5Parser.cpp](#)
- file [FRAT5Parser.hpp](#)
- file [FRAT5ParserHelper.cpp](#)
- file [FRAT5ParserHelper.hpp](#)
- file [InventoryBuilder.cpp](#)
- file [InventoryBuilder.hpp](#)
- file [InventoryGenerator.cpp](#)
- file [InventoryGenerator.hpp](#)
- file [InventoryManager.cpp](#)
- file [InventoryManager.hpp](#)
- file [InventoryParser.cpp](#)
- file [InventoryParser.hpp](#)
- file [InventoryParserHelper.cpp](#)
- file [InventoryParserHelper.hpp](#)
- file [ScheduleParser.cpp](#)
- file [ScheduleParser.hpp](#)
- file [ScheduleParserHelper.cpp](#)
- file [ScheduleParserHelper.hpp](#)

## 22.8 airinv/config/ Directory Reference

### Files

- file [airinv-paths.hpp.in](#)



## 22.9 airinv/factory/ Directory Reference

### Files

- file [FacAirinvMasterServiceContext.cpp](#)
- file [FacAirinvMasterServiceContext.hpp](#)
- file [FacAirinvServiceContext.cpp](#)
- file [FacAirinvServiceContext.hpp](#)
- file [FacBomAbstract.cpp](#)
- file [FacBomAbstract.hpp](#)
- file [FacServiceAbstract.cpp](#)
- file [FacServiceAbstract.hpp](#)
- file [FacSupervisor.cpp](#)
- file [FacSupervisor.hpp](#)

## 22.10 airinv/server/ Directory Reference

### Files

- file [AirInvClient.cpp](#)
- file [AirInvClient\\_ASIO.cpp](#)
- file [AirInvServer.cpp](#)
- file [AirInvServer.hpp](#)
- file [AirInvServer\\_ASIO.cpp](#)
- file [BomPropertyTree.cpp](#)
- file [BomPropertyTree.hpp](#)
- file [Connection.cpp](#)
- file [Connection.hpp](#)
- file [header.hpp](#)
- file [posix\\_main.cpp](#)
- file [Reply.cpp](#)
- file [Reply.hpp](#)
- file [Request.cpp](#)
- file [Request.hpp](#)
- file [RequestHandler.cpp](#)
- file [RequestHandler.hpp](#)
- file [RequestParser.cpp](#)
- file [RequestParser.hpp](#)
- file [win\\_main.cpp](#)

## 22.11 airinv/service/ Directory Reference

### Files

- file [AIRINV\\_Master\\_Service.cpp](#)
- file [AIRINV\\_Master\\_ServiceContext.cpp](#)
- file [AIRINV\\_Master\\_ServiceContext.hpp](#)
- file [AIRINV\\_Service.cpp](#)
- file [AIRINV\\_ServiceContext.cpp](#)
- file [AIRINV\\_ServiceContext.hpp](#)
- file [ServiceAbstract.cpp](#)
- file [ServiceAbstract.hpp](#)

## 22.12 test/ Directory Reference

### Directories

- directory [airinv](#)

## 22.13 airinv/ui/ Directory Reference

### Directories

- directory [cmdline](#)

## 22.14 airinv/command/vault/ Directory Reference

### Files

- file [DCPEventGenerator.cpp](#)
- file [DCPEventGenerator.hpp](#)
- file [DCPParser.cpp](#)
- file [DCPParser.hpp](#)
- file [DCPParserHelper.cpp](#)
- file [DCPParserHelper.hpp](#)

## 23 Namespace Documentation

### 23.1 AIRINV Namespace Reference

#### Namespaces

- namespace [FFDisutilityParserHelper](#)
- namespace [FRAT5ParserHelper](#)
- namespace [InventoryParserHelper](#)
- namespace [ScheduleParserHelper](#)
- namespace [DCPParserHelper](#)

#### Classes

- class [AIRINV\\_Master\\_Service](#)  
*Interface for the [AIRINV](#) Services.*
- class [AIRINV\\_Service](#)  
*Interface for the [AIRINV](#) Services.*
- class [InventoryFileParsingFailedException](#)
- class [ScheduleFileParsingFailedException](#)
- class [MissingPartnerFlightDateWithinScheduleFile](#)
- class [FRAT5FileParsingFailedException](#)
- class [FFDisutilityFileParsingFailedException](#)

- class [SegmentDateNotFoundException](#)
- class [InventoryInputFileNotFoundException](#)
- class [ScheduleInputFileNotFoundException](#)
- class [FRAT5InputFileNotFoundException](#)
- class [FFDisutilityInputFileNotFoundException](#)
- class [FlightDateDuplicationException](#)
- class [BookingException](#)
- class [InventoryNotFoundException](#)
- class [FlightDateNotFoundException](#)
- class [InventoryFilePath](#)
- struct [DefaultMap](#)
- struct [FlightTypeCode](#)
- struct [FlightVisibilityCode](#)
- class [BomAbstract](#)
- class [BomRootHelper](#)
- class [BookingClassHelper](#)
- struct [BookingClassStruct](#)
- struct [BucketStruct](#)

*Utility Structure for the parsing of Bucket structures.*

- struct [DCPEventStruct](#)
- struct [FareFamilyStruct](#)

*Utility Structure for the parsing of fare family details.*

- struct [FFDisutilityStruct](#)
- class [FlightDateHelper](#)
- struct [FlightDateStruct](#)
- struct [FlightPeriodStruct](#)
- struct [FRAT5Struct](#)
- class [InventoryHelper](#)
- class [LegCabinHelper](#)
- struct [LegCabinStruct](#)
- struct [LegStruct](#)
- class [SegmentCabinHelper](#)

*Class representing the actual business functions for an airline segment-cabin.*

- struct [SegmentCabinStruct](#)

*Utility Structure for the parsing of SegmentCabin details.*

- class [SegmentDateHelper](#)
- class [SegmentSnapshotTableHelper](#)
- struct [SegmentStruct](#)
- class [FFDisutilityParser](#)

*Class wrapping the parser entry point.*

- class [FFDisutilityFileParser](#)
- class [FRAT5Parser](#)

*Class wrapping the parser entry point.*

- class [FRAT5FileParser](#)

- class [InventoryBuilder](#)  
*Class handling the generation / instantiation of the Inventory BOM.*
- class [InventoryGenerator](#)  
*Class handling the generation / instantiation of the Inventory BOM.*
- class [InventoryManager](#)
- class [InventoryParser](#)  
*Class wrapping the parser entry point.*
- class [InventoryFileParser](#)
- class [ScheduleParser](#)  
*Class wrapping the parser entry point.*
- class [FlightPeriodFileParser](#)
- class [DCPEventGenerator](#)
- class [DCPParser](#)
- class [DCPRuleFileParser](#)
- class [FacAirinvMasterServiceContext](#)  
*Factory for Bucket.*
- class [FacAirinvServiceContext](#)
- class [FacBomAbstract](#)
- class [FacServiceAbstract](#)
- class [FacSupervisor](#)
- struct [FlightRequestStatus](#)
- class [AirInvServer](#)
- class [Connection](#)
- struct [header](#)
- struct [Reply](#)
- struct [Request](#)
- class [RequestHandler](#)  
*The common handler for all incoming requests.*
- class [RequestParser](#)  
*Parser for incoming requests.*
- class [AIRINV\\_Master\\_ServiceContext](#)
- class [AIRINV\\_ServiceContext](#)  
*Class holding the context of the AirInv services.*
- class [ServiceAbstract](#)

## Typedefs

- typedef boost::shared\_ptr< [AIRINV\\_Service](#) > [AIRINV\\_ServicePtr\\_T](#)
- typedef boost::shared\_ptr< [AIRINV\\_Master\\_Service](#) > [AIRINV\\_Master\\_ServicePtr\\_T](#)
- typedef std::map< const stdair::AirlineCode\_T, [AIRINV\\_ServicePtr\\_T](#) > [AIRINV\\_ServicePtr\\_Map\\_T](#)
- typedef std::map< const stdair::DTD\_T, double > [FRAT5Curve\\_T](#)

- typedef char [char\\_t](#)
- typedef boost::spirit::classic::file\_iterator< [char\\_t](#) > [iterator\\_t](#)
- typedef boost::spirit::classic::scanner< [iterator\\_t](#) > [scanner\\_t](#)
- typedef boost::spirit::classic::rule< [scanner\\_t](#) > [rule\\_t](#)
- typedef boost::spirit::classic::int\_parser< unsigned int, 10, 1, 1 > [int1\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 2, 2 > [uint2\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 1, 2 > [uint1\\_2\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 1, 3 > [uint1\\_3\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 4, 4 > [uint4\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 1, 4 > [uint1\\_4\\_p\\_t](#)
- typedef boost::spirit::classic::chset< [char\\_t](#) > [chset\\_t](#)
- typedef boost::spirit::classic::impl::loop\_traits< [chset\\_t](#), unsigned int, unsigned int >::type [repeat\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< [uint2\\_p\\_t](#), unsigned int > [bounded2\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< [uint1\\_2\\_p\\_t](#), unsigned int > [bounded1\\_2\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< [uint1\\_3\\_p\\_t](#), unsigned int > [bounded1\\_3\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< [uint4\\_p\\_t](#), unsigned int > [bounded4\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< [uint1\\_4\\_p\\_t](#), unsigned int > [bounded1\\_4\\_p\\_t](#)
- typedef std::set< stdair::AirportCode\_T > [AirportList\\_T](#)
- typedef std::vector< stdair::AirportCode\_T > [AirportOrderedList\\_T](#)
- typedef std::vector< [BookingClassStruct](#) > [BookingClassStructList\\_T](#)
- typedef std::vector< [BucketStruct](#) > [BucketStructList\\_T](#)
- typedef std::vector< [FareFamilyStruct](#) > [FareFamilyStructList\\_T](#)
- typedef std::vector< [LegCabinStruct](#) > [LegCabinStructList\\_T](#)
- typedef std::vector< [LegStruct](#) > [LegStructList\\_T](#)
- typedef std::vector< [SegmentCabinStruct](#) > [SegmentCabinStructList\\_T](#)
- typedef std::vector< [SegmentStruct](#) > [SegmentStructList\\_T](#)
- typedef std::map< const stdair::Date\_T, stdair::SegmentCabin \* > [DepartureDateSegmentCabinMap\\_T](#)
- typedef std::map< const std::string, [DepartureDateSegmentCabinMap\\_T](#) > [SimilarSegmentCabinSetMap\\_T](#)
- typedef boost::shared\_ptr< boost::thread > [ThreadShrPtr\\_T](#)
- typedef std::vector< [ThreadShrPtr\\_T](#) > [ThreadShrPtrList\\_T](#)
- typedef boost::shared\_ptr< [Connection](#) > [ConnectionShrPtr\\_T](#)

## Variables

- const std::string [DEFAULT\\_AIRLINE\\_CODE](#) = "BA"
- const [FRAT5Curve\\_T](#) [DEFAULT\\_PICKUP\\_FRAT5\\_CURVE](#)

### 23.1.1 Typedef Documentation

#### 23.1.1.1 typedef boost::shared\_ptr<AIRINV\_Service> AIRINV::AIRINV\_ServicePtr\_T

(Smart) Pointer on the AirInv (slave) service handler.

Definition at line 210 of file [AIRINV\\_Types.hpp](#).

**23.1.1.2** `typedef boost::shared_ptr<AIRINV_Master_Service> AIRINV::AIRINV_Master_ServicePtr_T`

(Smart) Pointer on the AirInv master service handler.

Definition at line 215 of file [AIRINV\\_Types.hpp](#).

**23.1.1.3** `typedef std::map<const stdair::AirlineCode_T, AIRINV_ServicePtr_T> AIRINV::AIRINV_ServicePtr_Map_T`

Type defining a map of airline codes and the corresponding airline inventories.

Definition at line 222 of file [AIRINV\\_Types.hpp](#).

**23.1.1.4** `typedef std::map<const stdair::DTD_T, double> AIRINV::FRAT5Curve_T`

Define the FRAT5 curve.

Definition at line 227 of file [AIRINV\\_Types.hpp](#).

**23.1.1.5** `typedef char AIRINV::char_t`

Definition at line 31 of file [BasParserTypes.hpp](#).

**23.1.1.6** `typedef boost::spirit::classic::file_iterator<char_t> AIRINV::iterator_t`

Definition at line 35 of file [BasParserTypes.hpp](#).

**23.1.1.7** `typedef boost::spirit::classic::scanner<iterator_t> AIRINV::scanner_t`

Definition at line 36 of file [BasParserTypes.hpp](#).

**23.1.1.8** `typedef boost::spirit::classic::rule<scanner_t> AIRINV::rule_t`

Definition at line 37 of file [BasParserTypes.hpp](#).

**23.1.1.9** `typedef boost::spirit::classic::int_parser<unsigned int, 10, 1, 1> AIRINV::int1_p_t`

1-digit-integer parser

Definition at line 45 of file [BasParserTypes.hpp](#).

**23.1.1.10** `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 2, 2> AIRINV::uint2_p_t`

2-digit-integer parser

Definition at line 48 of file [BasParserTypes.hpp](#).

**23.1.1.11** `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 2> AIRINV::uint1_2_p_t`

Up-to-2-digit-integer parser

Definition at line 51 of file [BasParserTypes.hpp](#).

**23.1.1.12** `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 3> AIRINV::uint1_3_p_t`

Up-to-3-digit-integer parser

Definition at line 54 of file [BasParserTypes.hpp](#).

**23.1.1.13** `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 4, 4> AIRINV::uint4_p_t`

4-digit-integer parser

Definition at line 57 of file [BasParserTypes.hpp](#).

**23.1.1.14** `typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 4> AIRINV::uint1_4_p_t`

Up-to-4-digit-integer parser

Definition at line 60 of file [BasParserTypes.hpp](#).

**23.1.1.15** `typedef boost::spirit::classic::chset<char_t> AIRINV::chset_t`

character set

Definition at line 63 of file [BasParserTypes.hpp](#).

**23.1.1.16** `typedef boost::spirit::classic::impl::loop_traits<chset_t, unsigned int, unsigned int>::type AIRINV::repeat_p_t`

(Repeating) sequence of a given number of characters: repeat\_p(min, max)

Definition at line 69 of file [BasParserTypes.hpp](#).

**23.1.1.17** `typedef boost::spirit::classic::bounded<uint2_p_t, unsigned int>  
AIRINV::bounded2_p_t`

Bounded-number-of-integers parser

Definition at line 72 of file [BasParserTypes.hpp](#).

**23.1.1.18** `typedef boost::spirit::classic::bounded<uint1_2_p_t, unsigned int>  
AIRINV::bounded1_2_p_t`

Definition at line 73 of file [BasParserTypes.hpp](#).

**23.1.1.19** `typedef boost::spirit::classic::bounded<uint1_3_p_t, unsigned int>  
AIRINV::bounded1_3_p_t`

Definition at line 74 of file [BasParserTypes.hpp](#).

**23.1.1.20** `typedef boost::spirit::classic::bounded<uint4_p_t, unsigned int>  
AIRINV::bounded4_p_t`

Definition at line 75 of file [BasParserTypes.hpp](#).

**23.1.1.21** `typedef boost::spirit::classic::bounded<uint1_4_p_t, unsigned int>  
AIRINV::bounded1_4_p_t`

Definition at line 76 of file [BasParserTypes.hpp](#).

**23.1.1.22** `typedef std::set<stdair::AirportCode_T> AIRINV::AirportList_T`

Define lists of Airport Codes.

Definition at line 16 of file [AirportList.hpp](#).

**23.1.1.23** `typedef std::vector<stdair::AirportCode_T> AIRINV::AirportOrderedList_T`

Definition at line 17 of file [AirportList.hpp](#).

**23.1.1.24** `typedef std::vector<BookingClassStruct> AIRINV::BookingClassStructList_T`

List of BookingClass structures.

Definition at line 60 of file [BookingClassStruct.hpp](#).

**23.1.1.25** `typedef std::vector<BucketStruct> AIRINV::BucketStructList_T`

List of Bucket structures.

Definition at line 44 of file [BucketStruct.hpp](#).



**23.1.1.26** `typedef std::vector<FareFamilyStruct> AIRINV::FareFamilyStructList_T`

List of FareFamily-Detail structures.

Definition at line 59 of file [FareFamilyStruct.hpp](#).

**23.1.1.27** `typedef std::vector<LegCabinStruct> AIRINV::LegCabinStructList_T`

List of LegCabin-Detail structures.

Definition at line 52 of file [LegCabinStruct.hpp](#).

**23.1.1.28** `typedef std::vector<LegStruct> AIRINV::LegStructList_T`

List of Leg structures.

Definition at line 57 of file [LegStruct.hpp](#).

**23.1.1.29** `typedef std::vector<SegmentCabinStruct> AIRINV::SegmentCabinStructList_T`

List of SegmentCabin-Detail structures.

Definition at line 48 of file [SegmentCabinStruct.hpp](#).

**23.1.1.30** `typedef std::vector<SegmentStruct> AIRINV::SegmentStructList_T`

List of Segment structures.

Definition at line 43 of file [SegmentStruct.hpp](#).

**23.1.1.31** `typedef std::map<const stdair::Date_T, stdair::SegmentCabin*>  
AIRINV::DepartureDateSegmentCabinMap_T`

Definition at line 31 of file [InventoryManager.hpp](#).

**23.1.1.32** `typedef std::map<const std::string, DepartureDateSegmentCabinMap_T>  
AIRINV::SimilarSegmentCabinSetMap_T`

Definition at line 33 of file [InventoryManager.hpp](#).

**23.1.1.33** `typedef boost::shared_ptr<boost::thread> AIRINV::ThreadShrPtr_T`

Definition at line 15 of file [AirInvServer\\_ASIO.cpp](#).

**23.1.1.34** `typedef std::vector<ThreadShrPtr_T> AIRINV::ThreadShrPtrList_T`

Definition at line 16 of file [AirInvServer\\_ASIO.cpp](#).

**23.1.1.35** `typedef boost::shared_ptr<Connection> AIRINV::ConnectionShrPtr_T`

Shared pointer on a [Connection](#) object.

Definition at line 71 of file [Connection.hpp](#).

**23.1.2 Variable Documentation****23.1.2.1** `const std::string AIRINV::DEFAULT_AIRLINE_CODE = "BA"`

Default airline name for the [AIRINV\\_Service](#).

Definition at line 11 of file [BasConst.cpp](#).

**23.1.2.2** `const FRAT5Curve_T AIRINV::DEFAULT_PICKUP_FRAT5_CURVE`

**Initial value:**

```
DefaultMap::createPickupFRAT5Curve()
```

Default pick-up FRAT5 curve for Q-equivalent booking conversion.

Definition at line 14 of file [BasConst.cpp](#).

**23.2 AIRINV::DCPParserHelper Namespace Reference****Classes**

- struct [ParserSemanticAction](#)
- struct [storeDCPIId](#)
- struct [storeOrigin](#)
- struct [storeDestination](#)
- struct [storeDateRangeStart](#)
- struct [storeDateRangeEnd](#)
- struct [storeStartRangeTime](#)
- struct [storeEndRangeTime](#)
- struct [storePOS](#)
- struct [storeCabinCode](#)
- struct [storeChannel](#)
- struct [storeAdvancePurchase](#)
- struct [storeSaturdayStay](#)
- struct [storeChangeFees](#)
- struct [storeNonRefundable](#)
- struct [storeMinimumStay](#)

- struct [storeDCP](#)
- struct [storeAirlineCode](#)
- struct [storeClass](#)
- struct [doEndDCP](#)
- struct [DCPRuleParser](#)

### Variables

- stdair::int1\_p\_t [int1\\_p](#)
- stdair::uint2\_p\_t [uint2\\_p](#)
- stdair::uint4\_p\_t [uint4\\_p](#)
- stdair::uint1\_4\_p\_t [uint1\\_4\\_p](#)
- stdair::hour\_p\_t [hour\\_p](#)
- stdair::minute\_p\_t [minute\\_p](#)
- stdair::second\_p\_t [second\\_p](#)
- stdair::year\_p\_t [year\\_p](#)
- stdair::month\_p\_t [month\\_p](#)
- stdair::day\_p\_t [day\\_p](#)

#### 23.2.1 Variable Documentation

##### 23.2.1.1 stdair::int1\_p\_t AIRINV::DCPParserHelper::int1\_p

Namespaces. 1-digit-integer parser

Definition at line [427](#) of file [DCPParserHelper.cpp](#).

##### 23.2.1.2 stdair::uint2\_p\_t AIRINV::DCPParserHelper::uint2\_p

2-digit-integer parser

Definition at line [430](#) of file [DCPParserHelper.cpp](#).

##### 23.2.1.3 stdair::uint4\_p\_t AIRINV::DCPParserHelper::uint4\_p

4-digit-integer parser

Definition at line [433](#) of file [DCPParserHelper.cpp](#).

##### 23.2.1.4 stdair::uint1\_4\_p\_t AIRINV::DCPParserHelper::uint1\_4\_p

Up-to-4-digit-integer parser

Definition at line [436](#) of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

#### 23.2.1.5 stdair::hour\_p\_t AIRINV::DCPParserHelper::hour\_p

Time element parsers.

Definition at line 439 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

#### 23.2.1.6 stdair::minute\_p\_t AIRINV::DCPParserHelper::minute\_p

Definition at line 440 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

#### 23.2.1.7 stdair::second\_p\_t AIRINV::DCPParserHelper::second\_p

Definition at line 441 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

#### 23.2.1.8 stdair::year\_p\_t AIRINV::DCPParserHelper::year\_p

Date element parsers.

Definition at line 444 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

#### 23.2.1.9 stdair::month\_p\_t AIRINV::DCPParserHelper::month\_p

Definition at line 445 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

#### 23.2.1.10 stdair::day\_p\_t AIRINV::DCPParserHelper::day\_p

Definition at line 446 of file [DCPParserHelper.cpp](#).

Referenced by [AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser\(\)](#).

### 23.3 AIRINV::FFDisutilityParserHelper Namespace Reference

#### Classes

- struct [ParserSemanticAction](#)
- struct [storeCurveKey](#)
- struct [storeDTD](#)

- struct [storeFFDisutilityValue](#)
- struct [doEndCurve](#)
- struct [FFDisutilityParser](#)

## Functions

- [repeat\\_p\\_t key\\_p](#) ([chset\\_t](#)("0-9A-Z").derived(), 1, 10)

### 23.3.1 Function Documentation

#### 23.3.1.1 [repeat\\_p\\_t](#) AIRINV::FFDisutilityParserHelper::key\_p ([chset\\_t](#)("0-9A-Z").derived(), 1, 10)

Key Parser: [repeat\\_p](#)(1,10)[[chset\\_p](#)("0-9A-Z")]

Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

## 23.4 AIRINV::FRAT5ParserHelper Namespace Reference

### Classes

- struct [ParserSemanticAction](#)
- struct [storeCurveKey](#)
- struct [storeDTD](#)
- struct [storeFRAT5Value](#)
- struct [doEndCurve](#)
- struct [FRAT5Parser](#)

## Functions

- [repeat\\_p\\_t key\\_p](#) ([chset\\_t](#)("0-9A-Z").derived(), 1, 10)

### 23.4.1 Function Documentation

#### 23.4.1.1 [repeat\\_p\\_t](#) AIRINV::FRAT5ParserHelper::key\_p ([chset\\_t](#)("0-9A-Z").derived(), 1, 10)

Key Parser: [repeat\\_p](#)(1,10)[[chset\\_p](#)("0-9A-Z")]

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

## 23.5 AIRINV::InventoryParserHelper Namespace Reference

### Classes

- struct [ParserSemanticAction](#)
- struct [storeSnapshotDate](#)
- struct [storeAirlineCode](#)
- struct [storeFlightNumber](#)
- struct [storeFlightDate](#)

- struct [storeFlightTypeCode](#)
- struct [storeFlightVisibilityCode](#)
- struct [storeLegBoardingPoint](#)
- struct [storeLegOffPoint](#)
- struct [storeOperatingAirlineCode](#)
- struct [storeOperatingFlightNumber](#)
- struct [storeBoardingDate](#)
- struct [storeBoardingTime](#)
- struct [storeOffDate](#)
- struct [storeOffTime](#)
- struct [storeLegCabinCode](#)
- struct [storeSaleableCapacity](#)
- struct [storeAU](#)
- struct [storeUPR](#)
- struct [storeBookingCounter](#)
- struct [storeNAV](#)
- struct [storeGAV](#)
- struct [storeACP](#)
- struct [storeETB](#)
- struct [storeYieldUpperRange](#)
- struct [storeBucketAvailibility](#)
- struct [storeSeatIndex](#)
- struct [storeSegmentBoardingPoint](#)
- struct [storeSegmentOffPoint](#)
- struct [storeSegmentCabinCode](#)
- struct [storeSegmentCabinBookingCounter](#)
- struct [storeClassCode](#)
- struct [storeSubclassCode](#)
- struct [storeParentClassCode](#)
- struct [storeParentSubclassCode](#)
- struct [storeCumulatedProtection](#)
- struct [storeProtection](#)
- struct [storeNego](#)
- struct [storeNoShow](#)
- struct [storeOverbooking](#)
- struct [storeNbOfBkgs](#)
- struct [storeNbOfGroupBkgs](#)
- struct [storeNbOfPendingGroupBkgs](#)
- struct [storeNbOfStaffBkgs](#)
- struct [storeNbOfWLBkgs](#)
- struct [storeClassETB](#)
- struct [storeClassAvailability](#)
- struct [storeSegmentAvailability](#)
- struct [storeRevenueAvailability](#)
- struct [storeFamilyCode](#)
- struct [storeFClasses](#)
- struct [doEndFlightDate](#)
- struct [InventoryParser](#)

**Functions**

- [repeat\\_p\\_t airline\\_code\\_p](#) ([chset\\_t](#)("0-9A-Z").[derived\(\)](#), 2, 3)
- [bounded1\\_4\\_p\\_t flight\\_number\\_p](#) ([uint1\\_4\\_p](#).[derived\(\)](#), 0u, 9999u)
- [bounded2\\_p\\_t year\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 0u, 99u)
- [bounded2\\_p\\_t month\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 1u, 12u)
- [bounded2\\_p\\_t day\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 1u, 31u)
- [repeat\\_p\\_t dow\\_p](#) ([chset\\_t](#)("0-1").[derived\(\)](#).[derived\(\)](#), 7, 7)
- [repeat\\_p\\_t airport\\_p](#) ([chset\\_t](#)("0-9A-Z").[derived\(\)](#), 3, 3)
- [bounded1\\_2\\_p\\_t hours\\_p](#) ([uint1\\_2\\_p](#).[derived\(\)](#), 0u, 24u)
- [bounded2\\_p\\_t minutes\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 0u, 59u)
- [bounded2\\_p\\_t seconds\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 0u, 59u)
- [chset\\_t cabin\\_code\\_p](#) ("A-Z")
- [chset\\_t class\\_code\\_p](#) ("A-Z")
- [chset\\_t passenger\\_type\\_p](#) ("A-Z")
- [repeat\\_p\\_t class\\_code\\_list\\_p](#) ([chset\\_t](#)("A-Z").[derived\(\)](#), 1, 26)
- [bounded1\\_3\\_p\\_t stay\\_duration\\_p](#) ([uint1\\_3\\_p](#).[derived\(\)](#), 0u, 999u)

**Variables**

- [int1\\_p\\_t int1\\_p](#)
- [uint2\\_p\\_t uint2\\_p](#)
- [uint1\\_2\\_p\\_t uint1\\_2\\_p](#)
- [uint1\\_3\\_p\\_t uint1\\_3\\_p](#)
- [uint4\\_p\\_t uint4\\_p](#)
- [uint1\\_4\\_p\\_t uint1\\_4\\_p](#)
- [int1\\_p\\_t family\\_code\\_p](#)

**23.5.1 Function Documentation****23.5.1.1 repeat\_p\_t AIRINV::InventoryParserHelper::airline\_code\_p**  
([chset\\_t](#)("0-9A-Z").[derived\(\)](#), 2, 3)

Airline Code Parser: [repeat\\_p](#)(2,3)[[chset\\_p](#)("0-9A-Z")]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**23.5.1.2 bounded1\_4\_p\_t AIRINV::InventoryParserHelper::flight\_number\_p** ([uint1\\_4\\_p](#).  
[derived\(\)](#), 0u, 9999u)

Flight Number Parser: [limit\\_d](#)(0u, 9999u)[[uint1\\_4\\_p](#)]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**23.5.1.3 bounded2\_p\_t AIRINV::InventoryParserHelper::year\_p** ([uint2\\_p](#). [derived\(\)](#), 0u, 99u)

Year Parser: [limit\\_d](#)(00u, 99u)[[uint4\\_p](#)]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**23.5.1.4 bounded2\_p\_t AIRINV::InventoryParserHelper::month\_p (uint2\_p. *derived*(), 1u, 12u)**

Month Parser: limit\_d(1u, 12u)[uint2\_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.1.5 bounded2\_p\_t AIRINV::InventoryParserHelper::day\_p (uint2\_p. *derived*(), 1u, 31u)**

Day Parser: limit\_d(1u, 31u)[uint2\_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.1.6 repeat\_p\_t AIRINV::InventoryParserHelper::dow\_p (chset\_t("0-1").*derived*().*derived*(), 7, 7)**

DOW (Day-Of-the-Week) Parser: repeat\_p(7)[chset\_p("0-1")]

**23.5.1.7 repeat\_p\_t AIRINV::InventoryParserHelper::airport\_p (chset\_t("0-9A-Z").*derived*(), 3, 3)**

Airport Parser: repeat\_p(3)[chset\_p("0-9A-Z")]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.1.8 bounded1\_2\_p\_t AIRINV::InventoryParserHelper::hours\_p (uint1\_2\_p. *derived*(), 0u, 24u)**

Hour Parser: limit\_d(0u, 24u)[uint2\_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.1.9 bounded2\_p\_t AIRINV::InventoryParserHelper::minutes\_p (uint2\_p. *derived*(), 0u, 59u)**

Minute Parser: limit\_d(0u, 59u)[uint2\_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.1.10 bounded2\_p\_t AIRINV::InventoryParserHelper::seconds\_p (uint2\_p. *derived*(), 0u, 59u)**

Second Parser: limit\_d(0u, 59u)[uint2\_p]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.1.11 chset\_t AIRINV::InventoryParserHelper::cabin\_code\_p ("A-Z")**

Cabin code parser: chset\_p("A-Z")

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).



**23.5.1.12 chset\_t AIRINV::InventoryParserHelper::class\_code\_p ("A-Z")**

Booking class code parser: chset\_p("A-Z")

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.1.13 chset\_t AIRINV::InventoryParserHelper::passenger\_type\_p ("A-Z")**

Passenger type parser: chset\_p("A-Z")

**23.5.1.14 repeat\_p\_t AIRINV::InventoryParserHelper::class\_code\_list\_p  
(chset\_t("A-Z").derived(), 1, 26)**

Class Code List Parser: repeat\_p(1,26)[chset\_p("A-Z")]

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.1.15 bounded1\_3\_p\_t AIRINV::InventoryParserHelper::stay\_duration\_p (uint1\_3\_p.  
derived(), 0u, 999u)**

Stay duration Parser: limit\_d(0u, 999u)[uint3\_p]

**23.5.2 Variable Documentation****23.5.2.1 int1\_p\_t AIRINV::InventoryParserHelper::int1\_p**

1-digit-integer parser

Definition at line 823 of file [InventoryParserHelper.cpp](#).**23.5.2.2 uint2\_p\_t AIRINV::InventoryParserHelper::uint2\_p**

2-digit-integer parser

Definition at line 826 of file [InventoryParserHelper.cpp](#).**23.5.2.3 uint1\_2\_p\_t AIRINV::InventoryParserHelper::uint1\_2\_p**

Up-to-2-digit-integer parser

Definition at line 829 of file [InventoryParserHelper.cpp](#).Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).**23.5.2.4 uint1\_3\_p\_t AIRINV::InventoryParserHelper::uint1\_3\_p**

Up-to-3-digit-integer parser

Definition at line 832 of file [InventoryParserHelper.cpp](#).Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

#### 23.5.2.5 uint4\_p\_t AIRINV::InventoryParserHelper::uint4\_p

4-digit-integer parser

Definition at line 835 of file [InventoryParserHelper.cpp](#).

#### 23.5.2.6 uint1\_4\_p\_t AIRINV::InventoryParserHelper::uint1\_4\_p

Up-to-4-digit-integer parser

Definition at line 838 of file [InventoryParserHelper.cpp](#).

#### 23.5.2.7 int1\_p\_t AIRINV::InventoryParserHelper::family\_code\_p

Family code parser

Definition at line 880 of file [InventoryParserHelper.cpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

## 23.6 AIRINV::ScheduleParserHelper Namespace Reference

### Classes

- struct [ParserSemanticAction](#)
- struct [storeAirlineCode](#)
- struct [storeFlightNumber](#)
- struct [storeDateRangeStart](#)
- struct [storeDateRangeEnd](#)
- struct [storeDow](#)
- struct [storeLegBoardingPoint](#)
- struct [storeLegOffPoint](#)
- struct [storeOperatingAirlineCode](#)
- struct [storeOperatingFlightNumber](#)
- struct [storeBoardingTime](#)
- struct [storeOffTime](#)
- struct [storeElapsedTime](#)
- struct [storeLegCabinCode](#)
- struct [storeCapacity](#)
- struct [storeSegmentSpecificity](#)
- struct [storeSegmentBoardingPoint](#)
- struct [storeSegmentOffPoint](#)
- struct [storeSegmentCabinCode](#)
- struct [storeClasses](#)
- struct [storeFamilyCode](#)
- struct [storeFRAT5CurveKey](#)
- struct [storeFFDisutilityCurveKey](#)
- struct [storeFClasses](#)
- struct [doEndFlight](#)
- struct [FlightPeriodParser](#)

## Functions

- [repeat\\_p\\_t airline\\_code\\_p](#) ([chset\\_t](#)("0-9A-Z").[derived\(\)](#), 2, 3)
- [bounded1\\_4\\_p\\_t flight\\_number\\_p](#) ([uint1\\_4\\_p](#).[derived\(\)](#), 0u, 9999u)
- [bounded4\\_p\\_t year\\_p](#) ([uint4\\_p](#).[derived\(\)](#), 2000u, 2099u)
- [bounded2\\_p\\_t month\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 1u, 12u)
- [bounded2\\_p\\_t day\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 1u, 31u)
- [repeat\\_p\\_t dow\\_p](#) ([chset\\_t](#)("0-1").[derived\(\)](#).[derived\(\)](#), 7, 7)
- [repeat\\_p\\_t airport\\_p](#) ([chset\\_t](#)("0-9A-Z").[derived\(\)](#), 3, 3)
- [bounded2\\_p\\_t hours\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 0u, 23u)
- [bounded2\\_p\\_t minutes\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 0u, 59u)
- [bounded2\\_p\\_t seconds\\_p](#) ([uint2\\_p](#).[derived\(\)](#), 0u, 59u)
- [chset\\_t cabin\\_code\\_p](#) ("A-Z")
- [repeat\\_p\\_t key\\_p](#) ([chset\\_t](#)("0-9A-Z").[derived\(\)](#), 1, 10)
- [repeat\\_p\\_t class\\_code\\_list\\_p](#) ([chset\\_t](#)("A-Z").[derived\(\)](#), 1, 26)

## Variables

- [int1\\_p\\_t int1\\_p](#)
- [uint2\\_p\\_t uint2\\_p](#)
- [uint4\\_p\\_t uint4\\_p](#)
- [uint1\\_4\\_p\\_t uint1\\_4\\_p](#)
- [int1\\_p\\_t family\\_code\\_p](#)

### 23.6.1 Function Documentation

#### 23.6.1.1 [repeat\\_p\\_t AIRINV::ScheduleParserHelper::airline\\_code\\_p](#) ([chset\\_t](#)("0-9A-Z").[derived\(\)](#), 2, 3)

Airline Code Parser: [repeat\\_p\(2,3\)\[chset\\_p\("0-9A-Z"\)\]](#)

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

#### 23.6.1.2 [bounded1\\_4\\_p\\_t AIRINV::ScheduleParserHelper::flight\\_number\\_p](#) ([uint1\\_4\\_p](#). [derived\(\)](#), 0u, 9999u)

Flight Number Parser: [limit\\_d\(0u, 9999u\)\[uint1\\_4\\_p\]](#)

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

#### 23.6.1.3 [bounded4\\_p\\_t AIRINV::ScheduleParserHelper::year\\_p](#) ([uint4\\_p](#). [derived\(\)](#), 2000u, 2099u)

Year Parser: [limit\\_d\(2000u, 2099u\)\[uint4\\_p\]](#)

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**23.6.1.4 bounded2\_p\_t AIRINV::ScheduleParserHelper::month\_p (uint2\_p. *derived*(), 1u, 12u)**

Month Parser: limit\_d(1u, 12u)[uint2\_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).**23.6.1.5 bounded2\_p\_t AIRINV::ScheduleParserHelper::day\_p (uint2\_p. *derived*(), 1u, 31u)**

Day Parser: limit\_d(1u, 31u)[uint2\_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).**23.6.1.6 repeat\_p\_t AIRINV::ScheduleParserHelper::dow\_p (chset\_t("0-1").*derived*().*derived*(), 7, 7)**

DOW (Day-Of-the-Week) Parser: repeat\_p(7)[chset\_p("0-1")]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).**23.6.1.7 repeat\_p\_t AIRINV::ScheduleParserHelper::airport\_p (chset\_t("0-9A-Z").*derived*(), 3, 3)**

Airport Parser: repeat\_p(3)[chset\_p("0-9A-Z")]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).**23.6.1.8 bounded2\_p\_t AIRINV::ScheduleParserHelper::hours\_p (uint2\_p. *derived*(), 0u, 23u)**

Hour Parser: limit\_d(0u, 23u)[uint2\_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).**23.6.1.9 bounded2\_p\_t AIRINV::ScheduleParserHelper::minutes\_p (uint2\_p. *derived*(), 0u, 59u)**

Minute Parser: limit\_d(0u, 59u)[uint2\_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).**23.6.1.10 bounded2\_p\_t AIRINV::ScheduleParserHelper::seconds\_p (uint2\_p. *derived*(), 0u, 59u)**

Second Parser: limit\_d(0u, 59u)[uint2\_p]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**23.6.1.11 chset\_t AIRINV::ScheduleParserHelper::cabin\_code\_p ("A-Z")**

Cabin Code Parser: chset\_p("A-Z")

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**23.6.1.12 repeat\_p\_t AIRINV::ScheduleParserHelper::key\_p (chset\_t("0-9A-Z").derived(), 1, 10)**

Key Parser: repeat\_p(1,10)[chset\_p("0-9A-Z")]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**23.6.1.13 repeat\_p\_t AIRINV::ScheduleParserHelper::class\_code\_list\_p (chset\_t("A-Z").derived(), 1, 26)**

Class Code List Parser: repeat\_p(1,26)[chset\_p("A-Z")]

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**23.6.2 Variable Documentation****23.6.2.1 int1\_p\_t AIRINV::ScheduleParserHelper::int1\_p**

1-digit-integer parser

Definition at line 469 of file [ScheduleParserHelper.cpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**23.6.2.2 uint2\_p\_t AIRINV::ScheduleParserHelper::uint2\_p**

2-digit-integer parser

Definition at line 472 of file [ScheduleParserHelper.cpp](#).

**23.6.2.3 uint4\_p\_t AIRINV::ScheduleParserHelper::uint4\_p**

4-digit-integer parser

Definition at line 475 of file [ScheduleParserHelper.cpp](#).

**23.6.2.4 uint1\_4\_p\_t AIRINV::ScheduleParserHelper::uint1\_4\_p**

Up-to-4-digit-integer parser

Definition at line 478 of file [ScheduleParserHelper.cpp](#).

**23.6.2.5 int1\_p\_t AIRINV::ScheduleParserHelper::family\_code\_p**

Family code parser

Definition at line 514 of file [ScheduleParserHelper.cpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

## 23.7 stdair Namespace Reference

Forward declarations.

### Classes

- struct [BomPropertyTree](#)

### 23.7.1 Detailed Description

Forward declarations.

## 24 Class Documentation

### 24.1 AIRINV::AIRINV\_Master\_Service Class Reference

Interface for the [AIRINV](#) Services.

```
#include <airinv/AIRINV_Master_Service.hpp>
```

#### Public Member Functions

- [AIRINV\\_Master\\_Service](#) (const stdair::BasLogParams &, const stdair::BasDBParams &)
- [AIRINV\\_Master\\_Service](#) (const stdair::BasLogParams &)
- [AIRINV\\_Master\\_Service](#) (stdair::STDAIR\_ServicePtr\_T)
- [AIRINV\\_Master\\_Service](#) (stdair::STDAIR\_ServicePtr\_T, SEVMGR::SEVMGR\_ServicePtr\_T)
- void [parseAndLoad](#) (const [InventoryFilePath](#) &)
- void [parseAndLoad](#) (const stdair::ScheduleFilePath &, const stdair::ODFilePath &, const stdair::FRAT5FilePath &, const stdair::FFDisutilityFilePath &, const AIRRAC::YieldFilePath &)
- [~AIRINV\\_Master\\_Service](#) ()
- void [initSnapshotAndRMEvents](#) (const stdair::Date\_T &, const stdair::Date\_T &)
- void [buildSampleBom](#) ()
- void [clonePersistentBom](#) ()
- void [buildComplementaryLinks](#) (stdair::BomRoot &)
- void [calculateAvailability](#) (stdair::TravelSolutionStruct &)
- bool [sell](#) (const std::string &iSegmentDateKey, const stdair::ClassCode\_T &, const stdair::PartySize\_T &)
- bool [sell](#) (const stdair::BookingClassID\_T &, const stdair::PartySize\_T &)
- bool [cancel](#) (const std::string &iSegmentDateKey, const stdair::ClassCode\_T &, const stdair::PartySize\_T &)
- bool [cancel](#) (const stdair::BookingClassID\_T &, const stdair::PartySize\_T &)
- void [takeSnapshots](#) (const stdair::SnapshotStruct &)
- void [optimise](#) (const stdair::RMEventStruct &)
- std::string [jsonHandler](#) (const stdair::JSONString &) const

- std::string [jsonExportFlightDateList](#) (const stdair::AirlineCode\_T &iAirlineCode="all", const stdair::FlightNumber\_T &iFlightNumber=0) const
- std::string [jsonExportFlightDateObjects](#) (const stdair::AirlineCode\_T &, const stdair::FlightNumber\_T &, const stdair::Date\_T &iDepartureDate) const
- std::string [list](#) (const stdair::AirlineCode\_T &iAirlineCode="all", const stdair::FlightNumber\_T &iFlightNumber=0) const
- bool [check](#) (const stdair::AirlineCode\_T &, const stdair::FlightNumber\_T &, const stdair::Date\_T &iDepartureDate) const
- std::string [csvDisplay](#) () const
- std::string [csvDisplay](#) (const stdair::AirlineCode\_T &, const stdair::FlightNumber\_T &, const stdair::Date\_T &iDepartureDate) const

### 24.1.1 Detailed Description

Interface for the [AIRINV](#) Services.

Definition at line 47 of file [AIRINV\\_Master\\_Service.hpp](#).

### 24.1.2 Constructor & Destructor Documentation

#### 24.1.2.1 AIRINV::AIRINV\_Master\_Service::AIRINV\_Master\_Service (const stdair::BasLogParams & iLogParams, const stdair::BasDBParams & iDBParams)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Moreover, database connection parameters are given, so that a session can be created on the corresponding database.

#### Parameters:

**const** stdair::BasLogParams& Parameters for the output log stream.

**const** stdair::BasDBParams& Parameters for the database access.

Definition at line 46 of file [AIRINV\\_Master\\_Service.cpp](#).

#### 24.1.2.2 AIRINV::AIRINV\_Master\_Service::AIRINV\_Master\_Service (const stdair::BasLogParams & iLogParams)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

#### Parameters:

**const** stdair::BasLogParams& Parameters for the output log stream.

Definition at line 68 of file [AIRINV\\_Master\\_Service.cpp](#).

### 24.1.2.3 AIRINV::AIRINV\_Master\_Service::AIRINV\_Master\_Service (stdair::STDAIR\_ServicePtr\_T ioSTDAIR\_Service\_ptr)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

Moreover, as no reference on any output stream is given, it is assumed that the StdAir log service has already been initialised with the proper log output stream by some other methods in the calling chain (for instance, when the [AIRINV\\_Master\\_Service](#) is itself being initialised by another library service such as SIMCRS\_Service).

#### Parameters:

*stdair::STDAIR\_ServicePtr\_T* Reference on the STDAIR service.

Definition at line 89 of file [AIRINV\\_Master\\_Service.cpp](#).

### 24.1.2.4 AIRINV::AIRINV\_Master\_Service::AIRINV\_Master\_Service (stdair::STDAIR\_ServicePtr\_T ioSTDAIR\_Service\_ptr, SEVMGR::SEVMGR\_ServicePtr\_T ioSEVMGR\_Service\_ptr)

Constructor.

The initSlaveAirinvService() method is called; see the corresponding documentation for more details.

Moreover, as no reference on any output stream is given, it is assumed that the StdAir log service has already been initialised with the proper log output stream by some other methods in the calling chain (for instance, when the [AIRINV\\_Master\\_Service](#) is itself being initialised by another library service such as SIMCRS\_Service).

#### Parameters:

*stdair::STDAIR\_ServicePtr\_T* Reference on the STDAIR service.

*stdair::SEVMGR\_ServicePtr\_T* Reference on the SEVMGR service.

Definition at line 106 of file [AIRINV\\_Master\\_Service.cpp](#).

### 24.1.2.5 AIRINV::AIRINV\_Master\_Service::~~AIRINV\_Master\_Service ()

Destructor.

Definition at line 127 of file [AIRINV\\_Master\\_Service.cpp](#).

## 24.1.3 Member Function Documentation

### 24.1.3.1 void AIRINV::AIRINV\_Master\_Service::parseAndLoad (const InventoryFilePath & iInventoryInputFilename)

Parse the inventory dump and load it into memory.

The CSV file, describing the airline inventory for the simulator, is parsed and instantiated in memory accordingly.



**Parameters:**

**const** [InventoryFilePath](#)& Filename of the input inventory file.

Definition at line 255 of file [AIRINV\\_Master\\_Service.cpp](#).

References [clonePersistentBom\(\)](#), and [AIRINV::AIRINV\\_Service::parseAndLoad\(\)](#).

### 24.1.3.2 void AIRINV::AIRINV\_Master\_Service::parseAndLoad (const stdair::ScheduleFilePath & iScheduleInputFilename, const stdair::ODFilePath & iODInputFilename, const stdair::FRAT5FilePath & iFRAT5InputFilename, const stdair::FFDisutilityFilePath & iFFDisutilityInputFilename, const AIRRAC::YieldFilePath & iYieldFilename)

Parse the schedule and O&D input files, and load them into memory.

The CSV files, describing the airline schedule and the O&Ds for the simulator, are parsed and instantiated in memory accordingly.

**Parameters:**

**const** stdair::ScheduleFilePath& Filename of the input schedule file.

**const** stdair::ODFilePath& Filename of the input O&D file.

**const** stdair::FRAT5FilePath& Filename of the input FRAT5 file.

**const** stdair::FFDisutilityFilePath& Filename of the input FF disutility file.

**const** AIRRAC::YieldFilePath& Filename of the input yield file.

Definition at line 353 of file [AIRINV\\_Master\\_Service.cpp](#).

References [buildComplementaryLinks\(\)](#), [clonePersistentBom\(\)](#), and [AIRINV::AIRINV\\_Service::parseAndLoad\(\)](#).

### 24.1.3.3 void AIRINV::AIRINV\_Master\_Service::initSnapshotAndRMEvents (const stdair::Date\_T & iStartDate, const stdair::Date\_T & iEndDate)

Initialise the snapshot and RM events for the inventories.

**Parameters:**

**const** stdair::Date\_T& Parameters for the start date.

**const** stdair::Date\_T& Parameters for the end date.

Definition at line 647 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::initRMEvents\(\)](#).

### 24.1.3.4 void AIRINV::AIRINV\_Master\_Service::buildSampleBom ()

Build a sample BOM tree, and attach it to the BomRoot instance.

The BOM tree is based on two actual inventories (one for BA, another for AF). Each inventory contains one flight. One of those flights has two legs (and therefore three segments).

Definition at line 291 of file [AIRINV\\_Master\\_Service.cpp](#).

References [buildComplementaryLinks\(\)](#), [AIRINV::AIRINV\\_Service::buildSampleBom\(\)](#), and [clonePersistentBom\(\)](#).

**24.1.3.5 void AIRINV::AIRINV\_Master\_Service::clonePersistentBom ()**

Clone the persistent BOM object.

Definition at line 415 of file [AIRINV\\_Master\\_Service.cpp](#).

References [buildComplementaryLinks\(\)](#), and [AIRINV::AIRINV\\_Service::clonePersistentBom\(\)](#).

Referenced by [buildSampleBom\(\)](#), and [parseAndLoad\(\)](#).

**24.1.3.6 void AIRINV::AIRINV\_Master\_Service::buildComplementaryLinks (stdair::BomRoot & ioBomRoot)**

Build all the complementary links in the given bom root object.

**Note:**

Do nothing for now.

Definition at line 466 of file [AIRINV\\_Master\\_Service.cpp](#).

Referenced by [buildSampleBom\(\)](#), [clonePersistentBom\(\)](#), and [parseAndLoad\(\)](#).

**24.1.3.7 void AIRINV::AIRINV\_Master\_Service::calculateAvailability (stdair::TravelSolutionStruct & ioTravelSolution)**

Compute the availability for the given travel solution.

Definition at line 684 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::calculateAvailability\(\)](#).

**24.1.3.8 bool AIRINV::AIRINV\_Master\_Service::sell (const std::string & iSegmentDateKey, const stdair::ClassCode\_T & iClassCode, const stdair::PartySize\_T & iPartySize)**

Register a booking.

**Parameters:**

**const** std::string& Key for the segment on which the sale is made.

**const** stdair::ClassCode\_T& Class code where the sale is made.

**const** stdair::PartySize\_T& Party size.

**Returns:**

bool Whether or not the sale was successfull

Definition at line 714 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::sell\(\)](#).

**24.1.3.9 bool AIRINV::AIRINV\_Master\_Service::sell (const stdair::BookingClassID\_T & iClassID, const stdair::PartySize\_T & iPartySize)**

Register a booking.

**Parameters:**

*const* stdair::BookingClassID\_T&  
*const* stdair::PartySize\_T& Party size.

**Returns:**

bool Whether or not the sale was successfull

Definition at line 756 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::sell\(\)](#).

#### 24.1.3.10 bool AIRINV::AIRINV\_Master\_Service::cancel (const std::string & *iSegmentDateKey*, const stdair::ClassCode\_T & *iClassCode*, const stdair::PartySize\_T & *iPartySize*)

Register a cancellation.

**Parameters:**

*const* std::string& Key for the segment on which the cancellation is made.  
*const* stdair::ClassCode\_T& Class code where the sale is made.  
*const* stdair::PartySize\_T& Party size.

**Returns:**

bool Whether or not the cancellation was successfull

Definition at line 797 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::cancel\(\)](#).

#### 24.1.3.11 bool AIRINV::AIRINV\_Master\_Service::cancel (const stdair::BookingClassID\_T & *iClassID*, const stdair::PartySize\_T & *iPartySize*)

Register a cancellation.

**Parameters:**

*stdair::BookingClassID\_T*&  
*const* stdair::PartySize\_T& Party size.

**Returns:**

bool Whether or not the cancellation was successfull

Definition at line 839 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::cancel\(\)](#).

#### 24.1.3.12 void AIRINV::AIRINV\_Master\_Service::takeSnapshots (const stdair::SnapshotStruct & *iSnapshot*)

Take inventory snapshots.

Definition at line 881 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::takeSnapshots\(\)](#).

**24.1.3.13 void AIRINV::AIRINV\_Master\_Service::optimise (const stdair::RMEEventStruct & iRMEvent)**

Optimise (revenue management) an flight-date/network-date

Definition at line 907 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::optimise\(\)](#).

**24.1.3.14 std::string AIRINV::AIRINV\_Master\_Service::jsonHandler (const stdair::JSONString & iJSONString) const**

Dispatch the JSon command string to the right JSon Service, according to the JSon command type.

**Parameters:**

**const** stdair::JSONString& Input string which contained the JSon command string.

**Returns:**

std::string Output string in which the asking objects are logged/dumped in a JSon format.

Definition at line 472 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::jsonHandler\(\)](#).

**24.1.3.15 std::string AIRINV::AIRINV\_Master\_Service::jsonExportFlightDateList (const stdair::AirlineCode\_T & iAirlineCode = "a11", const stdair::FlightNumber\_T & iFlightNumber = 0) const**

Recursively dump, in the returned string and in JSON format, the flight-date list corresponding to the parameters given as input.

**Parameters:**

**const** AirlineCode& Airline for which the flight-dates should be displayed. If set to "all" (default), all the inventories will be displayed.

**const** FlightNumber\_T& Flight number for which all the departure dates should be displayed. If set to 0 (the default), all the flight numbers will be displayed.

Definition at line 496 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::jsonExportFlightDateList\(\)](#).

**24.1.3.16 std::string AIRINV::AIRINV\_Master\_Service::jsonExportFlightDateObjects (const stdair::AirlineCode\_T & iAirlineCode, const stdair::FlightNumber\_T & iFlightNumber, const stdair::Date\_T & iDepartureDate) const**

Recursively dump, in the returned string and in JSON format, the flight-date corresponding to the parameters given as input.

**Parameters:**

**const** stdair::AirlineCode\_T& Airline code of the flight to dump.

**const** stdair::FlightNumber\_T& Flight number of the flight to dump.

**const** stdair::Date\_T& Departure date of the flight to dump.

**Returns:**

std::string Output string in which the BOM tree is JSON-ified.

Definition at line 521 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::jsonExportFlightDateObjects\(\)](#).

### 24.1.3.17 std::string AIRINV::AIRINV\_Master\_Service::list (const stdair::AirlineCode\_T & iAirlineCode = "a11", const stdair::FlightNumber\_T & iFlightNumber = 0) const

Display the list of flight-dates (contained within the BOM tree) corresponding to the parameters given as input.

**Parameters:**

**const** AirlineCode& Airline for which the flight-dates should be displayed. If set to "all" (the default), all the inventories will be displayed.

**const** FlightNumber\_T& Flight number for which all the departure dates should be displayed. If set to 0 (the default), all the flight numbers will be displayed.

**Returns:**

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 548 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::list\(\)](#).

### 24.1.3.18 bool AIRINV::AIRINV\_Master\_Service::check (const stdair::AirlineCode\_T & iAirlineCode, const stdair::FlightNumber\_T & iFlightNumber, const stdair::Date\_T & iDepartureDate) const

Check whether the given flight-date is a valid one.

**Parameters:**

**const** stdair::AirlineCode\_T& Airline code of the flight to check.

**const** stdair::FlightNumber\_T& Flight number of the flight to check.

**const** stdair::Date\_T& Departure date of the flight to check.

**Returns:**

bool Whether or not the given flight date is valid.

Definition at line 573 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::check\(\)](#).

**24.1.3.19** `std::string AIRINV::AIRINV_Master_Service::csvDisplay () const`

Recursively display (dump in the returned string) the objects of the BOM tree.

**Returns:**

`std::string` Output string in which the BOM tree is logged/dumped.

Definition at line 598 of file [AIRINV\\_Master\\_Service.cpp](#).

References [AIRINV::AIRINV\\_Service::csvDisplay\(\)](#).

**24.1.3.20** `std::string AIRINV::AIRINV_Master_Service::csvDisplay (const stdair::AirlineCode_T & iAirlineCode, const stdair::FlightNumber_T & iFlightNumber, const stdair::Date_T & iDepartureDate) const`

Recursively display (dump in the returned string) the flight-date corresponding to the parameters given as input.

**Parameters:**

**const** `stdair::AirlineCode_T`& Airline code of the flight to display.

**const** `stdair::FlightNumber_T`& Flight number of the flight to display.

**const** `stdair::Date_T`& Departure date of the flight to display.

**Returns:**

`std::string` Output string in which the BOM tree is logged/dumped.

Definition at line 621 of file [AIRINV\\_Master\\_Service.cpp](#).

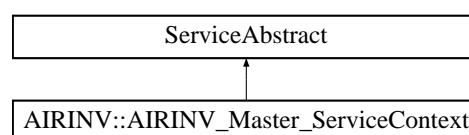
References [AIRINV::AIRINV\\_Service::csvDisplay\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/AIRINV\\_Master\\_Service.hpp](#)
- [airinv/service/AIRINV\\_Master\\_Service.cpp](#)

**24.2** AIRINV::AIRINV\_Master\_ServiceContext Class Reference

`#include <airinv/service/AIRINV_Master_ServiceContext.hpp>` Inheritance diagram for AIRINV::AIRINV\_Master\_ServiceContext::

**Friends**

- class [AIRINV\\_Master\\_Service](#)
- class [FacAirinvMasterServiceContext](#)

### 24.2.1 Detailed Description

Class holding the context of the Airinv services.

Definition at line 28 of file [AIRINV\\_Master\\_ServiceContext.hpp](#).

### 24.2.2 Friends And Related Function Documentation

#### 24.2.2.1 friend class AIRINV\_Master\_Service [friend]

The [AIRINV\\_Master\\_Service](#) class should be the sole class to get access to ServiceContext content: general users do not want to bother with a context interface.

Definition at line 34 of file [AIRINV\\_Master\\_ServiceContext.hpp](#).

#### 24.2.2.2 friend class FacAirinvMasterServiceContext [friend]

Definition at line 35 of file [AIRINV\\_Master\\_ServiceContext.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/service/AIRINV\\_Master\\_ServiceContext.hpp](#)
- [airinv/service/AIRINV\\_Master\\_ServiceContext.cpp](#)

## 24.3 AIRINV::AIRINV\_Service Class Reference

Interface for the [AIRINV](#) Services.

```
#include <airinv/AIRINV_Service.hpp>
```

### Public Member Functions

- [AIRINV\\_Service](#) (const stdair::BasLogParams &, const stdair::BasDBParams &)
- [AIRINV\\_Service](#) (const stdair::BasLogParams &)
- [AIRINV\\_Service](#) (stdair::STDAIR\_ServicePtr\_T)
- [AIRINV\\_Service](#) (stdair::STDAIR\_ServicePtr\_T, SEVMGR::SEVMGR\_ServicePtr\_T)
- void [parseAndLoad](#) (const [AIRINV::InventoryFilePath](#) &)
- void [parseAndLoad](#) (const stdair::ScheduleFilePath &, const stdair::ODFilePath &, const stdair::FRAT5FilePath &, const stdair::FFDisutilityFilePath &, const AIRRAC::YieldFilePath &)
- [~AIRINV\\_Service](#) ()
- void [buildSampleBom](#) ()
- void [clonePersistentBom](#) ()
- void [buildComplementaryLinks](#) (stdair::BomRoot &)
- stdair::RMEventList\_T [initRMEvents](#) (const stdair::Date\_T &iStartDate, const stdair::Date\_T &iEndDate)
- void [calculateAvailability](#) (stdair::TravelSolutionStruct &)
- bool [sell](#) (const std::string &iSegmentDateKey, const stdair::ClassCode\_T &, const stdair::PartySize\_T &)
- bool [sell](#) (const stdair::BookingClassID\_T &, const stdair::PartySize\_T &)

- bool [cancel](#) (const std::string &iSegmentDateKey, const stdair::ClassCode\_T &, const stdair::PartySize\_T &)
- bool [cancel](#) (const stdair::BookingClassID\_T &, const stdair::PartySize\_T &)
- void [takeSnapshots](#) (const stdair::AirlineCode\_T &, const stdair::DateTime\_T &)
- void [optimise](#) (const stdair::AirlineCode\_T &, const stdair::KeyDescription\_T &, const stdair::DateTime\_T &)
- std::string [jsonHandler](#) (const stdair::JSONString &) const
- std::string [jsonExportFlightDateList](#) (const stdair::AirlineCode\_T &iAirlineCode="all", const stdair::FlightNumber\_T &iFlightNumber=0) const
- std::string [jsonExportFlightDateObjects](#) (const stdair::AirlineCode\_T &, const stdair::FlightNumber\_T &, const stdair::Date\_T &iDepartureDate) const
- std::string [list](#) (const stdair::AirlineCode\_T &iAirlineCode="all", const stdair::FlightNumber\_T &iFlightNumber=0) const
- bool [check](#) (const stdair::AirlineCode\_T &, const stdair::FlightNumber\_T &, const stdair::Date\_T &iDepartureDate) const
- std::string [csvDisplay](#) () const
- std::string [csvDisplay](#) (const stdair::AirlineCode\_T &, const stdair::FlightNumber\_T &, const stdair::Date\_T &iDepartureDate) const

### 24.3.1 Detailed Description

Interface for the [AIRINV](#) Services.

Definition at line 40 of file [AIRINV\\_Service.hpp](#).

### 24.3.2 Constructor & Destructor Documentation

#### 24.3.2.1 AIRINV::AIRINV\_Service::AIRINV\_Service (const stdair::BasLogParams & iLogParams, const stdair::BasDBParams & iDBParams)

Constructor.

The `initAirinvService()` method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.

Moreover, database connection parameters are given, so that a session can be created on the corresponding database.

#### Parameters:

**const** stdair::BasLogParams& Parameters for the output log stream.

**const** stdair::BasDBParams& Parameters for the database access.

Definition at line 89 of file [AIRINV\\_Service.cpp](#).

#### 24.3.2.2 AIRINV::AIRINV\_Service::AIRINV\_Service (const stdair::BasLogParams & iLogParams)

Constructor.

The `initAirinvService()` method is called; see the corresponding documentation for more details.

A reference on an output stream is given, so that log outputs can be directed onto that stream.



**Parameters:**

*const* stdair::BasLogParams& Parameters for the output log stream.

Definition at line 60 of file [AIRINV\\_Service.cpp](#).

### 24.3.2.3 AIRINV::AIRINV\_Service::AIRINV\_Service (stdair::STDAIR\_ServicePtr\_T ioSTDAIR\_Service\_ptr)

Constructor.

The initAirinvService() method is called; see the corresponding documentation for more details.

Moreover, as no reference on any output stream is given, it is assumed that the StdAir log service has already been initialised with the proper log output stream by some other methods in the calling chain (for instance, when the [AIRINV\\_Master\\_Service](#) is itself being initialised by another library service such as SIMCRS\_Service).

**Parameters:**

*stdair::STDAIR\_ServicePtr\_T* Reference on the STDAIR service.

Definition at line 120 of file [AIRINV\\_Service.cpp](#).

### 24.3.2.4 AIRINV::AIRINV\_Service::AIRINV\_Service (stdair::STDAIR\_ServicePtr\_T ioSTDAIR\_Service\_ptr, SEVMGR::SEVMGR\_ServicePtr\_T ioSEVMGR\_Service\_ptr)

Constructor.

The initAirinvService() method is called; see the corresponding documentation for more details.

Moreover, as no reference on any output stream is given, it is assumed that the StdAir log service has already been initialised with the proper log output stream by some other methods in the calling chain (for instance, when the [AIRINV\\_Master\\_Service](#) is itself being initialised by another library service such as SIMCRS\_Service).

**Parameters:**

*stdair::STDAIR\_ServicePtr\_T* Reference on the STDAIR service.

*stdair::SEVMGR\_ServicePtr\_T* Reference on the SEVMGR service.

Definition at line 148 of file [AIRINV\\_Service.cpp](#).

### 24.3.2.5 AIRINV::AIRINV\_Service::~~AIRINV\_Service ()

Destructor.

Definition at line 177 of file [AIRINV\\_Service.cpp](#).

## 24.3.3 Member Function Documentation

### 24.3.3.1 void AIRINV::AIRINV\_Service::parseAndLoad (const AIRINV::InventoryFilePath & iInventoryInputFilename)

Parse the inventory dump and load it into memory.

The CSV file, describing the airline inventory for the simulator, is parsed and instantiated in memory accordingly.

#### Parameters:

**const** [AIRINV::InventoryFilePath](#)& Filename of the input inventory file.

Definition at line 346 of file [AIRINV\\_Service.cpp](#).

References [buildComplementaryLinks\(\)](#), [AIRINV::InventoryParser::buildInventory\(\)](#), and [clonePersistentBom\(\)](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::parseAndLoad\(\)](#).

#### 24.3.3.2 void AIRINV::AIRINV\_Service::parseAndLoad (const stdair::ScheduleFilePath & iScheduleInputFilename, const stdair::ODFilePath & iODInputFilename, const stdair::FRAT5FilePath & iFRAT5InputFilename, const stdair::FFDisutilityFilePath & iFFDisutilityInputFilename, const AIRRAC::YieldFilePath & iYieldFilename)

Parse the schedule and O&D input files, and load them into memory.

The CSV files, describing the airline schedule and the O&Ds for the simulator, are parsed and instantiated in memory accordingly.

#### Parameters:

**const** [stdair::ScheduleFilePath](#)& Filename of the input schedule file.

**const** [stdair::ODFilePath](#)& Filename of the input O&D file.

**const** [stdair::FRAT5FilePath](#)& Filename of the input FRAT5 file.

**const** [stdair::FFDisutilityFilePath](#)& Filename of the input FF disutility file.

**const** [AIRRAC::YieldFilePath](#)& Filename of the input yield file.

Definition at line 404 of file [AIRINV\\_Service.cpp](#).

References [buildComplementaryLinks\(\)](#), [clonePersistentBom\(\)](#), [AIRINV::ScheduleParser::generateInventories\(\)](#), [AIRINV::FFDisutilityParser::parse\(\)](#), and [AIRINV::FRAT5Parser::parse\(\)](#).

#### 24.3.3.3 void AIRINV::AIRINV\_Service::buildSampleBom ()

Build a sample BOM tree, and attach it to the BomRoot instance.

The BOM tree is based on two actual inventories (one for BA, another for AF). Each inventory contains one flight. One of those flights has two legs (and therefore three segments).

Definition at line 487 of file [AIRINV\\_Service.cpp](#).

References [buildComplementaryLinks\(\)](#), and [clonePersistentBom\(\)](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::buildSampleBom\(\)](#).

#### 24.3.3.4 void AIRINV::AIRINV\_Service::clonePersistentBom ()

Clone the persistent BOM object.

Definition at line 570 of file [AIRINV\\_Service.cpp](#).

References [buildComplementaryLinks\(\)](#).

Referenced by [buildSampleBom\(\)](#), [AIRINV::AIRINV\\_Master\\_Service::clonePersistentBom\(\)](#), and [parseAndLoad\(\)](#).

#### 24.3.3.5 void AIRINV::AIRINV\_Service::buildComplementaryLinks (stdair::BomRoot & ioBomRoot)

Build all the complementary links in the given bom root object. For instance, build the links between leg and segment date (as well as leg and segment cabin).

Definition at line 608 of file [AIRINV\\_Service.cpp](#).

References [AIRINV::InventoryManager::buildSimilarSegmentCabinSets\(\)](#), [AIRINV::InventoryManager::createDirectAccesses\(\)](#), [AIRINV::InventoryManager::initialiseListsOfUsablePolicies\(\)](#), [AIRINV::InventoryManager::initialiseYieldBasedNestingStructures\(\)](#), and [AIRINV::InventoryManager::setDefaultBidPriceVector\(\)](#).

Referenced by [buildSampleBom\(\)](#), [clonePersistentBom\(\)](#), and [parseAndLoad\(\)](#).

#### 24.3.3.6 stdair::RMEventList\_T AIRINV::AIRINV\_Service::initRMEvents (const stdair::Date\_T & iStartDate, const stdair::Date\_T & iEndDate)

Initialise the RM events for the inventory.

##### Parameters:

**const** stdair::Date\_T& Parameters for the start date.

**const** stdair::Date\_T& Parameters for the end date.

Definition at line 920 of file [AIRINV\\_Service.cpp](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::initSnapshotAndRMEvents\(\)](#).

#### 24.3.3.7 void AIRINV::AIRINV\_Service::calculateAvailability (stdair::TravelSolutionStruct & ioTravelSolution)

Compute the availability for the given travel solution.

Definition at line 952 of file [AIRINV\\_Service.cpp](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::calculateAvailability\(\)](#).

#### 24.3.3.8 bool AIRINV::AIRINV\_Service::sell (const std::string & iSegmentDateKey, const stdair::ClassCode\_T & iClassCode, const stdair::PartySize\_T & iPartySize)

Register a booking.

##### Parameters:

**const** std::string& Key for the segment on which the sale is made

**const** stdair::ClassCode\_T& Class code where the sale is made

**const** stdair::PartySize\_T& Party size

**Returns:**

bool Whether or not the sale was successfull

Definition at line 978 of file [AIRINV\\_Service.cpp](#).

Referenced by [sell\(\)](#), and [AIRINV::AIRINV\\_Master\\_Service::sell\(\)](#).

**24.3.3.9 bool AIRINV::AIRINV\_Service::sell (const stdair::BookingClassID\_T & iClassID, const stdair::PartySize\_T & iPartySize)**

Register a booking.

**Parameters:**

**const** stdair::BookingClassID\_T&

**const** stdair::PartySize\_T& Party size

**Returns:**

bool Whether or not the sale was successfull

Definition at line 1019 of file [AIRINV\\_Service.cpp](#).

References [sell\(\)](#).

**24.3.3.10 bool AIRINV::AIRINV\_Service::cancel (const std::string & iSegmentDateKey, const stdair::ClassCode\_T & iClassCode, const stdair::PartySize\_T & iPartySize)**

Register a cancellation.

**Parameters:**

**const** std::string& Key for the segment on which the cancellation is made

**const** stdair::ClassCode\_T& Class code where the sale is made

**const** stdair::PartySize\_T& Party size

**Returns:**

bool Whether or not the cancellation was successfull

Definition at line 1036 of file [AIRINV\\_Service.cpp](#).

Referenced by [cancel\(\)](#), and [AIRINV::AIRINV\\_Master\\_Service::cancel\(\)](#).

**24.3.3.11 bool AIRINV::AIRINV\_Service::cancel (const stdair::BookingClassID\_T & iClassID, const stdair::PartySize\_T & iPartySize)**

Register a cancellation.

**Parameters:**

**const** stdair::BookingClassID\_T&

**const** stdair::PartySize\_T& Party size

**Returns:**

bool Whether or not the cancellation was successful

Definition at line 1080 of file [AIRINV\\_Service.cpp](#).

References [cancel\(\)](#).

#### 24.3.3.12 void AIRINV::AIRINV\_Service::takeSnapshots (const stdair::AirlineCode\_T & iAirlineCode, const stdair::DateTime\_T & iSnapshotTime)

Take inventory snapshots.

Definition at line 1097 of file [AIRINV\\_Service.cpp](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::takeSnapshots\(\)](#).

#### 24.3.3.13 void AIRINV::AIRINV\_Service::optimise (const stdair::AirlineCode\_T & iAirlineCode, const stdair::KeyDescription\_T & iFDDescription, const stdair::DateTime\_T & iRMEventTime)

Optimise (revenue management) an flight-date/network-date

Definition at line 1124 of file [AIRINV\\_Service.cpp](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::optimise\(\)](#).

#### 24.3.3.14 std::string AIRINV::AIRINV\_Service::jsonHandler (const stdair::JSONString & iJSONString) const

Dispatch the JSon command string to the right JSon Service, according to the JSon command type.

**Parameters:**

**const** stdair::JSONString& Input string which contained the JSon command string.

**Returns:**

std::string Output string in which the asking objects are logged/dumped in a JSon format.

Definition at line 646 of file [AIRINV\\_Service.cpp](#).

References [csvDisplay\(\)](#), [jsonExportFlightDateList\(\)](#), [jsonExportFlightDateObjects\(\)](#), and [list\(\)](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::jsonHandler\(\)](#).

#### 24.3.3.15 std::string AIRINV::AIRINV\_Service::jsonExportFlightDateList (const stdair::AirlineCode\_T & iAirlineCode = "a11", const stdair::FlightNumber\_T & iFlightNumber = 0) const

Recursively dump, in the returned string and in JSON format, the flight-date list corresponding to the parameters given as input.

**Parameters:**

**const** AirlineCode& Airline for which the flight-dates should be displayed. If set to "all" (default), all the inventories will be displayed.

**const** FlightNumber\_T& Flight number for which all the departure dates should be displayed. If set to 0 (the default), all the flight numbers will be displayed.

Definition at line 778 of file [AIRINV\\_Service.cpp](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::jsonExportFlightDateList\(\)](#), and [jsonHandler\(\)](#).

#### 24.3.3.16 std::string AIRINV::AIRINV\_Service::jsonExportFlightDateObjects (const stdair::AirlineCode\_T & iAirlineCode, const stdair::FlightNumber\_T & iFlightNumber, const stdair::Date\_T & iDepartureDate) const

Recursively dump, in the returned string and in JSON format, the flight-date corresponding to the parameters given as input.

##### Parameters:

**const** stdair::AirlineCode\_T& Airline code of the flight to dump.

**const** stdair::FlightNumber\_T& Flight number of the flight to dump.

**const** stdair::Date\_T& Departure date of the flight to dump.

##### Returns:

std::string Output string in which the BOM tree is JSON-ified.

Definition at line 801 of file [AIRINV\\_Service.cpp](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::jsonExportFlightDateObjects\(\)](#), and [jsonHandler\(\)](#).

#### 24.3.3.17 std::string AIRINV::AIRINV\_Service::list (const stdair::AirlineCode\_T & iAirlineCode = "a11", const stdair::FlightNumber\_T & iFlightNumber = 0) const

Display the list of flight-dates (contained within the BOM tree) corresponding to the parameters given as input.

##### Parameters:

**const** AirlineCode& Airline for which the flight-dates should be displayed. If set to "all" (the default), all the inventories will be displayed.

**const** FlightNumber\_T& Flight number for which all the departure dates should be displayed. If set to 0 (the default), all the flight numbers will be displayed.

##### Returns:

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 826 of file [AIRINV\\_Service.cpp](#).

Referenced by [jsonHandler\(\)](#), and [AIRINV::AIRINV\\_Master\\_Service::list\(\)](#).

#### 24.3.3.18 bool AIRINV::AIRINV\_Service::check (const stdair::AirlineCode\_T & iAirlineCode, const stdair::FlightNumber\_T & iFlightNumber, const stdair::Date\_T & iDepartureDate) const

Check whether the given flight-date is a valid one.

**Parameters:**

**const** stdair::AirlineCode\_T& Airline code of the flight to check.  
**const** stdair::FlightNumber\_T& Flight number of the flight to check.  
**const** stdair::Date\_T& Departure date of the flight to check.

**Returns:**

bool Whether or not the given flight date is valid.

Definition at line 850 of file [AIRINV\\_Service.cpp](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::check\(\)](#).

**24.3.3.19 std::string AIRINV::AIRINV\_Service::csvDisplay () const**

Recursively display (dump in the returned string) the objects of the BOM tree.

**Returns:**

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 874 of file [AIRINV\\_Service.cpp](#).

Referenced by [AIRINV::AIRINV\\_Master\\_Service::csvDisplay\(\)](#), and [jsonHandler\(\)](#).

**24.3.3.20 std::string AIRINV::AIRINV\_Service::csvDisplay (const stdair::AirlineCode\_T & iAirlineCode, const stdair::FlightNumber\_T & iFlightNumber, const stdair::Date\_T & iDepartureDate) const**

Recursively display (dump in the returned string) the flight-date corresponding to the parameters given as input.

**Parameters:**

**const** stdair::AirlineCode\_T& Airline code of the flight to display  
**const** stdair::FlightNumber\_T& Flight number of the flight to display.  
**const** stdair::Date\_T& Departure date of the flight to display.

**Returns:**

std::string Output string in which the BOM tree is logged/dumped.

Definition at line 896 of file [AIRINV\\_Service.cpp](#).

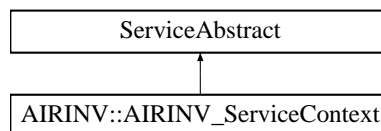
The documentation for this class was generated from the following files:

- [airinv/AIRINV\\_Service.hpp](#)
- [airinv/service/AIRINV\\_Service.cpp](#)

## 24.4 AIRINV::AIRINV\_ServiceContext Class Reference

Class holding the context of the AirInv services.

`#include <airinv/service/AIRINV_ServiceContext.hpp>` Inheritance diagram for AIRINV::AIRINV\_ServiceContext::



### Friends

- class [AIRINV\\_Service](#)
- class [FacAirinvServiceContext](#)

#### 24.4.1 Detailed Description

Class holding the context of the AirInv services.

Definition at line 28 of file [AIRINV\\_ServiceContext.hpp](#).

#### 24.4.2 Friends And Related Function Documentation

##### 24.4.2.1 friend class AIRINV\_Service [friend]

The [AIRINV\\_Service](#) class should be the sole class to get access to ServiceContext content: general users do not want to bother with a context interface.

Definition at line 34 of file [AIRINV\\_ServiceContext.hpp](#).

##### 24.4.2.2 friend class FacAirinvServiceContext [friend]

Definition at line 35 of file [AIRINV\\_ServiceContext.hpp](#).

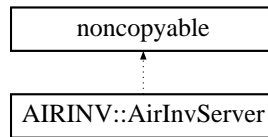
The documentation for this class was generated from the following files:

- [airinv/service/AIRINV\\_ServiceContext.hpp](#)
- [airinv/service/AIRINV\\_ServiceContext.cpp](#)

## 24.5 AIRINV::AirInvServer Class Reference

`#include <airinv/server/AirInvServer.hpp>` Inheritance diagram for AIR-INV::AirInvServer::





## Public Member Functions

- [AirInvServer](#) (const std::string &address, const std::string &port, const stdair::AirlineCode\_T &iAirlineCode, std::size\_t thread\_pool\_size)
- [~AirInvServer](#) ()
- void [run](#) ()
- void [stop](#) ()

### 24.5.1 Detailed Description

The top-level class of the AirInv server.

Definition at line 23 of file [AirInvServer.hpp](#).

### 24.5.2 Constructor & Destructor Documentation

#### 24.5.2.1 AIRINV::AirInvServer::AirInvServer (const std::string &address, const std::string &port, const stdair::AirlineCode\_T &iAirlineCode, std::size\_t thread\_pool\_size)

Constructor.

Construct the server to listen on the specified TCP address and port, and serve up files from the given directory.

Definition at line 20 of file [AirInvServer\\_ASIO.cpp](#).

#### 24.5.2.2 AIRINV::AirInvServer::~~AirInvServer ()

Destructor.

Definition at line 46 of file [AirInvServer\\_ASIO.cpp](#).

### 24.5.3 Member Function Documentation

#### 24.5.3.1 void AIRINV::AirInvServer::run ()

Run the server's io\_service loop.

Definition at line 50 of file [AirInvServer\\_ASIO.cpp](#).

Referenced by [main\(\)](#).

#### 24.5.3.2 void AIRINV::AirInvServer::stop ()

Stop the server.

Definition at line 69 of file [AirInvServer\\_ASIO.cpp](#).

The documentation for this class was generated from the following files:

- [airinv/server/AirInvServer.hpp](#)
- [airinv/server/AirInvServer\\_ASIO.cpp](#)

## 24.6 AIRINV::BomAbstract Class Reference

```
#include <airinv/bom/BomAbstract.hpp>
```

### Public Member Functions

- virtual void [toStream](#) (std::ostream &ioOut) const =0
- virtual void [fromStream](#) (std::istream &ioIn)=0
- virtual std::string [toString](#) () const =0
- virtual std::string [describeKey](#) () const =0
- virtual std::string [describeShortKey](#) () const =0

### Protected Member Functions

- [BomAbstract](#) ()
- [BomAbstract](#) (const [BomAbstract](#) &)
- virtual [~BomAbstract](#) ()

### Friends

- class [FacBomAbstract](#)

#### 24.6.1 Detailed Description

Base class for the Business Object Model (BOM) layer.

Definition at line 14 of file [BomAbstract.hpp](#).

#### 24.6.2 Constructor & Destructor Documentation

##### 24.6.2.1 AIRINV::BomAbstract::BomAbstract () [inline, protected]

Protected Default Constructor to ensure this class is abstract.

Definition at line 40 of file [BomAbstract.hpp](#).

##### 24.6.2.2 AIRINV::BomAbstract::BomAbstract (const BomAbstract &) [inline, protected]

Definition at line 41 of file [BomAbstract.hpp](#).

**24.6.2.3** `virtual AIRINV::BomAbstract::~~BomAbstract () [inline, protected, virtual]`

Destructor.

Definition at line 44 of file [BomAbstract.hpp](#).

### 24.6.3 Member Function Documentation

**24.6.3.1** `virtual void AIRINV::BomAbstract::toStream (std::ostream & ioOut) const [pure virtual]`

Dump a Business Object into an output stream.

#### Parameters:

*ostream&* the output stream.

**24.6.3.2** `virtual void AIRINV::BomAbstract::fromStream (std::istream & ioIn) [pure virtual]`

Read a Business Object from an input stream.

#### Parameters:

*istream&* the input stream.

Referenced by [operator>>\(\)](#).

**24.6.3.3** `virtual std::string AIRINV::BomAbstract::toString () const [pure virtual]`

Get the serialised version of the Business Object.

**24.6.3.4** `virtual std::string AIRINV::BomAbstract::describeKey () const [pure virtual]`

Get a string describing the whole key (differentiating two objects at any level).

**24.6.3.5** `virtual std::string AIRINV::BomAbstract::describeShortKey () const [pure virtual]`

Get a string describing the short key (differentiating two objects at the same level).

### 24.6.4 Friends And Related Function Documentation

**24.6.4.1** `friend class FacBomAbstract [friend]`

Definition at line 15 of file [BomAbstract.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/bom/BomAbstract.hpp](#)

## 24.7 stdair::BomPropertyTree Struct Reference

```
#include <airinv/server/BomPropertyTree.hpp>
```

### Public Member Functions

- void [load](#) (const std::string &iBomTree)
- std::string [save](#) () const

### Public Attributes

- stdair::AirlineCode\_T [\\_airlineCode](#)
- stdair::FlightNumber\_T [\\_flightNumber](#)
- stdair::Date\_T [\\_departureDate](#)
- std::set< stdair::AirportCode\_T > [\\_airportCodeList](#)

#### 24.7.1 Detailed Description

Structure representing a list of airports.

Definition at line 19 of file [BomPropertyTree.hpp](#).

#### 24.7.2 Member Function Documentation

##### 24.7.2.1 void stdair::BomPropertyTree::load (const std::string &iBomTree)

Update the current BOM tree (\*this) with the parsed stream, which is JSON formatted.

Definition at line 17 of file [BomPropertyTree.cpp](#).

References [\\_airlineCode](#), [\\_departureDate](#), and [\\_flightNumber](#).

##### 24.7.2.2 std::string stdair::BomPropertyTree::save () const

Dump the BOM tree (\*this) into the stream with a JSON format.

Definition at line 60 of file [BomPropertyTree.cpp](#).

References [\\_airlineCode](#), [\\_airportCodeList](#), [\\_departureDate](#), and [\\_flightNumber](#).

#### 24.7.3 Member Data Documentation

##### 24.7.3.1 stdair::AirlineCode\_T stdair::BomPropertyTree::\_airlineCode

Airline code.

Definition at line 33 of file [BomPropertyTree.hpp](#).

Referenced by [load\(\)](#), and [save\(\)](#).

**24.7.3.2 stdair::FlightNumber\_T stdair::BomPropertyTree::\_flightNumber**

Flight number.

Definition at line 36 of file [BomPropertyTree.hpp](#).Referenced by [load\(\)](#), and [save\(\)](#).**24.7.3.3 stdair::Date\_T stdair::BomPropertyTree::\_departureDate**

Departure date.

Definition at line 39 of file [BomPropertyTree.hpp](#).Referenced by [load\(\)](#), and [save\(\)](#).**24.7.3.4 std::set<stdair::AirportCode\_T> stdair::BomPropertyTree::\_airportCodeList**

Just to have a list, for now.

Definition at line 42 of file [BomPropertyTree.hpp](#).Referenced by [save\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/server/BomPropertyTree.hpp](#)
- [airinv/server/BomPropertyTree.cpp](#)

**24.8 AIRINV::BomRootHelper Class Reference**

```
#include <airinv/bom/BomRootHelper.hpp>
```

**Static Public Member Functions**

- static void [fillFromRouting](#) (const stdair::BomRoot &)

**24.8.1 Detailed Description**

Class representing the actual business functions for an airline bom root.

Definition at line 16 of file [BomRootHelper.hpp](#).**24.8.2 Member Function Documentation****24.8.2.1 void AIRINV::BomRootHelper::fillFromRouting (const stdair::BomRoot & *iBomRoot*) [static]**

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 16 of file [BomRootHelper.cpp](#).Referenced by [AIRINV::InventoryManager::createDirectAccesses\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/bom/BomRootHelper.hpp](#)
- [airinv/bom/BomRootHelper.cpp](#)

## 24.9 AIRINV::BookingClassHelper Class Reference

```
#include <airinv/bom/BookingClassHelper.hpp>
```

### 24.9.1 Detailed Description

Class representing the actual business functions for an airline booking class.

Definition at line 19 of file [BookingClassHelper.hpp](#).

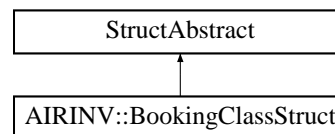
The documentation for this class was generated from the following file:

- [airinv/bom/BookingClassHelper.hpp](#)

## 24.10 AIRINV::BookingClassStruct Struct Reference

```
#include <airinv/bom/BookingClassStruct.hpp>
```

Inheritance diagram for AIRINV::BookingClassStruct:



### Public Member Functions

- `stdair::ClassCode_T` [getFullSubclassCode](#) () const
- `void` [fill](#) (stdair::BookingClass &) const
- `const std::string` [describe](#) () const
- [BookingClassStruct](#) ()

### Public Attributes

- `stdair::ClassCode_T` [\\_classCode](#)
- `stdair::SubclassCode_T` [\\_subclassCode](#)
- `stdair::ClassCode_T` [\\_parentClassCode](#)
- `stdair::SubclassCode_T` [\\_parentSubclassCode](#)
- `stdair::AuthorizationLevel_T` [\\_cumulatedProtection](#)
- `stdair::AuthorizationLevel_T` [\\_protection](#)
- `stdair::NbOfSeats_T` [\\_nego](#)
- `stdair::OverbookingRate_T` [\\_noShowPercentage](#)
- `stdair::OverbookingRate_T` [\\_overbookingPercentage](#)
- `stdair::NbOfBookings_T` [\\_nbOfBookings](#)
- `stdair::NbOfBookings_T` [\\_nbOfGroupBookings](#)
- `stdair::NbOfBookings_T` [\\_nbOfPendingGroupBookings](#)

- [stdair::NbOfBookings\\_T \\_nbOfStaffBookings](#)
- [stdair::NbOfBookings\\_T \\_nbOfWLBookings](#)
- [stdair::NbOfBookings\\_T \\_etb](#)
- [stdair::Availability\\_T \\_netClassAvailability](#)
- [stdair::Availability\\_T \\_segmentAvailability](#)
- [stdair::Availability\\_T \\_netRevenueAvailability](#)

### 24.10.1 Detailed Description

Utility Structure for the parsing of BookingClass structures.

Definition at line 24 of file [BookingClassStruct.hpp](#).

### 24.10.2 Constructor & Destructor Documentation

#### 24.10.2.1 AIRINV::BookingClassStruct::BookingClassStruct ()

Default Constructor.

Definition at line 16 of file [BookingClassStruct.cpp](#).

### 24.10.3 Member Function Documentation

#### 24.10.3.1 stdair::ClassCode\_T AIRINV::BookingClassStruct::getFullSubclassCode () const

Returns the concatenation of the class and subclass codes.

Definition at line 20 of file [BookingClassStruct.cpp](#).

References [\\_classCode](#), and [\\_subclassCode](#).

#### 24.10.3.2 void AIRINV::BookingClassStruct::fill (stdair::BookingClass & ioBookingClass) const

Fill the BookingClass objects with the attributes of the [BookingClassStruct](#).

Definition at line 44 of file [BookingClassStruct.cpp](#).

#### 24.10.3.3 const std::string AIRINV::BookingClassStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 27 of file [BookingClassStruct.cpp](#).

References [\\_classCode](#), [\\_cumulatedProtection](#), [\\_etb](#), [\\_nbOfBookings](#), [\\_nbOfGroupBookings](#), [\\_nbOfPendingGroupBookings](#), [\\_nbOfStaffBookings](#), [\\_nbOfWLBookings](#), [\\_nego](#), [\\_netClassAvailability](#), [\\_netRevenueAvailability](#), [\\_noShowPercentage](#), [\\_overbookingPercentage](#), [\\_parentClassCode](#), [\\_parentSubclassCode](#), [\\_protection](#), [\\_segmentAvailability](#), and [\\_subclassCode](#).

Referenced by [AIRINV::FareFamilyStruct::describe\(\)](#).

#### 24.10.4 Member Data Documentation

##### 24.10.4.1 stdair::ClassCode\_T AIRINV::BookingClassStruct::\_classCode

Definition at line 26 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), [getFullSubclassCode\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

##### 24.10.4.2 stdair::SubclassCode\_T AIRINV::BookingClassStruct::\_subclassCode

Definition at line 27 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), [getFullSubclassCode\(\)](#), and [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#).

##### 24.10.4.3 stdair::ClassCode\_T AIRINV::BookingClassStruct::\_parentClassCode

Definition at line 28 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#).

##### 24.10.4.4 stdair::SubclassCode\_T AIRINV::BookingClassStruct::\_parentSubclassCode

Definition at line 29 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#).

##### 24.10.4.5 stdair::AuthorizationLevel\_T AIRINV::BookingClassStruct::\_cumulatedProtection

Definition at line 30 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#).

##### 24.10.4.6 stdair::AuthorizationLevel\_T AIRINV::BookingClassStruct::\_protection

Definition at line 31 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#).

##### 24.10.4.7 stdair::NbOfSeats\_T AIRINV::BookingClassStruct::\_nego



Definition at line 32 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#).

#### 24.10.4.8 stdair::OverbookingRate\_T AIRINV::BookingClassStruct::\_noShowPercentage

Definition at line 33 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#).

#### 24.10.4.9 stdair::OverbookingRate\_T AIRINV::BookingClassStruct::\_overbookingPercentage

Definition at line 34 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#).

#### 24.10.4.10 stdair::NbOfBookings\_T AIRINV::BookingClassStruct::\_nbOfBookings

Definition at line 35 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#).

#### 24.10.4.11 stdair::NbOfBookings\_T AIRINV::BookingClassStruct::\_nbOfGroupBookings

Definition at line 36 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#).

#### 24.10.4.12 stdair::NbOfBookings\_T AIRINV::BookingClassStruct::\_nbOfPendingGroupBookings

Definition at line 37 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#).

#### 24.10.4.13 stdair::NbOfBookings\_T AIRINV::BookingClassStruct::\_nbOfStaffBookings

Definition at line 38 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#).

#### 24.10.4.14 stdair::NbOfBookings\_T AIRINV::BookingClassStruct::\_nbOfWLBookings

Definition at line 39 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#).

#### 24.10.4.15 stdair::NbOfBookings\_T AIRINV::BookingClassStruct::\_etb

Definition at line 40 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#).

#### 24.10.4.16 stdair::Availability\_T AIRINV::BookingClassStruct::\_netClassAvailability

Definition at line 41 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#).

#### 24.10.4.17 stdair::Availability\_T AIRINV::BookingClassStruct::\_segmentAvailability

Definition at line 42 of file [BookingClassStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#).

#### 24.10.4.18 stdair::Availability\_T AIRINV::BookingClassStruct::\_netRevenueAvailability

Definition at line 43 of file [BookingClassStruct.hpp](#).

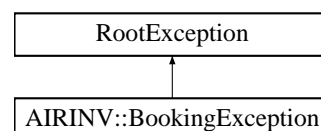
Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/BookingClassStruct.hpp](#)
- [airinv/bom/BookingClassStruct.cpp](#)

## 24.11 AIRINV::BookingException Class Reference

`#include <airinv/AIRINV_Types.hpp>`Inheritance diagram for AIRINV::BookingException::



### 24.11.1 Detailed Description

Specific exception related to bookings made against the inventory.

Definition at line 166 of file [AIRINV\\_Types.hpp](#).

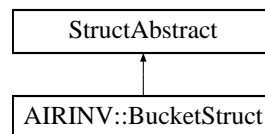
The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.12 AIRINV::BucketStruct Struct Reference

Utility Structure for the parsing of Bucket structures.

`#include <airinv/bom/BucketStruct.hpp>`Inheritance diagram for AIRINV::BucketStruct::



### Public Member Functions

- void [fill](#) (stdair::Bucket &) const
- const std::string [describe](#) () const
- [BucketStruct](#) ()

### Public Attributes

- stdair::Yield\_T [\\_yieldRangeUpperValue](#)
- stdair::CabinCapacity\_T [\\_availability](#)
- stdair::NbOfSeats\_T [\\_nbOfSeats](#)
- stdair::SeatIndex\_T [\\_seatIndex](#)

### 24.12.1 Detailed Description

Utility Structure for the parsing of Bucket structures.

Definition at line 26 of file [BucketStruct.hpp](#).

### 24.12.2 Constructor & Destructor Documentation

#### 24.12.2.1 AIRINV::BucketStruct::BucketStruct ()

Default Constructor.

Definition at line 16 of file [BucketStruct.cpp](#).

### 24.12.3 Member Function Documentation

#### 24.12.3.1 void AIRINV::BucketStruct::fill (stdair::Bucket & *ioBucket*) const

Fill the Bucket objects with the attributes of the [BucketStruct](#).

Definition at line 29 of file [BucketStruct.cpp](#).

References [\\_availability](#), [\\_nbOfSeats](#), and [\\_yieldRangeUpperValue](#).

#### 24.12.3.2 const std::string AIRINV::BucketStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 20 of file [BucketStruct.cpp](#).

References [\\_availability](#), [\\_nbOfSeats](#), [\\_seatIndex](#), and [\\_yieldRangeUpperValue](#).

Referenced by [AIRINV::LegCabinStruct::describe\(\)](#).

### 24.12.4 Member Data Documentation

#### 24.12.4.1 stdair::Yield\_T AIRINV::BucketStruct::\_yieldRangeUpperValue

Definition at line 28 of file [BucketStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

#### 24.12.4.2 stdair::CabinCapacity\_T AIRINV::BucketStruct::\_availability

Definition at line 29 of file [BucketStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), and [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#).

#### 24.12.4.3 stdair::NbOfSeats\_T AIRINV::BucketStruct::\_nbOfSeats

Definition at line 30 of file [BucketStruct.hpp](#).

Referenced by [describe\(\)](#), and [fill\(\)](#).

#### 24.12.4.4 stdair::SeatIndex\_T AIRINV::BucketStruct::\_seatIndex

Definition at line 31 of file [BucketStruct.hpp](#).

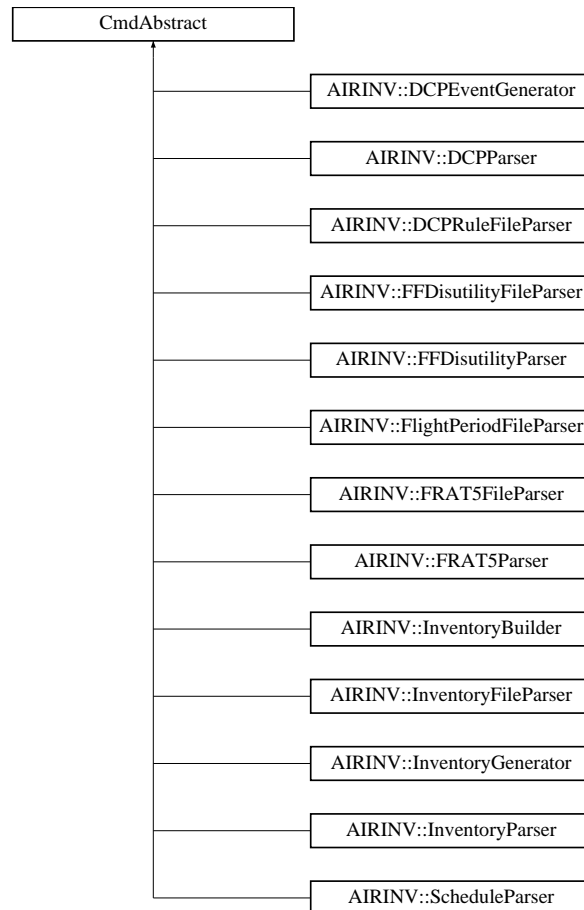
Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/BucketStruct.hpp](#)
- [airinv/bom/BucketStruct.cpp](#)

## 24.13 CmdAbstract Class Reference

Inheritance diagram for CmdAbstract::

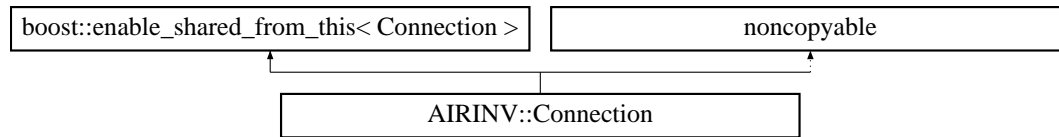


The documentation for this class was generated from the following files:

- [airinv/command/FFDisutilityParser.hpp](#)
- [airinv/command/InventoryBuilder.hpp](#)
- [airinv/command/InventoryParser.hpp](#)
- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParser.hpp](#)
- [airinv/command/vault/DCPParser.hpp](#)
- [airinv/command/FRAT5Parser.hpp](#)
- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/vault/DCPEventGenerator.hpp](#)
- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/InventoryGenerator.hpp](#)

## 24.14 AIRINV::Connection Class Reference

`#include <airinv/server/Connection.hpp>` Inheritance diagram for AIRINV::Connection::



### Public Member Functions

- [Connection](#) (boost::asio::io\_service &, [RequestHandler](#) &)
- boost::asio::ip::tcp::socket & [socket](#) ()
- void [start](#) ()

#### 24.14.1 Detailed Description

Represents a single connection from a client.

Definition at line 25 of file [Connection.hpp](#).

#### 24.14.2 Constructor & Destructor Documentation

##### 24.14.2.1 AIRINV::Connection::Connection (boost::asio::io\_service & *ioService*, [RequestHandler](#) & *ioHandler*)

Constructor.

Construct a connection with the given io\_service.

Definition at line 16 of file [Connection.cpp](#).

#### 24.14.3 Member Function Documentation

##### 24.14.3.1 boost::asio::ip::tcp::socket & AIRINV::Connection::socket ()

Get the socket associated with the connection.

Definition at line 22 of file [Connection.cpp](#).

##### 24.14.3.2 void AIRINV::Connection::start ()

Start the first asynchronous operation for the connection.

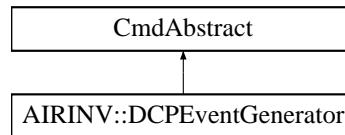
Definition at line 27 of file [Connection.cpp](#).

The documentation for this class was generated from the following files:

- airinv/server/[Connection.hpp](#)
- airinv/server/[Connection.cpp](#)

## 24.15 AIRINV::DCPEventGenerator Class Reference

`#include <airinv/command/vault/DCPEventGenerator.hpp>` Inheritance diagram for AIRINV::DCPEventGenerator::



### Friends

- class [DCPFileParser](#)
- struct [DCPParserHelper::doEndDCP](#)
- class [DCPParser](#)

### 24.15.1 Detailed Description

Class handling the generation / instantiation of the DCP BOM.

Definition at line 27 of file [DCPEventGenerator.hpp](#).

### 24.15.2 Friends And Related Function Documentation

#### 24.15.2.1 friend class DCPFileParser [friend]

Definition at line 31 of file [DCPEventGenerator.hpp](#).

#### 24.15.2.2 friend struct DCPParserHelper::doEndDCP [friend]

Definition at line 32 of file [DCPEventGenerator.hpp](#).

#### 24.15.2.3 friend class DCPParser [friend]

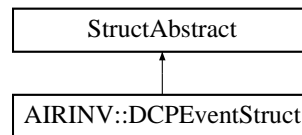
Definition at line 33 of file [DCPEventGenerator.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/command/vault/DCPEventGenerator.hpp](#)
- [airinv/command/vault/DCPEventGenerator.cpp](#)

## 24.16 AIRINV::DCPEventStruct Struct Reference

`#include <airinv/bom/DCPEventStruct.hpp>` Inheritance diagram for AIR-INV::DCPEventStruct:



### Public Member Functions

- [DCPEventStruct \(\)](#)
- `stdair::Date_T` [getDate \(\)](#) const
- `stdair::Duration_T` [getTime \(\)](#) const
- `const std::string` [describe \(\)](#) const
- `const unsigned int` [getAirlineListSize \(\)](#) const
- `const unsigned int` [getClassCodeListSize \(\)](#) const
- `const stdair::AirlineCode_T &` [getFirstAirlineCode \(\)](#) const
- `void` [beginAirline \(\)](#)
- `bool` [hasNotReachedEndAirline \(\)](#) const
- `stdair::AirlineCode_T` [getCurrentAirlineCode \(\)](#) const
- `void` [iterateAirline \(\)](#)
- `const std::string &` [getFirstClassCode \(\)](#) const
- `void` [beginClassCode \(\)](#)
- `bool` [hasNotReachedEndClassCode \(\)](#) const
- `std::string` [getCurrentClassCode \(\)](#) const
- `void` [iterateClassCode \(\)](#)

### Public Attributes

- `stdair::year_t` [\\_itYear](#)
- `stdair::month_t` [\\_itMonth](#)
- `stdair::day_t` [\\_itDay](#)
- `stdair::hour_t` [\\_itHours](#)
- `stdair::minute_t` [\\_itMinutes](#)
- `stdair::second_t` [\\_itSeconds](#)
- `stdair::AirlineCodeList_T::iterator` [\\_itCurrentAirlineCode](#)
- `stdair::ClassList_StringList_T::iterator` [\\_itCurrentClassCode](#)
- `stdair::AirportCode_T` [\\_origin](#)
- `stdair::AirportCode_T` [\\_destination](#)
- `stdair::Date_T` [\\_dateRangeStart](#)
- `stdair::Date_T` [\\_dateRangeEnd](#)
- `stdair::Duration_T` [\\_timeRangeStart](#)
- `stdair::Duration_T` [\\_timeRangeEnd](#)
- `stdair::CabinCode_T` [\\_cabinCode](#)
- `stdair::CityCode_T` [\\_pos](#)
- `stdair::ChannelLabel_T` [\\_channel](#)



- `stdair::DayDuration_T _advancePurchase`
- `stdair::SaturdayStay_T _saturdayStay`
- `stdair::ChangeFees_T _changeFees`
- `stdair::NonRefundable_T _nonRefundable`
- `stdair::DayDuration_T _minimumStay`
- `stdair::PriceValue_T _DCP`
- `stdair::AirlineCode_T _airlineCode`
- `stdair::ClassCode_T _classCode`
- `stdair::AirlineCodeList_T _airlineCodeList`
- `stdair::ClassList_StringList_T _classCodeList`

### 24.16.1 Detailed Description

Utility Structure for the parsing of Flight-Period structures.

Definition at line 21 of file [DCPEventStruct.hpp](#).

### 24.16.2 Constructor & Destructor Documentation

#### 24.16.2.1 AIRINV::DCPEventStruct::DCPEventStruct ()

Default constructor.

Definition at line 18 of file [DCPEventStruct.cpp](#).

### 24.16.3 Member Function Documentation

#### 24.16.3.1 stdair::Date\_T AIRINV::DCPEventStruct::getDate () const

Get the date from the staging details.

Definition at line 38 of file [DCPEventStruct.cpp](#).

References [\\_itDay](#), [\\_itMonth](#), and [\\_itYear](#).

#### 24.16.3.2 stdair::Duration\_T AIRINV::DCPEventStruct::getTime () const

Get the time from the staging details.

Definition at line 44 of file [DCPEventStruct.cpp](#).

References [\\_itHours](#), [\\_itMinutes](#), and [\\_itSeconds](#).

#### 24.16.3.3 const std::string AIRINV::DCPEventStruct::describe () const

Display of the structure.

Definition at line 53 of file [DCPEventStruct.cpp](#).

References [\\_advancePurchase](#), [\\_airlineCodeList](#), [\\_cabinCode](#), [\\_changeFees](#), [\\_channel](#), [\\_classCodeList](#), [\\_dateRangeEnd](#), [\\_dateRangeStart](#), [\\_DCP](#), [\\_destination](#), [\\_minimumStay](#), [\\_nonRefundable](#), [\\_origin](#), [\\_pos](#), [\\_saturdayStay](#), [\\_timeRangeEnd](#), and [\\_timeRangeStart](#).

**24.16.3.4 const unsigned int AIRINV::DCPEventStruct::getAirlineListSize () const [inline]**

Get the size of the airline code list.

Definition at line 37 of file [DCPEventStruct.hpp](#).

References [\\_airlineCodeList](#).

**24.16.3.5 const unsigned int AIRINV::DCPEventStruct::getClassCodeListSize () const [inline]**

Get the size of the class code list.

Definition at line 42 of file [DCPEventStruct.hpp](#).

References [\\_classCodeList](#).

**24.16.3.6 const stdair::AirlineCode\_T & AIRINV::DCPEventStruct::getFirstAirlineCode () const**

Get the first airline code.

Definition at line 87 of file [DCPEventStruct.cpp](#).

References [\\_airlineCodeList](#).

**24.16.3.7 void AIRINV::DCPEventStruct::beginAirline ()**

Initialise the internal iterators on airline code: The current iterator is set on the first airline code, the next iterator is set on the second one.

Definition at line 95 of file [DCPEventStruct.cpp](#).

References [\\_airlineCodeList](#), and [\\_itCurrentAirlineCode](#).

**24.16.3.8 bool AIRINV::DCPEventStruct::hasNotReachedEndAirline () const**

States whether or not the end of the (airline code) list has been reached.

Definition at line 100 of file [DCPEventStruct.cpp](#).

References [\\_airlineCodeList](#), and [\\_itCurrentAirlineCode](#).

**24.16.3.9 stdair::AirlineCode\_T AIRINV::DCPEventStruct::getCurrentAirlineCode () const**

Get the current element (airline code).

Definition at line 106 of file [DCPEventStruct.cpp](#).

References [\\_airlineCodeList](#), and [\\_itCurrentAirlineCode](#).

**24.16.3.10 void AIRINV::DCPEventStruct::iterateAirline ()**

Iterate for one element (airline code): increment both internal iterators on Buckets.

Definition at line 112 of file [DCPEventStruct.cpp](#).

References [\\_classCodeList](#), and [\\_itCurrentAirlineCode](#).

**24.16.3.11 const std::string & AIRINV::DCPEventStruct::getFirstClassCode () const**

Get the first class code list as a string.

Definition at line 119 of file [DCPEventStruct.cpp](#).

References [\\_classCodeList](#).

**24.16.3.12 void AIRINV::DCPEventStruct::beginClassCode ()**

Initialise the internal iterators on class code: The current iterator is set on the first class code, the next iterator is set on the second one.

Definition at line 127 of file [DCPEventStruct.cpp](#).

References [\\_classCodeList](#), and [\\_itCurrentClassCode](#).

**24.16.3.13 bool AIRINV::DCPEventStruct::hasNotReachedEndClassCode () const**

States whether or not the end of the (class code) list has been reached.

Definition at line 132 of file [DCPEventStruct.cpp](#).

References [\\_classCodeList](#), and [\\_itCurrentClassCode](#).

**24.16.3.14 std::string AIRINV::DCPEventStruct::getCurrentClassCode () const**

Get the current element (class code).

Definition at line 138 of file [DCPEventStruct.cpp](#).

References [\\_classCodeList](#), and [\\_itCurrentClassCode](#).

**24.16.3.15 void AIRINV::DCPEventStruct::iterateClassCode ()**

Iterate for one element (classCode): increment both internal iterators on Buckets.

Definition at line 145 of file [DCPEventStruct.cpp](#).

References [\\_classCodeList](#), and [\\_itCurrentClassCode](#).

**24.16.4 Member Data Documentation****24.16.4.1 stdair::year\_t AIRINV::DCPEventStruct::\_itYear**

Staging Date.

Definition at line 87 of file [DCPEventStruct.hpp](#).

Referenced by [getDate\(\)](#).

**24.16.4.2 stdair::month\_t AIRINV::DCPEventStruct::\_itMonth**

Definition at line 88 of file [DCPEventStruct.hpp](#).

Referenced by [getDate\(\)](#).

#### 24.16.4.3 stdair::day\_t AIRINV::DCPEventStruct::\_itDay

Definition at line 89 of file [DCPEventStruct.hpp](#).

Referenced by [getDate\(\)](#).

#### 24.16.4.4 stdair::hour\_t AIRINV::DCPEventStruct::\_itHours

Staging Time.

Definition at line 93 of file [DCPEventStruct.hpp](#).

Referenced by [getTime\(\)](#).

#### 24.16.4.5 stdair::minute\_t AIRINV::DCPEventStruct::\_itMinutes

Definition at line 94 of file [DCPEventStruct.hpp](#).

Referenced by [getTime\(\)](#).

#### 24.16.4.6 stdair::second\_t AIRINV::DCPEventStruct::\_itSeconds

Definition at line 95 of file [DCPEventStruct.hpp](#).

Referenced by [getTime\(\)](#).

#### 24.16.4.7 stdair::AirlineCodeList\_T::iterator AIRINV::DCPEventStruct::\_itCurrentAirlineCode

Iterator for the current airline code list.

Definition at line 98 of file [DCPEventStruct.hpp](#).

Referenced by [beginAirline\(\)](#), [getCurrentAirlineCode\(\)](#), [hasNotReachedEndAirline\(\)](#), and [iterateAirline\(\)](#).

#### 24.16.4.8 stdair::ClassList\_StringList\_T::iterator AIRINV::DCPEventStruct::\_itCurrentClassCode

Iterator for the current class code.

Definition at line 101 of file [DCPEventStruct.hpp](#).

Referenced by [beginClassCode\(\)](#), [getCurrentClassCode\(\)](#), [hasNotReachedEndClassCode\(\)](#), and [iterateClassCode\(\)](#).

#### 24.16.4.9 stdair::AirportCode\_T AIRINV::DCPEventStruct::\_origin

Origin.

Definition at line 104 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.10 stdair::AirportCode\_T AIRINV::DCPEventStruct::\_destination

Destination.

Definition at line 107 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.11 stdair::Date\_T AIRINV::DCPEventStruct::\_dateRangeStart

Start Range date available for this DCP event.

Definition at line 110 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.12 stdair::Date\_T AIRINV::DCPEventStruct::\_dateRangeEnd

Start Range date available for this DCP event.

Definition at line 113 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.13 stdair::Duration\_T AIRINV::DCPEventStruct::\_timeRangeStart

Start time from the time range available for this DCP event.

Definition at line 116 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.14 stdair::Duration\_T AIRINV::DCPEventStruct::\_timeRangeEnd

End time from the time range available for this DCP event.

Definition at line 119 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.15 stdair::CabinCode\_T AIRINV::DCPEventStruct::\_cabinCode

Cabin code.

Definition at line 122 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.16 stdair::CityCode\_T AIRINV::DCPEventStruct::\_pos

Point-of-sale.

Definition at line 125 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.17 stdair::ChannelLabel\_T AIRINV::DCPEventStruct::\_channel

Channel distribution.

Definition at line 128 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.18 stdair::DayDuration\_T AIRINV::DCPEventStruct::\_advancePurchase

Number of days that the ticket is sold before the flightDate.

Definition at line 131 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.19 stdair::SaturdayStay\_T AIRINV::DCPEventStruct::\_saturdayStay

Boolean saying whether a saturday is considered during the stay .

Definition at line 134 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.20 stdair::ChangeFees\_T AIRINV::DCPEventStruct::\_changeFees

Boolean saying whether the change fees option is requested or not.

Definition at line 137 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.21 stdair::NonRefundable\_T AIRINV::DCPEventStruct::\_nonRefundable

Boolean saying whether the refundable option is requested or not.

Definition at line 140 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.22 stdair::DayDuration\_T AIRINV::DCPEventStruct::\_minimumStay

Number of days that the customer spent into the destination city.

Definition at line 143 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.23 stdair::PriceValue\_T AIRINV::DCPEventStruct::\_DCP

Price.

Definition at line 146 of file [DCPEventStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.16.4.24 stdair::AirlineCode\_T AIRINV::DCPEventStruct::\_airlineCode

Airline code

Definition at line 149 of file [DCPEventStruct.hpp](#).

#### 24.16.4.25 stdair::ClassCode\_T AIRINV::DCPEventStruct::\_classCode

Code

Definition at line 152 of file [DCPEventStruct.hpp](#).

#### 24.16.4.26 stdair::AirlineCodeList\_T AIRINV::DCPEventStruct::\_airlineCodeList

Airline Code List

Definition at line 155 of file [DCPEventStruct.hpp](#).

Referenced by [beginAirline\(\)](#), [describe\(\)](#), [getAirlineListSize\(\)](#), [getCurrentAirlineCode\(\)](#), [getFirstAirlineCode\(\)](#), and [hasNotReachedEndAirline\(\)](#).

#### 24.16.4.27 stdair::ClassList\_StringList\_T AIRINV::DCPEventStruct::\_classCodeList

Numbers of different Airline Codes Class Code List

Definition at line 161 of file [DCPEventStruct.hpp](#).

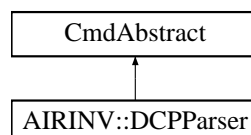
Referenced by [beginClassCode\(\)](#), [describe\(\)](#), [getClassCodeListSize\(\)](#), [getCurrentClassCode\(\)](#), [getFirstClassCode\(\)](#), [hasNotReachedEndClassCode\(\)](#), [iterateAirline\(\)](#), and [iterateClassCode\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/DCPEventStruct.hpp](#)
- [airinv/bom/DCPEventStruct.cpp](#)

## 24.17 AIRINV::DCPParser Class Reference

`#include <airinv/command/vault/DCPParser.hpp>`Inheritance diagram for AIRINV::DCPParser::



### Static Public Member Functions

- static void [DCPRuleGeneration](#) (const stdair::Filename\_T &, stdair::BomRoot &)

### 24.17.1 Detailed Description

Class wrapping the parser entry point.

Definition at line 19 of file [DCPParser.hpp](#).

### 24.17.2 Member Function Documentation

#### 24.17.2.1 void AIRINV::DCPParser::DCPRuleGeneration (const stdair::Filename\_T & iFilename, stdair::BomRoot & ioBomRoot) [static]

Parses the CSV file describing the DCPs for the simulator, and generates the event structures accordingly.

##### Parameters:

- const* stdair::Filename\_T& The file-name of the CSV-formatted DCP input file.
- stdair::BomRoot&* Root of the BOM tree.

Definition at line 16 of file [DCPParser.cpp](#).

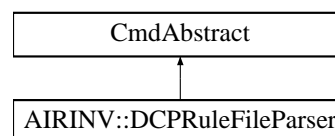
References [AIRINV::DCPRuleFileParser::generateDCPRules\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/vault/DCPParser.hpp](#)
- [airinv/command/vault/DCPParser.cpp](#)

## 24.18 AIRINV::DCPRuleFileParser Class Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPRuleFileParser:



### Public Member Functions

- [DCPRuleFileParser](#) (stdair::BomRoot &ioBomRoot, const stdair::Filename\_T &iFilename)
- bool [generateDCPRules](#) ()

### 24.18.1 Detailed Description

Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

Definition at line 337 of file [DCPParserHelper.hpp](#).



## 24.18.2 Constructor & Destructor Documentation

### 24.18.2.1 AIRINV::DCPRuleFileParser::DCPRuleFileParser (stdair::BomRoot & *ioBomRoot*, const stdair::Filename\_T & *iFilename*)

Constructor.

Definition at line 572 of file [DCPParserHelper.cpp](#).

## 24.18.3 Member Function Documentation

### 24.18.3.1 bool AIRINV::DCPRuleFileParser::generateDCPRules ()

Parse the input file and generate the Inventories.

Definition at line 593 of file [DCPParserHelper.cpp](#).

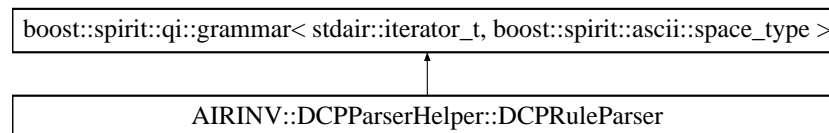
Referenced by [AIRINV::DCPParser::DCPRuleGeneration\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.19 AIRINV::DCPParserHelper::DCPRuleParser Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::DCPRuleParser::



## Public Member Functions

- [DCPRuleParser](#) (stdair::BomRoot &, DCPRuleStruct &)

## Public Attributes

- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [start](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [comments](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [DCP\\_rule](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [DCP\\_rule\\_end](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [DCP\\_key](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [DCP\\_id](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [origin](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [destination](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [dateRangeStart](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [dateRangeEnd](#)

- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [date](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [timeRangeStart](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [timeRangeEnd](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [time](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [position](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [cabinCode](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [channel](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [advancePurchase](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [saturdayStay](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [changeFees](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [nonRefundable](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [minimumStay](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [DCP](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [segment](#)
- boost::spirit::qi::rule< stdair::iterator\_t, boost::spirit::ascii::space\_type > [list\\_class](#)
- stdair::BomRoot & [\\_bomRoot](#)
- DCPRuleStruct & [\\_DCPRule](#)

### 24.19.1 Detailed Description

DCP: DCPID; OriginCity; DestinationCity; DateRangeStart; DateRangeEnd; DepartureTimeRangeStart; DepartureTimeRangeEnd; POS; AdvancePurchase; SaturdayNight; ChangeFees; NonRefundable; MinimumStay; Price; AirlineCode; Class;

DCPID OriginCity (3-char airport code) DestinationCity (3-char airport code) DateRangeStart (yyyy-mm-dd) DateRangeEnd (yyyy-mm-dd) DepartureTimeRangeStart (hh:mm) DepartureTimeRangeEnd (hh:mm) POS (3-char position city) Cabin Code (1-char cabin code) Channel (D=direct, I=indirect, N=online, F=offline) AdvancePurchase SaturdayNight (T=True, F=False) ChangeFees (T=True, F=False) NonRefundable (T=True, F=False) MinimumStay Price AirlineCode (2-char airline code) ClassList (List of 1-char class code)

Grammar: Demand ::= PrefDepDate ';' Origin ';' Destination ';' PassengerType ';' DemandParams ';' PosDist ';' ChannelDist ';' TripDist ';' StayDist ';' FfDist ';' PrefDepTimeDist ';' minWTP ';' TimeValueDist ';' DtdDist EndOfDemand PrefDepDate ::= date PassengerType ::= 'T' | 'F' DemandParams ::= DemandMean ';' DemandStdDev PosDist ::= PosPair (';' PosPair)\* PosPair ::= PosCode ';' PosShare PosCode ::= AirportCode | "row" PosShare ::= real ChannelDist ::= ChannelPair (';' ChannelPair)\* ChannelPair ::= Channel\_Code ';' ChannelShare ChannelCode ::= "DF" | "DN" | "IF" | "IN" ChannelShare ::= real TripDist ::= TripPair (';' TripPair)\* TripPair ::= TripCode ';' TripShare TripCode ::= "RO" | "RI" | "OW" TripShare ::= real StayDist ::= StayPair (';' StayPair)\* StayPair ::= [0;3]-digit-integer ';' stay\_share StayShare ::= real FFDist ::= FF\_Pair (';' FF\_Pair)\* FFPair ::= FFCODE ';' FFShare FFCODE ::= 'P' | 'G' | 'S' | 'M' | 'N' FFShare ::= real PrefDepTimeDist ::= PrefDepTimePair (';' PrefDepTimePair)\* PrefDepTimePair ::= time ';' PrefDepTimeShare PrefDepTimeShare ::= real minWTP ::= real TimeValueDist ::= TimeValuePair (';' TimeValuePair)\* TimeValuePair ::= [0;2]-digit-integer ';' TimeValueShare TimeValueShare ::= real DTDDist ::= DTDPair (';' DTDPair)\* DTDPair ::= real ';' DTDDShare DTDDShare ::= real EndOfDemand ::= ';' Grammar for the DCP-Rule parser.

Definition at line 304 of file [DCPParserHelper.hpp](#).

### 24.19.2 Constructor & Destructor Documentation

#### 24.19.2.1 AIRINV::DCPParserHelper::DCPRuleParser::DCPRuleParser (stdair::BomRoot & ioBomRoot, DCPRuleStruct & ioDCPRule)

Definition at line 453 of file [DCPParserHelper.cpp](#).

References [\\_bomRoot](#), [\\_DCPRule](#), [advancePurchase](#), [cabinCode](#), [changeFees](#), [channel](#), [comments](#), [date](#), [dateRangeEnd](#), [dateRangeStart](#), [AIRINV::DCPParserHelper::day\\_p](#), [DCP](#), [DCP\\_id](#), [DCP\\_key](#), [DCP\\_rule](#), [DCP\\_rule\\_end](#), [destination](#), [AIRINV::DCPParserHelper::hour\\_p](#), [list\\_class](#), [minimumStay](#), [AIRINV::DCPParserHelper::minute\\_p](#), [AIRINV::DCPParserHelper::month\\_p](#), [nonRefundable](#), [origin](#), [position](#), [saturdayStay](#), [AIRINV::DCPParserHelper::second\\_p](#), [segment](#), [start](#), [time](#), [timeRangeEnd](#), [timeRangeStart](#), [AIRINV::DCPParserHelper::uint1\\_4\\_p](#), and [AIRINV::DCPParserHelper::year\\_p](#).

### 24.19.3 Member Data Documentation

#### 24.19.3.1 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::start`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

#### 24.19.3.2 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::comments`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

#### 24.19.3.3 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::DCP_rule`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

#### 24.19.3.4 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::DCP_rule_end`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

#### 24.19.3.5 `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>` `AIRINV::DCPParserHelper::DCPRuleParser::DCP_key`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.6** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`  
`AIRINV::DCPParserHelper::DCPRuleParser::DCP_id`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.7** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`  
`AIRINV::DCPParserHelper::DCPRuleParser::origin`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.8** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`  
`AIRINV::DCPParserHelper::DCPRuleParser::destination`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.9** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`  
`AIRINV::DCPParserHelper::DCPRuleParser::dateRangeStart`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.10** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`  
`AIRINV::DCPParserHelper::DCPRuleParser::dateRangeEnd`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.11** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>`  
`AIRINV::DCPParserHelper::DCPRuleParser::date`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.12** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>  
AIRINV::DCPParserHelper::DCPRuleParser::timeRangeStart`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.13** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>  
AIRINV::DCPParserHelper::DCPRuleParser::timeRangeEnd`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.14** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>  
AIRINV::DCPParserHelper::DCPRuleParser::time`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.15** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>  
AIRINV::DCPParserHelper::DCPRuleParser::position`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.16** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>  
AIRINV::DCPParserHelper::DCPRuleParser::cabinCode`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.17** `boost::spirit::qi::rule<stdair::iterator_t, boost::spirit::ascii::space_type>  
AIRINV::DCPParserHelper::DCPRuleParser::channel`

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.18** boost::spirit::qi::rule<stdair::iterator\_t, boost::spirit::ascii::space\_type>  
AIRINV::DCPParserHelper::DCPRuleParser::advancePurchase

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.19** boost::spirit::qi::rule<stdair::iterator\_t, boost::spirit::ascii::space\_type>  
AIRINV::DCPParserHelper::DCPRuleParser::saturdayStay

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.20** boost::spirit::qi::rule<stdair::iterator\_t, boost::spirit::ascii::space\_type>  
AIRINV::DCPParserHelper::DCPRuleParser::changeFees

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.21** boost::spirit::qi::rule<stdair::iterator\_t, boost::spirit::ascii::space\_type>  
AIRINV::DCPParserHelper::DCPRuleParser::nonRefundable

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.22** boost::spirit::qi::rule<stdair::iterator\_t, boost::spirit::ascii::space\_type>  
AIRINV::DCPParserHelper::DCPRuleParser::minimumStay

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

**24.19.3.23** boost::spirit::qi::rule<stdair::iterator\_t, boost::spirit::ascii::space\_type>  
AIRINV::DCPParserHelper::DCPRuleParser::DCP

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

### 24.19.3.24 boost::spirit::qi::rule<stdair::iterator\_t, boost::spirit::ascii::space\_type> AIRINV::DCPParserHelper::DCPRuleParser::segment

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

### 24.19.3.25 boost::spirit::qi::rule<stdair::iterator\_t, boost::spirit::ascii::space\_type> AIRINV::DCPParserHelper::DCPRuleParser::list\_class

Definition at line 313 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

### 24.19.3.26 stdair::BomRoot& AIRINV::DCPParserHelper::DCPRuleParser::\_bomRoot

Definition at line 320 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

### 24.19.3.27 DCPRuleStruct& AIRINV::DCPParserHelper::DCPRuleParser::\_DCPRule

Definition at line 321 of file [DCPParserHelper.hpp](#).

Referenced by [DCPRuleParser\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.20 AIRINV::DefaultMap Struct Reference

```
#include <airinv/basic/BasConst_Curves.hpp>
```

### Static Public Member Functions

- static [FRAT5Curve\\_T](#) createPickupFRAT5Curve ()

### 24.20.1 Detailed Description

Default PoS probability mass.

Definition at line 16 of file [BasConst\\_Curves.hpp](#).

## 24.20.2 Member Function Documentation

### 24.20.2.1 FRAT5Curve\_T AIRINV::DefaultMap::createPickupFRAT5Curve () [static]

Definition at line 16 of file [BasConst.cpp](#).

The documentation for this struct was generated from the following files:

- [airinv/basic/BasConst\\_Curves.hpp](#)
- [airinv/basic/BasConst.cpp](#)

## 24.21 AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT > Struct Template Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

### Public Member Functions

- [definition](#) ([FlightPeriodParser](#) const &self)
- [boost::spirit::classic::rule< ScannerT > const & start \(\) const](#)

### Public Attributes

- [boost::spirit::classic::rule< ScannerT > flight\\_period\\_list](#)
- [boost::spirit::classic::rule< ScannerT > not\\_to\\_be\\_parsed](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_period](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_period\\_end](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_key](#)
- [boost::spirit::classic::rule< ScannerT > airline\\_code](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_number](#)
- [boost::spirit::classic::rule< ScannerT > date](#)
- [boost::spirit::classic::rule< ScannerT > dow](#)
- [boost::spirit::classic::rule< ScannerT > time](#)
- [boost::spirit::classic::rule< ScannerT > date\\_offset](#)
- [boost::spirit::classic::rule< ScannerT > leg](#)
- [boost::spirit::classic::rule< ScannerT > leg\\_key](#)
- [boost::spirit::classic::rule< ScannerT > operating\\_leg\\_details](#)
- [boost::spirit::classic::rule< ScannerT > leg\\_details](#)
- [boost::spirit::classic::rule< ScannerT > leg\\_cabin\\_details](#)
- [boost::spirit::classic::rule< ScannerT > segment\\_section](#)
- [boost::spirit::classic::rule< ScannerT > segment\\_key](#)
- [boost::spirit::classic::rule< ScannerT > full\\_segment\\_cabin\\_details](#)
- [boost::spirit::classic::rule< ScannerT > segment\\_cabin\\_details](#)
- [boost::spirit::classic::rule< ScannerT > full\\_family\\_cabin\\_details](#)
- [boost::spirit::classic::rule< ScannerT > family\\_cabin\\_details](#)
- [boost::spirit::classic::rule< ScannerT > generic\\_segment](#)
- [boost::spirit::classic::rule< ScannerT > specific\\_segment\\_list](#)



### 24.21.1 Detailed Description

**template<typename ScannerT> struct AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >**

Definition at line 288 of file [ScheduleParserHelper.hpp](#).

### 24.21.2 Constructor & Destructor Documentation

**24.21.2.1 template<typename ScannerT >  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition<  
ScannerT >::definition (FlightPeriodParser const & self) [inline]**

Definition at line 538 of file [ScheduleParserHelper.cpp](#).

References

AIRINV::ScheduleParserHelper::FlightPeriodParser::\_bomRoot,  
AIRINV::FlightPeriodStruct::\_dateOffset, AIRINV::ScheduleParserHelper::FlightPeriodParser::\_  
flightPeriod, AIRINV::FlightPeriodStruct::\_itDay, AIRINV::FlightPeriodStruct::\_  
itHours, AIRINV::FlightPeriodStruct::\_itMinutes, AIRINV::FlightPeriodStruct::\_  
itMonth, AIRINV::FlightPeriodStruct::\_itSeconds, AIRINV::FlightPeriodStruct::\_itYear,  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::airline\_code,  
AIRINV::ScheduleParserHelper::airline\_code\_p(), AIRINV::ScheduleParserHelper::airport\_p(),  
AIRINV::ScheduleParserHelper::cabin\_code\_p(), AIRINV::ScheduleParserHelper::class\_code\_  
list\_p(), AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::date,  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::date\_offset,  
AIRINV::ScheduleParserHelper::day\_p(), AIRINV::ScheduleParserHelper::FlightPeriodParser::definition<  
ScannerT >::dow, AIRINV::ScheduleParserHelper::dow\_p(), AIRINV::ScheduleParserHelper::FlightPeriodParser::definition<  
ScannerT >::family\_cabin\_details, AIRINV::ScheduleParserHelper::family\_  
code\_p, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< Scanner  
T >::flight\_key, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition<  
ScannerT >::flight\_number, AIRINV::ScheduleParserHelper::flight\_number\_p(),  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight\_period,  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight\_period\_  
end, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight\_  
period\_list, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::full\_  
segment\_cabin\_details, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition<  
ScannerT >::generic\_segment, AIRINV::ScheduleParserHelper::hours\_p(),  
AIRINV::ScheduleParserHelper::int1\_p, AIRINV::ScheduleParserHelper::key\_p(),  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::leg,  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::leg\_cabin\_  
details, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::leg\_  
details, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::leg\_  
key, AIRINV::ScheduleParserHelper::minutes\_p(), AIRINV::ScheduleParserHelper::month\_  
p(), AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::not\_to\_be\_parsed, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition<  
ScannerT >::operating\_leg\_details, AIRINV::ScheduleParserHelper::seconds\_p(),  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::segment\_cabin\_  
details, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::segment\_  
key, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::segment\_  
section, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::specific\_  
segment\_list, AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::time,  
and AIRINV::ScheduleParserHelper::year\_p().

### 24.21.3 Member Function Documentation

**24.21.3.1** `template<typename ScannerT > bsc::rule< ScannerT > const &  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::start ()  
const [inline]`

Entry point of the parser.

Definition at line 692 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::flight\\_period\\_list](#).

### 24.21.4 Member Data Documentation

**24.21.4.1** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::flight_period_list`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#),  
and [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::start\(\)](#).

**24.21.4.2** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::not_to_be_parsed`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.3** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::flight_period`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.4** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::flight_period_end`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.5** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::flight_key`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.6** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::airline_code`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.7** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::flight_number`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.8** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::date`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.9** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::dow`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.10** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::time`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.11** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::date_offset`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.12** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::leg`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.13** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::leg_key`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.14** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::operating_leg_details`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.15** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::leg_details`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::definition\(\)](#).

**24.21.4.16** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::leg_cabin_details`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::definition\(\)](#).

**24.21.4.17** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::segment_section`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::definition\(\)](#).

**24.21.4.18** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::segment_key`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::definition\(\)](#).

**24.21.4.19** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::full_segment_cabin_details`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::definition\(\)](#).

**24.21.4.20** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::segment_cabin_details`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.21** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::full_family_cabin_details`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

**24.21.4.22** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::family_cabin_details`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.23** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::generic_segment`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

**24.21.4.24** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT  
>::specific_segment_list`

Definition at line 292 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.22 AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT > Struct Template Reference

```
#include <airinv/command/FFDisutilityParserHelper.hpp>
```

### Public Member Functions

- [definition](#) (FFDisutilityParser const &self)
- boost::spirit::classic::rule< ScannerT > const & [start](#) () const

### Public Attributes

- boost::spirit::classic::rule< ScannerT > [curve\\_list](#)
- boost::spirit::classic::rule< ScannerT > [not\\_to\\_be\\_parsed](#)
- boost::spirit::classic::rule< ScannerT > [curve](#)
- boost::spirit::classic::rule< ScannerT > [key](#)
- boost::spirit::classic::rule< ScannerT > [map](#)
- boost::spirit::classic::rule< ScannerT > [value\\_pair](#)
- boost::spirit::classic::rule< ScannerT > [curve\\_end](#)

### 24.22.1 Detailed Description

**template<typename ScannerT> struct AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >**

Definition at line 95 of file [FFDisutilityParserHelper.hpp](#).

### 24.22.2 Constructor & Destructor Documentation

**24.22.2.1 template<typename ScannerT >  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition<  
ScannerT >::definition (FFDisutilityParser const & self) [inline]**

Definition at line 123 of file [FFDisutilityParserHelper.cpp](#).

References [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::\\_bomRoot](#), [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::\\_ffDisutility](#), [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::curve](#), [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::curve\\_end](#), [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::curve\\_list](#), [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::key](#), [AIRINV::FFDisutilityParserHelper::key\\_p\(\)](#), [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::map](#), [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::not\\_to\\_be\\_parsed](#), and [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::value\\_pair](#).

### 24.22.3 Member Function Documentation

**24.22.3.1** `template<typename ScannerT > bsc::rule< ScannerT > const &  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::start  
( ) const [inline]`

Entry point of the parser.

Definition at line 163 of file [FFDisutilityParserHelper.cpp](#).

References [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::curve\\_list](#).

### 24.22.4 Member Data Documentation

**24.22.4.1** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT  
>::curve_list`

Definition at line 99 of file [FFDisutilityParserHelper.hpp](#).

Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#), and [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::start\(\)](#).

**24.22.4.2** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT  
>::not_to_be_parsed`

Definition at line 99 of file [FFDisutilityParserHelper.hpp](#).

Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

**24.22.4.3** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT  
>::curve`

Definition at line 99 of file [FFDisutilityParserHelper.hpp](#).

Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

**24.22.4.4** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::key`

Definition at line 99 of file [FFDisutilityParserHelper.hpp](#).



## 24.23 AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT > Struct Template Reference 204

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Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

**24.22.4.5** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::map`

Definition at line 99 of file [FFDisutilityParserHelper.hpp](#).

Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

**24.22.4.6** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT  
>::value_pair`

Definition at line 99 of file [FFDisutilityParserHelper.hpp](#).

Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

**24.22.4.7** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT  
>::curve_end`

Definition at line 99 of file [FFDisutilityParserHelper.hpp](#).

Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/FFDisutilityParserHelper.cpp](#)

## 24.23 AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT > Struct Template Reference

```
#include <airinv/command/FRAT5ParserHelper.hpp>
```

### Public Member Functions

- [definition](#) ([FRAT5Parser](#) const &self)
- `boost::spirit::classic::rule< ScannerT > const & start () const`

### Public Attributes

- `boost::spirit::classic::rule< ScannerT > curve\_list`

- [boost::spirit::classic::rule< ScannerT > not\\_to\\_be\\_parsed](#)
- [boost::spirit::classic::rule< ScannerT > curve](#)
- [boost::spirit::classic::rule< ScannerT > key](#)
- [boost::spirit::classic::rule< ScannerT > map](#)
- [boost::spirit::classic::rule< ScannerT > value\\_pair](#)
- [boost::spirit::classic::rule< ScannerT > curve\\_end](#)

### 24.23.1 Detailed Description

**template<typename ScannerT> struct AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >**

Definition at line 95 of file [FRAT5ParserHelper.hpp](#).

### 24.23.2 Constructor & Destructor Documentation

**24.23.2.1 template<typename ScannerT >  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT  
>::definition (FRAT5Parser const & self) [inline]**

Definition at line 124 of file [FRAT5ParserHelper.cpp](#).

References [AIRINV::FRAT5ParserHelper::FRAT5Parser::\\_bomRoot](#), [AIRINV::FRAT5ParserHelper::FRAT5Parser::\\_frat5](#), [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::curve](#), [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::curve\\_end](#), [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::curve\\_list](#), [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::key](#), [AIRINV::FRAT5ParserHelper::key\\_p\(\)](#), [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::map](#), [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::not\\_to\\_be\\_parsed](#), and [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::value\\_pair](#).

### 24.23.3 Member Function Documentation

**24.23.3.1 template<typename ScannerT > bsc::rule< ScannerT > const &  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::start () const  
[inline]**

Entry point of the parser.

Definition at line 164 of file [FRAT5ParserHelper.cpp](#).

References [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::curve\\_list](#).

### 24.23.4 Member Data Documentation

**24.23.4.1 template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::curve\_list**

Definition at line 99 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#), and [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::start\(\)](#).

**24.23.4.2** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT  
>::not_to_be_parsed`

Definition at line 99 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

**24.23.4.3** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::curve`

Definition at line 99 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

**24.23.4.4** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::key`

Definition at line 99 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

**24.23.4.5** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::map`

Definition at line 99 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

**24.23.4.6** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::value_pair`

Definition at line 99 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

**24.23.4.7** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::curve_end`

Definition at line 99 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.cpp](#)

## 24.24 AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT > Struct Template Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
```

### Public Member Functions

- [definition](#) ([InventoryParser](#) const &self)
- [boost::spirit::classic::rule< ScannerT > const & start](#) () const

### Public Attributes

- [boost::spirit::classic::rule< ScannerT > flight\\_date\\_list](#)
- [boost::spirit::classic::rule< ScannerT > not\\_to\\_be\\_parsed](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_date](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_date\\_end](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_key](#)
- [boost::spirit::classic::rule< ScannerT > airline\\_code](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_number](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_type\\_code](#)
- [boost::spirit::classic::rule< ScannerT > flight\\_visibility\\_code](#)
- [boost::spirit::classic::rule< ScannerT > date](#)
- [boost::spirit::classic::rule< ScannerT > leg\\_list](#)
- [boost::spirit::classic::rule< ScannerT > leg](#)
- [boost::spirit::classic::rule< ScannerT > operating\\_leg\\_details](#)
- [boost::spirit::classic::rule< ScannerT > leg\\_key](#)
- [boost::spirit::classic::rule< ScannerT > leg\\_details](#)
- [boost::spirit::classic::rule< ScannerT > leg\\_cabin\\_list](#)
- [boost::spirit::classic::rule< ScannerT > leg\\_cabin\\_details](#)
- [boost::spirit::classic::rule< ScannerT > bucket\\_list](#)
- [boost::spirit::classic::rule< ScannerT > bucket\\_details](#)
- [boost::spirit::classic::rule< ScannerT > time](#)
- [boost::spirit::classic::rule< ScannerT > segment\\_list](#)
- [boost::spirit::classic::rule< ScannerT > segment](#)
- [boost::spirit::classic::rule< ScannerT > segment\\_key](#)
- [boost::spirit::classic::rule< ScannerT > full\\_segment\\_cabin\\_details](#)
- [boost::spirit::classic::rule< ScannerT > segment\\_cabin\\_list](#)
- [boost::spirit::classic::rule< ScannerT > segment\\_cabin\\_key](#)
- [boost::spirit::classic::rule< ScannerT > segment\\_cabin\\_details](#)
- [boost::spirit::classic::rule< ScannerT > class\\_list](#)
- [boost::spirit::classic::rule< ScannerT > class\\_key](#)
- [boost::spirit::classic::rule< ScannerT > parent\\_subclass\\_code](#)
- [boost::spirit::classic::rule< ScannerT > class\\_protection](#)

- [boost::spirit::classic::rule< ScannerT > class\\_nego](#)
- [boost::spirit::classic::rule< ScannerT > class\\_details](#)
- [boost::spirit::classic::rule< ScannerT > family\\_cabin\\_list](#)
- [boost::spirit::classic::rule< ScannerT > family\\_cabin\\_details](#)

### 24.24.1 Detailed Description

**template<typename ScannerT> struct AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >**

Definition at line 476 of file [InventoryParserHelper.hpp](#).

### 24.24.2 Constructor & Destructor Documentation

**24.24.2.1 template<typename ScannerT >  
AIRINV::InventoryParserHelper::InventoryParser::definition<  
ScannerT >::definition (InventoryParser const & self) [inline]**

Definition at line 904 of file [InventoryParserHelper.cpp](#).

References

AIRINV::InventoryParserHelper::InventoryParser::_bomRoot,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::airline_code,
AIRINV::InventoryParserHelper::InventoryParser::_flightDate,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::bucket_details,
AIRINV::FlightDateStruct::_itDay,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::bucket_list,
AIRINV::FlightDateStruct::_itHours,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::cabin_code_p(),
AIRINV::FlightDateStruct::_itMinutes,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_code_list_p(),
AIRINV::FlightDateStruct::_itMonth,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_details,
AIRINV::FlightDateStruct::_itSeconds,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_key,
AIRINV::FlightDateStruct::_itYear,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_list,
AIRINV::InventoryParserHelper::InventoryParser::_nbOfFlights,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_nego,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::airline_code,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::date,
AIRINV::InventoryParserHelper::airline_code_p(),	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::day_p(),
AIRINV::InventoryParserHelper::airport_p(),	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::family_cabin_details,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::bucket_details,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::family_cabin_list,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::bucket_list,	AIRINV::InventoryParserHelper::family_code_p(),
AIRINV::InventoryParserHelper::cabin_code_p(),	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date,
AIRINV::InventoryParserHelper::class_code_list_p(),	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date_end,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_code_p(),	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date_list,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_details,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_key,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_key,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_number,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_list,	AIRINV::InventoryParserHelper::InventoryParser::flight_number_p(),
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_nego,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_type_code,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::date,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_visibility_code,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::day_p(),	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::full_segment_cabin_details,
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::family_cabin_details,	AIRINV::InventoryParserHelper::hours_p(),
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::family_cabin_list,	AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg,
AIRINV::InventoryParserHelper::family_code_p(),	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date,	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date_end,	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_date_list,	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_key,	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_number,	
AIRINV::InventoryParserHelper::InventoryParser::flight_number_p(),	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_type_code,	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_visibility_code,	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::full_segment_cabin_details,	
AIRINV::InventoryParserHelper::hours_p(),	
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg,	

```

AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::leg_cabin_
details,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::leg_
cabin_list,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::leg_
details,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::leg_
key,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::leg_list,
AIRINV::InventoryParserHelper::minutes_p(),
AIRINV::InventoryParserHelper::month_
p(),
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::not_
to_be_parsed,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::operating_leg_details,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::parent_subclass_code,
AIRINV::InventoryParserHelper::seconds_p(),
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::segment,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::segment_cabin_
details,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::segment_
cabin_key,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::segment_
cabin_list,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::segment_
key,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::segment_
list,
AIRINV::InventoryParserHelper::InventoryParser::definition<
ScannerT
>::time,
AIRINV::InventoryParserHelper::uint1_2_p,
AIRINV::InventoryParserHelper::uint1_3_p,
and
AIRINV::InventoryParserHelper::year_p().

```

### 24.24.3 Member Function Documentation

**24.24.3.1** `template<typename ScannerT > bsc::rule< ScannerT > const &  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::start ()  
const [inline]`

Entry point of the parser.

Definition at line 1118 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight\\_date\\_list](#).

### 24.24.4 Member Data Documentation

**24.24.4.1** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::flight_date_list`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#),  
and [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::start\(\)](#).

**24.24.4.2** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::not_to_be_parsed`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.3** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::flight_date`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.4** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::flight_date_end`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.5** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::flight_key`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.6** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::airline_code`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.7** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::flight_number`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.8** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::flight_type_code`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.9** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::flight_visibility_code`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.10** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::date`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.11** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg_list`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.12** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.13** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::operating_leg_details`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.14** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::leg_key`

Definition at line 480 of file [InventoryParserHelper.hpp](#).



Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.15** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::leg_details`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.16** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::leg_cabin_list`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.17** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::leg_cabin_details`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.18** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::bucket_list`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.19** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::bucket_details`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.20** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::time`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.21** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::segment_list`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.22** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::segment`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.23** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::segment_key`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.24** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::full_segment_cabin_details`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.25** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::segment_cabin_list`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.26** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::segment_cabin_key`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.27** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::segment_cabin_details`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.28** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::class_list`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.29** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::class_key`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.30** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::parent_subclass_code`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.31** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::class_protection`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.32** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::class_nego`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.33** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::class_details`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.34** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::family_cabin_list`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

**24.24.4.35** `template<typename ScannerT > boost::spirit::classic::rule<ScannerT>  
AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT  
>::family_cabin_details`

Definition at line 480 of file [InventoryParserHelper.hpp](#).

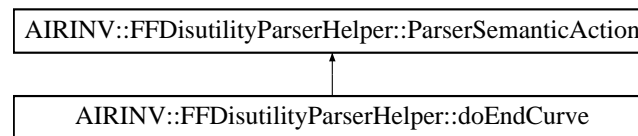
Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.25 AIRINV::FFDisutilityParserHelper::doEndCurve Struct Reference

#include <airinv/command/FFDisutilityParserHelper.hpp> Inheritance diagram for AIRINV::FFDisutilityParserHelper::doEndCurve::



### Public Member Functions

- [doEndCurve](#) (stdair::BomRoot &, [FFDisutilityStruct](#) &)
- void [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- [FFDisutilityStruct](#) & [\\_ffDisutility](#)

#### 24.25.1 Detailed Description

Mark the end of the FFDisutility curve parsing.

Definition at line 61 of file [FFDisutilityParserHelper.hpp](#).

#### 24.25.2 Constructor & Destructor Documentation

##### 24.25.2.1 AIRINV::FFDisutilityParserHelper::doEndCurve::doEndCurve (stdair::BomRoot & ioBomRoot, FFDisutilityStruct & ioFFDisutility)

Actor Constructor.

Definition at line 79 of file [FFDisutilityParserHelper.cpp](#).

#### 24.25.3 Member Function Documentation

##### 24.25.3.1 void AIRINV::FFDisutilityParserHelper::doEndCurve::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 87 of file [FFDisutilityParserHelper.cpp](#).

References [\\_bomRoot](#), [AIRINV::FFDisutilityStruct::\\_curve](#), [AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\\_ffDisutility](#), [AIRINV::FFDisutilityStruct::\\_key](#), and [AIRINV::FFDisutilityStruct::describe\(\)](#).

### 24.25.4 Member Data Documentation

#### 24.25.4.1 stdair::BomRoot& AIRINV::FFDisutilityParserHelper::doEndCurve::\_bomRoot

Actor Specific Context.

Definition at line 67 of file [FFDisutilityParserHelper.hpp](#).

Referenced by [operator\(\)](#).

#### 24.25.4.2 FFDIsutilityStruct& AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\_ffDisutility [inherited]

Actor Context.

Definition at line 33 of file [FFDisutilityParserHelper.hpp](#).

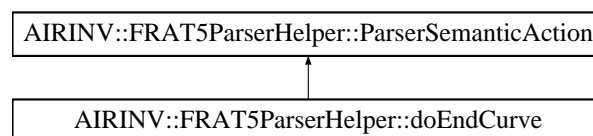
Referenced by [operator\(\)](#), [AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::operator\(\)](#), [AIRINV::FFDisutilityParserHelper::storeDTD::operator\(\)](#), and [AIRINV::FFDisutilityParserHelper::storeCurveKey::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/FFDisutilityParserHelper.cpp](#)

## 24.26 AIRINV::FRAT5ParserHelper::doEndCurve Struct Reference

`#include <airinv/command/FRAT5ParserHelper.hpp>`Inheritance diagram for AIRINV::FRAT5ParserHelper::doEndCurve::



### Public Member Functions

- [doEndCurve](#) (stdair::BomRoot &, [FRAT5Struct](#) &)
- void [operator\(\)](#) (iterator\_t iStr, iterator\_t iStrEnd) const

### Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- [FRAT5Struct](#) & [\\_frat5](#)

### 24.26.1 Detailed Description

Mark the end of the FRAT5 curve parsing.

Definition at line 61 of file [FRAT5ParserHelper.hpp](#).

## 24.26.2 Constructor & Destructor Documentation

### 24.26.2.1 AIRINV::FRAT5ParserHelper::doEndCurve::doEndCurve (stdair::BomRoot & ioBomRoot, FRAT5Struct & ioFRAT5)

Actor Constructor.

Definition at line 80 of file [FRAT5ParserHelper.cpp](#).

## 24.26.3 Member Function Documentation

### 24.26.3.1 void AIRINV::FRAT5ParserHelper::doEndCurve::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 88 of file [FRAT5ParserHelper.cpp](#).

References [\\_bomRoot](#), [AIRINV::FRAT5Struct::\\_curve](#), [AIRINV::FRAT5ParserHelper::ParserSemanticAction::\\_frat5](#), [AIRINV::FRAT5Struct::\\_key](#), and [AIRINV::FRAT5Struct::describe\(\)](#).

## 24.26.4 Member Data Documentation

### 24.26.4.1 stdair::BomRoot& AIRINV::FRAT5ParserHelper::doEndCurve::\_bomRoot

Actor Specific Context.

Definition at line 67 of file [FRAT5ParserHelper.hpp](#).

Referenced by [operator\(\)](#).

### 24.26.4.2 FRAT5Struct& AIRINV::FRAT5ParserHelper::ParserSemanticAction::\_frat5 [inherited]

Actor Context.

Definition at line 33 of file [FRAT5ParserHelper.hpp](#).

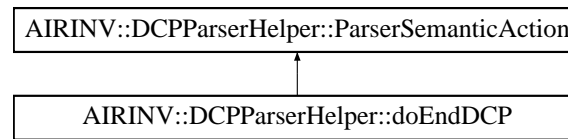
Referenced by [operator\(\)](#), [AIRINV::FRAT5ParserHelper::storeFRAT5Value::operator\(\)](#), [AIRINV::FRAT5ParserHelper::storeDTD::operator\(\)](#), and [AIRINV::FRAT5ParserHelper::storeCurveKey::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.cpp](#)

## 24.27 AIRINV::DCPParserHelper::doEndDCP Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::doEndDCP:



## Public Member Functions

- [doEndDCP](#) (stdair::BomRoot &, DCPRuleStruct &)
- void [operator\(\)](#) (boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

## Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- DCPRuleStruct & [\\_DCPRule](#)

### 24.27.1 Detailed Description

Mark the end of the DCP-rule parsing.

Definition at line 218 of file [DCPParserHelper.hpp](#).

### 24.27.2 Constructor & Destructor Documentation

#### 24.27.2.1 AIRINV::DCPParserHelper::doEndDCP::doEndDCP (stdair::BomRoot & *ioBomRoot*, DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 399 of file [DCPParserHelper.cpp](#).

### 24.27.3 Member Function Documentation

#### 24.27.3.1 void AIRINV::DCPParserHelper::doEndDCP::operator() (boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 406 of file [DCPParserHelper.cpp](#).

References [\\_bomRoot](#), and [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.27.4 Member Data Documentation

#### 24.27.4.1 stdair::BomRoot& AIRINV::DCPParserHelper::doEndDCP::\_bomRoot

Actor Specific Context.

Definition at line 226 of file [DCPParserHelper.hpp](#).



Referenced by [operator\(\)](#).

#### 24.27.4.2 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

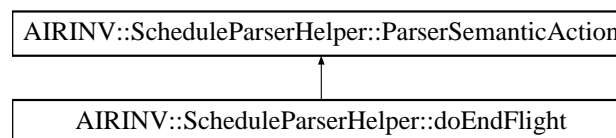
Referenced by [operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.28 AIRINV::ScheduleParserHelper::doEndFlight Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::doEndFlight::



### Public Member Functions

- [doEndFlight](#) (stdair::BomRoot &, [FlightPeriodStruct](#) &)
- [void operator\(\)](#) (iterator\_t iStr, iterator\_t iStrEnd) const

### Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.28.1 Detailed Description

Mark the end of the flight-period parsing.

Definition at line 224 of file [ScheduleParserHelper.hpp](#).

## 24.28.2 Constructor & Destructor Documentation

### 24.28.2.1 AIRINV::ScheduleParserHelper::doEndFlight::doEndFlight (stdair::BomRoot & ioBomRoot, FlightPeriodStruct & ioFlightPeriod)

Actor Constructor.

Definition at line 436 of file [ScheduleParserHelper.cpp](#).

## 24.28.3 Member Function Documentation

### 24.28.3.1 void AIRINV::ScheduleParserHelper::doEndFlight::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 444 of file [ScheduleParserHelper.cpp](#).

References [\\_bomRoot](#), [AIRINV::LegStruct::\\_cabinList](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itLeg](#), [AIRINV::FlightPeriodStruct::\\_legAlreadyDefined](#), [AIRINV::FlightPeriodStruct::\\_legList](#), and [AIRINV::FlightPeriodStruct::describe\(\)](#).

## 24.28.4 Member Data Documentation

### 24.28.4.1 stdair::BomRoot& AIRINV::ScheduleParserHelper::doEndFlight::\_bomRoot

Actor Specific Context.

Definition at line 230 of file [ScheduleParserHelper.hpp](#).

Referenced by [operator\(\)](#).

### 24.28.4.2 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#).

[INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#),  
[INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

and

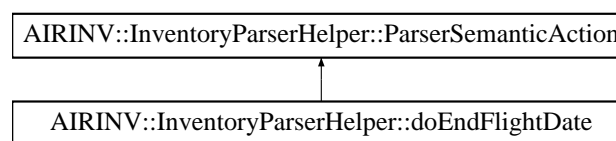
[AIR-](#)

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.29 AIRINV::InventoryParserHelper::doEndFlightDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::doEndFlightDate::



### Public Member Functions

- [doEndFlightDate](#) (stdair::BomRoot &, [FlightDateStruct](#) &, unsigned int &)
- void [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- unsigned int & [\\_nbOfFlights](#)
- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.29.1 Detailed Description

Mark the end of the inventory parsing.

Definition at line [441](#) of file [InventoryParserHelper.hpp](#).

### 24.29.2 Constructor & Destructor Documentation

#### 24.29.2.1 AIRINV::InventoryParserHelper::doEndFlightDate::doEndFlightDate (stdair::BomRoot & *ioBomRoot*, [FlightDateStruct](#) & *ioFlightDate*, unsigned int & *ioNbOfFlights*)

Actor Constructor.

Definition at line [778](#) of file [InventoryParserHelper.cpp](#).

### 24.29.3 Member Function Documentation

#### 24.29.3.1 void AIRINV::InventoryParserHelper::doEndFlightDate::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 787 of file [InventoryParserHelper.cpp](#).

References [\\_bomRoot](#), [AIRINV::SegmentStruct::\\_cabinList](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itSegment](#), [\\_nbOfFlights](#), and [AIRINV::FlightDateStruct::\\_segmentList](#).

### 24.29.4 Member Data Documentation

#### 24.29.4.1 stdair::BomRoot& AIRINV::InventoryParserHelper::doEndFlightDate::\_bomRoot

Actor Specific Context.

Definition at line 448 of file [InventoryParserHelper.hpp](#).

Referenced by [operator\(\)](#).

#### 24.29.4.2 unsigned int& AIRINV::InventoryParserHelper::doEndFlightDate::\_nbOfFlights

Definition at line 449 of file [InventoryParserHelper.hpp](#).

Referenced by [operator\(\)](#).

#### 24.29.4.3 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#),

```

AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator().

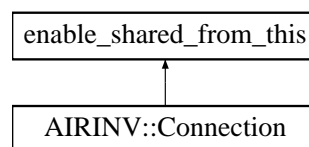
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.30 enable\_shared\_from\_this Class Reference

Inheritance diagram for enable\_shared\_from\_this::



The documentation for this class was generated from the following file:

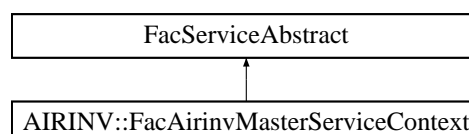
- [airinv/server/Connection.hpp](#)

## 24.31 AIRINV::FacAirinvMasterServiceContext Class Reference

Factory for Bucket.

```
#include <airinv/factory/FacAirinvMasterServiceContext.hpp>
```

Inheritance diagram for AIRINV::FacAirinvMasterServiceContext::



### Public Member Functions

- [~FacAirinvMasterServiceContext\(\)](#)

- [AIRINV\\_Master\\_ServiceContext](#) & [create](#) ()

#### Static Public Member Functions

- static [FacAirinvMasterServiceContext](#) & [instance](#) ()

#### Protected Member Functions

- [FacAirinvMasterServiceContext](#) ()

#### 24.31.1 Detailed Description

Factory for Bucket.

Definition at line 20 of file [FacAirinvMasterServiceContext.hpp](#).

#### 24.31.2 Constructor & Destructor Documentation

##### 24.31.2.1 AIRINV::FacAirinvMasterServiceContext::~~FacAirinvMasterServiceContext ()

Destructor.

The Destruction put the `_instance` to NULL in order to be clean for the next [FacAirinvMasterServiceContext::instance\(\)](#)

Definition at line 17 of file [FacAirinvMasterServiceContext.cpp](#).

##### 24.31.2.2 AIRINV::FacAirinvMasterServiceContext::FacAirinvMasterServiceContext () [inline, protected]

Default Constructor.

This constructor is protected in order to ensure the singleton pattern.

Definition at line 44 of file [FacAirinvMasterServiceContext.hpp](#).

Referenced by [instance\(\)](#).

#### 24.31.3 Member Function Documentation

##### 24.31.3.1 FacAirinvMasterServiceContext & AIRINV::FacAirinvMasterServiceContext::instance () [static]

Provide the unique instance.

The singleton is instantiated when first used

#### Returns:

[FacAirinvMasterServiceContext](#)&

Definition at line 22 of file [FacAirinvMasterServiceContext.cpp](#).

References [FacAirinvMasterServiceContext\(\)](#).

### 24.31.3.2 AIRINV\_Master\_ServiceContext & AIRINV::FacAirinvMasterServiceContext::create ()

Create a new [AIRINV\\_Master\\_ServiceContext](#) object.

This new object is added to the list of instantiated objects.

#### Returns:

[AIRINV\\_Master\\_ServiceContext](#)& The newly created object.

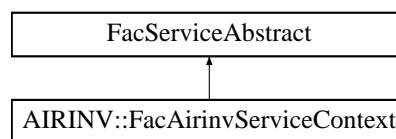
Definition at line 34 of file [FacAirinvMasterServiceContext.cpp](#).

The documentation for this class was generated from the following files:

- [airinv/factory/FacAirinvMasterServiceContext.hpp](#)
- [airinv/factory/FacAirinvMasterServiceContext.cpp](#)

## 24.32 AIRINV::FacAirinvServiceContext Class Reference

`#include <airinv/factory/FacAirinvServiceContext.hpp>`Inheritance diagram for AIRINV::FacAirinvServiceContext::



#### Public Member Functions

- [~FacAirinvServiceContext \(\)](#)
- [AIRINV\\_ServiceContext & create \(\)](#)

#### Static Public Member Functions

- static [FacAirinvServiceContext & instance \(\)](#)

#### Protected Member Functions

- [FacAirinvServiceContext \(\)](#)

### 24.32.1 Detailed Description

Factory for Bucket.

Definition at line 18 of file [FacAirinvServiceContext.hpp](#).

## 24.32.2 Constructor & Destructor Documentation

### 24.32.2.1 AIRINV::FacAirinvServiceContext::~~FacAirinvServiceContext ()

Destructor.

The Destruction put the `_instance` to NULL in order to be clean for the next [FacAirinvServiceContext::instance\(\)](#)

Definition at line 17 of file [FacAirinvServiceContext.cpp](#).

### 24.32.2.2 AIRINV::FacAirinvServiceContext::FacAirinvServiceContext () [inline, protected]

Default Constructor.

This constructor is protected in order to ensure the singleton pattern.

Definition at line 42 of file [FacAirinvServiceContext.hpp](#).

Referenced by [instance\(\)](#).

## 24.32.3 Member Function Documentation

### 24.32.3.1 FacAirinvServiceContext & AIRINV::FacAirinvServiceContext::instance () [static]

Provide the unique instance.

The singleton is instantiated when first used

#### Returns:

[FacAirinvServiceContext&](#)

Definition at line 22 of file [FacAirinvServiceContext.cpp](#).

References [FacAirinvServiceContext\(\)](#).

### 24.32.3.2 AIRINV\_ServiceContext & AIRINV::FacAirinvServiceContext::create ()

Create a new [AIRINV\\_ServiceContext](#) object.

This new object is added to the list of instantiated objects.

#### Returns:

[AIRINV\\_ServiceContext&](#) The newly created object.

Definition at line 34 of file [FacAirinvServiceContext.cpp](#).

The documentation for this class was generated from the following files:

- [airinv/factory/FacAirinvServiceContext.hpp](#)
- [airinv/factory/FacAirinvServiceContext.cpp](#)



## 24.33 AIRINV::FacBomAbstract Class Reference

```
#include <airinv/factory/FacBomAbstract.hpp>
```

### Public Types

- typedef std::vector< [BomAbstract](#) \* > [BomPool\\_T](#)

### Static Public Member Functions

- static std::size\_t [getID](#) (const [BomAbstract](#) \*)
- static std::size\_t [getID](#) (const [BomAbstract](#) &)
- static std::string [getIDString](#) (const [BomAbstract](#) \*)
- static std::string [getIDString](#) (const [BomAbstract](#) &)

### Protected Member Functions

- [FacBomAbstract](#) ()
- [FacBomAbstract](#) (const [FacBomAbstract](#) &)
- virtual [~FacBomAbstract](#) ()

### Protected Attributes

- [BomPool\\_T \\_pool](#)

### Friends

- class [FacSupervisor](#)

#### 24.33.1 Detailed Description

Base class for Factory layer.

Definition at line 17 of file [FacBomAbstract.hpp](#).

#### 24.33.2 Member Typedef Documentation

##### 24.33.2.1 typedef std::vector<BomAbstract\*> AIRINV::FacBomAbstract::BomPool\_T

Define the list (pool) of Bom objects.

Definition at line 22 of file [FacBomAbstract.hpp](#).

#### 24.33.3 Constructor & Destructor Documentation

##### 24.33.3.1 AIRINV::FacBomAbstract::FacBomAbstract () [inline, protected]

Default Constructor.

This constructor is protected to ensure the class is abstract.

Definition at line 41 of file [FacBomAbstract.hpp](#).

#### 24.33.3.2 AIRINV::FacBomAbstract::FacBomAbstract (const FacBomAbstract &) [inline, protected]

Definition at line 42 of file [FacBomAbstract.hpp](#).

#### 24.33.3.3 AIRINV::FacBomAbstract::~~FacBomAbstract () [protected, virtual]

Destructor.

Definition at line 16 of file [FacBomAbstract.cpp](#).

### 24.33.4 Member Function Documentation

#### 24.33.4.1 std::size\_t AIRINV::FacBomAbstract::getID (const BomAbstract \* *iBomAbstract\_ptr*) [static]

Return the ID corresponding to the given object pointer.

Definition at line 35 of file [FacBomAbstract.cpp](#).

Referenced by [getID\(\)](#), and [getIDString\(\)](#).

#### 24.33.4.2 std::size\_t AIRINV::FacBomAbstract::getID (const BomAbstract & *iBomAbstract*) [static]

Return the ID corresponding to the given object reference.

Definition at line 43 of file [FacBomAbstract.cpp](#).

References [getID\(\)](#).

#### 24.33.4.3 std::string AIRINV::FacBomAbstract::getIDString (const BomAbstract \* *iBomAbstract\_ptr*) [static]

Return the ID, as a string, corresponding to the given object pointer.

Definition at line 48 of file [FacBomAbstract.cpp](#).

References [getID\(\)](#).

Referenced by [getIDString\(\)](#).

#### 24.33.4.4 std::string AIRINV::FacBomAbstract::getIDString (const BomAbstract & *iBomAbstract*) [static]

Return the ID, as a string, corresponding to the given object reference.

Definition at line 56 of file [FacBomAbstract.cpp](#).

References [getIDString\(\)](#).

### 24.33.5 Friends And Related Function Documentation

#### 24.33.5.1 friend class FacSupervisor [friend]

Definition at line 18 of file [FacBomAbstract.hpp](#).

### 24.33.6 Member Data Documentation

#### 24.33.6.1 BomPool\_T AIRINV::FacBomAbstract::\_pool [protected]

List of instantiated Business Objects

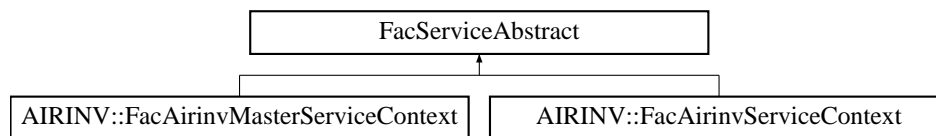
Definition at line 53 of file [FacBomAbstract.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/factory/FacBomAbstract.hpp](#)
- [airinv/factory/FacBomAbstract.cpp](#)

## 24.34 FacServiceAbstract Class Reference

Inheritance diagram for FacServiceAbstract::



The documentation for this class was generated from the following files:

- [airinv/factory/FacAirinvMasterServiceContext.hpp](#)
- [airinv/factory/FacAirinvServiceContext.hpp](#)

## 24.35 AIRINV::FacServiceAbstract Class Reference

```
#include <airinv/factory/FacServiceAbstract.hpp>
```

### Public Types

- typedef std::vector< [ServiceAbstract](#) \* > [ServicePool\\_T](#)

### Public Member Functions

- virtual [~FacServiceAbstract](#) ()
- void [clean](#) ()

### Protected Member Functions

- [FacServiceAbstract\(\)](#)

### Protected Attributes

- [ServicePool\\_T \\_pool](#)

#### 24.35.1 Detailed Description

Base class for the (Service) Factory layer.

Definition at line 16 of file [FacServiceAbstract.hpp](#).

#### 24.35.2 Member Typedef Documentation

##### 24.35.2.1 `typedef std::vector<ServiceAbstract*> AIRINV::FacServiceAbstract::ServicePool_T`

Define the list (pool) of Service objects.

Definition at line 20 of file [FacServiceAbstract.hpp](#).

#### 24.35.3 Constructor & Destructor Documentation

##### 24.35.3.1 `AIRINV::FacServiceAbstract::~~FacServiceAbstract() [virtual]`

Destructor.

Definition at line 13 of file [FacServiceAbstract.cpp](#).

References [clean\(\)](#).

##### 24.35.3.2 `AIRINV::FacServiceAbstract::FacServiceAbstract() [inline, protected]`

Default Constructor.

This constructor is protected to ensure the class is abstract.

Definition at line 31 of file [FacServiceAbstract.hpp](#).

#### 24.35.4 Member Function Documentation

##### 24.35.4.1 `void AIRINV::FacServiceAbstract::clean()`

Destroyed all the object instantiated by this factory.

Definition at line 18 of file [FacServiceAbstract.cpp](#).

References [\\_pool](#).

Referenced by [~FacServiceAbstract\(\)](#).

### 24.35.5 Member Data Documentation

#### 24.35.5.1 ServicePool\_T AIRINV::FacServiceAbstract::\_pool [protected]

List of instantiated Business Objects

Definition at line 34 of file [FacServiceAbstract.hpp](#).

Referenced by [clean\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/factory/FacServiceAbstract.hpp](#)
- [airinv/factory/FacServiceAbstract.cpp](#)

## 24.36 AIRINV::FacSupervisor Class Reference

```
#include <airinv/factory/FacSupervisor.hpp>
```

### Public Types

- typedef std::vector< [FacBomAbstract \\*](#) > [BomFactoryPool\\_T](#)
- typedef std::vector< [FacServiceAbstract \\*](#) > [ServiceFactoryPool\\_T](#)

### Public Member Functions

- void [registerBomFactory](#) ([FacBomAbstract \\*](#))
- void [registerServiceFactory](#) ([FacServiceAbstract \\*](#))
- void [cleanBomLayer](#) ()
- void [cleanServiceLayer](#) ()
- [~FacSupervisor](#) ()

### Static Public Member Functions

- static [FacSupervisor](#) & [instance](#) ()
- static void [cleanFactory](#) ()

### Protected Member Functions

- [FacSupervisor](#) ()
- [FacSupervisor](#) (const [FacSupervisor](#) &)

#### 24.36.1 Detailed Description

Singleton class to register and clean all Factories.

Definition at line 17 of file [FacSupervisor.hpp](#).

### 24.36.2 Member Typedef Documentation

#### 24.36.2.1 `typedef std::vector<FacBomAbstract*> AIRINV::FacSupervisor::BomFactoryPool_T`

Define the pool (list) of factories.

Definition at line 21 of file [FacSupervisor.hpp](#).

#### 24.36.2.2 `typedef std::vector<FacServiceAbstract*> AIRINV::FacSupervisor::ServiceFactoryPool_T`

Definition at line 22 of file [FacSupervisor.hpp](#).

### 24.36.3 Constructor & Destructor Documentation

#### 24.36.3.1 `AIRINV::FacSupervisor::~~FacSupervisor ()`

Destructor

The static instance is deleted (and reset to NULL) by the static [cleanFactory\(\)](#) method.

Definition at line 41 of file [FacSupervisor.cpp](#).

References [cleanBomLayer\(\)](#), and [cleanServiceLayer\(\)](#).

#### 24.36.3.2 `AIRINV::FacSupervisor::FacSupervisor () [protected]`

Default Constructor.

This constructor is protected to ensure the singleton pattern.

Definition at line 16 of file [FacSupervisor.cpp](#).

Referenced by [instance\(\)](#).

#### 24.36.3.3 `AIRINV::FacSupervisor::FacSupervisor (const FacSupervisor &) [inline, protected]`

Definition at line 66 of file [FacSupervisor.hpp](#).

### 24.36.4 Member Function Documentation

#### 24.36.4.1 `FacSupervisor & AIRINV::FacSupervisor::instance () [static]`

Provides the unique instance.

The singleton is instantiated when first used.

#### Returns:

[FacSupervisor&](#)

Definition at line 20 of file [FacSupervisor.cpp](#).

References [FacSupervisor\(\)](#).

#### 24.36.4.2 void AIRINV::FacSupervisor::registerBomFactory (FacBomAbstract \* ioFacBomAbstract\_ptr)

Register a newly instantiated concrete factory for the Bom layer.

When a concrete Factory is firstly instantiated this factory have to register itself to the [FacSupervisor](#)

##### Parameters:

*FacAbstract&* the concrete Factory to register.

Definition at line 30 of file [FacSupervisor.cpp](#).

#### 24.36.4.3 void AIRINV::FacSupervisor::registerServiceFactory (FacServiceAbstract \* ioFacServiceAbstract\_ptr)

Register a newly instantiated concrete factory for the Service layer.

When a concrete Factory is firstly instantiated this factory have to register itself to the [FacSupervisor](#).

##### Parameters:

*FacServiceAbstract&* the concrete Factory to register.

Definition at line 36 of file [FacSupervisor.cpp](#).

#### 24.36.4.4 void AIRINV::FacSupervisor::cleanBomLayer ()

Clean all created object.

Call the clean method of all the instantiated factories for the Bom layer.

Definition at line 47 of file [FacSupervisor.cpp](#).

Referenced by [cleanFactory\(\)](#), and [~FacSupervisor\(\)](#).

#### 24.36.4.5 void AIRINV::FacSupervisor::cleanServiceLayer ()

Clean all Service created object.

Call the clean method of all the instantiated factories for the Service layer.

Definition at line 61 of file [FacSupervisor.cpp](#).

Referenced by [cleanFactory\(\)](#), and [~FacSupervisor\(\)](#).

#### 24.36.4.6 void AIRINV::FacSupervisor::cleanFactory () [static]

Clean the static instance.

The singleton is deleted.

Definition at line 75 of file [FacSupervisor.cpp](#).

References [cleanBomLayer\(\)](#), and [cleanServiceLayer\(\)](#).

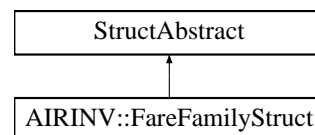
The documentation for this class was generated from the following files:

- [airinv/factory/FacSupervisor.hpp](#)
- [airinv/factory/FacSupervisor.cpp](#)

## 24.37 AIRINV::FareFamilyStruct Struct Reference

Utility Structure for the parsing of fare family details.

`#include <airinv/bom/FareFamilyStruct.hpp>` Inheritance diagram for AIR-INV::FareFamilyStruct:



### Public Member Functions

- [FareFamilyStruct](#) ()
- [FareFamilyStruct](#) (const stdair::FamilyCode\_T &, const stdair::CurveKey\_T &, const stdair::CurveKey\_T &, const stdair::ClassList\_String\_T &)
- void [fill](#) (stdair::FareFamily &) const
- const std::string [describe](#) () const

### Public Attributes

- stdair::FamilyCode\_T [\\_familyCode](#)
- stdair::CurveKey\_T [\\_frat5CurveKey](#)
- stdair::CurveKey\_T [\\_ffDisutilityCurveKey](#)
- stdair::ClassList\_String\_T [\\_classes](#)
- [BookingClassStructList\\_T](#) [\\_classList](#)

#### 24.37.1 Detailed Description

Utility Structure for the parsing of fare family details.

Definition at line 26 of file [FareFamilyStruct.hpp](#).

#### 24.37.2 Constructor & Destructor Documentation

##### 24.37.2.1 AIRINV::FareFamilyStruct::FareFamilyStruct ()

Default constructor.

Definition at line 16 of file [FareFamilyStruct.cpp](#).



**24.37.2.2** `AIRINV::FareFamilyStruct::FareFamilyStruct (const stdair::FamilyCode_T & iFamilyCode, const stdair::CurveKey_T & iFRAT5Key, const stdair::CurveKey_T & iFFDisutilityKey, const stdair::ClassList_String_T & iClasses)`

Main constructor.

Definition at line 23 of file [FareFamilyStruct.cpp](#).

### 24.37.3 Member Function Documentation

**24.37.3.1** `void AIRINV::FareFamilyStruct::fill (stdair::FareFamily & ioFareFamily) const`

Fill the FareFamily objects with the attributes of the [FareFamilyStruct](#).

Definition at line 52 of file [FareFamilyStruct.cpp](#).

**24.37.3.2** `const std::string AIRINV::FareFamilyStruct::describe () const`

Give a description of the structure (for display purposes).

Definition at line 32 of file [FareFamilyStruct.cpp](#).

References [\\_classes](#), [\\_classList](#), [\\_familyCode](#), [\\_ffDisutilityCurveKey](#), [\\_frat5CurveKey](#), and [AIR-INV::BookingClassStruct::describe\(\)](#).

Referenced by [AIRINV::SegmentCabinStruct::describe\(\)](#).

### 24.37.4 Member Data Documentation

**24.37.4.1** `stdair::FamilyCode_T AIRINV::FareFamilyStruct::_familyCode`

Definition at line 28 of file [FareFamilyStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeFamilyCode::operator\(\)](#).

**24.37.4.2** `stdair::CurveKey_T AIRINV::FareFamilyStruct::_frat5CurveKey`

Definition at line 29 of file [FareFamilyStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIR-INV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#).

**24.37.4.3** `stdair::CurveKey_T AIRINV::FareFamilyStruct::_ffDisutilityCurveKey`

Definition at line 30 of file [FareFamilyStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), and [AIR-INV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#).

#### 24.37.4.4 stdair::ClassList\_String\_T AIRINV::FareFamilyStruct::\_classes

Definition at line 31 of file [FareFamilyStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#).

#### 24.37.4.5 BookingClassStructList\_T AIRINV::FareFamilyStruct::\_classList

Definition at line 32 of file [FareFamilyStruct.hpp](#).

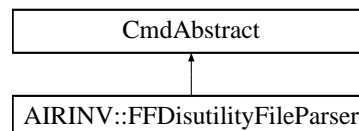
Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/FareFamilyStruct.hpp](#)
- [airinv/bom/FareFamilyStruct.cpp](#)

## 24.38 AIRINV::FFDisutilityFileParser Class Reference

`#include <airinv/command/FFDisutilityParserHelper.hpp>` Inheritance diagram for AIRINV::FFDisutilityFileParser:



### Public Member Functions

- [FFDisutilityFileParser](#) (stdair::BomRoot &ioBomRoot, const stdair::Filename\_T &iFilename)
- bool [generateFFDisutilityCurves](#) ()

#### 24.38.1 Detailed Description

Short Description

Detailed Description. Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

Definition at line 126 of file [FFDisutilityParserHelper.hpp](#).

## 24.38.2 Constructor & Destructor Documentation

### 24.38.2.1 AIRINV::FFDisutilityFileParser::FFDisutilityFileParser (stdair::BomRoot & ioBomRoot, const stdair::Filename\_T & iFilename)

Constructor.

Definition at line 177 of file [FFDisutilityParserHelper.cpp](#).

## 24.38.3 Member Function Documentation

### 24.38.3.1 bool AIRINV::FFDisutilityFileParser::generateFFDisutilityCurves ()

Parse the input file and generate the FFDIsutility curves.

Definition at line 201 of file [FFDisutilityParserHelper.cpp](#).

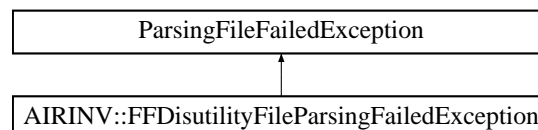
Referenced by [AIRINV::FFDisutilityParser::parse\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/FFDisutilityParserHelper.cpp](#)

## 24.39 AIRINV::FFDisutilityFileParsingFailedException Class Reference

`#include <airinv/AIRINV_Types.hpp>` Inheritance diagram for AIR-INV::FFDisutilityFileParsingFailedException::



## Public Member Functions

- [FFDisutilityFileParsingFailedException](#) (const std::string &iWhat)

### 24.39.1 Detailed Description

The FFDIsutility input file can not be parsed.

Definition at line 80 of file [AIRINV\\_Types.hpp](#).

## 24.39.2 Constructor & Destructor Documentation

### 24.39.2.1 AIRINV::FFDisutilityFileParsingFailedException::FFDisutilityFileParsingFailedException (const std::string &iWhat) [inline]

Constructor.

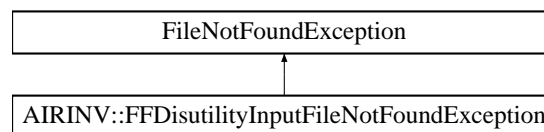
Definition at line 86 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.40 AIRINV::FFDisutilityInputFileNotFoundException Class Reference

`#include <airinv/AIRINV_Types.hpp>`  
 Inheritance diagram for AIR-  
 INV::FFDisutilityInputFileNotFoundException::



### Public Member Functions

- [FFDisutilityInputFileNotFoundException](#) (const std::string &iWhat)

#### 24.40.1 Detailed Description

The FF disutility input file can not be found or opened.

Definition at line 142 of file [AIRINV\\_Types.hpp](#).

#### 24.40.2 Constructor & Destructor Documentation

##### 24.40.2.1 AIRINV::FFDisutilityInputFileNotFoundException::FFDisutilityInputFileNotFoundException (const std::string &iWhat) [inline]

Constructor.

Definition at line 147 of file [AIRINV\\_Types.hpp](#).

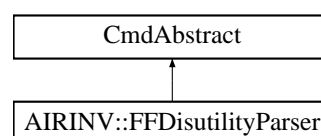
The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.41 AIRINV::FFDisutilityParser Class Reference

Class wrapping the parser entry point.

`#include <airinv/command/FFDisutilityParser.hpp>`  
 Inheritance diagram for AIR-  
 INV::FFDisutilityParser::



### Static Public Member Functions

- static void [parse](#) (const stdair::FFDisutilityFilePath &iFFDisutilityInputFilename, stdair::BomRoot &)

#### 24.41.1 Detailed Description

Class wrapping the parser entry point.

Definition at line 22 of file [FFDisutilityParser.hpp](#).

#### 24.41.2 Member Function Documentation

##### 24.41.2.1 void AIRINV::FFDisutilityParser::parse (const stdair::FFDisutilityFilePath &iFFDisutilityInputFilename, stdair::BomRoot &ioBomRoot) [static]

Parse the CSV file describing the FFDisutility curves for the simulator, and generates the curves accordingly.

#### Parameters:

- const* stdair::Filename\_T& The file-name of the CSV-formatted FFDisutility curve input file.
- stdair::BomRoot&* Root of the BOM tree.

Definition at line 20 of file [FFDisutilityParser.cpp](#).

References [AIRINV::FFDisutilityFileParser::generateFFDisutilityCurves\(\)](#).

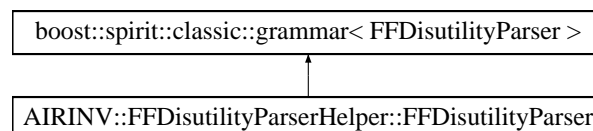
Referenced by [AIRINV::AIRINV\\_Service::parseAndLoad\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/FFDisutilityParser.hpp](#)
- [airinv/command/FFDisutilityParser.cpp](#)

## 24.42 AIRINV::FFDisutilityParserHelper::FFDisutilityParser Struct Reference

`#include <airinv/command/FFDisutilityParserHelper.hpp>`Inheritance diagram for AIRINV::FFDisutilityParserHelper::FFDisutilityParser:



### Classes

- struct [definition](#)

### Public Member Functions

- [FFDisutilityParser](#) (stdair::BomRoot &, [FFDisutilityStruct](#) &)

### Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- [FFDisutilityStruct](#) & [\\_ffDisutility](#)

#### 24.42.1 Detailed Description

CurveKey; FFDisutilityCurve; D1; 63:0.0050; 56:0.0049; 49:0.0047; 42:0.0045; 35:0.0043; 31:0.0040; 27:0.0037; 23:0.0034; 19:0.0030; 16:0.0026; 13:0.0022; 10:0.0017; 7:0.0013; 5:0.0012; 3:0.0011; 1:0.0010;

Grammar: Curve ::= Key ',' FFDisutilityMap EndOfCurve Key ::= string FFDisutilityMap ::= DTDValue-Paire (',' DTDValuePaire)\* DTDValuePaire ::= DTD ':' FFDisutilityValue EndOfCurve ::= ',' Grammar for the FFDisutility curve parser.

Definition at line 89 of file [FFDisutilityParserHelper.hpp](#).

#### 24.42.2 Constructor & Destructor Documentation

##### 24.42.2.1 AIRINV::FFDisutilityParserHelper::FFDisutilityParser::FFDisutilityParser (stdair::BomRoot & *ioBomRoot*, FFDisutilityStruct & *ioFFDisutility*)

Definition at line 114 of file [FFDisutilityParserHelper.cpp](#).

#### 24.42.3 Member Data Documentation

##### 24.42.3.1 stdair::BomRoot& AIRINV::FFDisutilityParserHelper::FFDisutilityParser::\_bomRoot

Definition at line 107 of file [FFDisutilityParserHelper.hpp](#).

Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

##### 24.42.3.2 FFDisutilityStruct& AIRINV::FFDisutilityParserHelper::FFDisutilityParser::\_ffDisutility

Definition at line 108 of file [FFDisutilityParserHelper.hpp](#).

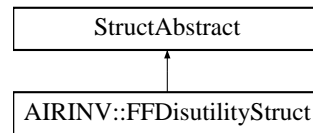
Referenced by [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >::definition\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/FFDisutilityParserHelper.cpp](#)

## 24.43 AIRINV::FFDisutilityStruct Struct Reference

`#include <airinv/bom/FFDisutilityStruct.hpp>` Inheritance diagram for AIRINV::FFDisutilityStruct:



### Public Member Functions

- `const std::string describe () const`
- `FFDisutilityStruct ()`
- `~FFDisutilityStruct ()`

### Public Attributes

- `std::string _key`
- `stdair::FFDisutilityCurve_T _curve`
- `stdair::DTD_T _dtd`

#### 24.43.1 Detailed Description

Utility Structure for the parsing of FFDisutility structures.

Definition at line 15 of file [FFDisutilityStruct.hpp](#).

#### 24.43.2 Constructor & Destructor Documentation

##### 24.43.2.1 AIRINV::FFDisutilityStruct::FFDisutilityStruct ()

Default constructor.

Definition at line 15 of file [FFDisutilityStruct.cpp](#).

##### 24.43.2.2 AIRINV::FFDisutilityStruct::~~FFDisutilityStruct ()

Destructor

Definition at line 19 of file [FFDisutilityStruct.cpp](#).

#### 24.43.3 Member Function Documentation

##### 24.43.3.1 const std::string AIRINV::FFDisutilityStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 23 of file [FFDisutilityStruct.cpp](#).

References [\\_curve](#), and [\\_key](#).

Referenced by [AIRINV::FFDisutilityParserHelper::doEndCurve::operator\(\)](#).

#### 24.43.4 Member Data Documentation

##### 24.43.4.1 `std::string AIRINV::FFDisutilityStruct::_key`

Curve key.

Definition at line 37 of file [FFDisutilityStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::FFDisutilityParserHelper::doEndCurve::operator\(\)](#), and [AIRINV::FFDisutilityParserHelper::storeCurveKey::operator\(\)](#).

##### 24.43.4.2 `stdair::FFDisutilityCurve_T AIRINV::FFDisutilityStruct::_curve`

Curve.

Definition at line 40 of file [FFDisutilityStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::FFDisutilityParserHelper::doEndCurve::operator\(\)](#), and [AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::operator\(\)](#).

##### 24.43.4.3 `stdair::DTD_T AIRINV::FFDisutilityStruct::_dtd`

DTD.

Definition at line 45 of file [FFDisutilityStruct.hpp](#).

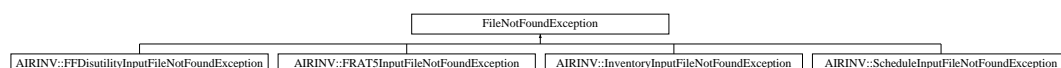
Referenced by [AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::operator\(\)](#), and [AIRINV::FFDisutilityParserHelper::storeDTD::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/FFDisutilityStruct.hpp](#)
- [airinv/bom/FFDisutilityStruct.cpp](#)

## 24.44 FileNotFoundException Class Reference

Inheritance diagram for FileNotFoundException::



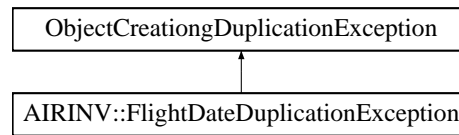
The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.45 AIRINV::FlightDateDuplicationException Class Reference

`#include <airinv/AIRINV_Types.hpp>`Inheritance diagram for AIRINV::FlightDateDuplicationException::





## Public Member Functions

- [FlightDateDuplicationException](#) (const std::string &iWhat)

### 24.45.1 Detailed Description

Duplicated flight date object.

Definition at line 154 of file [AIRINV\\_Types.hpp](#).

### 24.45.2 Constructor & Destructor Documentation

#### 24.45.2.1 AIRINV::FlightDateDuplicationException::FlightDateDuplicationException (const std::string &iWhat) [inline]

Constructor.

Definition at line 159 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.46 AIRINV::FlightDateHelper Class Reference

```
#include <airinv/bom/FlightDateHelper.hpp>
```

## Static Public Member Functions

- static void [fillFromRouting](#) (const stdair::FlightDate &)
- static void [updateAvailability](#) (const stdair::FlightDate &, const stdair::SegmentCabin &, const stdair::PartySize\_T &iNbOfBookings)
- static void [updateAvailabilityPool](#) (const stdair::FlightDate &, const stdair::CabinCode\_T &)
- static void [recalculateAvailability](#) (const stdair::FlightDate &, const stdair::CabinCode\_T &)
- static void [updateBookingControls](#) (stdair::FlightDate &)
- static void [recalculateAvailability](#) (const stdair::FlightDate &)

### 24.46.1 Detailed Description

Class representing the actual business functions for an airline flight-date.

Definition at line 19 of file [FlightDateHelper.hpp](#).

## 24.46.2 Member Function Documentation

### 24.46.2.1 void AIRINV::FlightDateHelper::fillFromRouting (const stdair::FlightDate & *iFlightDate*) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 51 of file [FlightDateHelper.cpp](#).

### 24.46.2.2 void AIRINV::FlightDateHelper::updateAvailability (const stdair::FlightDate & *iFlightDate*, const stdair::SegmentCabin & *iSegmentCabin*, const stdair::PartySize\_T & *iNbOfBookings*) [static]

Update the availability of all classes after a reservation.

Definition at line 67 of file [FlightDateHelper.cpp](#).

References [recalculateAvailability\(\)](#), and [updateAvailabilityPool\(\)](#).

Referenced by [AIRINV::SegmentCabinHelper::updateFromReservation\(\)](#).

### 24.46.2.3 void AIRINV::FlightDateHelper::updateAvailabilityPool (const stdair::FlightDate & *iFlightDate*, const stdair::CabinCode\_T & *iCabinCode*) [static]

Update the availability pool of all the segment-cabins after a reservation.

Definition at line 92 of file [FlightDateHelper.cpp](#).

Referenced by [updateAvailability\(\)](#).

### 24.46.2.4 void AIRINV::FlightDateHelper::recalculateAvailability (const stdair::FlightDate & *iFlightDate*, const stdair::CabinCode\_T & *iCabinCode*) [static]

Recalculate the availability of all the segment-cabins after a reservation.

Definition at line 127 of file [FlightDateHelper.cpp](#).

References [AIRINV::SegmentCabinHelper::updateAvailabilities\(\)](#).

Referenced by [updateAvailability\(\)](#).

### 24.46.2.5 void AIRINV::FlightDateHelper::updateBookingControls (stdair::FlightDate & *ioFlightDate*) [static]

Update booking controls after optimisation.

Definition at line 22 of file [FlightDateHelper.cpp](#).

References [AIRINV::SegmentCabinHelper::buildPseudoBidPriceVector\(\)](#), and [AIRINV::SegmentCabinHelper::updateBookingControlsUsingPseudoBidPriceVector\(\)](#).

### 24.46.2.6 void AIRINV::FlightDateHelper::recalculateAvailability (const stdair::FlightDate & *iFlightDate*) [static]

Recalculate the availability of all the segment-cabins after an optimisation.

Definition at line 145 of file [FlightDateHelper.cpp](#).

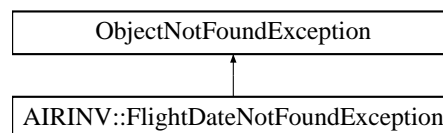
References [AIRINV::SegmentCabinHelper::updateAvailabilities\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/bom/FlightDateHelper.hpp](#)
- [airinv/bom/FlightDateHelper.cpp](#)

## 24.47 AIRINV::FlightDateNotFoundException Class Reference

`#include <airinv/AIRINV_Types.hpp>`Inheritance diagram for AIR-  
INV::FlightDateNotFoundException::



### Public Member Functions

- [FlightDateNotFoundException](#) (const std::string &iWhat)

#### 24.47.1 Detailed Description

Flight Date not found

Definition at line 184 of file [AIRINV\\_Types.hpp](#).

#### 24.47.2 Constructor & Destructor Documentation

##### 24.47.2.1 AIRINV::FlightDateNotFoundException::FlightDateNotFoundException (const std::string &iWhat) [inline]

Constructor.

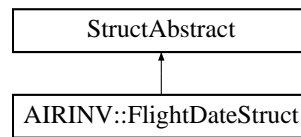
Definition at line 189 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.48 AIRINV::FlightDateStruct Struct Reference

`#include <airinv/bom/FlightDateStruct.hpp>`Inheritance diagram for AIR-  
INV::FlightDateStruct::



### Public Member Functions

- stdair::Date\_T [getDate](#) () const
- stdair::Duration\_T [getTime](#) () const
- const std::string [describe](#) () const
- void [addAirport](#) (const stdair::AirportCode\_T &)
- void [buildSegments](#) ()
- void [addSegmentCabin](#) (const [SegmentStruct](#) &, const [SegmentCabinStruct](#) &)
- void [addSegmentCabin](#) (const [SegmentCabinStruct](#) &)
- void [addFareFamily](#) (const [SegmentStruct](#) &, const [SegmentCabinStruct](#) &, const [FareFamilyStruct](#) &)
- void [addFareFamily](#) (const [SegmentCabinStruct](#) &, const [FareFamilyStruct](#) &)
- [FlightDateStruct](#) ()

### Public Attributes

- stdair::AirlineCode\_T [\\_airlineCode](#)
- stdair::FlightNumber\_T [\\_flightNumber](#)
- stdair::Date\_T [\\_flightDate](#)
- [FlightTypeCode](#) [\\_flightTypeCode](#)
- [FlightVisibilityCode](#) [\\_flightVisibilityCode](#)
- [LegStructList\\_T](#) [\\_legList](#)
- [SegmentStructList\\_T](#) [\\_segmentList](#)
- unsigned int [\\_itYear](#)
- unsigned int [\\_itMonth](#)
- unsigned int [\\_itDay](#)
- int [\\_dateOffSet](#)
- long [\\_itHours](#)
- long [\\_itMinutes](#)
- long [\\_itSeconds](#)
- [AirportList\\_T](#) [\\_airportList](#)
- [AirportOrderedList\\_T](#) [\\_airportOrderedList](#)
- bool [\\_legAlreadyDefined](#)
- [LegStruct](#) [\\_itLeg](#)
- [LegCabinStruct](#) [\\_itLegCabin](#)
- [BucketStruct](#) [\\_itBucket](#)
- bool [\\_areSegmentDefinitionsSpecific](#)
- [SegmentStruct](#) [\\_itSegment](#)
- [SegmentCabinStruct](#) [\\_itSegmentCabin](#)
- [BookingClassStruct](#) [\\_itBookingClass](#)

### 24.48.1 Detailed Description

Utility Structure for the parsing of Flight-Date structures.

Definition at line 27 of file [FlightDateStruct.hpp](#).

### 24.48.2 Constructor & Destructor Documentation

#### 24.48.2.1 AIRINV::FlightDateStruct::FlightDateStruct ()

Constructor.

Definition at line 17 of file [FlightDateStruct.cpp](#).

### 24.48.3 Member Function Documentation

#### 24.48.3.1 stdair::Date\_T AIRINV::FlightDateStruct::getDate () const

Set the date from the staging details.

Definition at line 25 of file [FlightDateStruct.cpp](#).

References [\\_itDay](#), [\\_itMonth](#), and [\\_itYear](#).

Referenced by [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)\(\)](#).

#### 24.48.3.2 stdair::Duration\_T AIRINV::FlightDateStruct::getTime () const

Set the time from the staging details.

Definition at line 30 of file [FlightDateStruct.cpp](#).

References [\\_itHours](#), [\\_itMinutes](#), and [\\_itSeconds](#).

Referenced by [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightTime::operator\(\)\(\)](#).

#### 24.48.3.3 const std::string AIRINV::FlightDateStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 37 of file [FlightDateStruct.cpp](#).

References [\\_airlineCode](#), [\\_flightDate](#), [\\_flightNumber](#), [\\_flightTypeCode](#), [\\_flightVisibilityCode](#), [\\_legList](#), [\\_segmentList](#), [AIRINV::SegmentStruct::describe\(\)](#), [AIRINV::LegStruct::describe\(\)](#), [AIRINV::FlightVisibilityCode::getCode\(\)](#), and [AIRINV::FlightVisibilityCode::NORMAL](#).

#### 24.48.3.4 void AIRINV::FlightDateStruct::addAirport (const stdair::AirportCode\_T & iAirport)

Add the given airport to the internal lists (if not already existing).

Definition at line 67 of file [FlightDateStruct.cpp](#).

References [\\_airportList](#), and [\\_airportOrderedList](#).

Referenced by [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#).

#### 24.48.3.5 void AIRINV::FlightDateStruct::buildSegments ()

Build the list of [SegmentStruct](#) objects.

Definition at line 83 of file [FlightDateStruct.cpp](#).

References [\\_airportList](#), [\\_airportOrderedList](#), [AIRINV::SegmentStruct::\\_boardingPoint](#), [AIRINV::SegmentStruct::\\_offPoint](#), and [\\_segmentList](#).

#### 24.48.3.6 void AIRINV::FlightDateStruct::addSegmentCabin (const SegmentStruct & iSegment, const SegmentCabinStruct & iCabin)

Add, to the Segment structure whose key corresponds to the given (board point, off point) pair, the specific segment cabin details (mainly, the list of the class codes).

Note that the Segment structure is retrieved from the internal list, already filled by a previous step (the [buildSegments\(\)](#) method).

Definition at line 116 of file [FlightDateStruct.cpp](#).

References [AIRINV::SegmentStruct::\\_boardingPoint](#), [AIRINV::SegmentStruct::\\_offPoint](#), and [\\_segmentList](#).

#### 24.48.3.7 void AIRINV::FlightDateStruct::addSegmentCabin (const SegmentCabinStruct & iCabin)

Add, to all the Segment structures, the general segment cabin details (mainly, the list of the class codes).

Note that the Segment structures are stored within the internal list, already filled by a previous step (the [buildSegments\(\)](#) method).

Definition at line 153 of file [FlightDateStruct.cpp](#).

References [AIRINV::SegmentStruct::\\_cabinList](#), and [\\_segmentList](#).

#### 24.48.3.8 void AIRINV::FlightDateStruct::addFareFamily (const SegmentStruct & iSegment, const SegmentCabinStruct & iCabin, const FareFamilyStruct & iFareFamily)

Add, to the SegmentCabin structure whose key corresponds to the given cabin code, the specific segment fare family details (mainly, the list of the class codes).

Note that the SegmentCabin structure is retrieved from the internal list, already filled by a previous step (the [buildSegmentCabins\(\)](#) method).

Definition at line 167 of file [FlightDateStruct.cpp](#).

References [AIRINV::SegmentStruct::\\_boardingPoint](#), [AIRINV::SegmentCabinStruct::\\_cabinCode](#), [AIRINV::SegmentStruct::\\_offPoint](#), and [\\_segmentList](#).

#### 24.48.3.9 void AIRINV::FlightDateStruct::addFareFamily (const SegmentCabinStruct & iCabin, const FareFamilyStruct & iFareFamily)

Add, to all the Segment structures, the general fare family sets (list of fare families).

Note that the SegmentCabin structures are stored within the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 231 of file [FlightDateStruct.cpp](#).

References [AIRINV::SegmentCabinStruct::\\_cabinCode](#), [AIRINV::SegmentStruct::\\_cabinList](#), and [\\_segmentList](#).

#### 24.48.4 Member Data Documentation

##### 24.48.4.1 stdair::AirlineCode\_T AIRINV::FlightDateStruct::\_airlineCode

Definition at line 81 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

##### 24.48.4.2 stdair::FlightNumber\_T AIRINV::FlightDateStruct::\_flightNumber

Definition at line 82 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#).

##### 24.48.4.3 stdair::Date\_T AIRINV::FlightDateStruct::\_flightDate

Definition at line 83 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

##### 24.48.4.4 FlightTypeCode AIRINV::FlightDateStruct::\_flightTypeCode

Definition at line 84 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#).

##### 24.48.4.5 FlightVisibilityCode AIRINV::FlightDateStruct::\_flightVisibilityCode

Definition at line 85 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#).

##### 24.48.4.6 LegStructList\_T AIRINV::FlightDateStruct::\_legList

Definition at line 86 of file [FlightDateStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

#### 24.48.4.7 SegmentStructList\_T AIRINV::FlightDateStruct::\_segmentList

Definition at line 87 of file [FlightDateStruct.hpp](#).

Referenced by [addFareFamily\(\)](#), [addSegmentCabin\(\)](#), [buildSegments\(\)](#), [describe\(\)](#), [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

#### 24.48.4.8 unsigned int AIRINV::FlightDateStruct::\_itYear

Staging Date.

Definition at line 90 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#), and [getDate\(\)](#).

#### 24.48.4.9 unsigned int AIRINV::FlightDateStruct::\_itMonth

Definition at line 91 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#), and [getDate\(\)](#).

#### 24.48.4.10 unsigned int AIRINV::FlightDateStruct::\_itDay

Definition at line 92 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#), and [getDate\(\)](#).

#### 24.48.4.11 int AIRINV::FlightDateStruct::\_dateOffset

Definition at line 93 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#).

#### 24.48.4.12 long AIRINV::FlightDateStruct::\_itHours

Staging Time.



Definition at line 96 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#), and [getTime\(\)](#).

#### 24.48.4.13 long AIRINV::FlightDateStruct::\_itMinutes

Definition at line 97 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#), and [getTime\(\)](#).

#### 24.48.4.14 long AIRINV::FlightDateStruct::\_itSeconds

Definition at line 98 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#), [getTime\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#).

#### 24.48.4.15 AirportList\_T AIRINV::FlightDateStruct::\_airportList

Staging Airport List (helper to derive the list of Segment structures).

Definition at line 102 of file [FlightDateStruct.hpp](#).

Referenced by [addAirport\(\)](#), and [buildSegments\(\)](#).

#### 24.48.4.16 AirportOrderedList\_T AIRINV::FlightDateStruct::\_airportOrderedList

Definition at line 103 of file [FlightDateStruct.hpp](#).

Referenced by [addAirport\(\)](#), and [buildSegments\(\)](#).

#### 24.48.4.17 bool AIRINV::FlightDateStruct::\_legAlreadyDefined

Staging Leg (resp. Cabin) structure, gathering the result of the iteration on one leg (resp. cabin).

Definition at line 107 of file [FlightDateStruct.hpp](#).

#### 24.48.4.18 LegStruct AIRINV::FlightDateStruct::\_itLeg

Definition at line 108 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#).

AIRINV::InventoryParserHelper::storeBoardingTime::operator(), AIR-  
 INV::InventoryParserHelper::storeBoardingDate::operator(), AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator()  
 AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-  
 INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()  
 and AIRINV::InventoryParserHelper::storeAirlineCode::operator().

#### 24.48.4.19 LegCabinStruct AIRINV::FlightDateStruct::\_itLegCabin

Definition at line 109 of file [FlightDateStruct.hpp](#).

Referenced by AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),  
 AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIR-  
 INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),  
 AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),  
 AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-  
 INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),  
 AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-  
 INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()  
 and AIRINV::InventoryParserHelper::storeAirlineCode::operator().

#### 24.48.4.20 BucketStruct AIRINV::FlightDateStruct::\_itBucket

Definition at line 110 of file [FlightDateStruct.hpp](#).

Referenced by AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIR-  
 INV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator()  
 AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIR-  
 INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()  
 and AIRINV::InventoryParserHelper::storeAirlineCode::operator().

#### 24.48.4.21 bool AIRINV::FlightDateStruct::\_areSegmentDefinitionsSpecific

Staging Segment-related attributes.

Definition at line 113 of file [FlightDateStruct.hpp](#).

#### 24.48.4.22 SegmentStruct AIRINV::FlightDateStruct::\_itSegment

Definition at line 114 of file [FlightDateStruct.hpp](#).

Referenced by AIRINV::InventoryParserHelper::doEndFlightDate::operator(), AIR-  
 INV::InventoryParserHelper::storeFClasses::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()  
 AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIR-  
 INV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), and AIR-  
 INV::InventoryParserHelper::storeAirlineCode::operator().

## 24.48.4.23 SegmentCabinStruct AIRINV::FlightDateStruct::\_itSegmentCabin

Definition at line 115 of file [FlightDateStruct.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

## 24.48.4.24 BookingClassStruct AIRINV::FlightDateStruct::\_itBookingClass

Definition at line 116 of file [FlightDateStruct.hpp](#).

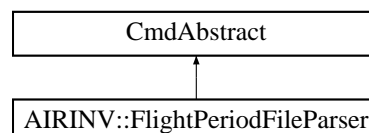
Referenced by [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/FlightDateStruct.hpp](#)
- [airinv/bom/FlightDateStruct.cpp](#)

## 24.49 AIRINV::FlightPeriodFileParser Class Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIRINV::FlightPeriodFileParser::



## Public Member Functions

- [FlightPeriodFileParser](#) (stdair::BomRoot &ioBomRoot, const stdair::Filename\_T &iFilename)

- bool [generateInventories](#) ()

### 24.49.1 Detailed Description

Short Description

Detailed Description. Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

Definition at line 325 of file [ScheduleParserHelper.hpp](#).

### 24.49.2 Constructor & Destructor Documentation

#### 24.49.2.1 AIRINV::FlightPeriodFileParser::FlightPeriodFileParser (stdair::BomRoot & ioBomRoot, const stdair::Filename\_T & iFilename)

Constructor.

Definition at line 706 of file [ScheduleParserHelper.cpp](#).

### 24.49.3 Member Function Documentation

#### 24.49.3.1 bool AIRINV::FlightPeriodFileParser::generateInventories ()

Parse the input file and generate the Inventories.

Definition at line 730 of file [ScheduleParserHelper.cpp](#).

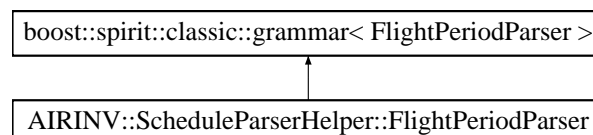
Referenced by [AIRINV::ScheduleParser::generateInventories\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.50 AIRINV::ScheduleParserHelper::FlightPeriodParser Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::FlightPeriodParser::



### Classes

- struct [definition](#)

## Public Member Functions

- [FlightPeriodParser](#) (stdair::BomRoot &, [FlightPeriodStruct](#) &)

## Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.50.1 Detailed Description

AirlineCode; FlightNumber; DateRangeStart; DateRangeEnd; DOW; (list) BoardingPoint; OffPoint; BoardingTime; DateOffset; OffTime; ElapsedTime; (list) CabinCode; Capacity; SegmentSpecificity (0 or 1); (list) (optional BoardingPoint; OffPoint); CabinCode; Classes BA; 9; 2007-04-20; 2007-04-30; 0000011; LHR; BKK; 22:00; +1; 15:15; 11:15; C; 12; M; 300; BKK; SYD; 18:10; +1; 06:05; 08:55; C; 20; M; 250; 0; C; CDIU; 1; CD; 2; IU; M; YHBKLMNOPQRSTUVWXYZ; 3; YHBKLMNOPQRSTUVWXYZ BA; 9; 2007-04-20; 2007-04-30; 1111100; LHR; SIN; 22:00; +1; 15:15; 11:15; C; 15; M; 310; SIN; SYD; 18:10; +1; 06:05; 08:55; C; 25; M; 260; 1; LHR; SIN; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTUVWXYZ; 2;YHBKLMNOPQRSTUVWXYZ SIN; SYD; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTUVWXYZ; 2;YHBKLMNOPQRSTUVWXYZ LHR; SYD; C; CDIU; 1; CDIU; M; YHBKLMNOPQRSTUVWXYZ; 2;YHBKLMNOPQRSTUVWXYZ

Grammar: DOW ::= int FlightKey ::= AirlineCode ';' FlightNumber ';' DateRangeStart ';' DateRangeEnd ';' DOW LegKey ::= BoardingPoint ';' OffPoint LegDetails ::= BoardingTime ['/ BoardingDateOffset] ';' OffTime ['/ BoardingDateOffset] ';' Elapsed LegCabinDetails ::= CabinCode ';' Capacity Leg ::= LegKey ';' LegDetails (';' CabinDetails)+ SegmentKey ::= BoardingPoint ';' OffPoint SegmentCabinDetails ::= CabinCode ';' Classes (';' FamilyCabinDetails)+ FamilyCabinDetails ::= FamilyCode ';' FRAT5Key ';' FFDisutilityKey ';' Classes FullSegmentCabinDetails::= (';' SegmentCabinDetails)+ GenericSegment ::= '0' (';' SegmentCabinDetails)+ SpecificSegments ::= '1' (';' SegmentKey ';' FullSegmentCabinDetails)+ SegmentSection ::= GenericSegment | SpecificSegments FlightPeriod ::= FlightKey (';' Leg)+ ';' SegmentSection ';' EndOfFlight EndOfFlight ::= ';' Grammar for the Flight-Period parser.

Definition at line 282 of file [ScheduleParserHelper.hpp](#).

### 24.50.2 Constructor & Destructor Documentation

#### 24.50.2.1 AIRINV::ScheduleParserHelper::FlightPeriodParser::FlightPeriodParser (stdair::BomRoot & *ioBomRoot*, [FlightPeriodStruct](#) & *ioFlightPeriod*)

Definition at line 529 of file [ScheduleParserHelper.cpp](#).

### 24.50.3 Member Data Documentation

#### 24.50.3.1 stdair::BomRoot& AIRINV::ScheduleParserHelper::FlightPeriodParser::\_bomRoot

Definition at line 306 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

### 24.50.3.2 FlightPeriodStruct& AIRINV::ScheduleParserHelper::FlightPeriodParser::\_flightPeriod

Definition at line 307 of file [ScheduleParserHelper.hpp](#).

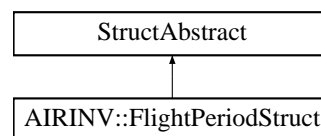
Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.51 AIRINV::FlightPeriodStruct Struct Reference

`#include <airinv/bom/FlightPeriodStruct.hpp>`Inheritance diagram for AIRINV::FlightPeriodStruct::



### Public Member Functions

- `stdair::Date_T getDate () const`
- `stdair::Duration_T getTime () const`
- `const std::string describe () const`
- `void addAirport (const stdair::AirportCode_T &)`
- `void buildSegments ()`
- `void addSegmentCabin (const SegmentStruct &, const SegmentCabinStruct &)`
- `void addSegmentCabin (const SegmentCabinStruct &)`
- `void addFareFamily (const SegmentStruct &, const SegmentCabinStruct &, const FareFamilyStruct &)`
- `void addFareFamily (const SegmentCabinStruct &, const FareFamilyStruct &)`
- `FlightPeriodStruct ()`

### Public Attributes

- `stdair::AirlineCode_T _airlineCode`
- `stdair::FlightNumber_T _flightNumber`
- `stdair::DatePeriod_T _dateRange`
- `stdair::DoWStruct _dow`
- `LegStructList_T _legList`
- `SegmentStructList_T _segmentList`
- `bool _legAlreadyDefined`
- `LegStruct _itLeg`
- `LegCabinStruct _itLegCabin`
- `stdair::Date_T _dateRangeStart`

- [stdair::Date\\_T \\_dateRangeEnd](#)
- [unsigned int \\_itYear](#)
- [unsigned int \\_itMonth](#)
- [unsigned int \\_itDay](#)
- [int \\_dateOffset](#)
- [long \\_itHours](#)
- [long \\_itMinutes](#)
- [long \\_itSeconds](#)
- [AirportList\\_T \\_airportList](#)
- [AirportOrderedList\\_T \\_airportOrderedList](#)
- [bool \\_areSegmentDefinitionsSpecific](#)
- [SegmentStruct \\_itSegment](#)
- [SegmentCabinStruct \\_itSegmentCabin](#)

### 24.51.1 Detailed Description

Utility Structure for the parsing of Flight-Period structures.

Definition at line 24 of file [FlightPeriodStruct.hpp](#).

### 24.51.2 Constructor & Destructor Documentation

#### 24.51.2.1 AIRINV::FlightPeriodStruct::FlightPeriodStruct ()

Constructor.

Definition at line 17 of file [FlightPeriodStruct.cpp](#).

### 24.51.3 Member Function Documentation

#### 24.51.3.1 stdair::Date\_T AIRINV::FlightPeriodStruct::getDate () const

Set the date from the staging details.

Definition at line 24 of file [FlightPeriodStruct.cpp](#).

References [\\_itDay](#), [\\_itMonth](#), and [\\_itYear](#).

Referenced by [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)\(\)](#).

#### 24.51.3.2 stdair::Duration\_T AIRINV::FlightPeriodStruct::getTime () const

Set the time from the staging details.

Definition at line 29 of file [FlightPeriodStruct.cpp](#).

References [\\_itHours](#), [\\_itMinutes](#), and [\\_itSeconds](#).

Referenced by [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)\(\)](#), and [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)\(\)](#).

**24.51.3.3 const std::string AIRINV::FlightPeriodStruct::describe () const**

Give a description of the structure (for display purposes).

Definition at line 36 of file [FlightPeriodStruct.cpp](#).

References [\\_airlineCode](#), [\\_dateRange](#), [\\_dow](#), [\\_flightNumber](#), [\\_legList](#), [\\_segmentList](#), [AIRINV::SegmentStruct::describe\(\)](#), and [AIRINV::LegStruct::describe\(\)](#).

Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)\(\)](#).

**24.51.3.4 void AIRINV::FlightPeriodStruct::addAirport (const stdair::AirportCode\_T & iAirport)**

Add the given airport to the internal lists (if not already existing).

Definition at line 62 of file [FlightPeriodStruct.cpp](#).

References [\\_airportList](#), and [\\_airportOrderedList](#).

Referenced by [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)\(\)](#), and [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)\(\)](#).

**24.51.3.5 void AIRINV::FlightPeriodStruct::buildSegments ()**

Build the list of [SegmentStruct](#) objects.

Definition at line 78 of file [FlightPeriodStruct.cpp](#).

References [\\_airportList](#), [\\_airportOrderedList](#), [AIRINV::SegmentStruct::\\_boardingPoint](#), [AIRINV::SegmentStruct::\\_offPoint](#), and [\\_segmentList](#).

Referenced by [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)\(\)](#).

**24.51.3.6 void AIRINV::FlightPeriodStruct::addSegmentCabin (const SegmentStruct & iSegment, const SegmentCabinStruct & iCabin)**

Add, to the Segment structure whose key corresponds to the given (board point, off point) pair, the specific segment cabin details (mainly, the list of the class codes).

Note that the Segment structure is retrieved from the internal list, already filled by a previous step (the [buildSegments\(\)](#) method).

Definition at line 111 of file [FlightPeriodStruct.cpp](#).

References [AIRINV::SegmentStruct::\\_boardingPoint](#), [AIRINV::SegmentStruct::\\_offPoint](#), and [\\_segmentList](#).

Referenced by [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)\(\)](#).

**24.51.3.7 void AIRINV::FlightPeriodStruct::addSegmentCabin (const SegmentCabinStruct & iCabin)**

Add, to all the Segment structures, the general segment cabin details (mainly, the list of the class codes).

Note that the Segment structures are stored within the internal list, already filled by a previous step (the [buildSegments\(\)](#) method).

Definition at line 148 of file [FlightPeriodStruct.cpp](#).



References [AIRINV::SegmentStruct::\\_cabinList](#), and [\\_segmentList](#).

#### 24.51.3.8 void AIRINV::FlightPeriodStruct::addFareFamily (const SegmentStruct & *iSegment*, const SegmentCabinStruct & *iCabin*, const FareFamilyStruct & *iFareFamily*)

Add, to the SegmentCabin structure whose key corresponds to the given cabin code, the specific segment fare family details (mainly, the list of the class codes).

Note that the SegmentCabin structure is retrieved from the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 161 of file [FlightPeriodStruct.cpp](#).

References [AIRINV::SegmentStruct::\\_boardingPoint](#), [AIRINV::SegmentCabinStruct::\\_cabinCode](#), [AIRINV::SegmentStruct::\\_offPoint](#), and [\\_segmentList](#).

Referenced by [AIRINV::ScheduleParserHelper::storeFCClasses::operator\(\)\(\)](#).

#### 24.51.3.9 void AIRINV::FlightPeriodStruct::addFareFamily (const SegmentCabinStruct & *iCabin*, const FareFamilyStruct & *iFareFamily*)

Add, to all the Segment structures, the general fare family sets (list of fare families).

Note that the SegmentCabin structures are stored within the internal list, already filled by a previous step (the buildSegmentCabins() method).

Definition at line 225 of file [FlightPeriodStruct.cpp](#).

References [AIRINV::SegmentCabinStruct::\\_cabinCode](#), [AIRINV::SegmentStruct::\\_cabinList](#), and [\\_segmentList](#).

### 24.51.4 Member Data Documentation

#### 24.51.4.1 stdair::AirlineCode\_T AIRINV::FlightPeriodStruct::\_airlineCode

Definition at line 80 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)\(\)](#).

#### 24.51.4.2 stdair::FlightNumber\_T AIRINV::FlightPeriodStruct::\_flightNumber

Definition at line 81 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)\(\)](#), and [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)\(\)](#).

#### 24.51.4.3 stdair::DatePeriod\_T AIRINV::FlightPeriodStruct::\_dateRange

Definition at line 82 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#).

#### 24.51.4.4 stdair::DoWStruct AIRINV::FlightPeriodStruct::\_dow

Definition at line 83 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#).

#### 24.51.4.5 LegStructList\_T AIRINV::FlightPeriodStruct::\_legList

Definition at line 84 of file [FlightPeriodStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

#### 24.51.4.6 SegmentStructList\_T AIRINV::FlightPeriodStruct::\_segmentList

Definition at line 85 of file [FlightPeriodStruct.hpp](#).

Referenced by [addFareFamily\(\)](#), [addSegmentCabin\(\)](#), [buildSegments\(\)](#), and [describe\(\)](#).

#### 24.51.4.7 bool AIRINV::FlightPeriodStruct::\_legAlreadyDefined

Staging Leg (resp. Cabin) structure, gathering the result of the iteration on one leg (resp. cabin).

Definition at line 89 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#).

#### 24.51.4.8 LegStruct AIRINV::FlightPeriodStruct::\_itLeg

Definition at line 90 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#).

#### 24.51.4.9 LegCabinStruct AIRINV::FlightPeriodStruct::\_itLegCabin

Definition at line 91 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#).

#### 24.51.4.10 stdair::Date\_T AIRINV::FlightPeriodStruct::\_dateRangeStart

Staging Date.

Definition at line 94 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#).

#### 24.51.4.11 stdair::Date\_T AIRINV::FlightPeriodStruct::\_dateRangeEnd

Definition at line 95 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#).

#### 24.51.4.12 unsigned int AIRINV::FlightPeriodStruct::\_itYear

Definition at line 96 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#), and [getDate\(\)](#).

#### 24.51.4.13 unsigned int AIRINV::FlightPeriodStruct::\_itMonth

Definition at line 97 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#), and [getDate\(\)](#).

#### 24.51.4.14 unsigned int AIRINV::FlightPeriodStruct::\_itDay

Definition at line 98 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#), and [getDate\(\)](#).

#### 24.51.4.15 int AIRINV::FlightPeriodStruct::\_dateOffset

Definition at line 99 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#).

#### 24.51.4.16 long AIRINV::FlightPeriodStruct::\_itHours

Staging Time.

Definition at line 102 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#), and [getTime\(\)](#).

#### 24.51.4.17 long AIRINV::FlightPeriodStruct::\_itMinutes

Definition at line 103 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#), and [getTime\(\)](#).

#### 24.51.4.18 long AIRINV::FlightPeriodStruct::\_itSeconds

Definition at line 104 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >::definition\(\)](#), [getTime\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#).

#### 24.51.4.19 AirportList\_T AIRINV::FlightPeriodStruct::\_airportList

Staging Airport List (helper to derive the list of Segment structures).

Definition at line 108 of file [FlightPeriodStruct.hpp](#).

Referenced by [addAirport\(\)](#), [buildSegments\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#).

#### 24.51.4.20 AirportOrderedList\_T AIRINV::FlightPeriodStruct::\_airportOrderedList

Definition at line 109 of file [FlightPeriodStruct.hpp](#).

Referenced by [addAirport\(\)](#), [buildSegments\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#).

#### 24.51.4.21 bool AIRINV::FlightPeriodStruct::\_areSegmentDefinitionsSpecific

Staging Segment-related attributes.

Definition at line 112 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#).

#### 24.51.4.22 SegmentStruct AIRINV::FlightPeriodStruct::\_itSegment

Definition at line 113 of file [FlightPeriodStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#).

#### 24.51.4.23 SegmentCabinStruct AIRINV::FlightPeriodStruct::\_itSegmentCabin

Definition at line 114 of file [FlightPeriodStruct.hpp](#).

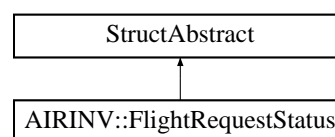
Referenced by [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/FlightPeriodStruct.hpp](#)
- [airinv/bom/FlightPeriodStruct.cpp](#)

## 24.52 AIRINV::FlightRequestStatus Struct Reference

`#include <airinv/FlightRequestStatus.hpp>` Inheritance diagram for AIRINV::FlightRequestStatus::



### Public Types

- enum [EN\\_FlightRequestStatus](#) { [OK](#) = 0, [NOT\\_FOUND](#), [INTERNAL\\_ERROR](#), [LAST\\_VALUE](#) }

### Public Member Functions

- [EN\\_FlightRequestStatus](#) [getCode](#) () const
- const std::string [describe](#) () const
- [FlightRequestStatus](#) (const [EN\\_FlightRequestStatus](#) &)
- [FlightRequestStatus](#) (const std::string &iCode)

### Static Public Member Functions

- static const std::string & [getLabel](#) (const [EN\\_FlightRequestStatus](#) &)
- static const std::string & [getCodeLabel](#) (const [EN\\_FlightRequestStatus](#) &)
- static std::string [describeLabels](#) ()

#### 24.52.1 Detailed Description

Enumeration of flight type codes.

Definition at line 15 of file [FlightRequestStatus.hpp](#).

#### 24.52.2 Member Enumeration Documentation

##### 24.52.2.1 enum AIRINV::FlightRequestStatus::EN\_FlightRequestStatus

Enumerator:

*OK*

*NOT\_FOUND*

*INTERNAL\_ERROR*

*LAST\_VALUE*

Definition at line 17 of file [FlightRequestStatus.hpp](#).

#### 24.52.3 Constructor & Destructor Documentation

##### 24.52.3.1 AIRINV::FlightRequestStatus::FlightRequestStatus (const [EN\\_FlightRequestStatus](#) & *iFlightRequestStatus*)

Constructor.

Definition at line 25 of file [FlightRequestStatus.cpp](#).

##### 24.52.3.2 AIRINV::FlightRequestStatus::FlightRequestStatus (const std::string & *iCode*)

Constructor.

Definition at line 30 of file [FlightRequestStatus.cpp](#).

References [describeLabels\(\)](#), [INTERNAL\\_ERROR](#), [LAST\\_VALUE](#), [NOT\\_FOUND](#), and [OK](#).

#### 24.52.4 Member Function Documentation

##### 24.52.4.1 const std::string & AIRINV::FlightRequestStatus::getLabel (const [EN\\_FlightRequestStatus](#) & *iCode*) [static]

Get the label as a string.

Definition at line 58 of file [FlightRequestStatus.cpp](#).

**24.52.4.2** `const std::string & AIRINV::FlightRequestStatus::getCodeLabel (const EN_FlightRequestStatus & iCode) [static]`

Get the label as a single char.

Definition at line 64 of file [FlightRequestStatus.cpp](#).

**24.52.4.3** `std::string AIRINV::FlightRequestStatus::describeLabels () [static]`

List the labels.

Definition at line 69 of file [FlightRequestStatus.cpp](#).

References [LAST\\_VALUE](#).

Referenced by [FlightRequestStatus\(\)](#).

**24.52.4.4** `FlightRequestStatus::EN_FlightRequestStatus AIRINV::FlightRequestStatus::getCode () const`

Get the enumerated value.

Definition at line 82 of file [FlightRequestStatus.cpp](#).

**24.52.4.5** `const std::string AIRINV::FlightRequestStatus::describe () const`

Give a description of the structure (for display purposes).

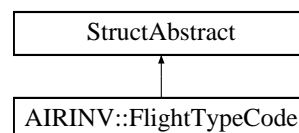
Definition at line 87 of file [FlightRequestStatus.cpp](#).

The documentation for this struct was generated from the following files:

- [airinv/FlightRequestStatus.hpp](#)
- [airinv/basic/FlightRequestStatus.cpp](#)

## 24.53 AIRINV::FlightTypeCode Struct Reference

`#include <airinv/basic/FlightTypeCode.hpp>` Inheritance diagram for AIRINV::FlightTypeCode::



### Public Types

- `enum EN_FlightTypeCode { DOMESTIC = 0, INTERNATIONAL, GROUND_HANDLING, LAST_VALUE }`

### Public Member Functions

- [EN\\_FlightTypeCode getCode](#) () const
- const std::string [describe](#) () const
- [FlightTypeCode](#) (const [EN\\_FlightTypeCode](#) &)
- [FlightTypeCode](#) (const std::string &iCode)

### Static Public Member Functions

- static const std::string & [getLabel](#) (const [EN\\_FlightTypeCode](#) &)
- static const std::string & [getCodeLabel](#) (const [EN\\_FlightTypeCode](#) &)
- static std::string [describeLabels](#) ()

#### 24.53.1 Detailed Description

Enumeration of flight type codes.

Definition at line 15 of file [FlightTypeCode.hpp](#).

#### 24.53.2 Member Enumeration Documentation

##### 24.53.2.1 enum AIRINV::FlightTypeCode::EN\_FlightTypeCode

Enumerator:

*DOMESTIC*  
*INTERNATIONAL*  
*GROUND\_HANDLING*  
*LAST\_VALUE*

Definition at line 17 of file [FlightTypeCode.hpp](#).

#### 24.53.3 Constructor & Destructor Documentation

##### 24.53.3.1 AIRINV::FlightTypeCode::FlightTypeCode (const EN\_FlightTypeCode & iFlightTypeCode)

Constructor.

Definition at line 24 of file [FlightTypeCode.cpp](#).

##### 24.53.3.2 AIRINV::FlightTypeCode::FlightTypeCode (const std::string & iCode)

Constructor.

Definition at line 29 of file [FlightTypeCode.cpp](#).

References [describeLabels\(\)](#), [DOMESTIC](#), [GROUND\\_HANDLING](#), [INTERNATIONAL](#), and [LAST\\_VALUE](#).



### 24.53.4 Member Function Documentation

#### 24.53.4.1 `const std::string & AIRINV::FlightTypeCode::getLabel (const EN_FlightTypeCode & iCode) [static]`

Get the label as a string.

Definition at line 54 of file [FlightTypeCode.cpp](#).

#### 24.53.4.2 `const std::string & AIRINV::FlightTypeCode::getCodeLabel (const EN_FlightTypeCode & iCode) [static]`

Get the label as a single char.

Definition at line 60 of file [FlightTypeCode.cpp](#).

#### 24.53.4.3 `std::string AIRINV::FlightTypeCode::describeLabels () [static]`

List the labels.

Definition at line 65 of file [FlightTypeCode.cpp](#).

References [LAST\\_VALUE](#).

Referenced by [FlightTypeCode\(\)](#).

#### 24.53.4.4 `FlightTypeCode::EN_FlightTypeCode AIRINV::FlightTypeCode::getCode () const`

Get the enumerated value.

Definition at line 77 of file [FlightTypeCode.cpp](#).

Referenced by [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)\(\)](#).

#### 24.53.4.5 `const std::string AIRINV::FlightTypeCode::describe () const`

Give a description of the structure (for display purposes).

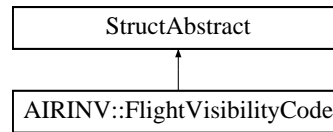
Definition at line 82 of file [FlightTypeCode.cpp](#).

The documentation for this struct was generated from the following files:

- [airinv/basic/FlightTypeCode.hpp](#)
- [airinv/basic/FlightTypeCode.cpp](#)

## 24.54 AIRINV::FlightVisibilityCode Struct Reference

`#include <airinv/basic/FlightVisibilityCode.hpp>`Inheritance diagram for AIR-INV::FlightVisibilityCode::



## Public Types

- enum [EN\\_FlightVisibilityCode](#) { [NORMAL](#) = 0, [HIDDEN](#), [PSEUDO](#), [LAST\\_VALUE](#) }

## Public Member Functions

- [EN\\_FlightVisibilityCode](#) [getCode](#) () const
- const std::string [describe](#) () const
- [FlightVisibilityCode](#) (const [EN\\_FlightVisibilityCode](#) &)
- [FlightVisibilityCode](#) (const std::string &iCode)

## Static Public Member Functions

- static const std::string & [getLabel](#) (const [EN\\_FlightVisibilityCode](#) &)
- static const std::string & [getCodeLabel](#) (const [EN\\_FlightVisibilityCode](#) &)
- static std::string [describeLabels](#) ()

### 24.54.1 Detailed Description

Enumeration of flight visibility codes.

Definition at line 15 of file [FlightVisibilityCode.hpp](#).

### 24.54.2 Member Enumeration Documentation

#### 24.54.2.1 enum AIRINV::FlightVisibilityCode::EN\_FlightVisibilityCode

#### Enumerator:

***NORMAL***  
***HIDDEN***  
***PSEUDO***  
***LAST\_VALUE***

Definition at line 17 of file [FlightVisibilityCode.hpp](#).

### 24.54.3 Constructor & Destructor Documentation

#### 24.54.3.1 AIRINV::FlightVisibilityCode::FlightVisibilityCode (const EN\_FlightVisibilityCode &iFlightVisibilityCode)

Constructor.

Definition at line 25 of file [FlightVisibilityCode.cpp](#).

#### 24.54.3.2 AIRINV::FlightVisibilityCode::FlightVisibilityCode (const std::string & iCode)

Constructor.

Definition at line 30 of file [FlightVisibilityCode.cpp](#).

References [describeLabels\(\)](#), [HIDDEN](#), [LAST\\_VALUE](#), [NORMAL](#), and [PSEUDO](#).

### 24.54.4 Member Function Documentation

#### 24.54.4.1 const std::string & AIRINV::FlightVisibilityCode::getLabel (const EN\_FlightVisibilityCode & iCode) [static]

Get the label as a string.

Definition at line 57 of file [FlightVisibilityCode.cpp](#).

#### 24.54.4.2 const std::string & AIRINV::FlightVisibilityCode::getCodeLabel (const EN\_FlightVisibilityCode & iCode) [static]

Get the label as a single char.

Definition at line 63 of file [FlightVisibilityCode.cpp](#).

#### 24.54.4.3 std::string AIRINV::FlightVisibilityCode::describeLabels () [static]

List the labels.

Definition at line 68 of file [FlightVisibilityCode.cpp](#).

References [LAST\\_VALUE](#).

Referenced by [FlightVisibilityCode\(\)](#).

#### 24.54.4.4 FlightVisibilityCode::EN\_FlightVisibilityCode AIRINV::FlightVisibilityCode::getCode () const

Get the enumerated value.

Definition at line 81 of file [FlightVisibilityCode.cpp](#).

Referenced by [AIRINV::FlightDateStruct::describe\(\)](#), and [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator](#)

#### 24.54.4.5 const std::string AIRINV::FlightVisibilityCode::describe () const

Give a description of the structure (for display purposes).

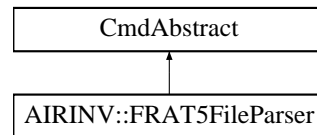
Definition at line 86 of file [FlightVisibilityCode.cpp](#).

The documentation for this struct was generated from the following files:

- [airinv/basic/FlightVisibilityCode.hpp](#)
- [airinv/basic/FlightVisibilityCode.cpp](#)

## 24.55 AIRINV::FRAT5FileParser Class Reference

#include <airinv/command/FRAT5ParserHelper.hpp> Inheritance diagram for AIRINV::FRAT5FileParser:



### Public Member Functions

- [FRAT5FileParser](#) (stdair::BomRoot &ioBomRoot, const stdair::Filename\_T &iFilename)
- bool [generateFRAT5Curves](#) ()

### 24.55.1 Detailed Description

Short Description

Detailed Description. Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

Definition at line 126 of file [FRAT5ParserHelper.hpp](#).

### 24.55.2 Constructor & Destructor Documentation

#### 24.55.2.1 AIRINV::FRAT5FileParser::FRAT5FileParser (stdair::BomRoot &ioBomRoot, const stdair::Filename\_T &iFilename)

Constructor.

Definition at line 178 of file [FRAT5ParserHelper.cpp](#).

### 24.55.3 Member Function Documentation

#### 24.55.3.1 bool AIRINV::FRAT5FileParser::generateFRAT5Curves ()

Parse the input file and generate the FRAT5 curves.

Definition at line 202 of file [FRAT5ParserHelper.cpp](#).

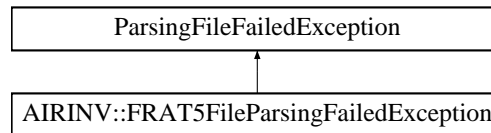
Referenced by [AIRINV::FRAT5Parser::parse\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.cpp](#)

## 24.56 AIRINV::FRAT5FileParsingFailedException Class Reference

#include <airinv/AIRINV\_Types.hpp> Inheritance diagram for AIR-  
INV::FRAT5FileParsingFailedException::



### Public Member Functions

- [FRAT5FileParsingFailedException](#) (const std::string &iWhat)

#### 24.56.1 Detailed Description

The FRAT5 input file can not be parsed.

Definition at line 67 of file [AIRINV\\_Types.hpp](#).

#### 24.56.2 Constructor & Destructor Documentation

##### 24.56.2.1 AIRINV::FRAT5FileParsingFailedException::FRAT5FileParsingFailedException (const std::string &iWhat) [inline]

Constructor.

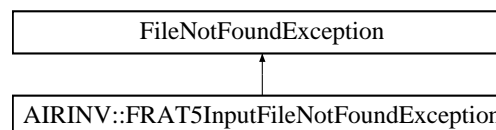
Definition at line 73 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.57 AIRINV::FRAT5InputFileNotFoundException Class Reference

#include <airinv/AIRINV\_Types.hpp> Inheritance diagram for AIR-  
INV::FRAT5InputFileNotFoundException::



### Public Member Functions

- [FRAT5InputFileNotFoundException](#) (const std::string &iWhat)

### 24.57.1 Detailed Description

The FRAT5 input file can not be found or opened.

Definition at line 130 of file [AIRINV\\_Types.hpp](#).

### 24.57.2 Constructor & Destructor Documentation

#### 24.57.2.1 AIRINV::FRAT5InputFileNotFoundException::FRAT5InputFileNotFoundException (const std::string & *iWhat*) [inline]

Constructor.

Definition at line 135 of file [AIRINV\\_Types.hpp](#).

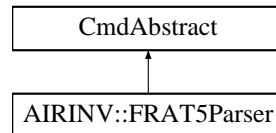
The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.58 AIRINV::FRAT5Parser Class Reference

Class wrapping the parser entry point.

`#include <airinv/command/FRAT5Parser.hpp>` Inheritance diagram for AIRINV::FRAT5Parser::



### Static Public Member Functions

- static void [parse](#) (const stdair::FRAT5FilePath &iFRAT5InputFilename, stdair::BomRoot &)

### 24.58.1 Detailed Description

Class wrapping the parser entry point.

Definition at line 22 of file [FRAT5Parser.hpp](#).

### 24.58.2 Member Function Documentation

#### 24.58.2.1 void AIRINV::FRAT5Parser::parse (const stdair::FRAT5FilePath & *iFRAT5InputFilename*, stdair::BomRoot & *ioBomRoot*) [static]

Parse the CSV file describing the FRAT5 curves for the simulator, and generates the curves accordingly.

#### Parameters:

**const** stdair::Filename\_T& The file-name of the CSV-formatted FRAT5 curve input file.

*stdair::BomRoot&* Root of the BOM tree.

Definition at line 20 of file [FRAT5Parser.cpp](#).

References [AIRINV::FRAT5FileParser::generateFRAT5Curves\(\)](#).

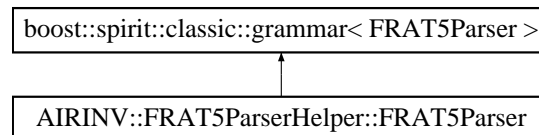
Referenced by [AIRINV::AIRINV\\_Service::parseAndLoad\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/FRAT5Parser.hpp](#)
- [airinv/command/FRAT5Parser.cpp](#)

## 24.59 AIRINV::FRAT5ParserHelper::FRAT5Parser Struct Reference

`#include <airinv/command/FRAT5ParserHelper.hpp>`Inheritance diagram for AIRINV::FRAT5ParserHelper::FRAT5Parser::



### Classes

- struct [definition](#)

### Public Member Functions

- [FRAT5Parser](#) (stdair::BomRoot &, [FRAT5Struct](#) &)

### Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- [FRAT5Struct](#) & [\\_frat5](#)

#### 24.59.1 Detailed Description

CurveKey; FRAT5Curve; F1; 63:1.40; 56:1.45; 49:1.50; 42:1.55; 35:1.60; 31:1.70; 27:1.80; 23:2.00; 19:2.30; 16:2.60; 13:3.00; 10:3.30; 7:3.40; 5:3.44; 3:3.47; 1:3.50;

Grammar: Curve ::= Key ';' FRAT5Map EndOfCurve Key ::= string FRAT5Map ::= DTDValuePaire (';' DTDValuePaire)\* DTDValuePaire ::= DTD ':' FRAT5Value EndOfCurve ::= ';' Grammar for the FRAT5 curve parser.

Definition at line 89 of file [FRAT5ParserHelper.hpp](#).

## 24.59.2 Constructor & Destructor Documentation

### 24.59.2.1 AIRINV::FRAT5ParserHelper::FRAT5Parser::FRAT5Parser (stdair::BomRoot & ioBomRoot, FRAT5Struct & ioFRAT5)

Definition at line 115 of file [FRAT5ParserHelper.cpp](#).

## 24.59.3 Member Data Documentation

### 24.59.3.1 stdair::BomRoot& AIRINV::FRAT5ParserHelper::FRAT5Parser::\_bomRoot

Definition at line 107 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

### 24.59.3.2 FRAT5Struct& AIRINV::FRAT5ParserHelper::FRAT5Parser::\_frat5

Definition at line 108 of file [FRAT5ParserHelper.hpp](#).

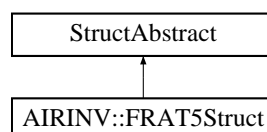
Referenced by [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >::definition\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.cpp](#)

## 24.60 AIRINV::FRAT5Struct Struct Reference

`#include <airinv/bom/FRAT5Struct.hpp>`Inheritance diagram for AIRINV::FRAT5Struct::



## Public Member Functions

- `const std::string describe () const`
- `FRAT5Struct ()`
- `~FRAT5Struct ()`

## Public Attributes

- `std::string \_key`
- `stdair::FRAT5Curve_T \_curve`
- `stdair::DTD_T \_dtd`



### 24.60.1 Detailed Description

Utility Structure for the parsing of FRAT5 structures.

Definition at line 15 of file [FRAT5Struct.hpp](#).

### 24.60.2 Constructor & Destructor Documentation

#### 24.60.2.1 AIRINV::FRAT5Struct::FRAT5Struct ()

Default constructor.

Definition at line 15 of file [FRAT5Struct.cpp](#).

#### 24.60.2.2 AIRINV::FRAT5Struct::~~FRAT5Struct ()

Destructor

Definition at line 19 of file [FRAT5Struct.cpp](#).

### 24.60.3 Member Function Documentation

#### 24.60.3.1 const std::string AIRINV::FRAT5Struct::describe () const

Give a description of the structure (for display purposes).

Definition at line 23 of file [FRAT5Struct.cpp](#).

References [\\_curve](#), and [\\_key](#).

Referenced by [AIRINV::FRAT5ParserHelper::doEndCurve::operator\(\)\(\)](#).

### 24.60.4 Member Data Documentation

#### 24.60.4.1 std::string AIRINV::FRAT5Struct::\_key

Curve key.

Definition at line 37 of file [FRAT5Struct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::FRAT5ParserHelper::doEndCurve::operator\(\)\(\)](#), and [AIRINV::FRAT5ParserHelper::storeCurveKey::operator\(\)\(\)](#).

#### 24.60.4.2 stdair::FRAT5Curve\_T AIRINV::FRAT5Struct::\_curve

Curve.

Definition at line 40 of file [FRAT5Struct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::FRAT5ParserHelper::doEndCurve::operator\(\)\(\)](#), and [AIRINV::FRAT5ParserHelper::storeFRAT5Value::operator\(\)\(\)](#).

#### 24.60.4.3 stdair::DTD\_T AIRINV::FRAT5Struct::\_dtd

DTD.

Definition at line 45 of file [FRAT5Struct.hpp](#).

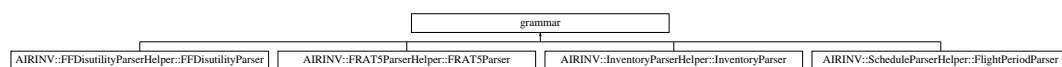
Referenced by [AIRINV::FRAT5ParserHelper::storeFRAT5Value::operator\(\)\(\)](#), and [AIRINV::FRAT5ParserHelper::storeDTD::operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/FRAT5Struct.hpp](#)
- [airinv/bom/FRAT5Struct.cpp](#)

## 24.61 grammar Class Reference

Inheritance diagram for grammar::

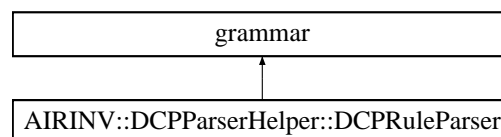


The documentation for this class was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.hpp](#)

## 24.62 grammar Class Reference

Inheritance diagram for grammar::



The documentation for this class was generated from the following file:

- [airinv/command/vault/DCPParserHelper.hpp](#)

## 24.63 AIRINV::header Struct Reference

```
#include <airinv/server/header.hpp>
```

### Public Attributes

- `std::string` [name](#)
- `std::string` [value](#)

### 24.63.1 Detailed Description

Header structure.

Definition at line 13 of file [header.hpp](#).

### 24.63.2 Member Data Documentation

#### 24.63.2.1 `std::string AIRINV::header::name`

Definition at line 14 of file [header.hpp](#).

#### 24.63.2.2 `std::string AIRINV::header::value`

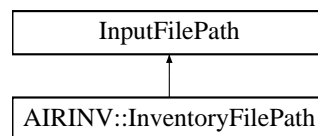
Definition at line 15 of file [header.hpp](#).

The documentation for this struct was generated from the following file:

- [airinv/server/header.hpp](#)

## 24.64 InputFilePath Class Reference

Inheritance diagram for InputFilePath::



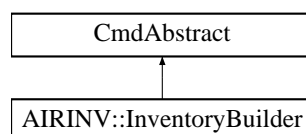
The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.65 AIRINV::InventoryBuilder Class Reference

Class handling the generation / instantiation of the Inventory BOM.

`#include <airinv/command/InventoryBuilder.hpp>`  
 Inheritance diagram for AIR-INV::InventoryBuilder::



**Friends**

- class [AIRINV\\_Service](#)
- struct [InventoryParserHelper::doEndFlightDate](#)

**24.65.1 Detailed Description**

Class handling the generation / instantiation of the Inventory BOM.

Definition at line 45 of file [InventoryBuilder.hpp](#).

**24.65.2 Friends And Related Function Documentation****24.65.2.1 friend class AIRINV\_Service [friend]**

Only the following class may use methods of [InventoryBuilder](#). Indeed, as those methods build the BOM, it is not good to expose them publicly.

Definition at line 51 of file [InventoryBuilder.hpp](#).

**24.65.2.2 friend struct InventoryParserHelper::doEndFlightDate [friend]**

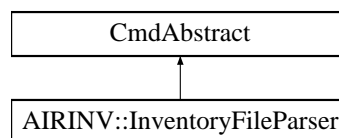
Definition at line 52 of file [InventoryBuilder.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/command/InventoryBuilder.hpp](#)
- [airinv/command/InventoryBuilder.cpp](#)

**24.66 AIRINV::InventoryFileParser Class Reference**

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryFileParser::

**Public Member Functions**

- [InventoryFileParser](#) (stdair::BomRoot &, const stdair::Filename\_T &iInventoryInputFilename)
- bool [buildInventory](#) ()

### 24.66.1 Detailed Description

Class wrapping the initialisation and entry point of the parser.

The seemingly redundancy is used to force the instantiation of the actual parser, which is a templatised Boost Spirit grammar. Hence, the actual parser is instantiated within that class object code.

Definition at line 516 of file [InventoryParserHelper.hpp](#).

### 24.66.2 Constructor & Destructor Documentation

#### 24.66.2.1 AIRINV::InventoryFileParser::InventoryFileParser (stdair::BomRoot &, const stdair::Filename\_T & *iInventoryInputFilename*)

Constructor.

### 24.66.3 Member Function Documentation

#### 24.66.3.1 bool AIRINV::InventoryFileParser::buildInventory ()

Parse the inventory input file.

Definition at line 1156 of file [InventoryParserHelper.cpp](#).

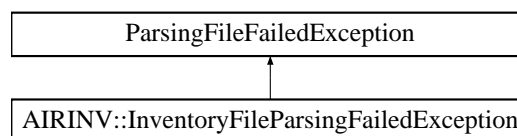
Referenced by [AIRINV::InventoryParser::buildInventory\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.67 AIRINV::InventoryFileParsingFailedException Class Reference

`#include <airinv/AIRINV_Types.hpp>`  
Inheritance diagram for AIRINV::InventoryFileParsingFailedException::



### Public Member Functions

- [InventoryFileParsingFailedException](#) (const std::string &iWhat)

### 24.67.1 Detailed Description

The inventory input file can not be parsed.

Definition at line 28 of file [AIRINV\\_Types.hpp](#).

### 24.67.2 Constructor & Destructor Documentation

#### 24.67.2.1 AIRINV::InventoryFileParsingFailedException::InventoryFileParsingFailedException (const std::string & *iWhat*) [inline]

Constructor.

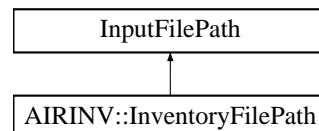
Definition at line 34 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.68 AIRINV::InventoryFilePath Class Reference

`#include <airinv/AIRINV_Types.hpp>`Inheritance diagram for AIRINV::InventoryFilePath::



### Public Member Functions

- [InventoryFilePath](#) (const stdair::Filename\_T &iFilename)

#### 24.68.1 Detailed Description

Inventory input file.

Definition at line 198 of file [AIRINV\\_Types.hpp](#).

### 24.68.2 Constructor & Destructor Documentation

#### 24.68.2.1 AIRINV::InventoryFilePath::InventoryFilePath (const stdair::Filename\_T & *iFilename*) [inline, explicit]

Constructor.

Definition at line 203 of file [AIRINV\\_Types.hpp](#).

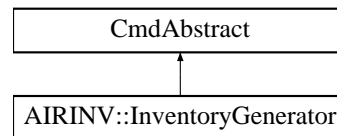
The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.69 AIRINV::InventoryGenerator Class Reference

Class handling the generation / instantiation of the Inventory BOM.

`#include <airinv/command/InventoryGenerator.hpp>`Inheritance diagram for AIR-INV::InventoryGenerator::



## Friends

- class [FlightPeriodFileParser](#)
- class [FFFlightPeriodFileParser](#)
- struct [ScheduleParserHelper::doEndFlight](#)
- class [ScheduleParser](#)

### 24.69.1 Detailed Description

Class handling the generation / instantiation of the Inventory BOM.

Definition at line 42 of file [InventoryGenerator.hpp](#).

### 24.69.2 Friends And Related Function Documentation

#### 24.69.2.1 friend class FlightPeriodFileParser [friend]

Only the following class may use methods of [InventoryGenerator](#). Indeed, as those methods build the BOM, it is not good to expose them publicly.

Definition at line 48 of file [InventoryGenerator.hpp](#).

#### 24.69.2.2 friend class FFFlightPeriodFileParser [friend]

Definition at line 49 of file [InventoryGenerator.hpp](#).

#### 24.69.2.3 friend struct ScheduleParserHelper::doEndFlight [friend]

Definition at line 50 of file [InventoryGenerator.hpp](#).

#### 24.69.2.4 friend class ScheduleParser [friend]

Definition at line 51 of file [InventoryGenerator.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/command/InventoryGenerator.hpp](#)
- [airinv/command/InventoryGenerator.cpp](#)

## 24.70 AIRINV::InventoryHelper Class Reference

```
#include <airinv/bom/InventoryHelper.hpp>
```

### Static Public Member Functions

- static void [fillFromRouting](#) (const stdair::Inventory &)
- static void [calculateAvailability](#) (const stdair::Inventory &, const std::string &, stdair::TravelSolutionStruct &)
- static void [getYieldAndBidPrice](#) (const stdair::Inventory &, const std::string &, stdair::TravelSolutionStruct &)
- static bool [sell](#) (stdair::Inventory &, const std::string &iSegmentDateKey, const stdair::ClassCode\_T &, const stdair::PartySize\_T &)
- static bool [sell](#) (const stdair::BookingClassID\_T &, const stdair::PartySize\_T &)
- static bool [cancel](#) (stdair::Inventory &, const std::string &iSegmentDateKey, const stdair::ClassCode\_T &, const stdair::PartySize\_T &)
- static bool [cancel](#) (const stdair::BookingClassID\_T &, const stdair::PartySize\_T &)
- static void [takeSnapshots](#) (const stdair::Inventory &, const stdair::DateTime\_T &)

### 24.70.1 Detailed Description

Class representing the actual business functions for an airline inventory.

Definition at line 23 of file [InventoryHelper.hpp](#).

### 24.70.2 Member Function Documentation

#### 24.70.2.1 void AIRINV::InventoryHelper::fillFromRouting (const stdair::Inventory & *iInventory*) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 28 of file [InventoryHelper.cpp](#).

#### 24.70.2.2 void AIRINV::InventoryHelper::calculateAvailability (const stdair::Inventory & *iInventory*, const std::string & *iFullSegmentDateKey*, stdair::TravelSolutionStruct & *ioTravelSolution*) [static]

Compute the availability for the given travel solution.

Definition at line 44 of file [InventoryHelper.cpp](#).

#### 24.70.2.3 void AIRINV::InventoryHelper::getYieldAndBidPrice (const stdair::Inventory & *iInventory*, const std::string & *iFullSegmentDateKey*, stdair::TravelSolutionStruct & *ioTravelSolution*) [static]

Get yield and bid price information for the given travel solution.

Definition at line 107 of file [InventoryHelper.cpp](#).



**24.70.2.4** `bool AIRINV::InventoryHelper::sell (stdair::Inventory & ioInventory, const std::string & iSegmentDateKey, const stdair::ClassCode_T & iClassCode, const stdair::PartySize_T & iPartySize) [static]`

Make a sale.

Definition at line 248 of file [InventoryHelper.cpp](#).

Referenced by [sell\(\)](#).

**24.70.2.5** `bool AIRINV::InventoryHelper::sell (const stdair::BookingClassID_T & iClassID, const stdair::PartySize_T & iPartySize) [static]`

Make a sale.

Definition at line 282 of file [InventoryHelper.cpp](#).

References [sell\(\)](#).

**24.70.2.6** `bool AIRINV::InventoryHelper::cancel (stdair::Inventory & ioInventory, const std::string & iSegmentDateKey, const stdair::ClassCode_T & iClassCode, const stdair::PartySize_T & iPartySize) [static]`

Make a cancellation.

Definition at line 328 of file [InventoryHelper.cpp](#).

Referenced by [cancel\(\)](#).

**24.70.2.7** `bool AIRINV::InventoryHelper::cancel (const stdair::BookingClassID_T & iClassID, const stdair::PartySize_T & iPartySize) [static]`

Make a cancellation.

Definition at line 362 of file [InventoryHelper.cpp](#).

References [cancel\(\)](#).

**24.70.2.8** `void AIRINV::InventoryHelper::takeSnapshots (const stdair::Inventory & iInventory, const stdair::DateTime_T & iSnapshotTime) [static]`

Take inventory snapshots.

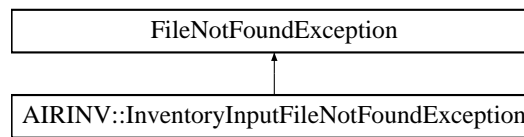
Definition at line 407 of file [InventoryHelper.cpp](#).

The documentation for this class was generated from the following files:

- [airinv/bom/InventoryHelper.hpp](#)
- [airinv/bom/InventoryHelper.cpp](#)

## 24.71 AIRINV::InventoryInputFileNotFoundException Class Reference

`#include <airinv/AIRINV_Types.hpp>` Inheritance diagram for AIR-INV::InventoryInputFileNotFoundException:



### Public Member Functions

- [InventoryInputFileNotFoundException](#) (const std::string &iWhat)

#### 24.71.1 Detailed Description

The inventory input file can not be found or opened.

Definition at line 106 of file [AIRINV\\_Types.hpp](#).

#### 24.71.2 Constructor & Destructor Documentation

##### 24.71.2.1 AIRINV::InventoryInputFileNotFoundException::InventoryInputFileNotFoundException (const std::string &iWhat) [inline]

Constructor.

Definition at line 111 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.72 AIRINV::InventoryManager Class Reference

```
#include <airinv/command/InventoryManager.hpp>
```

### Static Public Member Functions

- static void [createDirectAccesses](#) (const stdair::BomRoot &)
- static void [createDirectAccesses](#) (const stdair::BomRoot &, stdair::Inventory &)
- static void [createDirectAccesses](#) (const stdair::BomRoot &, stdair::Inventory &, stdair::FlightDate &)
- static void [createDirectAccesses](#) (stdair::SegmentDate &)
- static void [createPartnerAccesses](#) (const stdair::BomRoot &, stdair::Inventory &)
- static void [createPartnerAccesses](#) (stdair::FlightDate &)
- static void [createPartnerAccesses](#) (const stdair::BomRoot &, stdair::Inventory &, stdair::FlightDate &)
- static void [buildSimilarSegmentCabinSets](#) (const stdair::BomRoot &)
- static void [buildSimilarSegmentCabinSets](#) (stdair::Inventory &)
- static void [buildSegmentSnapshotTable](#) (stdair::Inventory &, const stdair::TableID\_T &, const [DepartureDateSegmentCabinMap\\_T](#) &)
- static void [setDefaultBidPriceVector](#) (stdair::BomRoot &)
- static void [setDefaultBidPriceVector](#) (stdair::Inventory &)

- static void [initialiseYieldBasedNestingStructures](#) (const stdair::BomRoot &)
- static void [initialiseListsOfUsablePolicies](#) (const stdair::BomRoot &)

### Friends

- class [AIRINV\\_Master\\_Service](#)
- class [AIRINV\\_Service](#)

### 24.72.1 Detailed Description

Command wrapping the travel request process.

Definition at line 36 of file [InventoryManager.hpp](#).

### 24.72.2 Member Function Documentation

#### 24.72.2.1 void AIRINV::InventoryManager::createDirectAccesses (const stdair::BomRoot & *iBomRoot*) [static]

Create the direct accesses within the inventories such as links between leg-date and segment-date, ect.

Definition at line 746 of file [InventoryManager.cpp](#).

References [createPartnerAccesses\(\)](#), and [AIRINV::BomRootHelper::fillFromRouting\(\)](#).

Referenced by [AIRINV::AIRINV\\_Service::buildComplementaryLinks\(\)](#), and [createDirectAccesses\(\)](#).

#### 24.72.2.2 void AIRINV::InventoryManager::createDirectAccesses (const stdair::BomRoot & *iBomRoot*, stdair::Inventory & *ioInventory*) [static]

Definition at line 776 of file [InventoryManager.cpp](#).

References [createDirectAccesses\(\)](#).

#### 24.72.2.3 void AIRINV::InventoryManager::createDirectAccesses (const stdair::BomRoot & *ioBomRoot*, stdair::Inventory & *ioInventory*, stdair::FlightDate & *ioFlightDate*) [static]

Definition at line 811 of file [InventoryManager.cpp](#).

References [createDirectAccesses\(\)](#).

#### 24.72.2.4 void AIRINV::InventoryManager::createDirectAccesses (stdair::SegmentDate & *ioSegmentDate*) [static]

Definition at line 860 of file [InventoryManager.cpp](#).

**24.72.2.5 void AIRINV::InventoryManager::createPartnerAccesses (const stdair::BomRoot & iBomRoot, stdair::Inventory & ioInventory) [static]**

Create the direct accesses within the inventories such as the link between a marketing segment date and its operating one.

Definition at line 926 of file [InventoryManager.cpp](#).

Referenced by [createDirectAccesses\(\)](#).

**24.72.2.6 static void AIRINV::InventoryManager::createPartnerAccesses (stdair::FlightDate &) [static]****24.72.2.7 void AIRINV::InventoryManager::createPartnerAccesses (const stdair::BomRoot & ioBomRoot, stdair::Inventory & ioInventory, stdair::FlightDate & ioFlightDate) [static]**

Definition at line 945 of file [InventoryManager.cpp](#).

**24.72.2.8 void AIRINV::InventoryManager::buildSimilarSegmentCabinSets (const stdair::BomRoot & iBomRoot) [static]**

Build the similar segment-cabin sets and the corresponding snapshot tables and other data.

Definition at line 1027 of file [InventoryManager.cpp](#).

Referenced by [AIRINV::AIRINV\\_Service::buildComplementaryLinks\(\)](#).

**24.72.2.9 void AIRINV::InventoryManager::buildSimilarSegmentCabinSets (stdair::Inventory & ioInventory) [static]**

Definition at line 1043 of file [InventoryManager.cpp](#).

References [buildSegmentSnapshotTable\(\)](#).

**24.72.2.10 void AIRINV::InventoryManager::buildSegmentSnapshotTable (stdair::Inventory & ioInventory, const stdair::TableID\_T & iTableID, const DepartureDateSegmentCabinMap\_T & iDDSCMap) [static]**

Definition at line 1118 of file [InventoryManager.cpp](#).

Referenced by [buildSimilarSegmentCabinSets\(\)](#).

**24.72.2.11 void AIRINV::InventoryManager::setDefaultBidPriceVector (stdair::BomRoot & ioBomRoot) [static]**

Bid price vectors initialisation

Definition at line 601 of file [InventoryManager.cpp](#).Referenced by [AIRINV::AIRINV\\_Service::buildComplementaryLinks\(\)](#).**24.72.2.12 void AIRINV::InventoryManager::setDefaultBidPriceVector (stdair::Inventory & ioInventory) [static]**Definition at line 633 of file [InventoryManager.cpp](#).**24.72.2.13 void AIRINV::InventoryManager::initialiseYieldBasedNestingStructures (const stdair::BomRoot & ioBomRoot) [static]**

Yield-based nesting structure initialisation

Definition at line 1277 of file [InventoryManager.cpp](#).References [AIRINV::SegmentCabinHelper::initYieldBasedNestingStructure\(\)](#).Referenced by [AIRINV::AIRINV\\_Service::buildComplementaryLinks\(\)](#).**24.72.2.14 void AIRINV::InventoryManager::initialiseListsOfUsablePolicies (const stdair::BomRoot & ioBomRoot) [static]**

Lists of usable policies initialisation.

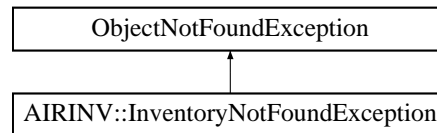
Definition at line 1327 of file [InventoryManager.cpp](#).References [AIRINV::SegmentCabinHelper::initListOfUsablePolicies\(\)](#).Referenced by [AIRINV::AIRINV\\_Service::buildComplementaryLinks\(\)](#).**24.72.3 Friends And Related Function Documentation****24.72.3.1 friend class AIRINV\_Master\_Service [friend]**Definition at line 37 of file [InventoryManager.hpp](#).**24.72.3.2 friend class AIRINV\_Service [friend]**Definition at line 38 of file [InventoryManager.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/command/InventoryManager.hpp](#)
- [airinv/command/InventoryManager.cpp](#)

## 24.73 AIRINV::InventoryNotFoundException Class Reference

`#include <airinv/AIRINV_Types.hpp>`Inheritance diagram for AIR-  
INV::InventoryNotFoundException::



### Public Member Functions

- [InventoryNotFoundException](#) (const std::string &iWhat)

#### 24.73.1 Detailed Description

Inventory not found.

Definition at line 172 of file [AIRINV\\_Types.hpp](#).

#### 24.73.2 Constructor & Destructor Documentation

##### 24.73.2.1 AIRINV::InventoryNotFoundException::InventoryNotFoundException (const std::string &iWhat) [inline]

Constructor.

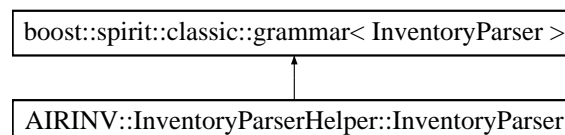
Definition at line 177 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.74 AIRINV::InventoryParserHelper::InventoryParser Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`Inheritance diagram for AIRINV::InventoryParserHelper::InventoryParser::



### Classes

- struct [definition](#)

## Public Member Functions

- [InventoryParser](#) (stdair::BomRoot & [FlightDateStruct](#) &, unsigned int &)

## Public Attributes

- stdair::BomRoot & [\\_bomRoot](#)
- [FlightDateStruct](#) & [\\_flightDate](#)
- unsigned int & [\\_nbOfFlights](#)

### 24.74.1 Detailed Description

FlightDepDate; 2010-02-08; SIN; BKK; L; 10.0; 1.0;

Grammar: FlightDate ::= FlightDepDate ';' Origin ';' Destination EndOfFlightDate FlightDepDate ::= date EndOfFlightDate ::= ';' Grammar for the inventory parser.

Definition at line 470 of file [InventoryParserHelper.hpp](#).

### 24.74.2 Constructor & Destructor Documentation

#### 24.74.2.1 AIRINV::InventoryParserHelper::InventoryParser::InventoryParser (stdair::BomRoot & *ioBomRoot*, [FlightDateStruct](#) & *ioFlightDate*, unsigned int & *ioNbOfFlights*)

Definition at line 894 of file [InventoryParserHelper.cpp](#).

### 24.74.3 Member Data Documentation

#### 24.74.3.1 stdair::BomRoot& AIRINV::InventoryParserHelper::InventoryParser::\_bomRoot

Definition at line 498 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

#### 24.74.3.2 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::InventoryParser::\_flightDate

Definition at line 499 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

#### 24.74.3.3 unsigned int& AIRINV::InventoryParserHelper::InventoryParser::\_nbOfFlights

Definition at line 500 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >::definition\(\)](#).

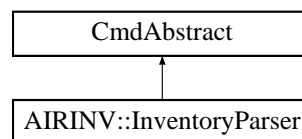
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.75 AIRINV::InventoryParser Class Reference

Class wrapping the parser entry point.

`#include <airinv/command/InventoryParser.hpp>` Inheritance diagram for AIR-INV::InventoryParser::



### Static Public Member Functions

- static void [buildInventory](#) (const [InventoryFilePath](#) &, stdair::BomRoot &)

#### 24.75.1 Detailed Description

Class wrapping the parser entry point.

Definition at line 23 of file [InventoryParser.hpp](#).

#### 24.75.2 Member Function Documentation

##### 24.75.2.1 void AIRINV::InventoryParser::buildInventory (const InventoryFilePath & iInventoryFilename, stdair::BomRoot & ioBomRoot) [static]

Parses the CSV file describing an airline inventory, and generates the corresponding data model in memory. It can then be used, for instance, in a simulator.

#### Parameters:

- const* [InventoryFilePath](#)& The file-name of the CSV-formatted inventory input file.
- stdair::BomRoot*& Root of the BOM tree.

Definition at line 20 of file [InventoryParser.cpp](#).

References [AIRINV::InventoryFileParser::buildInventory\(\)](#).

Referenced by [AIRINV::AIRINV\\_Service::parseAndLoad\(\)](#).

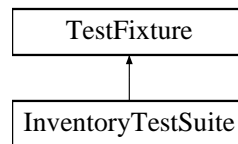
The documentation for this class was generated from the following files:

- [airinv/command/InventoryParser.hpp](#)
- [airinv/command/InventoryParser.cpp](#)



## 24.76 InventoryTestSuite Class Reference

`#include <test/airinv/InventoryTestSuite.hpp>`Inheritance diagram for InventoryTestSuite::



### Public Member Functions

- void [simpleInventory](#) ()
- [InventoryTestSuite](#) ()

### Protected Attributes

- `std::stringstream` [\\_describeKey](#)

#### 24.76.1 Detailed Description

Utility class for CPPUnit-based testing.

Definition at line 7 of file [InventoryTestSuite.hpp](#).

#### 24.76.2 Constructor & Destructor Documentation

##### 24.76.2.1 InventoryTestSuite::InventoryTestSuite ()

Test some error detection functionalities. Constructor.

#### 24.76.3 Member Function Documentation

##### 24.76.3.1 void InventoryTestSuite::simpleInventory ()

Test a simple inventory functionality.

#### 24.76.4 Member Data Documentation

##### 24.76.4.1 `std::stringstream` InventoryTestSuite::\_describeKey [protected]

Definition at line 28 of file [InventoryTestSuite.hpp](#).

The documentation for this class was generated from the following file:

- test/airinv/[InventoryTestSuite.hpp](#)

## 24.77 AIRINV::LegCabinHelper Class Reference

```
#include <airinv/bom/LegCabinHelper.hpp>
```

### 24.77.1 Detailed Description

Class representing the actual business functions for an airline leg-cabin.

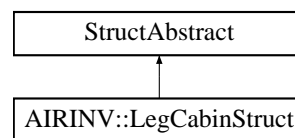
Definition at line 16 of file [LegCabinHelper.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/bom/LegCabinHelper.hpp](#)

## 24.78 AIRINV::LegCabinStruct Struct Reference

```
#include <airinv/bom/LegCabinStruct.hpp>Inheritance diagram for AIR-  
INV::LegCabinStruct::
```



### Public Member Functions

- void [fill](#) (stdair::LegCabin &) const
- const std::string [describe](#) () const

### Public Attributes

- stdair::CabinCode\_T [\\_cabinCode](#)
- stdair::CabinCapacity\_T [\\_saleableCapacity](#)
- stdair::CapacityAdjustment\_T [\\_adjustment](#)
- stdair::CapacityAdjustment\_T [\\_dcsRegrade](#)
- stdair::AuthorizationLevel\_T [\\_au](#)
- stdair::Availability\_T [\\_avPool](#)
- stdair::UPR\_T [\\_upr](#)
- stdair::NbOfBookings\_T [\\_nbOfBookings](#)
- stdair::Availability\_T [\\_nav](#)
- stdair::Availability\_T [\\_gav](#)
- stdair::OverbookingRate\_T [\\_acp](#)
- stdair::NbOfBookings\_T [\\_etb](#)
- stdair::NbOfBookings\_T [\\_staffNbOfBookings](#)
- stdair::NbOfBookings\_T [\\_wlnNbOfBookings](#)
- stdair::NbOfBookings\_T [\\_groupNbOfBookings](#)
- [BucketStructList\\_T \\_bucketList](#)

### 24.78.1 Detailed Description

Utility Structure for the parsing of LegCabin details.

Definition at line 24 of file [LegCabinStruct.hpp](#).

### 24.78.2 Member Function Documentation

#### 24.78.2.1 void AIRINV::LegCabinStruct::fill (stdair::LegCabin & ioLegCabin) const

Fill the LegCabin objects with the attributes of the [LegCabinStruct](#).

Definition at line 38 of file [LegCabinStruct.cpp](#).

References [\\_saleableCapacity](#).

#### 24.78.2.2 const std::string AIRINV::LegCabinStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 15 of file [LegCabinStruct.cpp](#).

References [\\_acp](#), [\\_adjustment](#), [\\_au](#), [\\_avPool](#), [\\_bucketList](#), [\\_cabinCode](#), [\\_dcsRegrade](#), [\\_etb](#), [\\_gav](#), [\\_groupNbOfBookings](#), [\\_nav](#), [\\_nbOfBookings](#), [\\_saleableCapacity](#), [\\_staffNbOfBookings](#), [\\_upr](#), [\\_wlnNbOfBookings](#), and [AIRINV::BucketStruct::describe\(\)](#).

Referenced by [AIRINV::LegStruct::describe\(\)](#).

### 24.78.3 Member Data Documentation

#### 24.78.3.1 stdair::CabinCode\_T AIRINV::LegCabinStruct::\_cabinCode

Definition at line 26 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#).

#### 24.78.3.2 stdair::CabinCapacity\_T AIRINV::LegCabinStruct::\_saleableCapacity

Definition at line 27 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#).

#### 24.78.3.3 stdair::CapacityAdjustment\_T AIRINV::LegCabinStruct::\_adjustment

Definition at line 28 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.78.3.4 stdair::CapacityAdjustment\_T AIRINV::LegCabinStruct::\_dcsRegrade

Definition at line 29 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.78.3.5 stdair::AuthorizationLevel\_T AIRINV::LegCabinStruct::\_au

Definition at line 30 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#).

#### 24.78.3.6 stdair::Availability\_T AIRINV::LegCabinStruct::\_avPool

Definition at line 31 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.78.3.7 stdair::UPR\_T AIRINV::LegCabinStruct::\_upr

Definition at line 32 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#).

#### 24.78.3.8 stdair::NbOfBookings\_T AIRINV::LegCabinStruct::\_nbOfBookings

Definition at line 33 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#).

#### 24.78.3.9 stdair::Availability\_T AIRINV::LegCabinStruct::\_nav

Definition at line 34 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#).

#### 24.78.3.10 stdair::Availability\_T AIRINV::LegCabinStruct::\_gav

Definition at line 35 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#).

#### 24.78.3.11 `stdair::OverbookingRate_T` `AIRINV::LegCabinStruct::_acp`

Definition at line 36 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#).

#### 24.78.3.12 `stdair::NbOfBookings_T` `AIRINV::LegCabinStruct::_etb`

Definition at line 37 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#).

#### 24.78.3.13 `stdair::NbOfBookings_T` `AIRINV::LegCabinStruct::_staffNbOfBookings`

Definition at line 38 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.78.3.14 `stdair::NbOfBookings_T` `AIRINV::LegCabinStruct::_wlnNbOfBookings`

Definition at line 39 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.78.3.15 `stdair::NbOfBookings_T` `AIRINV::LegCabinStruct::_groupNbOfBookings`

Definition at line 40 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#).

#### 24.78.3.16 `BucketStructList_T` `AIRINV::LegCabinStruct::_bucketList`

Definition at line 41 of file [LegCabinStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#) and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

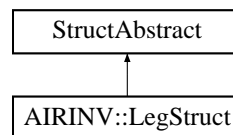
The documentation for this struct was generated from the following files:

- [airinv/bom/LegCabinStruct.hpp](#)

- [airinv/bom/LegCabinStruct.cpp](#)

## 24.79 AIRINV::LegStruct Struct Reference

`#include <airinv/bom/LegStruct.hpp>` Inheritance diagram for AIRINV::LegStruct:



### Public Member Functions

- void [fill](#) (const stdair::Date\_T &iRefDate, stdair::LegDate &) const
- void [fill](#) (stdair::LegDate &) const
- const std::string [describe](#) () const
- [LegStruct](#) ()

### Public Attributes

- stdair::AirlineCode\_T [\\_airlineCode](#)
- stdair::FlightNumber\_T [\\_flightNumber](#)
- stdair::AirportCode\_T [\\_boardingPoint](#)
- stdair::DateOffset\_T [\\_boardingDateOffset](#)
- stdair::Date\_T [\\_boardingDate](#)
- stdair::Duration\_T [\\_boardingTime](#)
- stdair::AirportCode\_T [\\_offPoint](#)
- stdair::DateOffset\_T [\\_offDateOffset](#)
- stdair::Date\_T [\\_offDate](#)
- stdair::Duration\_T [\\_offTime](#)
- stdair::Duration\_T [\\_elapsed](#)
- [LegCabinStructList\\_T](#) [\\_cabinList](#)

### 24.79.1 Detailed Description

Utility Structure for the parsing of Leg structures.

Definition at line 24 of file [LegStruct.hpp](#).

### 24.79.2 Constructor & Destructor Documentation

#### 24.79.2.1 AIRINV::LegStruct::LegStruct ()

Default Constructor.

Definition at line 16 of file [LegStruct.cpp](#).

### 24.79.3 Member Function Documentation

#### 24.79.3.1 void AIRINV::LegStruct::fill (const stdair::Date\_T & *iRefDate*, stdair::LegDate & *ioLegDate*) const

Fill the LegDate objects with the attributes of the [LegStruct](#).

The given reference date corresponds to the date of the FlightDate. Indeed, each Leg gets date off-sets, when compared to that (reference) flight-date, both for the boarding date and for the off date.

Definition at line 41 of file [LegStruct.cpp](#).

References [\\_airlineCode](#), [\\_boardingDateOffset](#), [\\_boardingTime](#), [\\_elapsed](#), [\\_flightNumber](#), [\\_offDateOffset](#), [\\_offPoint](#), and [\\_offTime](#).

#### 24.79.3.2 void AIRINV::LegStruct::fill (stdair::LegDate & *ioLegDate*) const

Fill the LegDate objects with the attributes of the [LegStruct](#).

Definition at line 62 of file [LegStruct.cpp](#).

References [\\_airlineCode](#), [\\_boardingTime](#), [\\_elapsed](#), [\\_flightNumber](#), [\\_offDate](#), [\\_offPoint](#), and [\\_offTime](#).

#### 24.79.3.3 const std::string AIRINV::LegStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 21 of file [LegStruct.cpp](#).

References [\\_boardingDate](#), [\\_boardingPoint](#), [\\_boardingTime](#), [\\_cabinList](#), [\\_elapsed](#), [\\_offDate](#), [\\_offPoint](#), [\\_offTime](#), and [AIRINV::LegCabinStruct::describe\(\)](#).

Referenced by [AIRINV::FlightPeriodStruct::describe\(\)](#), and [AIRINV::FlightDateStruct::describe\(\)](#).

### 24.79.4 Member Data Documentation

#### 24.79.4.1 stdair::AirlineCode\_T AIRINV::LegStruct::\_airlineCode

Definition at line 26 of file [LegStruct.hpp](#).

Referenced by [fill\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#).

#### 24.79.4.2 stdair::FlightNumber\_T AIRINV::LegStruct::\_flightNumber

Definition at line 27 of file [LegStruct.hpp](#).

Referenced by [fill\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#).

#### 24.79.4.3 stdair::AirportCode\_T AIRINV::LegStruct::\_boardingPoint

Definition at line 28 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#).

#### 24.79.4.4 stdair::DateOffset\_T AIRINV::LegStruct::\_boardingDateOffset

Definition at line 29 of file [LegStruct.hpp](#).

Referenced by [fill\(\)](#), and [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#).

#### 24.79.4.5 stdair::Date\_T AIRINV::LegStruct::\_boardingDate

Definition at line 30 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#).

#### 24.79.4.6 stdair::Duration\_T AIRINV::LegStruct::\_boardingTime

Definition at line 31 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#).

#### 24.79.4.7 stdair::AirportCode\_T AIRINV::LegStruct::\_offPoint

Definition at line 32 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#).

#### 24.79.4.8 stdair::DateOffset\_T AIRINV::LegStruct::\_offDateOffset

Definition at line 33 of file [LegStruct.hpp](#).

Referenced by [fill\(\)](#), and [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#).

#### 24.79.4.9 stdair::Date\_T AIRINV::LegStruct::\_offDate

Definition at line 34 of file [LegStruct.hpp](#).



Referenced by [describe\(\)](#), [fill\(\)](#), and [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#).

#### 24.79.4.10 stdair::Duration\_T AIRINV::LegStruct::\_offTime

Definition at line 35 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#).

#### 24.79.4.11 stdair::Duration\_T AIRINV::LegStruct::\_elapsed

Definition at line 36 of file [LegStruct.hpp](#).

Referenced by [describe\(\)](#), [fill\(\)](#), and [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#).

#### 24.79.4.12 LegCabinStructList\_T AIRINV::LegStruct::\_cabinList

Definition at line 37 of file [LegStruct.hpp](#).

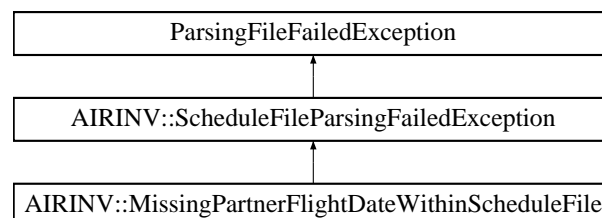
Referenced by [describe\(\)](#), [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/LegStruct.hpp](#)
- [airinv/bom/LegStruct.cpp](#)

## 24.80 AIRINV::MissingPartnerFlightDateWithinScheduleFile Class Reference

`#include <airinv/AIRINV_Types.hpp>` Inheritance diagram for AIRINV::MissingPartnerFlightDateWithinScheduleFile:



### Public Member Functions

- [MissingPartnerFlightDateWithinScheduleFile](#) (const std::string &iWhat)

### 24.80.1 Detailed Description

Missing partner flight date within the schedule file.

Definition at line 54 of file [AIRINV\\_Types.hpp](#).

### 24.80.2 Constructor & Destructor Documentation

#### 24.80.2.1 AIRINV::MissingPartnerFlightDateWithinScheduleFile::MissingPartnerFlightDateWithinScheduleFile (const std::string & *iWhat*) [inline]

Constructor.

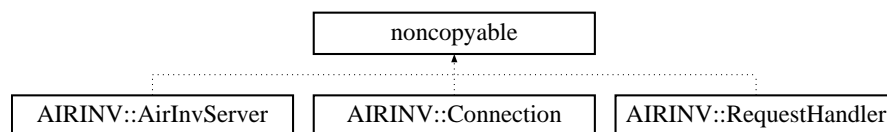
Definition at line 60 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.81 noncopyable Class Reference

Inheritance diagram for noncopyable::

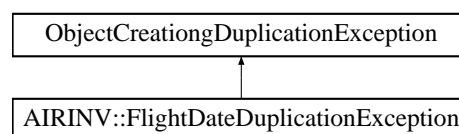


The documentation for this class was generated from the following files:

- [airinv/server/Connection.hpp](#)
- [airinv/server/AirInvServer.hpp](#)
- [airinv/server/RequestHandler.hpp](#)

## 24.82 ObjectCreationgDuplicationException Class Reference

Inheritance diagram for ObjectCreationgDuplicationException::

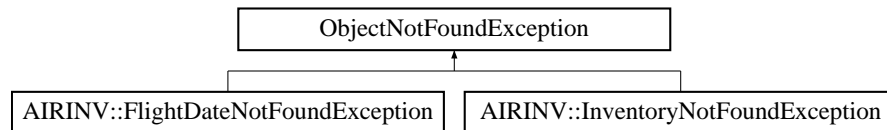


The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.83 ObjectNotFoundException Class Reference

Inheritance diagram for ObjectNotFoundException::

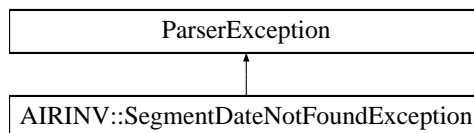


The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.84 ParserException Class Reference

Inheritance diagram for ParserException::



The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.85 AIRINV::InventoryParserHelper::ParserSemanticAction Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for `AIRINV::InventoryParserHelper::ParserSemanticAction::`

[illegible]

- ParserSemanticAction (FlightDateStruct &)

- FlightDateStruct & \_flightDate

Generic Semantic Action (Actor / Functor) for the Inventory Parser.  
Definition at line 29 of file [InventoryParserHelper.hpp](#).

#### 24.85.2.1 AIRINV::InventoryParserHelper::ParserSemanticAction::ParserSemanticAction (FlightDateStruct & ioFlightDate)

Definition at line 26 of file InventoryParserHelper.cpp.

### 24.85.3 Member Data Documentation

#### 24.85.3.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

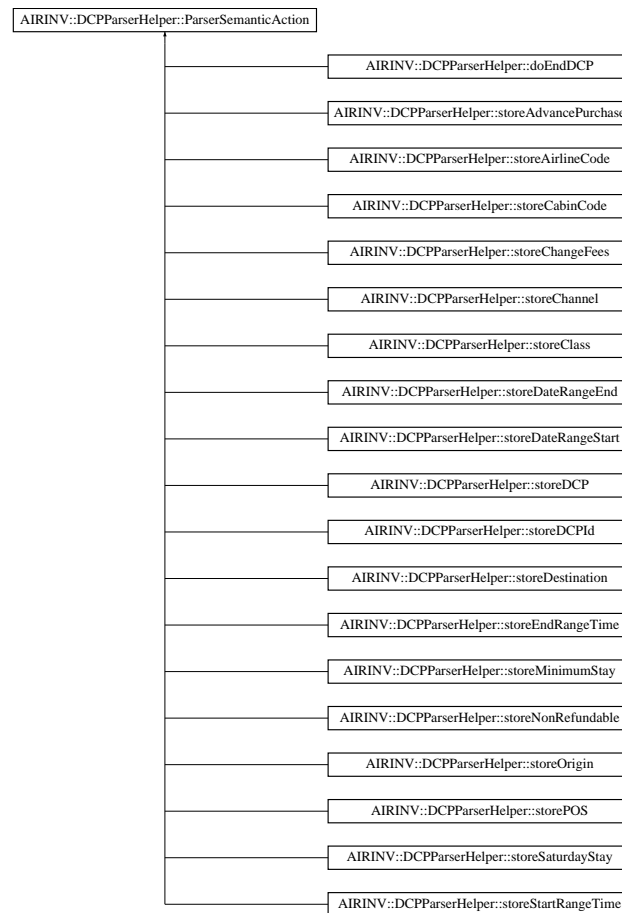
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.86 AIRINV::DCPParserHelper::ParserSemanticAction Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
Inheritance diagram for AIRINV::DCPParserHelper::ParserSemanticAction:
```



## Public Member Functions

- [ParserSemanticAction](#) (DCPRuleStruct &)

## Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

### 24.86.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the DCP Parser.

Definition at line 30 of file [DCPParserHelper.hpp](#).

### 24.86.2 Constructor & Destructor Documentation

#### 24.86.2.1 AIRINV::DCPParserHelper::ParserSemanticAction::ParserSemanticAction (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 25 of file [DCPParserHelper.cpp](#).

### 24.86.3 Member Data Documentation

#### 24.86.3.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

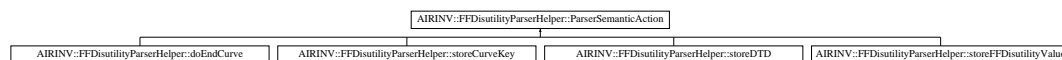
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.87 AIRINV::FFDisutilityParserHelper::ParserSemanticAction Struct Reference

`#include <airinv/command/FFDisutilityParserHelper.hpp>`Inheritance diagram for AIRINV::FFDisutilityParserHelper::ParserSemanticAction::



### Public Member Functions

- [ParserSemanticAction](#) ([FFDisutilityStruct](#) &)

### Public Attributes

- [FFDisutilityStruct](#) & [\\_ffDisutility](#)

#### 24.87.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the FFDisutility Parser.

Definition at line 29 of file [FFDisutilityParserHelper.hpp](#).

## 24.87.2 Constructor & Destructor Documentation

### 24.87.2.1 AIRINV::FFDisutilityParserHelper::ParserSemanticAction::ParserSemanticAction (FFDisutilityStruct & ioFFDisutility)

Actor Constructor.

Definition at line 27 of file [FFDisutilityParserHelper.cpp](#).

## 24.87.3 Member Data Documentation

### 24.87.3.1 FFDisutilityStruct& AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\_-ffDisutility

Actor Context.

Definition at line 33 of file [FFDisutilityParserHelper.hpp](#).

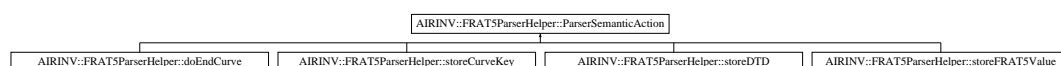
Referenced by [AIRINV::FFDisutilityParserHelper::doEndCurve::operator\(\)](#), [AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::operator\(\)](#), [AIRINV::FFDisutilityParserHelper::storeDTD::operator\(\)](#), and [AIRINV::FFDisutilityParserHelper::storeCurveKey::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/FFDisutilityParserHelper.cpp](#)

## 24.88 AIRINV::FRAT5ParserHelper::ParserSemanticAction Struct Reference

`#include <airinv/command/FRAT5ParserHelper.hpp>`Inheritance diagram for AIRINV::FRAT5ParserHelper::ParserSemanticAction::



## Public Member Functions

- [ParserSemanticAction](#) (FRAT5Struct &)

## Public Attributes

- [FRAT5Struct](#) & [\\_frat5](#)

### 24.88.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the FRAT5 Parser.

Definition at line 29 of file [FRAT5ParserHelper.hpp](#).



## 24.88.2 Constructor & Destructor Documentation

### 24.88.2.1 AIRINV::FRAT5ParserHelper::ParserSemanticAction::ParserSemanticAction (FRAT5Struct & *ioFRAT5*)

Actor Constructor.

Definition at line 27 of file [FRAT5ParserHelper.cpp](#).

## 24.88.3 Member Data Documentation

### 24.88.3.1 FRAT5Struct& AIRINV::FRAT5ParserHelper::ParserSemanticAction::\_frat5

Actor Context.

Definition at line 33 of file [FRAT5ParserHelper.hpp](#).

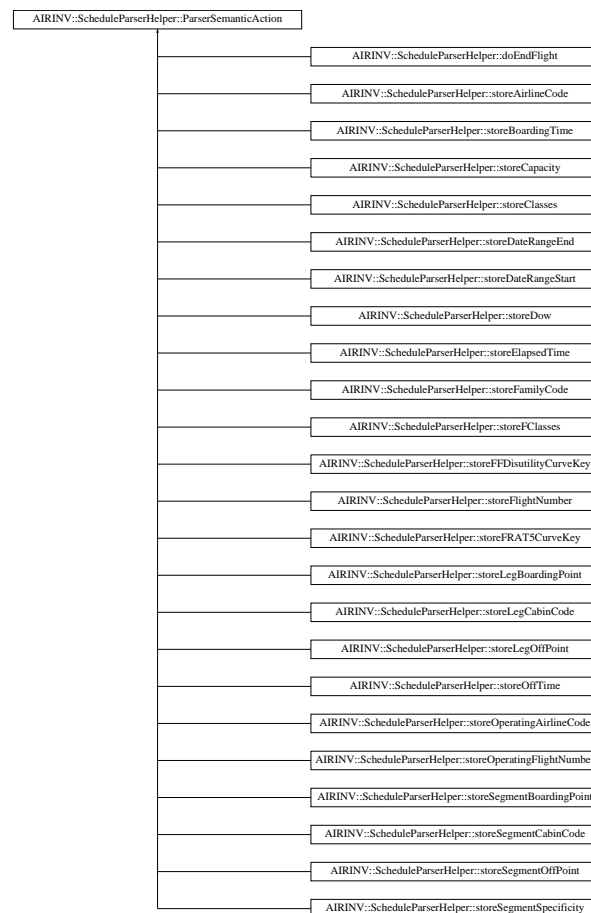
Referenced by [AIRINV::FRAT5ParserHelper::doEndCurve::operator\(\)](#), [AIRINV::FRAT5ParserHelper::storeFRAT5Value::operator\(\)](#), [AIRINV::FRAT5ParserHelper::storeDTD::operator\(\)](#), and [AIRINV::FRAT5ParserHelper::storeCurveKey::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.cpp](#)

## 24.89 AIRINV::ScheduleParserHelper::ParserSemanticAction Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::ParserSemanticAction::



## Public Member Functions

- [ParserSemanticAction](#) ([FlightPeriodStruct](#) &)

## Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.89.1 Detailed Description

Generic Semantic Action (Actor / Functor) for the Schedule Parser.

Definition at line 29 of file [ScheduleParserHelper.hpp](#).

### 24.89.2 Constructor & Destructor Documentation

#### 24.89.2.1 AIRINV::ScheduleParserHelper::ParserSemanticAction::ParserSemanticAction ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 28 of file [ScheduleParserHelper.cpp](#).

### 24.89.3 Member Data Documentation

#### 24.89.3.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_-flightPeriod

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

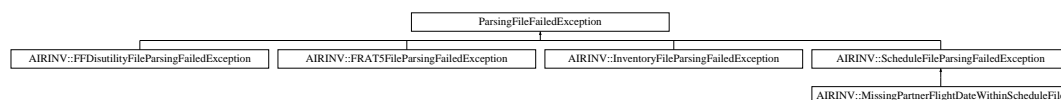
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIR-INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.90 ParsingFileFailedException Class Reference

Inheritance diagram for ParsingFileFailedException::



The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.91 AIRINV::Reply Struct Reference

```
#include <airinv/server/Reply.hpp>
```

### Public Member Functions

- `std::vector< boost::asio::const_buffer > to_buffers ()`

**Public Attributes**

- [FlightRequestStatus::EN\\_FlightRequestStatus \\_status](#)
- `std::string` [content](#)

**24.91.1 Detailed Description**

A reply to be sent to a client.

Definition at line 18 of file [Reply.hpp](#).

**24.91.2 Member Function Documentation****24.91.2.1 `std::vector< boost::asio::const_buffer > AIRINV::Reply::to_buffers ()`**

Convert the reply into a vector of buffers. The buffers do not own the underlying memory blocks, therefore the reply object must remain valid and not be changed until the write operation has completed.

Definition at line 15 of file [Reply.cpp](#).

References [content](#).

**24.91.3 Member Data Documentation****24.91.3.1 `FlightRequestStatus::EN_FlightRequestStatus AIRINV::Reply::_status`**

Status.

Definition at line 20 of file [Reply.hpp](#).

Referenced by [AIRINV::RequestHandler::handleRequest\(\)](#).

**24.91.3.2 `std::string AIRINV::Reply::content`**

The content to be sent in the reply.

Definition at line 23 of file [Reply.hpp](#).

Referenced by [AIRINV::RequestHandler::handleRequest\(\)](#), and [to\\_buffers\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/server/Reply.hpp](#)
- [airinv/server/Reply.cpp](#)

**24.92 AIRINV::Request Struct Reference**

```
#include <airinv/server/Request.hpp>
```

**Public Member Functions**

- `bool` [parseFlightDate \(\)](#)

## Public Attributes

- `std::string _flightDetails`
- `stdair::AirlineCode_T _airlineCode`
- `stdair::FlightNumber_T _flightNumber`
- `stdair::Date_T _departureDate`

### 24.92.1 Detailed Description

A request received from a client.

Definition at line 18 of file [Request.hpp](#).

### 24.92.2 Member Function Documentation

#### 24.92.2.1 `bool AIRINV::Request::parseFlightDate ()`

Parse the incoming request.

Expected requested is of the form: `<airline_code>,<flight_number>,<flight_date>`, where date format is YYYY-MM-DD. For instance: BA,341,2010-09-20.

Definition at line 12 of file [Request.cpp](#).

References [\\_airlineCode](#), [\\_departureDate](#), and [\\_flightNumber](#).

Referenced by [AIRINV::RequestHandler::handleRequest\(\)](#).

### 24.92.3 Member Data Documentation

#### 24.92.3.1 `std::string AIRINV::Request::_flightDetails`

String as it comes from the connected client.

Definition at line 29 of file [Request.hpp](#).

Referenced by [AIRINV::RequestHandler::handleRequest\(\)](#).

#### 24.92.3.2 `stdair::AirlineCode_T AIRINV::Request::_airlineCode`

Parsed airline code.

Definition at line 31 of file [Request.hpp](#).

Referenced by [parseFlightDate\(\)](#).

#### 24.92.3.3 `stdair::FlightNumber_T AIRINV::Request::_flightNumber`

Parsed flight number.

Definition at line 33 of file [Request.hpp](#).

Referenced by [parseFlightDate\(\)](#).

#### 24.92.3.4 stdair::Date\_T AIRINV::Request::\_departureDate

Parsed departure date.

Definition at line 35 of file [Request.hpp](#).

Referenced by [parseFlightDate\(\)](#).

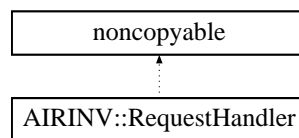
The documentation for this struct was generated from the following files:

- [airinv/server/Request.hpp](#)
- [airinv/server/Request.cpp](#)

## 24.93 AIRINV::RequestHandler Class Reference

The common handler for all incoming requests.

`#include <airinv/server/RequestHandler.hpp>` Inheritance diagram for AIR-INV::RequestHandler::



### Public Member Functions

- [RequestHandler](#) (const stdair::AirlineCode\_T &)
- bool [handleRequest](#) ([Request](#) &, [Reply](#) &) const

#### 24.93.1 Detailed Description

The common handler for all incoming requests.

Definition at line 28 of file [RequestHandler.hpp](#).

#### 24.93.2 Constructor & Destructor Documentation

##### 24.93.2.1 AIRINV::RequestHandler::RequestHandler (const stdair::AirlineCode\_T & *iAirlineCode*)

Constructor.

### Parameters:

**const** stdair::AirlineCode\_T& Airline code of the inventory owner.

Definition at line 20 of file [RequestHandler.cpp](#).

### 24.93.3 Member Function Documentation

#### 24.93.3.1 bool AIRINV::RequestHandler::handleRequest (Request & ioRequest, Reply & ioReply) const

Handle a request and produce a reply.

Definition at line 26 of file [RequestHandler.cpp](#).

References [AIRINV::Request::\\_flightDetails](#), [AIRINV::Reply::\\_status](#), [AIRINV::Reply::content](#), [AIRINV::FlightRequestStatus::INTERNAL\\_ERROR](#), [AIRINV::FlightRequestStatus::OK](#), and [AIRINV::Request::parseFlightDate\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/server/RequestHandler.hpp](#)
- [airinv/server/RequestHandler.cpp](#)

## 24.94 AIRINV::RequestParser Class Reference

Parser for incoming requests.

```
#include <airinv/server/RequestParser.hpp>
```

### Public Member Functions

- [RequestParser \(\)](#)  
*Construct ready to parse the request method.*
- void [reset \(\)](#)  
*Reset to initial parser state.*
- template<typename InputIterator >  
boost::tuple< boost::tribool, InputIterator > [parse](#) ([Request](#) &req, InputIterator begin, InputIterator end)

#### 24.94.1 Detailed Description

Parser for incoming requests.

Definition at line 17 of file [RequestParser.hpp](#).

#### 24.94.2 Constructor & Destructor Documentation

##### 24.94.2.1 AIRINV::RequestParser::RequestParser ()

Construct ready to parse the request method.

Definition at line 13 of file [RequestParser.cpp](#).

### 24.94.3 Member Function Documentation

#### 24.94.3.1 void AIRINV::RequestParser::reset ()

Reset to initial parser state.

Definition at line 18 of file [RequestParser.cpp](#).

#### 24.94.3.2 template<typename InputIterator > boost::tuple<boost::tribool, InputIterator> AIRINV::RequestParser::parse (Request & req, InputIterator begin, InputIterator end) [inline]

Parse some data. The tribool return value is true when a complete request has been parsed, false if the data is invalid, indeterminate when more data is required. The InputIterator return value indicates how much of the input has been consumed.

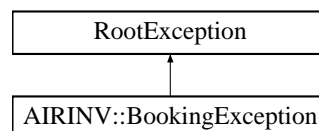
Definition at line 30 of file [RequestParser.hpp](#).

The documentation for this class was generated from the following files:

- [airinv/server/RequestParser.hpp](#)
- [airinv/server/RequestParser.cpp](#)

## 24.95 RootException Class Reference

Inheritance diagram for RootException::

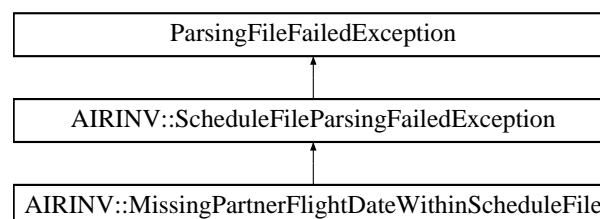


The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.96 AIRINV::ScheduleFileParsingFailedException Class Reference

#include <airinv/AIRINV\_Types.hpp>Inheritance diagram for AIR-  
INV::ScheduleFileParsingFailedException::





**Public Member Functions**

- [ScheduleFileParsingFailedException](#) (const std::string &iWhat)

**24.96.1 Detailed Description**

The schedule input file can not be parsed.

Definition at line 41 of file [AIRINV\\_Types.hpp](#).

**24.96.2 Constructor & Destructor Documentation****24.96.2.1 AIRINV::ScheduleFileParsingFailedException::ScheduleFileParsingFailedException (const std::string & iWhat) [inline]**

Constructor.

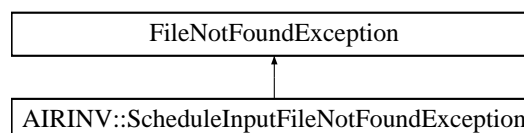
Definition at line 47 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

**24.97 AIRINV::ScheduleInputFileNotFoundException Class Reference**

`#include <airinv/AIRINV_Types.hpp>` Inheritance diagram for AIR-  
INV::ScheduleInputFileNotFoundException::

**Public Member Functions**

- [ScheduleInputFileNotFoundException](#) (const std::string &iWhat)

**24.97.1 Detailed Description**

The schedule input file can not be found or opened.

Definition at line 118 of file [AIRINV\\_Types.hpp](#).

**24.97.2 Constructor & Destructor Documentation****24.97.2.1 AIRINV::ScheduleInputFileNotFoundException::ScheduleInputFileNotFoundException (const std::string & iWhat) [inline]**

Constructor.

Definition at line 123 of file [AIRINV\\_Types.hpp](#).

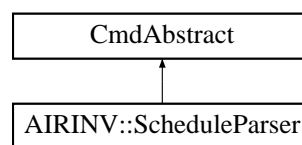
The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.98 AIRINV::ScheduleParser Class Reference

Class wrapping the parser entry point.

`#include <airinv/command/ScheduleParser.hpp>` Inheritance diagram for AIRINV::ScheduleParser::



### Static Public Member Functions

- static void [generateInventories](#) (const stdair::ScheduleFilePath &iScheduleFilename, stdair::BomRoot &)

### 24.98.1 Detailed Description

Class wrapping the parser entry point.

Definition at line 22 of file [ScheduleParser.hpp](#).

### 24.98.2 Member Function Documentation

#### 24.98.2.1 void AIRINV::ScheduleParser::generateInventories (const stdair::ScheduleFilePath &iScheduleFilename, stdair::BomRoot &ioBomRoot) [static]

Parse the CSV file describing the airline schedules for the simulator, and generates the inventories accordingly.

#### Parameters:

- const** stdair::Filename\_T& The file-name of the CSV-formatted schedule input file.
- stdair::BomRoot&** Root of the BOM tree.

Definition at line 20 of file [ScheduleParser.cpp](#).

References [AIRINV::FlightPeriodFileParser::generateInventories\(\)](#).

Referenced by [AIRINV::AIRINV\\_Service::parseAndLoad\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/command/ScheduleParser.hpp](#)
- [airinv/command/ScheduleParser.cpp](#)

## 24.99 AIRINV::SegmentCabinHelper Class Reference

Class representing the actual business functions for an airline segment-cabin.

```
#include <airinv/bom/SegmentCabinHelper.hpp>
```

### Static Public Member Functions

- static void [updateFromReservation](#) (const stdair::FlightDate &, stdair::SegmentCabin &, const stdair::PartySize\_T &)
- static void [buildPseudoBidPriceVector](#) (stdair::SegmentCabin &)
- static void [updateBookingControlsUsingPseudoBidPriceVector](#) (const stdair::SegmentCabin &)
- static void [updateAUs](#) (const stdair::SegmentCabin &)
- static void [updateAvailabilities](#) (const stdair::SegmentCabin &)
- static void [initialiseAU](#) (stdair::SegmentCabin &)
- static void [initYieldBasedNestingStructure](#) (stdair::SegmentCabin &)
- static void [initListOfUsablePolicies](#) (stdair::SegmentCabin &)

### 24.99.1 Detailed Description

Class representing the actual business functions for an airline segment-cabin.

Definition at line 25 of file [SegmentCabinHelper.hpp](#).

### 24.99.2 Member Function Documentation

**24.99.2.1 void AIRINV::SegmentCabinHelper::updateFromReservation (const stdair::FlightDate & *iFlightDate*, stdair::SegmentCabin & *ioSegmentCabin*, const stdair::PartySize\_T & *iNbOfBookings*) [static]**

Update the segment-cabin with the reservation.

Definition at line 64 of file [SegmentCabinHelper.cpp](#).

References [AIRINV::FlightDateHelper::updateAvailability\(\)](#).

**24.99.2.2 void AIRINV::SegmentCabinHelper::buildPseudoBidPriceVector (stdair::SegmentCabin & *ioSegmentCabin*) [static]**

Build the pseudo bid price vector from the vectors of the leg-cabins.

Definition at line 77 of file [SegmentCabinHelper.cpp](#).

Referenced by [AIRINV::FlightDateHelper::updateBookingControls\(\)](#).

**24.99.2.3 void AIR-INV::SegmentCabinHelper::updateBookingControlsUsingPseudoBidPriceVector (const stdair::SegmentCabin & *iSegmentCabin*) [static]**

Update the booking controls using the pseudo bid price vector.

Definition at line 128 of file [SegmentCabinHelper.cpp](#).

References [updateAUs\(\)](#).

Referenced by [AIRINV::FlightDateHelper::updateBookingControls\(\)](#).

**24.99.2.4** void AIRINV::SegmentCabinHelper::updateAUs (const stdair::SegmentCabin & iSegmentCabin) [static]

Update the authorisation levels using the booking limits.

Definition at line 186 of file [SegmentCabinHelper.cpp](#).

Referenced by [updateBookingControlsUsingPseudoBidPriceVector\(\)](#).

**24.99.2.5** void AIRINV::SegmentCabinHelper::updateAvailabilities (const stdair::SegmentCabin & iSegmentCabin) [static]

Update the availability of the booking classes.

Definition at line 240 of file [SegmentCabinHelper.cpp](#).

Referenced by [AIRINV::FlightDateHelper::recalculateAvailability\(\)](#), and [AIRINV::SegmentSnapshotTableHelper::takeSnapshots\(\)](#).

**24.99.2.6** void AIRINV::SegmentCabinHelper::initialiseAU (stdair::SegmentCabin & iSegmentCabin) [static]

Initialise the AU for the booking classes.

Definition at line 28 of file [SegmentCabinHelper.cpp](#).

Referenced by [AIRINV::SegmentDateHelper::fillFromRouting\(\)](#).

**24.99.2.7** void AIRINV::SegmentCabinHelper::initYieldBasedNestingStructure (stdair::SegmentCabin & ioSegmentCabin) [static]

Yield-based nesting structure initialisation.

Definition at line 333 of file [SegmentCabinHelper.cpp](#).

Referenced by [AIRINV::InventoryManager::initialiseYieldBasedNestingStructures\(\)](#).

**24.99.2.8** void AIRINV::SegmentCabinHelper::initListOfUsablePolicies (stdair::SegmentCabin & ioSegmentCabin) [static]

List of usable policies initialisation.

Definition at line 385 of file [SegmentCabinHelper.cpp](#).

Referenced by [AIRINV::InventoryManager::initialiseListsOfUsablePolicies\(\)](#).

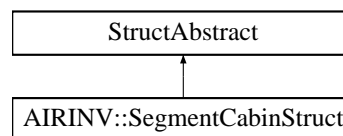
The documentation for this class was generated from the following files:

- [airinv/bom/SegmentCabinHelper.hpp](#)
- [airinv/bom/SegmentCabinHelper.cpp](#)

## 24.100 AIRINV::SegmentCabinStruct Struct Reference

Utility Structure for the parsing of SegmentCabin details.

#include <airinv/bom/SegmentCabinStruct.hpp> Inheritance diagram for AIRINV::SegmentCabinStruct:



### Public Member Functions

- void [fill](#) (stdair::SegmentCabin &) const
- const std::string [describe](#) () const

### Public Attributes

- stdair::CabinCode\_T [\\_cabinCode](#)
- stdair::NbOfBookings\_T [\\_nbOfBookings](#)
- [FareFamilyStruct](#) [\\_itFareFamily](#)
- [FareFamilyStructList\\_T](#) [\\_fareFamilies](#)

#### 24.100.1 Detailed Description

Utility Structure for the parsing of SegmentCabin details.

Definition at line 26 of file [SegmentCabinStruct.hpp](#).

#### 24.100.2 Member Function Documentation

##### 24.100.2.1 void AIRINV::SegmentCabinStruct::fill (stdair::SegmentCabin & *ioSegmentCabin*) const

Fill the SegmentCabin objects with the attributes of the [SegmentCabinStruct](#).

Definition at line 33 of file [SegmentCabinStruct.cpp](#).

##### 24.100.2.2 const std::string AIRINV::SegmentCabinStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 15 of file [SegmentCabinStruct.cpp](#).

References [\\_cabinCode](#), [\\_fareFamilies](#), [\\_nbOfBookings](#), and [AIRINV::FareFamilyStruct::describe\(\)](#).

Referenced by [AIRINV::SegmentStruct::describe\(\)](#).

### 24.100.3 Member Data Documentation

#### 24.100.3.1 stdair::CabinCode\_T AIRINV::SegmentCabinStruct::\_cabinCode

Definition at line 28 of file [SegmentCabinStruct.hpp](#).

Referenced by [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#).

#### 24.100.3.2 stdair::NbOfBookings\_T AIRINV::SegmentCabinStruct::\_nbOfBookings

Definition at line 29 of file [SegmentCabinStruct.hpp](#).

Referenced by [describe\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#).

#### 24.100.3.3 FareFamilyStruct AIRINV::SegmentCabinStruct::\_itFareFamily

Definition at line 30 of file [SegmentCabinStruct.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

#### 24.100.3.4 FareFamilyStructList\_T AIRINV::SegmentCabinStruct::\_fareFamilies

Definition at line 31 of file [SegmentCabinStruct.hpp](#).

Referenced by [describe\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/SegmentCabinStruct.hpp](#)
- [airinv/bom/SegmentCabinStruct.cpp](#)

## 24.101 AIRINV::SegmentDateHelper Class Reference

```
#include <airinv/bom/SegmentDateHelper.hpp>
```

### Static Public Member Functions

- static void [fillFromRouting](#) (stdair::SegmentDate &)
- static void [updateElapsedTimeFromRouting](#) (stdair::SegmentDate &)
- static void [updateDistanceFromElapsedTime](#) (stdair::SegmentDate &)

#### 24.101.1 Detailed Description

Class representing the actual business functions for an airline segment-date.

Definition at line 16 of file [SegmentDateHelper.hpp](#).

#### 24.101.2 Member Function Documentation

##### 24.101.2.1 void AIRINV::SegmentDateHelper::fillFromRouting (stdair::SegmentDate & ioSegmentDate) [static]

Fill the attributes derived from the routing legs (e.g., board and off dates).

Definition at line 18 of file [SegmentDateHelper.cpp](#).

References [AIRINV::SegmentCabinHelper::initialiseAU\(\)](#), and [updateElapsedTimeFromRouting\(\)](#).

##### 24.101.2.2 void AIRINV::SegmentDateHelper::updateElapsedTimeFromRouting (stdair::SegmentDate & ioSegmentDate) [static]

Calculate and set the elapsed time according to the leg routing.

Actually, the elapsed time of the segment is the sum of the elapsed times of the routing legs, plus the stop-over times. The stop-over time is the difference between the board time of a routing leg, and the off time of the previous leg. That is, it is the time spent at the corresponding airport.

Of course, in case of mono-leg segments, there is no stop-over, and the elapsed time of the segment is equal to the elapsed time of the single routing leg.

Definition at line 72 of file [SegmentDateHelper.cpp](#).

References [updateDistanceFromElapsedTime\(\)](#).

Referenced by [fillFromRouting\(\)](#).

##### 24.101.2.3 void AIRINV::SegmentDateHelper::updateDistanceFromElapsedTime (stdair::SegmentDate & ioSegmentDate) [static]

Method computing the distance of the segment (in kilometers).

Definition at line 115 of file [SegmentDateHelper.cpp](#).

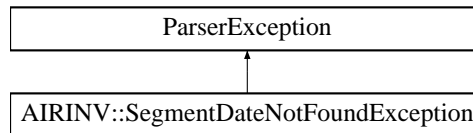
Referenced by [updateElapsedTimeFromRouting\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/bom/SegmentDateHelper.hpp](#)
- [airinv/bom/SegmentDateHelper.cpp](#)

## 24.102 AIRINV::SegmentDateNotFoundException Class Reference

`#include <airinv/AIRINV_Types.hpp>` Inheritance diagram for AIR-  
INV::SegmentDateNotFoundException::



### Public Member Functions

- [SegmentDateNotFoundException](#) (const std::string &iWhat)

#### 24.102.1 Detailed Description

Specific exception when some BOM objects can not be found within the inventory.

Definition at line 94 of file [AIRINV\\_Types.hpp](#).

#### 24.102.2 Constructor & Destructor Documentation

##### 24.102.2.1 AIRINV::SegmentDateNotFoundException::SegmentDateNotFoundException (const std::string &iWhat) [inline]

Constructor.

Definition at line 99 of file [AIRINV\\_Types.hpp](#).

The documentation for this class was generated from the following file:

- [airinv/AIRINV\\_Types.hpp](#)

## 24.103 AIRINV::SegmentSnapshotTableHelper Class Reference

`#include <airinv/bom/SegmentSnapshotTableHelper.hpp>`

### Static Public Member Functions

- static void [takeSnapshots](#) (stdair::SegmentSnapshotTable &, const stdair::DateTime\_T &)

#### 24.103.1 Detailed Description

Class representing the actual business functions for an airline inventory.

Definition at line 22 of file [SegmentSnapshotTableHelper.hpp](#).



### 24.103.2 Member Function Documentation

**24.103.2.1** `void AIRINV::SegmentSnapshotTableHelper::takeSnapshots`  
 (stdair::SegmentSnapshotTable & *ioSegmentSnapshotTable*, const stdair::DateTime\_T  
 & *iSnapshotTime*) **[static]**

Take inventory snapshots.

Definition at line 27 of file [SegmentSnapshotTableHelper.cpp](#).

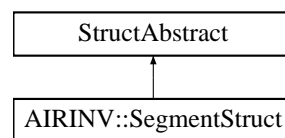
References [AIRINV::SegmentCabinHelper::updateAvailabilities\(\)](#).

The documentation for this class was generated from the following files:

- [airinv/bom/SegmentSnapshotTableHelper.hpp](#)
- [airinv/bom/SegmentSnapshotTableHelper.cpp](#)

## 24.104 AIRINV::SegmentStruct Struct Reference

`#include <airinv/bom/SegmentStruct.hpp>`Inheritance diagram for AIR-INV::SegmentStruct:



### Public Member Functions

- void [fill](#) (stdair::SegmentDate &) const
- const std::string [describe](#) () const

### Public Attributes

- stdair::AirportCode\_T [\\_boardingPoint](#)
- stdair::AirportCode\_T [\\_offPoint](#)
- stdair::Date\_T [\\_boardingDate](#)
- stdair::Duration\_T [\\_boardingTime](#)
- stdair::Date\_T [\\_offDate](#)
- stdair::Duration\_T [\\_offTime](#)
- stdair::Duration\_T [\\_elapsed](#)
- [SegmentCabinStructList\\_T\\_cabinList](#)

### 24.104.1 Detailed Description

Utility Structure for the parsing of Segment structures.

Definition at line 23 of file [SegmentStruct.hpp](#).

## 24.104.2 Member Function Documentation

### 24.104.2.1 void AIRINV::SegmentStruct::fill (stdair::SegmentDate & *ioSegmentDate*) const

Fill the SegmentDate objects with the attributes of the [SegmentStruct](#).

Definition at line 36 of file [SegmentStruct.cpp](#).

References [\\_boardingTime](#), [\\_elapsed](#), [\\_offDate](#), and [\\_offTime](#).

### 24.104.2.2 const std::string AIRINV::SegmentStruct::describe () const

Give a description of the structure (for display purposes).

Definition at line 14 of file [SegmentStruct.cpp](#).

References [\\_boardingPoint](#), [\\_boardingTime](#), [\\_cabinList](#), [\\_elapsed](#), [\\_offPoint](#), [\\_offTime](#), and [AIRINV::SegmentCabinStruct::describe\(\)](#).

Referenced by [AIRINV::FlightPeriodStruct::describe\(\)](#), and [AIRINV::FlightDateStruct::describe\(\)](#).

## 24.104.3 Member Data Documentation

### 24.104.3.1 stdair::AirportCode\_T AIRINV::SegmentStruct::\_boardingPoint

Definition at line 25 of file [SegmentStruct.hpp](#).

Referenced by [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [AIRINV::FlightPeriodStruct::addSegmentCabin\(\)](#), [AIRINV::FlightDateStruct::addSegmentCabin\(\)](#), [AIRINV::FlightPeriodStruct::buildSegments\(\)](#), [AIRINV::FlightDateStruct::buildSegments\(\)](#), [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#).

### 24.104.3.2 stdair::AirportCode\_T AIRINV::SegmentStruct::\_offPoint

Definition at line 26 of file [SegmentStruct.hpp](#).

Referenced by [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [AIRINV::FlightPeriodStruct::addSegmentCabin\(\)](#), [AIRINV::FlightDateStruct::addSegmentCabin\(\)](#), [AIRINV::FlightPeriodStruct::buildSegments\(\)](#), [AIRINV::FlightDateStruct::buildSegments\(\)](#), [describe\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#).

### 24.104.3.3 stdair::Date\_T AIRINV::SegmentStruct::\_boardingDate

Definition at line 27 of file [SegmentStruct.hpp](#).

**24.104.3.4 stdair::Duration\_T AIRINV::SegmentStruct::\_boardingTime**

Definition at line 28 of file [SegmentStruct.hpp](#).

Referenced by [describe\(\)](#), and [fill\(\)](#).

**24.104.3.5 stdair::Date\_T AIRINV::SegmentStruct::\_offDate**

Definition at line 29 of file [SegmentStruct.hpp](#).

Referenced by [fill\(\)](#).

**24.104.3.6 stdair::Duration\_T AIRINV::SegmentStruct::\_offTime**

Definition at line 30 of file [SegmentStruct.hpp](#).

Referenced by [describe\(\)](#), and [fill\(\)](#).

**24.104.3.7 stdair::Duration\_T AIRINV::SegmentStruct::\_elapsed**

Definition at line 31 of file [SegmentStruct.hpp](#).

Referenced by [describe\(\)](#), and [fill\(\)](#).

**24.104.3.8 SegmentCabinStructList\_T AIRINV::SegmentStruct::\_cabinList**

Definition at line 32 of file [SegmentStruct.hpp](#).

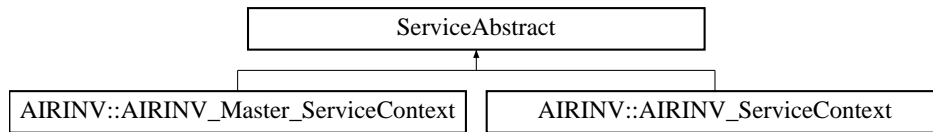
Referenced by [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#), [AIRINV::FlightDateStruct::addFareFamily\(\)](#), [AIRINV::FlightPeriodStruct::addSegmentCabin\(\)](#), [AIRINV::FlightDateStruct::addSegmentCabin\(\)](#), [describe\(\)](#), [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/bom/SegmentStruct.hpp](#)
- [airinv/bom/SegmentStruct.cpp](#)

**24.105 ServiceAbstract Class Reference**

Inheritance diagram for ServiceAbstract::



The documentation for this class was generated from the following files:

- [airinv/service/AIRINV\\_Master\\_ServiceContext.hpp](#)
- [airinv/service/AIRINV\\_ServiceContext.hpp](#)

## 24.106 AIRINV::ServiceAbstract Class Reference

```
#include <airinv/service/ServiceAbstract.hpp>
```

### Public Member Functions

- virtual [~ServiceAbstract](#) ()
- virtual void [toStream](#) (std::ostream &ioOut) const
- virtual void [fromStream](#) (std::istream &ioIn)

### Protected Member Functions

- [ServiceAbstract](#) ()

#### 24.106.1 Detailed Description

Base class for the Service layer.

Definition at line 14 of file [ServiceAbstract.hpp](#).

#### 24.106.2 Constructor & Destructor Documentation

##### 24.106.2.1 virtual AIRINV::ServiceAbstract::~~ServiceAbstract () [inline, virtual]

Destructor.

Definition at line 18 of file [ServiceAbstract.hpp](#).

##### 24.106.2.2 AIRINV::ServiceAbstract::ServiceAbstract () [inline, protected]

Protected Default Constructor to ensure this class is abstract.

Definition at line 30 of file [ServiceAbstract.hpp](#).

### 24.106.3 Member Function Documentation

#### 24.106.3.1 virtual void AIRINV::ServiceAbstract::toStream (std::ostream & *ioOut*) const [inline, virtual]

Dump a Business Object into an output stream.

##### Parameters:

*ostream&* the output stream.

Definition at line 22 of file [ServiceAbstract.hpp](#).

#### 24.106.3.2 virtual void AIRINV::ServiceAbstract::fromStream (std::istream & *ioIn*) [inline, virtual]

Read a Business Object from an input stream.

##### Parameters:

*istream&* the input stream.

Definition at line 26 of file [ServiceAbstract.hpp](#).

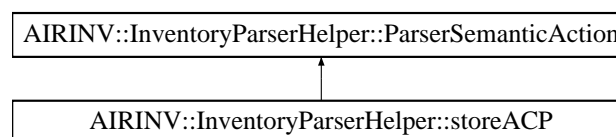
Referenced by [operator>>\(\)](#).

The documentation for this class was generated from the following file:

- [airinv/service/ServiceAbstract.hpp](#)

## 24.107 AIRINV::InventoryParserHelper::storeACP Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`Inheritance diagram for AIRINV::InventoryParserHelper::storeACP:



### Public Member Functions

- [storeACP](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.107.1 Detailed Description

Store the parsed Average Cancellation Percentage (ACP).

Definition at line 205 of file [InventoryParserHelper.hpp](#).

### 24.107.2 Constructor & Destructor Documentation

#### 24.107.2.1 AIRINV::InventoryParserHelper::storeACP::storeACP (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 350 of file [InventoryParserHelper.cpp](#).

### 24.107.3 Member Function Documentation

#### 24.107.3.1 void AIRINV::InventoryParserHelper::storeACP::operator() (double iReal) const

Actor Function (functor).

Definition at line 355 of file [InventoryParserHelper.cpp](#).

References [AIRINV::LegCabinStruct::\\_acp](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::\\_itLegCabin](#).

### 24.107.4 Member Data Documentation

#### 24.107.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeNAV::operator\(\)\(\)](#).

```

AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

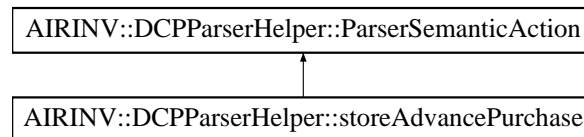
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.108 AIRINV::DCPParserHelper::storeAdvancePurchase Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeAdvancePurchase::



### Public Member Functions

- [storeAdvancePurchase](#) (DCPRuleStruct &)
- void [operator\(\)](#) (unsigned int, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.108.1 Detailed Description

Store the parsed advance purchase days.

Definition at line 138 of file [DCPParserHelper.hpp](#).

## 24.108.2 Constructor & Destructor Documentation

### 24.108.2.1 AIRINV::DCPParserHelper::storeAdvancePurchase::storeAdvancePurchase (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 208 of file [DCPParserHelper.cpp](#).

## 24.108.3 Member Function Documentation

### 24.108.3.1 void AIRINV::DCPParserHelper::storeAdvancePurchase::operator() (unsigned int iAdvancePurchase, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 213 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

## 24.108.4 Member Data Documentation

### 24.108.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

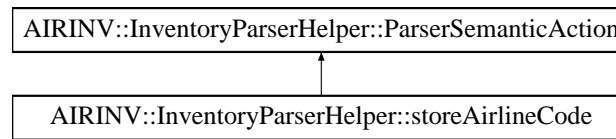
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.109 AIRINV::InventoryParserHelper::storeAirlineCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeAirlineCode::





## Public Member Functions

- [storeAirlineCode](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.109.1 Detailed Description

Store the parsed airline code.

Definition at line 45 of file [InventoryParserHelper.hpp](#).

### 24.109.2 Constructor & Destructor Documentation

#### 24.109.2.1 AIRINV::InventoryParserHelper::storeAirlineCode::storeAirlineCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 44 of file [InventoryParserHelper.cpp](#).

### 24.109.3 Member Function Documentation

#### 24.109.3.1 void AIRINV::InventoryParserHelper::storeAirlineCode::operator() ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 49 of file [InventoryParserHelper.cpp](#).

References [AIRINV::FlightDateStruct::\\_airlineCode](#), [AIRINV::LegCabinStruct::\\_bucketList](#), [AIRINV::SegmentStruct::\\_cabinList](#), [AIRINV::LegStruct::\\_cabinList](#), [AIRINV::BookingClassStruct::\\_classCode](#), [AIRINV::FareFamilyStruct::\\_classList](#), [AIRINV::SegmentCabinStruct::\\_fareFamilies](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), [AIRINV::FlightDateStruct::\\_itBucket](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), [AIRINV::FlightDateStruct::\\_itLeg](#), [AIRINV::FlightDateStruct::\\_itLegCabin](#), [AIRINV::FlightDateStruct::\\_itSegment](#), [AIRINV::FlightDateStruct::\\_itSegmentCabin](#), [AIRINV::FlightDateStruct::\\_legList](#), [AIRINV::FlightDateStruct::\\_segmentList](#), and [AIRINV::BucketStruct::\\_yieldRangeUpperValue](#).

#### 24.109.4 Member Data Documentation

##### 24.109.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_-flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

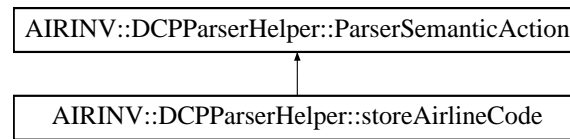
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

#### 24.110 AIRINV::DCPParserHelper::storeAirlineCode Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>Inheritance diagram for AIRINV::DCPParserHelper::storeAirlineCode::
```



## Public Member Functions

- [storeAirlineCode](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

## Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

### 24.110.1 Detailed Description

Store the parsed airline code.

Definition at line 198 of file [DCPParserHelper.hpp](#).

### 24.110.2 Constructor & Destructor Documentation

#### 24.110.2.1 AIRINV::DCPParserHelper::storeAirlineCode::storeAirlineCode (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 329 of file [DCPParserHelper.cpp](#).

### 24.110.3 Member Function Documentation

#### 24.110.3.1 void AIRINV::DCPParserHelper::storeAirlineCode::operator() (std::vector< char > iChar, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 334 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.110.4 Member Data Documentation

#### 24.110.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

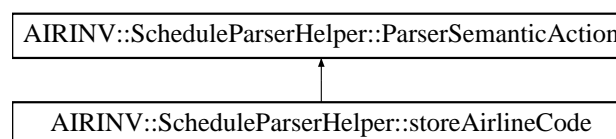
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.111 AIRINV::ScheduleParserHelper::storeAirlineCode Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeAirlineCode::



### Public Member Functions

- [storeAirlineCode](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.111.1 Detailed Description

Store the parsed airline code.

Definition at line 37 of file [ScheduleParserHelper.hpp](#).

#### 24.111.2 Constructor & Destructor Documentation

##### 24.111.2.1 AIRINV::ScheduleParserHelper::storeAirlineCode::storeAirlineCode ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 34 of file [ScheduleParserHelper.cpp](#).

### 24.111.3 Member Function Documentation

#### 24.111.3.1 void AIRINV::ScheduleParserHelper::storeAirlineCode::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 39 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_airlineCode](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), and [AIRINV::FlightPeriodStruct::\\_legList](#).

### 24.111.4 Member Data Documentation

#### 24.111.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

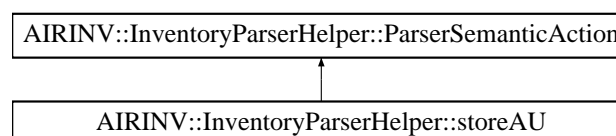
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.112 AIRINV::InventoryParserHelper::storeAU Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeAU:



**Public Member Functions**

- [storeAU](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

**Public Attributes**

- [FlightDateStruct](#) & [\\_flightDate](#)

**24.112.1 Detailed Description**

Store the parsed Authorisation Level (AU).

Definition at line 165 of file [InventoryParserHelper.hpp](#).

**24.112.2 Constructor & Destructor Documentation****24.112.2.1 AIRINV::InventoryParserHelper::storeAU::storeAU ([FlightDateStruct](#) & *ioFlightDate*)**

Actor Constructor.

Definition at line 295 of file [InventoryParserHelper.cpp](#).

**24.112.3 Member Function Documentation****24.112.3.1 void AIRINV::InventoryParserHelper::storeAU::operator() (double *iReal*) const**

Actor Function (functor).

Definition at line 300 of file [InventoryParserHelper.cpp](#).

References [AIRINV::LegCabinStruct::\\_au](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::\\_itLegCabin](#).

**24.112.4 Member Data Documentation****24.112.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]**

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#),

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AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),
AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIR-
INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),
AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),
AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIR-
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIR-
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
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INV::InventoryParserHelper::storeUPR::operator(), operator(), AIR-
INV::InventoryParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(),
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INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator().

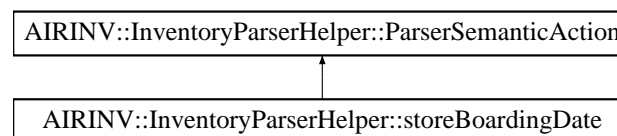
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The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.113 AIRINV::InventoryParserHelper::storeBoardingDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeBoardingDate:



### Public Member Functions

- [storeBoardingDate](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.113.1 Detailed Description

Store the boarding date.

Definition at line 117 of file [InventoryParserHelper.hpp](#).

### 24.113.2 Constructor & Destructor Documentation

#### 24.113.2.1 AIRINV::InventoryParserHelper::storeBoardingDate::storeBoardingDate (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 204 of file [InventoryParserHelper.cpp](#).

### 24.113.3 Member Function Documentation

#### 24.113.3.1 void AIRINV::InventoryParserHelper::storeBoardingDate::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 209 of file [InventoryParserHelper.cpp](#).

References [AIRINV::LegStruct::\\_boardingDate](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLeg](#), and [AIRINV::FlightDateStruct::getDate\(\)](#).

### 24.113.4 Member Data Documentation

#### 24.113.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#).



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AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
operator(), AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
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INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator().

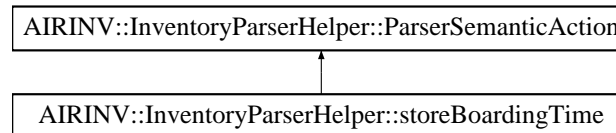
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The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.114 AIRINV::InventoryParserHelper::storeBoardingTime Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeBoardingTime:



### Public Member Functions

- [storeBoardingTime](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.114.1 Detailed Description

Store the boarding time.

Definition at line 125 of file [InventoryParserHelper.hpp](#).

### 24.114.2 Constructor & Destructor Documentation

#### 24.114.2.1 AIRINV::InventoryParserHelper::storeBoardingTime::storeBoardingTime (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 215 of file [InventoryParserHelper.cpp](#).

### 24.114.3 Member Function Documentation

#### 24.114.3.1 void AIRINV::InventoryParserHelper::storeBoardingTime::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 220 of file [InventoryParserHelper.cpp](#).

References [AIRINV::LegStruct::\\_boardingTime](#), [AIRINV::FlightDateStruct::\\_dateOffSet](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLeg](#), [AIRINV::FlightDateStruct::\\_itSeconds](#), and [AIRINV::FlightDateStruct::getTime\(\)](#).

### 24.114.4 Member Data Documentation

#### 24.114.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_ flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#),  
[AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-  
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[AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-  
INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#),

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AIRINV::InventoryParserHelper::storeOffDate::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

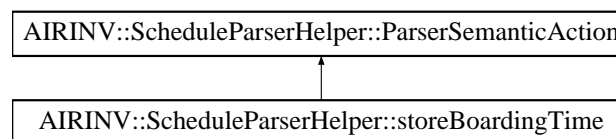
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The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.115 AIRINV::ScheduleParserHelper::storeBoardingTime Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeBoardingTime::



### Public Member Functions

- [storeBoardingTime](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.115.1 Detailed Description

Store the boarding time.

Definition at line 109 of file [ScheduleParserHelper.hpp](#).

### 24.115.2 Constructor & Destructor Documentation

#### 24.115.2.1 AIRINV::ScheduleParserHelper::storeBoardingTime::storeBoardingTime ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 190 of file [ScheduleParserHelper.cpp](#).

### 24.115.3 Member Function Documentation

#### 24.115.3.1 void AIRINV::ScheduleParserHelper::storeBoardingTime::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 195 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::LegStruct::\\_boardingTime](#), [AIRINV::FlightPeriodStruct::\\_dateOffset](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itLeg](#), [AIRINV::FlightPeriodStruct::\\_itSeconds](#), and [AIRINV::FlightPeriodStruct::getTime\(\)](#).

### 24.115.4 Member Data Documentation

#### 24.115.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

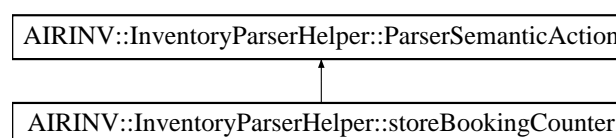
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.116 AIRINV::InventoryParserHelper::storeBookingCounter Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeBookingCounter:



## Public Member Functions

- [storeBookingCounter](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.116.1 Detailed Description

Store the parsed booking counter.

Definition at line 181 of file [InventoryParserHelper.hpp](#).

### 24.116.2 Constructor & Destructor Documentation

#### 24.116.2.1 AIRINV::InventoryParserHelper::storeBookingCounter::storeBookingCounter ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 317 of file [InventoryParserHelper.cpp](#).

### 24.116.3 Member Function Documentation

#### 24.116.3.1 void AIRINV::InventoryParserHelper::storeBookingCounter::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 322 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLegCabin](#), and [AIRINV::LegCabinStruct::\\_nbOfBookings](#).

### 24.116.4 Member Data Documentation

#### 24.116.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#).

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AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(),
INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),
AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNego::operator(),
AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),
AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(),
INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),
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AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(),
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvaibility::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
operator(),
INV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
AIRINV::InventoryParserHelper::storeLegCabinCode::operator(),
INV::InventoryParserHelper::storeOffTime::operator(), AIRINV::InventoryParserHelper::storeOffDate::operator(),
AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
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AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

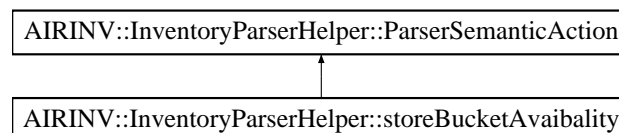
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The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.117 AIRINV::InventoryParserHelper::storeBucketAvaibility Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeBucketAvaibility::



### Public Member Functions

- [storeBucketAvaibility](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.117.1 Detailed Description

Store the parsed bucket availability.

Definition at line 229 of file [InventoryParserHelper.hpp](#).

### 24.117.2 Constructor & Destructor Documentation

#### 24.117.2.1 AIRINV::InventoryParserHelper::storeBucketAvaibility::storeBucketAvaibility (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 392 of file [InventoryParserHelper.cpp](#).

### 24.117.3 Member Function Documentation

#### 24.117.3.1 void AIRINV::InventoryParserHelper::storeBucketAvaibility::operator() (double iReal) const

Actor Function (functor).

Definition at line 397 of file [InventoryParserHelper.cpp](#).

References [AIRINV::BucketStruct::\\_availability](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_-flightDate](#), and [AIRINV::FlightDateStruct::\\_itBucket](#).

### 24.117.4 Member Data Documentation

#### 24.117.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_-flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#),

```

AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
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INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator().

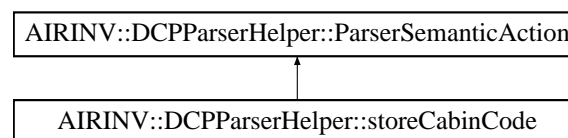
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.118 AIRINV::DCPParserHelper::storeCabinCode Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeCabinCode::



### Public Member Functions

- [storeCabinCode](#) (DCPRuleStruct &)
- void [operator\(\)](#) (char, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.118.1 Detailed Description

Store the cabin code.

Definition at line 118 of file [DCPParserHelper.hpp](#).



## 24.118.2 Constructor & Destructor Documentation

### 24.118.2.1 AIRINV::DCPParserHelper::storeCabinCode::storeCabinCode (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 166 of file [DCPParserHelper.cpp](#).

## 24.118.3 Member Function Documentation

### 24.118.3.1 void AIRINV::DCPParserHelper::storeCabinCode::operator() (char iChar, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 171 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

## 24.118.4 Member Data Documentation

### 24.118.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

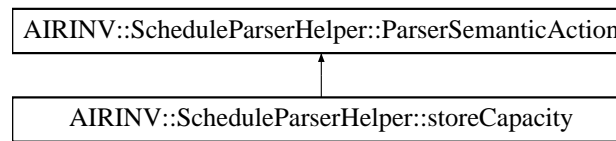
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)\(\)](#), [operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)\(\)](#), and [AIRINV::DCPParserHelper::storeDCPId::operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.119 AIRINV::ScheduleParserHelper::storeCapacity Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeCapacity::



## Public Member Functions

- [storeCapacity](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) (double *iReal*) const

## Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.119.1 Detailed Description

Store the parsed capacity.

Definition at line 141 of file [ScheduleParserHelper.hpp](#).

### 24.119.2 Constructor & Destructor Documentation

#### 24.119.2.1 AIRINV::ScheduleParserHelper::storeCapacity::storeCapacity ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 262 of file [ScheduleParserHelper.cpp](#).

### 24.119.3 Member Function Documentation

#### 24.119.3.1 void AIRINV::ScheduleParserHelper::storeCapacity::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 267 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::LegStruct::\\_cabinList](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itLeg](#), [AIRINV::FlightPeriodStruct::\\_itLegCabin](#), and [AIRINV::LegCabinStruct::\\_saleableCapacity](#).

### 24.119.4 Member Data Documentation

#### 24.119.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

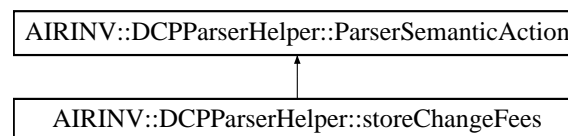
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIR-INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.120 AIRINV::DCPParserHelper::storeChangeFees Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeChangeFees:



### Public Member Functions

- [storeChangeFees](#) (DCPRuleStruct &)
- void [operator\(\)](#) (char, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.120.1 Detailed Description

Store the parsed change fees.

Definition at line 158 of file [DCPParserHelper.hpp](#).

## 24.120.2 Constructor & Destructor Documentation

### 24.120.2.1 AIRINV::DCPParserHelper::storeChangeFees::storeChangeFees (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 248 of file [DCPParserHelper.cpp](#).

## 24.120.3 Member Function Documentation

### 24.120.3.1 void AIRINV::DCPParserHelper::storeChangeFees::operator() (char iChangefees, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 253 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

## 24.120.4 Member Data Documentation

### 24.120.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

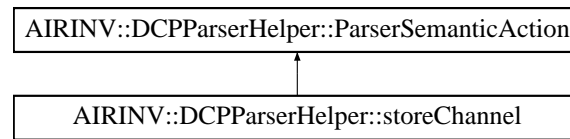
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.121 AIRINV::DCPParserHelper::storeChannel Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>Inheritance diagram for AIRINV::DCPParserHelper::storeChannel::
```



## Public Member Functions

- [storeChannel](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

## Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

### 24.121.1 Detailed Description

Store the channel distribution.

Definition at line 128 of file [DCPParserHelper.hpp](#).

### 24.121.2 Constructor & Destructor Documentation

#### 24.121.2.1 AIRINV::DCPParserHelper::storeChannel::storeChannel (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 187 of file [DCPParserHelper.cpp](#).

### 24.121.3 Member Function Documentation

#### 24.121.3.1 void AIRINV::DCPParserHelper::storeChannel::operator() (std::vector< char > iChar, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 192 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.121.4 Member Data Documentation

#### 24.121.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

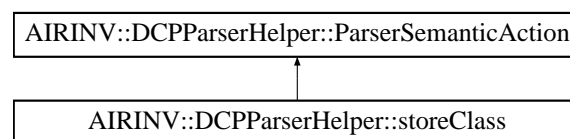
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.122 AIRINV::DCPParserHelper::storeClass Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeClass::



### Public Member Functions

- [storeClass](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.122.1 Detailed Description

Store the parsed class.

Definition at line 208 of file [DCPParserHelper.hpp](#).

#### 24.122.2 Constructor & Destructor Documentation

##### 24.122.2.1 AIRINV::DCPParserHelper::storeClass::storeClass (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 376 of file [DCPParserHelper.cpp](#).

### 24.122.3 Member Function Documentation

#### 24.122.3.1 void AIRINV::DCPParserHelper::storeClass::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 381 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.122.4 Member Data Documentation

#### 24.122.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

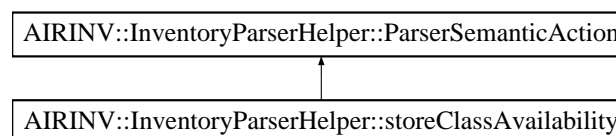
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.123 AIRINV::InventoryParserHelper::storeClassAvailability Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeClassAvailability::



### Public Member Functions

- [storeClassAvailability](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (double iReal) const





```

AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(),
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

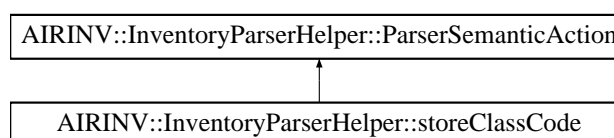
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.124 AIRINV::InventoryParserHelper::storeClassCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeClassCode:



### Public Member Functions

- [storeClassCode](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (char iChar) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.124.1 Detailed Description

Store the parsed booking class code.

Definition at line 277 of file [InventoryParserHelper.hpp](#).

## 24.124.2 Constructor & Destructor Documentation

### 24.124.2.1 AIRINV::InventoryParserHelper::storeClassCode::storeClassCode (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 524 of file [InventoryParserHelper.cpp](#).

## 24.124.3 Member Function Documentation

### 24.124.3.1 void AIRINV::InventoryParserHelper::storeClassCode::operator() (char iChar) const

Actor Function (functor).

Definition at line 529 of file [InventoryParserHelper.cpp](#).

References [AIRINV::BookingClassStruct::\\_classCode](#), [AIRINV::FareFamilyStruct::\\_classList](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), and [AIRINV::FlightDateStruct::\\_itSegmentCabin](#).

## 24.124.4 Member Data Documentation

### 24.124.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)\(\)](#).

```

AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator()
AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator()
AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator().

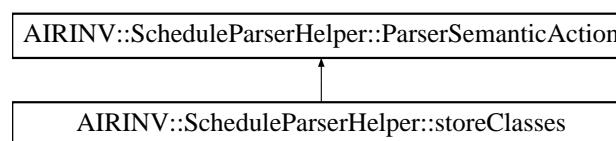
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.125 AIRINV::ScheduleParserHelper::storeClasses Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeClasses::



### Public Member Functions

- [storeClasses](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.125.1 Detailed Description

Store the parsed list of class codes.

Definition at line 184 of file [ScheduleParserHelper.hpp](#).

#### 24.125.2 Constructor & Destructor Documentation

##### 24.125.2.1 AIRINV::ScheduleParserHelper::storeClasses::storeClasses ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 344 of file [ScheduleParserHelper.cpp](#).

### 24.125.3 Member Function Documentation

#### 24.125.3.1 void AIRINV::ScheduleParserHelper::storeClasses::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 349 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_areSegmentDefinitionsSpecific](#), [AIRINV::FareFamilyStruct::\\_classes](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), [AIRINV::FlightPeriodStruct::\\_itSegment](#), [AIRINV::FlightPeriodStruct::\\_itSegmentCabin](#), and [AIRINV::FlightPeriodStruct::addSegmentCabin\(\)](#).

### 24.125.4 Member Data Documentation

#### 24.125.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

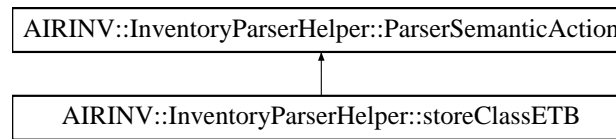
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.126 AIRINV::InventoryParserHelper::storeClassETB Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeClassETB::



## Public Member Functions

- [storeClassETB](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double *iReal*) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.126.1 Detailed Description

Store the parsed expected to board number (at booking class level).

Definition at line 390 of file [InventoryParserHelper.hpp](#).

### 24.126.2 Constructor & Destructor Documentation

#### 24.126.2.1 AIRINV::InventoryParserHelper::storeClassETB::storeClassETB ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 690 of file [InventoryParserHelper.cpp](#).

### 24.126.3 Member Function Documentation

#### 24.126.3.1 void AIRINV::InventoryParserHelper::storeClassETB::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 695 of file [InventoryParserHelper.cpp](#).

References [AIRINV::BookingClassStruct::\\_etb](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::\\_itBookingClass](#).

### 24.126.4 Member Data Documentation

#### 24.126.4.1 [FlightDateStruct&](#) AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#),

```

AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(),
INV::InventoryParserHelper::storeSegmentAvailability::operator(),
INV::InventoryParserHelper::storeClassAvailability::operator(),
AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(),
AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(),
INV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(),
AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(),
INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),
AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNegotiation::operator(),
AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),
AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(),
INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),
AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),
AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(),
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

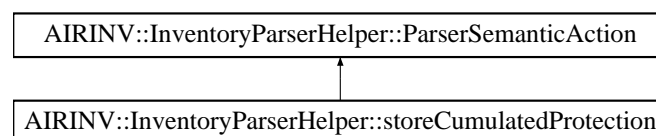
```

The documentation for this struct was generated from the following files:

- `airinv/command/InventoryParserHelper.hpp`
- `airinv/command/InventoryParserHelper.cpp`

## 24.127 AIRINV::InventoryParserHelper::storeCumulatedProtection Struct Reference

#include <airinv/command/InventoryParserHelper.hpp> Inheritance diagram for AIRINV::InventoryParserHelper::storeCumulatedProtection:



**Public Member Functions**

- [storeCumulatedProtection](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

**Public Attributes**

- [FlightDateStruct](#) & [\\_flightDate](#)

**24.127.1 Detailed Description**

Store the parsed cumulated protection (at booking class level).

Definition at line 309 of file [InventoryParserHelper.hpp](#).

**24.127.2 Constructor & Destructor Documentation****24.127.2.1 AIRINV::InventoryParserHelper::storeCumulatedProtection::storeCumulatedProtection (FlightDateStruct & *ioFlightDate*)**

Actor Constructor.

Definition at line 579 of file [InventoryParserHelper.cpp](#).

**24.127.3 Member Function Documentation****24.127.3.1 void AIRINV::InventoryParserHelper::storeCumulatedProtection::operator() (double *iReal*) const**

Actor Function (functor).

Definition at line 584 of file [InventoryParserHelper.cpp](#).

References [AIRINV::BookingClassStruct::\\_cumulatedProtection](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::\\_itBookingClass](#).

**24.127.4 Member Data Documentation****24.127.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]**

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#).

```

AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(),
INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),
AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNegotiation::operator(),
AIRINV::InventoryParserHelper::storeProtection::operator(), operator(), AIR-
INV::InventoryParserHelper::storeParentSubclassCode::operator(), AIR-
INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),
AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),
AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIR-
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIR-
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator().

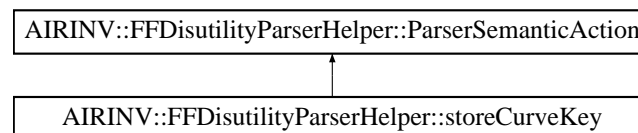
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.128 AIRINV::FFDisutilityParserHelper::storeCurveKey Struct Reference

#include <airinv/command/FFDisutilityParserHelper.hpp> Inheritance diagram for AIRINV::FFDisutilityParserHelper::storeCurveKey:



### Public Member Functions

- [storeCurveKey](#) (FFDisutilityStruct &)
- [operator\(\)](#) (iterator\_t iStr, iterator\_t iStrEnd) const

### Public Attributes

- [FFDisutilityStruct](#) & [\\_ffDisutility](#)



### 24.128.1 Detailed Description

Store the parsed curve key.

Definition at line 37 of file [FFDisutilityParserHelper.hpp](#).

### 24.128.2 Constructor & Destructor Documentation

#### 24.128.2.1 AIRINV::FFDisutilityParserHelper::storeCurveKey::storeCurveKey (FFDisutilityStruct & ioFFDisutility)

Actor Constructor.

Definition at line 33 of file [FFDisutilityParserHelper.cpp](#).

### 24.128.3 Member Function Documentation

#### 24.128.3.1 void AIRINV::FFDisutilityParserHelper::storeCurveKey::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 38 of file [FFDisutilityParserHelper.cpp](#).

References [AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\\_ffDisutility](#), and [AIRINV::FFDisutilityStruct::\\_key](#).

### 24.128.4 Member Data Documentation

#### 24.128.4.1 FFDisutilityStruct& AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\_ffDisutility [inherited]

Actor Context.

Definition at line 33 of file [FFDisutilityParserHelper.hpp](#).

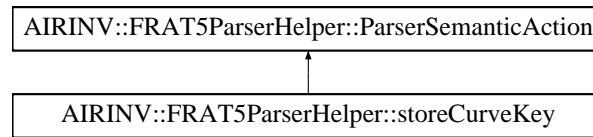
Referenced by [AIRINV::FFDisutilityParserHelper::doEndCurve::operator\(\)\(\)](#), [AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::operator\(\)\(\)](#), [AIRINV::FFDisutilityParserHelper::storeDTD::operator\(\)\(\)](#), and [operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/FFDisutilityParserHelper.cpp](#)

## 24.129 AIRINV::FRAT5ParserHelper::storeCurveKey Struct Reference

`#include <airinv/command/FRAT5ParserHelper.hpp>`Inheritance diagram for AIRINV::FRAT5ParserHelper::storeCurveKey::



## Public Member Functions

- [storeCurveKey](#) ([FRAT5Struct](#) &)
- void [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

## Public Attributes

- [FRAT5Struct](#) & [\\_frat5](#)

### 24.129.1 Detailed Description

Store the parsed curve key.

Definition at line 37 of file [FRAT5ParserHelper.hpp](#).

### 24.129.2 Constructor & Destructor Documentation

#### 24.129.2.1 AIRINV::FRAT5ParserHelper::storeCurveKey::storeCurveKey ([FRAT5Struct](#) & *ioFRAT5*)

Actor Constructor.

Definition at line 33 of file [FRAT5ParserHelper.cpp](#).

### 24.129.3 Member Function Documentation

#### 24.129.3.1 void AIRINV::FRAT5ParserHelper::storeCurveKey::operator() ([iterator\\_t](#) *iStr*, [iterator\\_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 38 of file [FRAT5ParserHelper.cpp](#).

References [AIRINV::FRAT5ParserHelper::ParserSemanticAction::\\_frat5](#), and [AIRINV::FRAT5Struct::\\_key](#).

### 24.129.4 Member Data Documentation

#### 24.129.4.1 [FRAT5Struct](#)& AIRINV::FRAT5ParserHelper::ParserSemanticAction::\_frat5 [inherited]

Actor Context.

Definition at line 33 of file [FRAT5ParserHelper.hpp](#).

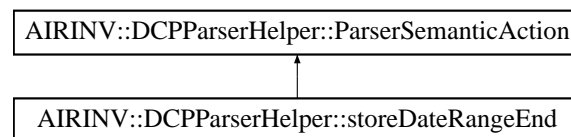
Referenced by [AIRINV::FRAT5ParserHelper::doEndCurve::operator\(\)](#), [AIRINV::FRAT5ParserHelper::storeFRAT5Value::operator\(\)](#), [AIRINV::FRAT5ParserHelper::storeDTD::operator\(\)](#), and [operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.cpp](#)

## 24.130 AIRINV::DCPParserHelper::storeDateRangeEnd Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeDateRangeEnd::



### Public Member Functions

- [storeDateRangeEnd](#) (DCPRuleStruct &)
- void [operator\(\)](#) (boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.130.1 Detailed Description

Store the parsed end of the date range.

Definition at line 78 of file [DCPParserHelper.hpp](#).

#### 24.130.2 Constructor & Destructor Documentation

##### 24.130.2.1 AIRINV::DCPParserHelper::storeDateRangeEnd::storeDateRangeEnd (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 101 of file [DCPParserHelper.cpp](#).

### 24.130.3 Member Function Documentation

**24.130.3.1** void AIRINV::DCPParserHelper::storeDateRangeEnd::operator()  
(boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type,  
boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 106 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.130.4 Member Data Documentation

**24.130.4.1** DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule  
[inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

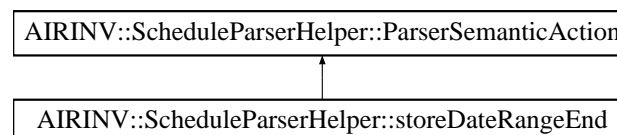
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIR-INV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [operator\(\)](#), [AIR-INV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.131 AIRINV::ScheduleParserHelper::storeDateRangeEnd Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIR-INV::ScheduleParserHelper::storeDateRangeEnd:



### Public Member Functions

- [storeDateRangeEnd](#) ([FlightPeriodStruct](#) &)
- void [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

## Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.131.1 Detailed Description

Store the end of the date range.

Definition at line 61 of file [ScheduleParserHelper.hpp](#).

### 24.131.2 Constructor & Destructor Documentation

#### 24.131.2.1 AIRINV::ScheduleParserHelper::storeDateRangeEnd::storeDateRangeEnd (FlightPeriodStruct & ioFlightPeriod)

Actor Constructor.

Definition at line 77 of file [ScheduleParserHelper.cpp](#).

### 24.131.3 Member Function Documentation

#### 24.131.3.1 void AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 82 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_airlineCode](#), [AIRINV::LegStruct::\\_airlineCode](#), [AIRINV::FlightPeriodStruct::\\_dateRange](#), [AIRINV::FlightPeriodStruct::\\_dateRangeEnd](#), [AIRINV::FlightPeriodStruct::\\_dateRangeStart](#), [AIRINV::FlightPeriodStruct::\\_flightNumber](#), [AIRINV::LegStruct::\\_flightNumber](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itLeg](#), [AIRINV::FlightPeriodStruct::\\_itSeconds](#), and [AIRINV::FlightPeriodStruct::getDate\(\)](#).

### 24.131.4 Member Data Documentation

#### 24.131.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#).

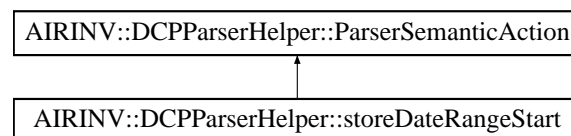
[AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#)  
[AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#)  
 and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.132 AIRINV::DCPParserHelper::storeDateRangeStart Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeDateRangeStart:



### Public Member Functions

- [storeDateRangeStart](#) (DCPRuleStruct &)
- void [operator\(\)](#) (boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.132.1 Detailed Description

Store the parsed start of the date range.

Definition at line 68 of file [DCPParserHelper.hpp](#).

#### 24.132.2 Constructor & Destructor Documentation

##### 24.132.2.1 AIRINV::DCPParserHelper::storeDateRangeStart::storeDateRangeStart (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 86 of file [DCPParserHelper.cpp](#).

### 24.132.3 Member Function Documentation

**24.132.3.1** void AIRINV::DCPParserHelper::storeDateRangeStart::operator()  
(boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type,  
boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 91 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.132.4 Member Data Documentation

**24.132.4.1** DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule  
[inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

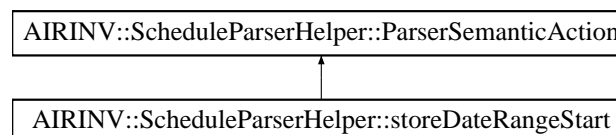
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIR-INV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIR-INV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.133 AIRINV::ScheduleParserHelper::storeDateRangeStart Struct Reference

#include <airinv/command/ScheduleParserHelper.hpp> Inheritance diagram for AIRINV::ScheduleParserHelper::storeDateRangeStart:



### Public Member Functions

- [storeDateRangeStart](#) (FlightPeriodStruct &)
- void [operator\(\)](#) (iterator\_t iStr, iterator\_t iStrEnd) const

**Public Attributes**

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

**24.133.1 Detailed Description**

Store the start of the date range.

Definition at line 53 of file [ScheduleParserHelper.hpp](#).

**24.133.2 Constructor & Destructor Documentation****24.133.2.1 AIRINV::ScheduleParserHelper::storeDateRangeStart::storeDateRangeStart (FlightPeriodStruct & ioFlightPeriod)**

Actor Constructor.

Definition at line 62 of file [ScheduleParserHelper.cpp](#).

**24.133.3 Member Function Documentation****24.133.3.1 void AIRINV::ScheduleParserHelper::storeDateRangeStart::operator() (iterator\_t iStr, iterator\_t iStrEnd) const**

Actor Function (functor).

Definition at line 67 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_dateRangeStart](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itSeconds](#), and [AIRINV::FlightPeriodStruct::getDate\(\)](#).

**24.133.4 Member Data Documentation****24.133.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]**

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#),



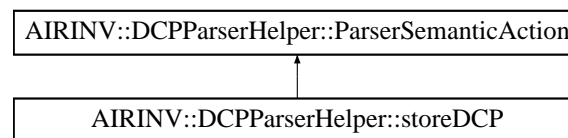
[operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.134 AIRINV::DCPParserHelper::storeDCP Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeDCP::



### Public Member Functions

- [storeDCP](#) (DCPRuleStruct &)
- [void operator\(\)](#) (double, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.134.1 Detailed Description

Store the parsed DCP value.

Definition at line 188 of file [DCPParserHelper.hpp](#).

#### 24.134.2 Constructor & Destructor Documentation

##### 24.134.2.1 AIRINV::DCPParserHelper::storeDCP::storeDCP (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 314 of file [DCPParserHelper.cpp](#).

#### 24.134.3 Member Function Documentation

##### 24.134.3.1 void AIRINV::DCPParserHelper::storeDCP::operator() (double *iDCP*, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 319 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

#### 24.134.4 Member Data Documentation

##### 24.134.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

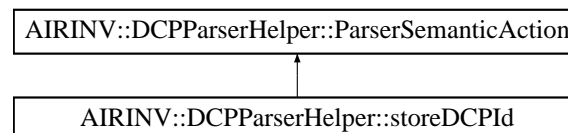
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.135 AIRINV::DCPParserHelper::storeDCPId Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeDCPId:



### Public Member Functions

- [storeDCPId](#) (DCPRuleStruct &)
- void [operator\(\)](#) (unsigned int, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.135.1 Detailed Description

Store the parsed DCP Id.

Definition at line 38 of file [DCPParserHelper.hpp](#).

## 24.135.2 Constructor & Destructor Documentation

### 24.135.2.1 AIRINV::DCPParserHelper::storeDCPID::storeDCPID (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 30 of file [DCPParserHelper.cpp](#).

## 24.135.3 Member Function Documentation

### 24.135.3.1 void AIRINV::DCPParserHelper::storeDCPID::operator() (unsigned int iDCPID, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 35 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

## 24.135.4 Member Data Documentation

### 24.135.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

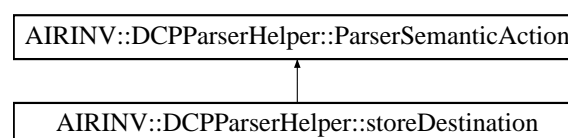
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.136 AIRINV::DCPParserHelper::storeDestination Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeDestination:



**Public Member Functions**

- [storeDestination](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

**Public Attributes**

- DCPRuleStruct & [\\_DCPRule](#)

**24.136.1 Detailed Description**

Store the parsed destination.

Definition at line 58 of file [DCPParserHelper.hpp](#).

**24.136.2 Constructor & Destructor Documentation****24.136.2.1 AIRINV::DCPParserHelper::storeDestination::storeDestination (DCPRuleStruct & ioDCPRule)**

Actor Constructor.

Definition at line 70 of file [DCPParserHelper.cpp](#).

**24.136.3 Member Function Documentation****24.136.3.1 void AIRINV::DCPParserHelper::storeDestination::operator() (std::vector< char > iChar, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const**

Actor Function (functor).

Definition at line 75 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

**24.136.4 Member Data Documentation****24.136.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]**

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#)

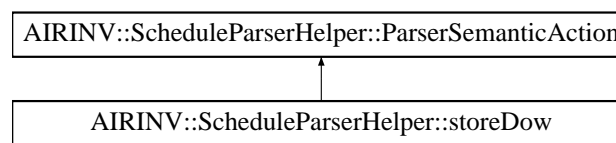
[AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [operator\(\)](#), [AIR-INV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPid::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.137 AIRINV::ScheduleParserHelper::storeDow Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIR-INV::ScheduleParserHelper::storeDow::



### Public Member Functions

- [storeDow](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.137.1 Detailed Description

Store the DOW (day of the Week).

Definition at line 69 of file [ScheduleParserHelper.hpp](#).

#### 24.137.2 Constructor & Destructor Documentation

##### 24.137.2.1 AIRINV::ScheduleParserHelper::storeDow::storeDow ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 105 of file [ScheduleParserHelper.cpp](#).

#### 24.137.3 Member Function Documentation

##### 24.137.3.1 void AIRINV::ScheduleParserHelper::storeDow::operator() ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 110 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_dow](#), and [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#).

#### 24.137.4 Member Data Documentation

##### 24.137.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

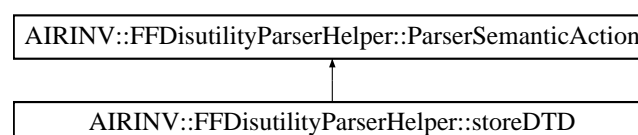
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.138 AIRINV::FFDisutilityParserHelper::storeDTD Struct Reference

`#include <airinv/command/FFDisutilityParserHelper.hpp>` Inheritance diagram for AIRINV::FFDisutilityParserHelper::storeDTD:



#### Public Member Functions

- [storeDTD](#) (FFDisutilityStruct &)
- [operator\(\)](#) (int iDTD) const

**Public Attributes**

- [FFDisutilityStruct](#) & [\\_ffDisutility](#)

**24.138.1 Detailed Description**

Store the DTD.

Definition at line 45 of file [FFDisutilityParserHelper.hpp](#).

**24.138.2 Constructor & Destructor Documentation****24.138.2.1 AIRINV::FFDisutilityParserHelper::storeDTD::storeDTD (FFDisutilityStruct & ioFFDisutility)**

Actor Constructor.

Definition at line 45 of file [FFDisutilityParserHelper.cpp](#).

**24.138.3 Member Function Documentation****24.138.3.1 void AIRINV::FFDisutilityParserHelper::storeDTD::operator() (int iDTD) const**

Actor Function (functor).

Definition at line 50 of file [FFDisutilityParserHelper.cpp](#).

References [AIRINV::FFDisutilityStruct::\\_dtd](#), and [AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\\_ffDisutility](#).

**24.138.4 Member Data Documentation****24.138.4.1 FFDIsutilityStruct& AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\_ffDisutility [inherited]**

Actor Context.

Definition at line 33 of file [FFDisutilityParserHelper.hpp](#).

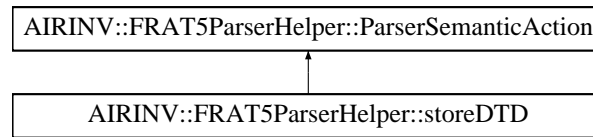
Referenced by [AIRINV::FFDisutilityParserHelper::doEndCurve::operator\(\)](#), [AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::operator\(\)](#), [operator\(\)](#), and [AIRINV::FFDisutilityParserHelper::storeCurveKey::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/FFDisutilityParserHelper.cpp](#)

**24.139 AIRINV::FRAT5ParserHelper::storeDTD Struct Reference**

`#include <airinv/command/FRAT5ParserHelper.hpp>`Inheritance diagram for AIRINV::FRAT5ParserHelper::storeDTD::



## Public Member Functions

- [storeDTD](#) ([FRAT5Struct](#) &)
- [void operator\(\)](#) (int iDTD) const

## Public Attributes

- [FRAT5Struct](#) & [\\_frat5](#)

### 24.139.1 Detailed Description

Store the DTD.

Definition at line 45 of file [FRAT5ParserHelper.hpp](#).

### 24.139.2 Constructor & Destructor Documentation

#### 24.139.2.1 AIRINV::FRAT5ParserHelper::storeDTD::storeDTD ([FRAT5Struct](#) & *ioFRAT5*)

Actor Constructor.

Definition at line 46 of file [FRAT5ParserHelper.cpp](#).

### 24.139.3 Member Function Documentation

#### 24.139.3.1 void AIRINV::FRAT5ParserHelper::storeDTD::operator() (int *iDTD*) const

Actor Function (functor).

Definition at line 51 of file [FRAT5ParserHelper.cpp](#).

References [AIRINV::FRAT5Struct::\\_dtd](#), and [AIRINV::FRAT5ParserHelper::ParserSemanticAction::\\_frat5](#).

### 24.139.4 Member Data Documentation

#### 24.139.4.1 [FRAT5Struct](#)& [AIRINV::FRAT5ParserHelper::ParserSemanticAction::\\_frat5](#) [[inherited](#)]

Actor Context.

Definition at line 33 of file [FRAT5ParserHelper.hpp](#).

Referenced by [AIRINV::FRAT5ParserHelper::doEndCurve::operator\(\)](#), [AIRINV::FRAT5ParserHelper::storeFRAT5Value::operator\(\)](#), [operator\(\)](#), and [AIRINV::FRAT5ParserHelper::storeCurveKey::operator\(\)](#).

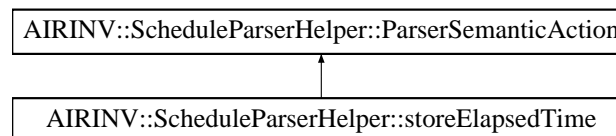


The documentation for this struct was generated from the following files:

- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.cpp](#)

## 24.140 AIRINV::ScheduleParserHelper::storeElapsedTime Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIRINV::ScheduleParserHelper::storeElapsedTime::



### Public Member Functions

- [storeElapsedTime](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.140.1 Detailed Description

Store the elapsed time.

Definition at line 125 of file [ScheduleParserHelper.hpp](#).

#### 24.140.2 Constructor & Destructor Documentation

##### 24.140.2.1 AIRINV::ScheduleParserHelper::storeElapsedTime::storeElapsedTime ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 229 of file [ScheduleParserHelper.cpp](#).

#### 24.140.3 Member Function Documentation

##### 24.140.3.1 void AIRINV::ScheduleParserHelper::storeElapsedTime::operator() ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 234 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_dateOffset](#), [AIRINV::LegStruct::\\_elapsed](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itLeg](#), [AIRINV::FlightPeriodStruct::\\_itSeconds](#), [AIRINV::LegStruct::\\_offDateOffset](#), and [AIRINV::FlightPeriodStruct::getTime\(\)](#).

#### 24.140.4 Member Data Documentation

##### 24.140.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

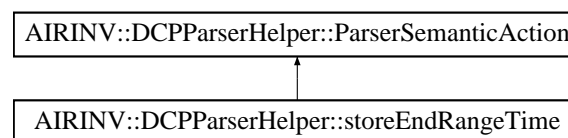
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.141 AIRINV::DCPParserHelper::storeEndRangeTime Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeEndRangeTime:



### Public Member Functions

- [storeEndRangeTime](#) (DCPRuleStruct &)

- void [operator\(\)](#) (boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

## Public Attributes

- [DCPRuleStruct](#) & [\\_DCPRule](#)

### 24.141.1 Detailed Description

Store the parsed end start range time.

Definition at line 98 of file [DCPParserHelper.hpp](#).

### 24.141.2 Constructor & Destructor Documentation

#### 24.141.2.1 AIRINV::DCPParserHelper::storeEndRangeTime::storeEndRangeTime (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 133 of file [DCPParserHelper.cpp](#).

### 24.141.3 Member Function Documentation

#### 24.141.3.1 void AIRINV::DCPParserHelper::storeEndRangeTime::operator() (boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 138 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.141.4 Member Data Documentation

#### 24.141.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

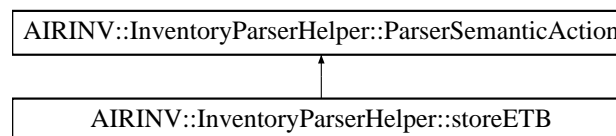
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPId::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.142 AIRINV::InventoryParserHelper::storeETB Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeETB::



### Public Member Functions

- [storeETB](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double *iReal*) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.142.1 Detailed Description

Store the parsed Expected To Board (ETB) number.

Definition at line 213 of file [InventoryParserHelper.hpp](#).

#### 24.142.2 Constructor & Destructor Documentation

##### 24.142.2.1 AIRINV::InventoryParserHelper::storeETB::storeETB ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 361 of file [InventoryParserHelper.cpp](#).

#### 24.142.3 Member Function Documentation

##### 24.142.3.1 void AIRINV::InventoryParserHelper::storeETB::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 366 of file [InventoryParserHelper.cpp](#).

References [AIRINV::LegCabinStruct::\\_etb](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::\\_itLegCabin](#).

## 24.142.4 Member Data Documentation

## 24.142.4.1 FlightDateStruct&amp; AIRINV::InventoryParserHelper::ParserSemanticAction::\_-flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [op-erator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

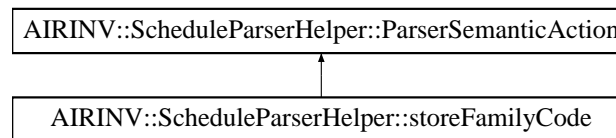
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.143 AIRINV::ScheduleParserHelper::storeFamilyCode Struct Reference

```
#include <airinv/command/ScheduleParserHelper.hpp>
```

Inheritance diagram for AIR-INV::ScheduleParserHelper::storeFamilyCode::



## Public Member Functions

- [storeFamilyCode](#) ([FlightPeriodStruct](#) &)
- [operator\(\)](#) (int iCode) const

## Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.143.1 Detailed Description

Store the parsed family code.

Definition at line 192 of file [ScheduleParserHelper.hpp](#).

### 24.143.2 Constructor & Destructor Documentation

#### 24.143.2.1 AIRINV::ScheduleParserHelper::storeFamilyCode::storeFamilyCode ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 369 of file [ScheduleParserHelper.cpp](#).

### 24.143.3 Member Function Documentation

#### 24.143.3.1 void AIRINV::ScheduleParserHelper::storeFamilyCode::operator() (int *iCode*) const

Actor Function (functor).

Definition at line 374 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FareFamilyStruct::\\_familyCode](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), and [AIRINV::FlightPeriodStruct::\\_itSegmentCabin](#).

### 24.143.4 Member Data Documentation

#### 24.143.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

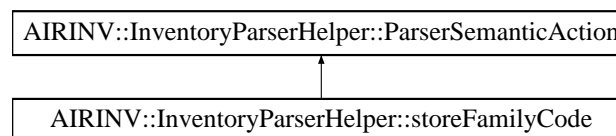
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIR-INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.144 AIRINV::InventoryParserHelper::storeFamilyCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeFamilyCode::



### Public Member Functions

- [storeFamilyCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (int iCode) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.144.1 Detailed Description

Store the parsed family code.

Definition at line [425](#) of file [InventoryParserHelper.hpp](#).

## 24.144.2 Constructor & Destructor Documentation

### 24.144.2.1 AIRINV::InventoryParserHelper::storeFamilyCode::storeFamilyCode (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 737 of file [InventoryParserHelper.cpp](#).

## 24.144.3 Member Function Documentation

### 24.144.3.1 void AIRINV::InventoryParserHelper::storeFamilyCode::operator() (int iCode) const

Actor Function (functor).

Definition at line 742 of file [InventoryParserHelper.cpp](#).

References [AIRINV::FareFamilyStruct::\\_familyCode](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), and [AIRINV::FlightDateStruct::\\_itSegmentCabin](#).

## 24.144.4 Member Data Documentation

### 24.144.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)\(\)](#), [operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)\(\)](#).



```

AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

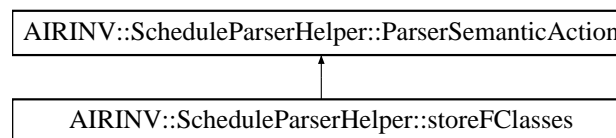
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.145 AIRINV::ScheduleParserHelper::storeFClasses Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeFClasses::



### Public Member Functions

- [storeFClasses](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.145.1 Detailed Description

Store the parsed list of class codes (for families).

Definition at line 216 of file [ScheduleParserHelper.hpp](#).

#### 24.145.2 Constructor & Destructor Documentation

##### 24.145.2.1 AIRINV::ScheduleParserHelper::storeFClasses::storeFClasses ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 409 of file [ScheduleParserHelper.cpp](#).

### 24.145.3 Member Function Documentation

#### 24.145.3.1 void AIRINV::ScheduleParserHelper::storeFClasses::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 414 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_areSegmentDefinitionsSpecific](#), [AIRINV::FareFamilyStruct::\\_familyCode](#), [AIRINV::FareFamilyStruct::\\_ffDisutilityCurveKey](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FareFamilyStruct::\\_frat5CurveKey](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), [AIRINV::FlightPeriodStruct::\\_itSegment](#), [AIRINV::FlightPeriodStruct::\\_itSegmentCabin](#), and [AIRINV::FlightPeriodStruct::addFareFamily\(\)](#).

### 24.145.4 Member Data Documentation

#### 24.145.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

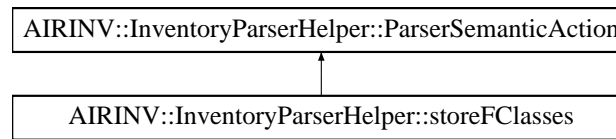
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.146 AIRINV::InventoryParserHelper::storeFClasses Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeFClasses:



## Public Member Functions

- [storeFClasses](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.146.1 Detailed Description

Store the parsed list of class codes (for families).

Definition at line 433 of file [InventoryParserHelper.hpp](#).

### 24.146.2 Constructor & Destructor Documentation

#### 24.146.2.1 AIRINV::InventoryParserHelper::storeFClasses::storeFClasses ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 749 of file [InventoryParserHelper.cpp](#).

### 24.146.3 Member Function Documentation

#### 24.146.3.1 void AIRINV::InventoryParserHelper::storeFClasses::operator() ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 754 of file [InventoryParserHelper.cpp](#).

References [AIRINV::SegmentStruct::\\_cabinList](#), [AIRINV::BookingClassStruct::\\_classCode](#), [AIRINV::FareFamilyStruct::\\_classes](#), [AIRINV::FareFamilyStruct::\\_classList](#), [AIRINV::SegmentCabinStruct::\\_fareFamilies](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), [AIRINV::FlightDateStruct::\\_itSegment](#), and [AIRINV::FlightDateStruct::\\_itSegmentCabin](#).

### 24.146.4 Member Data Documentation

#### 24.146.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

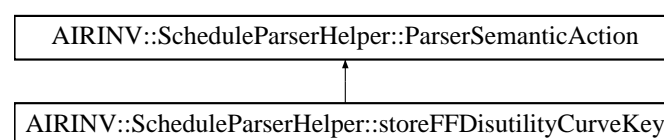
Referenced	by	AIRINV::InventoryParserHelper::doEndFlightDate::operator()(),
operator()(),		AIRINV::InventoryParserHelper::storeFamilyCode::operator()(),
AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()(),		AIR-
INV::InventoryParserHelper::storeSegmentAvailability::operator()(),		AIR-
INV::InventoryParserHelper::storeClassAvailability::operator()(),		AIRINV::InventoryParserHelper::storeClassETB::operator()(),
AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()(),		AIR-
INV::InventoryParserHelper::storeNbOfStaffBkgs::operator()(),		AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()(),
AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()(),		AIR-
INV::InventoryParserHelper::storeNbOfBkgs::operator()(),		AIRINV::InventoryParserHelper::storeOverbooking::operator()(),
AIRINV::InventoryParserHelper::storeNoShow::operator()(),		AIRINV::InventoryParserHelper::storeNego::operator()(),
AIRINV::InventoryParserHelper::storeProtection::operator()(),		AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()(),
AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()(),		AIR-
INV::InventoryParserHelper::storeParentClassCode::operator()(),		AIRINV::InventoryParserHelper::storeSubclassCode::operator()(),
AIRINV::InventoryParserHelper::storeClassCode::operator()(),		AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator()(),
AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()(),		AIR-
INV::InventoryParserHelper::storeSegmentOffPoint::operator()(),		AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator()(),		AIRINV::InventoryParserHelper::storeBucketAvailability::operator()(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()(),		AIR-
INV::InventoryParserHelper::storeETB::operator()(),		AIRINV::InventoryParserHelper::storeACP::operator()(),
AIRINV::InventoryParserHelper::storeGAV::operator()(),		AIRINV::InventoryParserHelper::storeNAV::operator()(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator()(),		AIR-
INV::InventoryParserHelper::storeUPR::operator()(),		AIRINV::InventoryParserHelper::storeAU::operator()(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator()(),		AIR-
INV::InventoryParserHelper::storeLegCabinCode::operator()(),		AIRINV::InventoryParserHelper::storeOffTime::operator()(),
AIRINV::InventoryParserHelper::storeOffDate::operator()(),		AIRINV::InventoryParserHelper::storeBoardingTime::operator()(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator()(),		AIR-
INV::InventoryParserHelper::storeOperatingFlightNumber::operator()(),		AIR-
INV::InventoryParserHelper::storeOperatingAirlineCode::operator()(),		AIR-
INV::InventoryParserHelper::storeLegOffPoint::operator()(),		AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator()(),		AIR-
INV::InventoryParserHelper::storeFlightTypeCode::operator()(),		AIRINV::InventoryParserHelper::storeFlightDate::operator()(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator()(),		AIR-
INV::InventoryParserHelper::storeAirlineCode::operator()(),	and	AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator()().		

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.147 AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey:





```

AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator(),
INV::ScheduleParserHelper::storeCapacity::operator(), AIRINV::ScheduleParserHelper::storeLegCabinCode::operator(),
AIRINV::ScheduleParserHelper::storeElapsedTime::operator(), AIRINV::ScheduleParserHelper::storeOffTime::operator(),
AIRINV::ScheduleParserHelper::storeBoardingTime::operator(),
INV::ScheduleParserHelper::storeOperatingFlightNumber::operator(),
INV::ScheduleParserHelper::storeOperatingAirlineCode::operator(),
INV::ScheduleParserHelper::storeLegOffPoint::operator(), AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator(),
AIRINV::ScheduleParserHelper::storeDow::operator(), AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator(),
AIRINV::ScheduleParserHelper::storeDateRangeStart::operator(),
INV::ScheduleParserHelper::storeFlightNumber::operator(),
INV::ScheduleParserHelper::storeAirlineCode::operator().

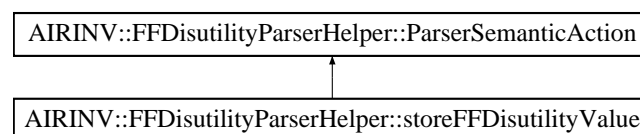
```

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.148 AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue Struct Reference

`#include <airinv/command/FFDisutilityParserHelper.hpp>`Inheritance diagram for AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::



### Public Member Functions

- [storeFFDisutilityValue](#) (FFDisutilityStruct &)
- [operator\(\)](#) (double iReal) const

### Public Attributes

- [FFDisutilityStruct](#) & [\\_ffDisutility](#)

#### 24.148.1 Detailed Description

Store the FFDisutility value.

Definition at line 53 of file [FFDisutilityParserHelper.hpp](#).

#### 24.148.2 Constructor & Destructor Documentation

##### 24.148.2.1 AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::storeFFDisutilityValue (FFDisutilityStruct & *ioFFDisutility*)

Actor Constructor.

Definition at line 56 of file [FFDisutilityParserHelper.cpp](#).

### 24.148.3 Member Function Documentation

#### 24.148.3.1 void AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 61 of file [FFDisutilityParserHelper.cpp](#).

References [AIRINV::FFDisutilityStruct::\\_curve](#), [AIRINV::FFDisutilityStruct::\\_dtd](#), and [AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\\_ffDisutility](#).

### 24.148.4 Member Data Documentation

#### 24.148.4.1 FFDisutilityStruct& AIRINV::FFDisutilityParserHelper::ParserSemanticAction::\_ffDisutility [inherited]

Actor Context.

Definition at line 33 of file [FFDisutilityParserHelper.hpp](#).

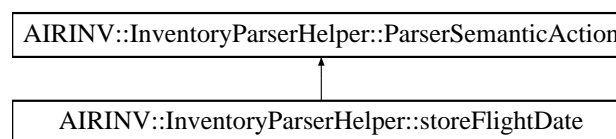
Referenced by [AIRINV::FFDisutilityParserHelper::doEndCurve::operator\(\)\(\)](#), [operator\(\)\(\)](#), [AIRINV::FFDisutilityParserHelper::storeDTD::operator\(\)\(\)](#), and [AIRINV::FFDisutilityParserHelper::storeCurveKey::operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FFDisutilityParserHelper.hpp](#)
- [airinv/command/FFDisutilityParserHelper.cpp](#)

## 24.149 AIRINV::InventoryParserHelper::storeFlightDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightDate::



### Public Member Functions

- [storeFlightDate](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.149.1 Detailed Description

Store the flight date.

Definition at line 61 of file [InventoryParserHelper.hpp](#).

### 24.149.2 Constructor & Destructor Documentation

#### 24.149.2.1 AIRINV::InventoryParserHelper::storeFlightDate::storeFlightDate (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 80 of file [InventoryParserHelper.cpp](#).

### 24.149.3 Member Function Documentation

#### 24.149.3.1 void AIRINV::InventoryParserHelper::storeFlightDate::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 85 of file [InventoryParserHelper.cpp](#).

References [AIRINV::FlightDateStruct::\\_flightDate](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::getDate\(\)](#).

### 24.149.4 Member Data Documentation

#### 24.149.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#),



```

AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-
INV::InventoryParserHelper::storeFlightTypeCode::operator(), operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator().

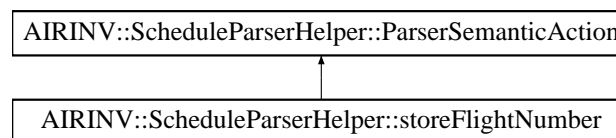
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.150 AIRINV::ScheduleParserHelper::storeFlightNumber Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIRINV::ScheduleParserHelper::storeFlightNumber:



### Public Member Functions

- [storeFlightNumber](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) (unsigned int iNumber) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.150.1 Detailed Description

Store the parsed flight number.

Definition at line 45 of file [ScheduleParserHelper.hpp](#).

## 24.150.2 Constructor & Destructor Documentation

### 24.150.2.1 AIRINV::ScheduleParserHelper::storeFlightNumber::storeFlightNumber (FlightPeriodStruct & ioFlightPeriod)

Actor Constructor.

Definition at line 51 of file [ScheduleParserHelper.cpp](#).

## 24.150.3 Member Function Documentation

### 24.150.3.1 void AIRINV::ScheduleParserHelper::storeFlightNumber::operator() (unsigned int iNumber) const

Actor Function (functor).

Definition at line 56 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_flightNumber](#), and [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#).

## 24.150.4 Member Data Documentation

### 24.150.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

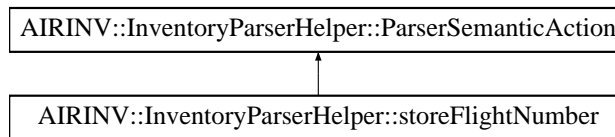
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.151 AIRINV::InventoryParserHelper::storeFlightNumber Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>`Inheritance diagram for

AIRINV::InventoryParserHelper::storeFlightNumber::



## Public Member Functions

- [storeFlightNumber](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (unsigned int iNumber) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.151.1 Detailed Description

Store the parsed flight number.

Definition at line 53 of file [InventoryParserHelper.hpp](#).

### 24.151.2 Constructor & Destructor Documentation

#### 24.151.2.1 AIRINV::InventoryParserHelper::storeFlightNumber::storeFlightNumber ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 70 of file [InventoryParserHelper.cpp](#).

### 24.151.3 Member Function Documentation

#### 24.151.3.1 void AIRINV::InventoryParserHelper::storeFlightNumber::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 75 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::\\_flightNumber](#).

### 24.151.4 Member Data Documentation

#### 24.151.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

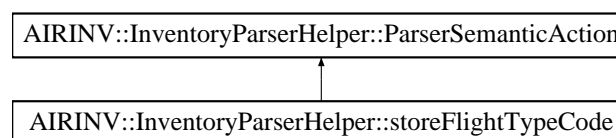
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.152 AIRINV::InventoryParserHelper::storeFlightTypeCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightTypeCode:



**Public Member Functions**

- [storeFlightTypeCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

**Public Attributes**

- [FlightDateStruct](#) & [\\_flightDate](#)

**24.152.1 Detailed Description**

Store the flight type code.

Definition at line 69 of file [InventoryParserHelper.hpp](#).

**24.152.2 Constructor & Destructor Documentation****24.152.2.1 AIRINV::InventoryParserHelper::storeFlightTypeCode::storeFlightTypeCode (FlightDateStruct & ioFlightDate)**

Actor Constructor.

Definition at line 91 of file [InventoryParserHelper.cpp](#).

**24.152.3 Member Function Documentation****24.152.3.1 void AIRINV::InventoryParserHelper::storeFlightTypeCode::operator() (iterator\_t iStr, iterator\_t iStrEnd) const**

Actor Function (functor).

Definition at line 96 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_flightTypeCode](#), and [AIRINV::FlightTypeCode::getCode\(\)](#).

**24.152.4 Member Data Documentation****24.152.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]**

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#).

```

AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(),
INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),
AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNego::operator(),
AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),
AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(),
INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),
AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),
AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(),
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

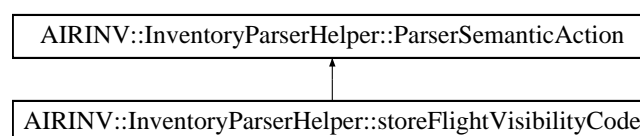
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.153 AIRINV::InventoryParserHelper::storeFlightVisibilityCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeFlightVisibilityCode::



### Public Member Functions

- [storeFlightVisibilityCode](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

**Public Attributes**

- [FlightDateStruct](#) & [\\_flightDate](#)

**24.153.1 Detailed Description**

Store the flight visibility code.

Definition at line 77 of file [InventoryParserHelper.hpp](#).

**24.153.2 Constructor & Destructor Documentation****24.153.2.1 AIRINV::InventoryParserHelper::storeFlightVisibilityCode::storeFlightVisibilityCode (FlightDateStruct & ioFlightDate)**

Actor Constructor.

Definition at line 106 of file [InventoryParserHelper.cpp](#).

**24.153.3 Member Function Documentation****24.153.3.1 void AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator() (iterator\_t iStr, iterator\_t iStrEnd) const**

Actor Function (functor).

Definition at line 111 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_flightVisibilityCode](#), and [AIRINV::FlightVisibilityCode::getCode\(\)](#).

**24.153.4 Member Data Documentation****24.153.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]**

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#).

```

AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(),
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightTypeCode::operator(),
INV::InventoryParserHelper::storeFlightDate::operator(), AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
AIRINV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

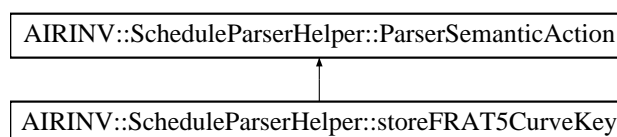
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.154 AIRINV::ScheduleParserHelper::storeFRAT5CurveKey Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::



### Public Member Functions

- [storeFRAT5CurveKey](#) ([FlightPeriodStruct](#) &)
- [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.154.1 Detailed Description

Store the FRAT5 curve key.

Definition at line 200 of file [ScheduleParserHelper.hpp](#).



### 24.154.2 Constructor & Destructor Documentation

#### 24.154.2.1 AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::storeFRAT5CurveKey (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 382 of file [ScheduleParserHelper.cpp](#).

### 24.154.3 Member Function Documentation

#### 24.154.3.1 void AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator() (iterator\_t *iStr*, iterator\_t *iStrEnd*) const

Actor Function (functor).

Definition at line 387 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FareFamilyStruct::\\_frat5CurveKey](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), and [AIRINV::FlightPeriodStruct::\\_itSegmentCabin](#).

### 24.154.4 Member Data Documentation

#### 24.154.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

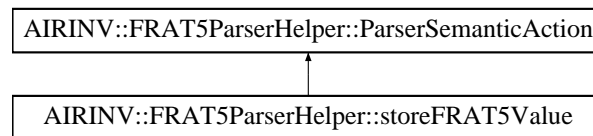
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.155 AIRINV::FRAT5ParserHelper::storeFRAT5Value Struct Reference

#include <airinv/command/FRAT5ParserHelper.hpp> Inheritance diagram for AIRINV::FRAT5ParserHelper::storeFRAT5Value::



### Public Member Functions

- [storeFRAT5Value](#) ([FRAT5Struct](#) &)
- [void operator\(\)](#) (double *iReal*) const

### Public Attributes

- [FRAT5Struct](#) & [\\_frat5](#)

#### 24.155.1 Detailed Description

Store the FRAT5 value.

Definition at line 53 of file [FRAT5ParserHelper.hpp](#).

#### 24.155.2 Constructor & Destructor Documentation

##### 24.155.2.1 AIRINV::FRAT5ParserHelper::storeFRAT5Value::storeFRAT5Value ([FRAT5Struct](#) & *ioFRAT5*)

Actor Constructor.

Definition at line 57 of file [FRAT5ParserHelper.cpp](#).

#### 24.155.3 Member Function Documentation

##### 24.155.3.1 void AIRINV::FRAT5ParserHelper::storeFRAT5Value::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 62 of file [FRAT5ParserHelper.cpp](#).

References [AIRINV::FRAT5Struct::\\_curve](#), [AIRINV::FRAT5Struct::\\_dtd](#), and [AIRINV::FRAT5ParserHelper::ParserSemanticAction::\\_frat5](#).

#### 24.155.4 Member Data Documentation

##### 24.155.4.1 FRAT5Struct& AIRINV::FRAT5ParserHelper::ParserSemanticAction::\_frat5 [inherited]

Actor Context.

Definition at line 33 of file [FRAT5ParserHelper.hpp](#).

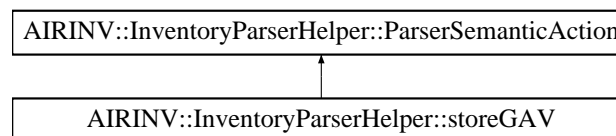
Referenced by [AIRINV::FRAT5ParserHelper::doEndCurve::operator\(\)\(\)](#), [operator\(\)\(\)](#), [AIRINV::FRAT5ParserHelper::storeDTD::operator\(\)\(\)](#), and [AIRINV::FRAT5ParserHelper::storeCurveKey::operator\(\)\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/FRAT5ParserHelper.hpp](#)
- [airinv/command/FRAT5ParserHelper.cpp](#)

## 24.156 AIRINV::InventoryParserHelper::storeGAV Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeGAV:



### Public Member Functions

- [storeGAV](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.156.1 Detailed Description

Store the parsed Gross Availability (GAV).

Definition at line 197 of file [InventoryParserHelper.hpp](#).

#### 24.156.2 Constructor & Destructor Documentation

##### 24.156.2.1 AIRINV::InventoryParserHelper::storeGAV::storeGAV ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 339 of file [InventoryParserHelper.cpp](#).

### 24.156.3 Member Function Documentation

#### 24.156.3.1 void AIRINV::InventoryParserHelper::storeGAV::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 344 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::LegCabinStruct::\\_gav](#), and [AIRINV::FlightDateStruct::\\_itLegCabin](#).

### 24.156.4 Member Data Documentation

#### 24.156.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

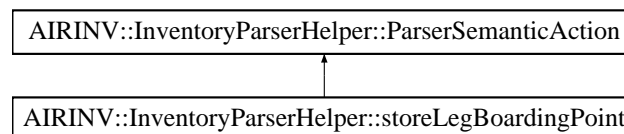
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.157 AIRINV::InventoryParserHelper::storeLegBoardingPoint Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeLegBoardingPoint::



### Public Member Functions

- [storeLegBoardingPoint](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.157.1 Detailed Description

Store the parsed leg boarding point.

Definition at line 85 of file [InventoryParserHelper.hpp](#).

#### 24.157.2 Constructor & Destructor Documentation

##### 24.157.2.1 AIRINV::InventoryParserHelper::storeLegBoardingPoint::storeLegBoardingPoint ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 121 of file [InventoryParserHelper.cpp](#).

#### 24.157.3 Member Function Documentation

##### 24.157.3.1 void AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator() ([iterator\\_t](#) *iStr*, [iterator\\_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 126 of file [InventoryParserHelper.cpp](#).

References [AIRINV::FlightDateStruct::\\_airlineCode](#), [AIRINV::LegStruct::\\_boardingPoint](#), [AIRINV::LegCabinStruct::\\_cabinCode](#), [AIRINV::LegStruct::\\_cabinList](#), [airlineCode](#), [AIRINV::LegCabinStruct::\\_cabinList](#), and [bucketList](#).

AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate, AIRINV::FlightDateStruct::\_flightNumber, AIRINV::LegStruct::\_flightNumber, AIRINV::FlightDateStruct::\_itBucket, AIRINV::FlightDateStruct::\_itLeg, AIRINV::FlightDateStruct::\_itLegCabin, AIRINV::FlightDateStruct::\_legList, AIRINV::BucketStruct::\_yieldRangeUpperValue, and AIRINV::FlightDateStruct::addAirport().

#### 24.157.4 Member Data Documentation

##### 24.157.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

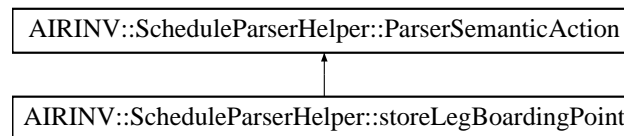
Referenced by AIRINV::InventoryParserHelper::doEndFlightDate::operator(), AIRINV::InventoryParserHelper::storeFClasses::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(), AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIRINV::InventoryParserHelper::storeSegmentAvailability::operator(), AIRINV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(), AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(), AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNego::operator(), AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(), AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIRINV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(), AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIRINV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(), AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(), AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIRINV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIRINV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(), AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIRINV::InventoryParserHelper::storeAirlineCode::operator(), and AIRINV::InventoryParserHelper::storeSnapshotDate::operator().

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.158 AIRINV::ScheduleParserHelper::storeLegBoardingPoint Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegBoardingPoint:



### Public Member Functions

- [storeLegBoardingPoint](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.158.1 Detailed Description

Store the parsed leg boarding point.

Definition at line 77 of file [ScheduleParserHelper.hpp](#).

#### 24.158.2 Constructor & Destructor Documentation

##### 24.158.2.1 AIRINV::ScheduleParserHelper::storeLegBoardingPoint::storeLegBoardingPoint ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 117 of file [ScheduleParserHelper.cpp](#).

#### 24.158.3 Member Function Documentation

##### 24.158.3.1 void AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator() ([iterator\\_t](#) *iStr*, [iterator\\_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 122 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::LegStruct::\\_boardingPoint](#), [AIRINV::LegStruct::\\_cabinList](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itLeg](#), [AIRINV::FlightPeriodStruct::\\_legAlreadyDefined](#), [AIRINV::FlightPeriodStruct::\\_legList](#), and [AIRINV::FlightPeriodStruct::addAirport\(\)](#).

### 24.158.4 Member Data Documentation

#### 24.158.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_-flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

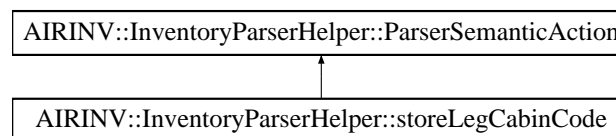
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIR-INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.159 AIRINV::InventoryParserHelper::storeLegCabinCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeLegCabinCode::



### Public Member Functions

- [storeLegCabinCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (char iChar) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)



### 24.159.1 Detailed Description

Store the parsed leg cabin code.

Definition at line 149 of file [InventoryParserHelper.hpp](#).

### 24.159.2 Constructor & Destructor Documentation

#### 24.159.2.1 AIRINV::InventoryParserHelper::storeLegCabinCode::storeLegCabinCode (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 255 of file [InventoryParserHelper.cpp](#).

### 24.159.3 Member Function Documentation

#### 24.159.3.1 void AIRINV::InventoryParserHelper::storeLegCabinCode::operator() (char iChar) const

Actor Function (functor).

Definition at line 260 of file [InventoryParserHelper.cpp](#).

References [AIRINV::LegCabinStruct::\\_bucketList](#), [AIRINV::LegCabinStruct::\\_cabinCode](#), [AIRINV::LegStruct::\\_cabinList](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBucket](#), [AIRINV::FlightDateStruct::\\_itLeg](#), [AIRINV::FlightDateStruct::\\_itLegCabin](#), and [AIRINV::BucketStruct::\\_yieldRangeUpperValue](#).

### 24.159.4 Member Data Documentation

#### 24.159.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#).

```

AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIR-
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), opera-
tor(), AIRINV::InventoryParserHelper::storeOffTime::operator(), AIR-
INV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-
INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-
INV::InventoryParserHelper::storeSnapshotDate::operator().

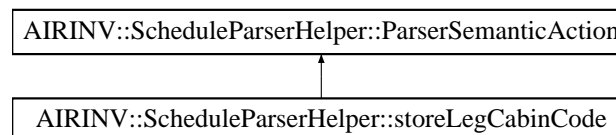
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.160 AIRINV::ScheduleParserHelper::storeLegCabinCode Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegCabinCode:



### Public Member Functions

- [storeLegCabinCode](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([char iChar](#)) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.160.1 Detailed Description

Store the parsed leg cabin code.

Definition at line 133 of file [ScheduleParserHelper.hpp](#).

## 24.160.2 Constructor & Destructor Documentation

### 24.160.2.1 AIRINV::ScheduleParserHelper::storeLegCabinCode::storeLegCabinCode (FlightPeriodStruct & ioFlightPeriod)

Actor Constructor.

Definition at line 250 of file [ScheduleParserHelper.cpp](#).

## 24.160.3 Member Function Documentation

### 24.160.3.1 void AIRINV::ScheduleParserHelper::storeLegCabinCode::operator() (char iChar) const

Actor Function (functor).

Definition at line 255 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::LegCabinStruct::\\_cabinCode](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_-flightPeriod](#), and [AIRINV::FlightPeriodStruct::\\_itLegCabin](#).

## 24.160.4 Member Data Documentation

### 24.160.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_-flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

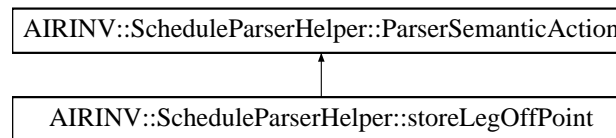
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.161 AIRINV::ScheduleParserHelper::storeLegOffPoint Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIRINV::ScheduleParserHelper::storeLegOffPoint:



### Public Member Functions

- [storeLegOffPoint](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.161.1 Detailed Description

Store the parsed leg off point.

Definition at line 85 of file [ScheduleParserHelper.hpp](#).

#### 24.161.2 Constructor & Destructor Documentation

##### 24.161.2.1 AIRINV::ScheduleParserHelper::storeLegOffPoint::storeLegOffPoint ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 146 of file [ScheduleParserHelper.cpp](#).

#### 24.161.3 Member Function Documentation

##### 24.161.3.1 void AIRINV::ScheduleParserHelper::storeLegOffPoint::operator() ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 151 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itLeg](#), [AIRINV::LegStruct::\\_offPoint](#), and [AIRINV::FlightPeriodStruct::addAirport\(\)](#).

### 24.161.4 Member Data Documentation

#### 24.161.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_-flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

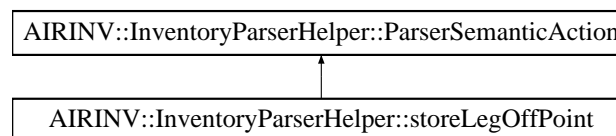
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [opera-tor\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIR-INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.162 AIRINV::InventoryParserHelper::storeLegOffPoint Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeLegOffPoint:



### Public Member Functions

- [storeLegOffPoint](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.162.1 Detailed Description

Store the parsed leg off point.

Definition at line 93 of file [InventoryParserHelper.hpp](#).

### 24.162.2 Constructor & Destructor Documentation

#### 24.162.2.1 AIRINV::InventoryParserHelper::storeLegOffPoint::storeLegOffPoint (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 160 of file [InventoryParserHelper.cpp](#).

### 24.162.3 Member Function Documentation

#### 24.162.3.1 void AIRINV::InventoryParserHelper::storeLegOffPoint::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 165 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLeg](#), [AIRINV::LegStruct::\\_offPoint](#), and [AIRINV::FlightDateStruct::addAirport\(\)](#).

### 24.162.4 Member Data Documentation

#### 24.162.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#).

```

AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

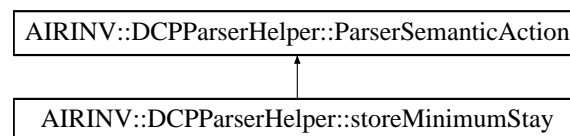
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.163 AIRINV::DCPParserHelper::storeMinimumStay Struct Reference

`#include <airinv/command/vault/DCPParserHelper.hpp>` Inheritance diagram for AIRINV::DCPParserHelper::storeMinimumStay::



### Public Member Functions

- [storeMinimumStay](#) (DCPRuleStruct &)
- void [operator\(\)](#) (unsigned int, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

### Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

#### 24.163.1 Detailed Description

Store the parsed minimum stay.

Definition at line 178 of file [DCPParserHelper.hpp](#).

### 24.163.2 Constructor & Destructor Documentation

#### 24.163.2.1 AIRINV::DCPParserHelper::storeMinimumStay::storeMinimumStay (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 299 of file [DCPParserHelper.cpp](#).

### 24.163.3 Member Function Documentation

#### 24.163.3.1 void AIRINV::DCPParserHelper::storeMinimumStay::operator() (unsigned int iMinStay, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 304 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.163.4 Member Data Documentation

#### 24.163.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

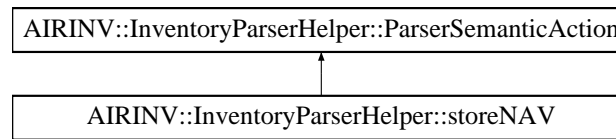
The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.164 AIRINV::InventoryParserHelper::storeNAV Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
Inheritance diagram for AIRINV::InventoryParserHelper::storeNAV:
```





## Public Member Functions

- [storeNAV](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double *iReal*) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.164.1 Detailed Description

Store the parsed Net Availability (NAV).

Definition at line 189 of file [InventoryParserHelper.hpp](#).

### 24.164.2 Constructor & Destructor Documentation

#### 24.164.2.1 AIRINV::InventoryParserHelper::storeNAV::storeNAV ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 328 of file [InventoryParserHelper.cpp](#).

### 24.164.3 Member Function Documentation

#### 24.164.3.1 void AIRINV::InventoryParserHelper::storeNAV::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 333 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLegCabin](#), and [AIRINV::LegCabinStruct::\\_nav](#).

### 24.164.4 Member Data Documentation

#### 24.164.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#),

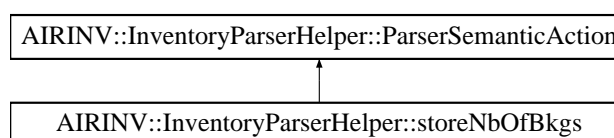
AIRINV::InventoryParserHelper::storeRevenueAvailability::operator()  
 INV::InventoryParserHelper::storeSegmentAvailability::operator()  
 INV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator()  
 AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator()  
 INV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()  
 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator()  
 INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator()  
 AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNego::operator()  
 AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator()  
 AIRINV::InventoryParserHelper::storeParentSubclassCode::operator()  
 INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator()  
 AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator()  
 AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator()  
 INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()  
 AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator()  
 AIRINV::InventoryParserHelper::storeYieldUpperRange::operator()  
 INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),  
 AIRINV::InventoryParserHelper::storeGAV::operator(), operator(),  
 INV::InventoryParserHelper::storeBookingCounter::operator(), AIRINV::InventoryParserHelper::storeUPR::operator(),  
 AIRINV::InventoryParserHelper::storeAU::operator(), AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),  
 AIRINV::InventoryParserHelper::storeLegCabinCode::operator(),  
 INV::InventoryParserHelper::storeOffTime::operator(), AIRINV::InventoryParserHelper::storeOffDate::operator(),  
 AIRINV::InventoryParserHelper::storeBoardingTime::operator(),  
 INV::InventoryParserHelper::storeBoardingDate::operator(), AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator()  
 AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator(),  
 INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator()  
 AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),  
 INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator()  
 AIRINV::InventoryParserHelper::storeFlightNumber::operator(),  
 INV::InventoryParserHelper::storeAirlineCode::operator(), and  
 INV::InventoryParserHelper::storeSnapshotDate::operator().

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.165 AIRINV::InventoryParserHelper::storeNbOfBkgs Struct Reference

#include <airinv/command/InventoryParserHelper.hpp> Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfBkgs:



### Public Member Functions

- [storeNbOfBkgs](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (double iReal) const

**Public Attributes**

- [FlightDateStruct](#) & [\\_flightDate](#)

**24.165.1 Detailed Description**

Store the parsed number of bookings (at booking class level).

Definition at line 349 of file [InventoryParserHelper.hpp](#).

**24.165.2 Constructor & Destructor Documentation****24.165.2.1 AIRINV::InventoryParserHelper::storeNbOfBkgs::storeNbOfBkgs (FlightDateStruct & ioFlightDate)**

Actor Constructor.

Definition at line 634 of file [InventoryParserHelper.cpp](#).

**24.165.3 Member Function Documentation****24.165.3.1 void AIRINV::InventoryParserHelper::storeNbOfBkgs::operator() (double iReal) const**

Actor Function (functor).

Definition at line 639 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_nbOfBookings](#).

**24.165.4 Member Data Documentation****24.165.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]**

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingC](#)

```

AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(),
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

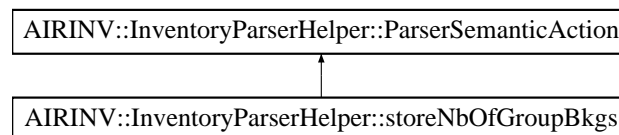
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.166 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfGroupBkgs:



### Public Member Functions

- [storeNbOfGroupBkgs](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.166.1 Detailed Description

Store the parsed number of group bookings (at booking class level).

Definition at line 357 of file [InventoryParserHelper.hpp](#).

## 24.166.2 Constructor & Destructor Documentation

### 24.166.2.1 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::storeNbOfGroupBkgs (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 645 of file [InventoryParserHelper.cpp](#).

## 24.166.3 Member Function Documentation

### 24.166.3.1 void AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator() (double iReal) const

Actor Function (functor).

Definition at line 650 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_nbOfGroupBookings](#).

## 24.166.4 Member Data Documentation

### 24.166.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#).

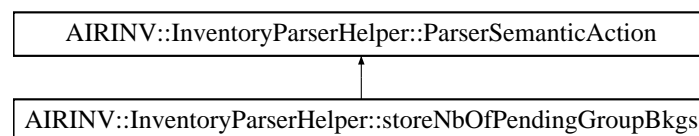
[AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), AIR-  
[INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), AIR-  
[INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), AIR-  
[INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), AIR-  
[AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), AIR-  
[INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), AIR-  
[AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), AIR-  
[INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), AIR-  
[INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#). and

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.167 AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::



### Public Member Functions

- [storeNbOfPendingGroupBkgs](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.167.1 Detailed Description

Store the parsed number of pending group bookings (at booking class level).

Definition at line 365 of file [InventoryParserHelper.hpp](#).

#### 24.167.2 Constructor & Destructor Documentation

##### 24.167.2.1 AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::storeNbOfPendingGroupBkgs ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 657 of file [InventoryParserHelper.cpp](#).

## 24.167.3 Member Function Documentation

24.167.3.1 void AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator()  
(double *iReal*) const

Actor Function (functor).

Definition at line 662 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#),  
[AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_nbOfPendingGroupBookings](#).

## 24.167.4 Member Data Documentation

## 24.167.4.1 FlightDateStruct&amp; AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

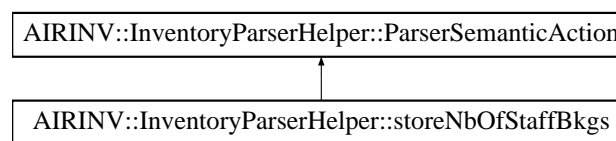
[INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.168 AIRINV::InventoryParserHelper::storeNbOfStaffBkgs Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::



### Public Member Functions

- [storeNbOfStaffBkgs](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.168.1 Detailed Description

Store the parsed number of staff bookings (at booking class level).

Definition at line 373 of file [InventoryParserHelper.hpp](#).

#### 24.168.2 Constructor & Destructor Documentation

##### 24.168.2.1 AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::storeNbOfStaffBkgs ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 668 of file [InventoryParserHelper.cpp](#).

#### 24.168.3 Member Function Documentation

##### 24.168.3.1 void AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 673 of file [InventoryParserHelper.cpp](#).



References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_nbOfStaffBookings](#).

## 24.168.4 Member Data Documentation

### 24.168.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

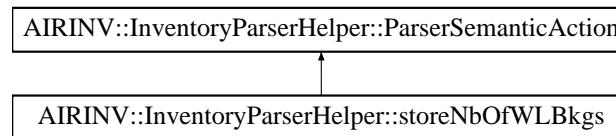
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [and](#) [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.169 AIRINV::InventoryParserHelper::storeNbOfWLBkgs Struct Reference

#include <airinv/command/InventoryParserHelper.hpp> Inheritance diagram for AIRINV::InventoryParserHelper::storeNbOfWLBkgs::



### Public Member Functions

- [storeNbOfWLBkgs](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double *iReal*) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.169.1 Detailed Description

Store the parsed number of wait-list bookings (at booking class level).

Definition at line 382 of file [InventoryParserHelper.hpp](#).

#### 24.169.2 Constructor & Destructor Documentation

##### 24.169.2.1 AIRINV::InventoryParserHelper::storeNbOfWLBkgs::storeNbOfWLBkgs ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 679 of file [InventoryParserHelper.cpp](#).

#### 24.169.3 Member Function Documentation

##### 24.169.3.1 void AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 684 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_nbOfWLBookings](#).

## 24.169.4 Member Data Documentation

## 24.169.4.1 FlightDateStruct&amp; AIRINV::InventoryParserHelper::ParserSemanticAction::\_-flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

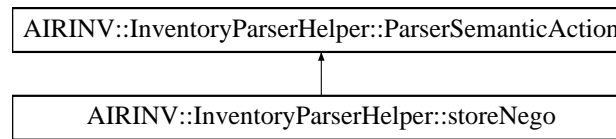
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.170 AIRINV::InventoryParserHelper::storeNego Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
Inheritance diagram for AIRINV::InventoryParserHelper::storeNego:
```



## Public Member Functions

- [storeNego](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.170.1 Detailed Description

Store the negotiated allotment (at booking class level).

Definition at line 325 of file [InventoryParserHelper.hpp](#).

### 24.170.2 Constructor & Destructor Documentation

#### 24.170.2.1 AIRINV::InventoryParserHelper::storeNego::storeNego ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 601 of file [InventoryParserHelper.cpp](#).

### 24.170.3 Member Function Documentation

#### 24.170.3.1 void AIRINV::InventoryParserHelper::storeNego::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 606 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_nego](#).

### 24.170.4 Member Data Documentation

#### 24.170.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#),

```

AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(),
INV::InventoryParserHelper::storeSegmentAvailability::operator(),
INV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(),
AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(),
INV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(),
AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(),
INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),
AIRINV::InventoryParserHelper::storeNoShow::operator(), operator(),
INV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),
AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(),
INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),
AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),
AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(),
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(), and
INV::InventoryParserHelper::storeSnapshotDate::operator().

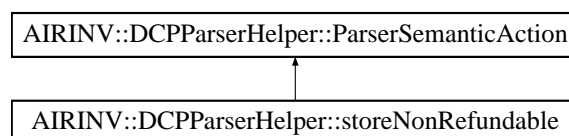
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.171 AIRINV::DCPPParserHelper::storeNonRefundable Struct Reference

```
#include <airinv/command/vault/DCPPParserHelper.hpp>
Inheritance diagram for AIRINV::DCPPParserHelper::storeNonRefundable::
```



### Public Member Functions

- [storeNonRefundable](#) (DCPRuleStruct &)

- void [operator\(\)](#) (char, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

## Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

### 24.171.1 Detailed Description

Store the parsed refundable option

Definition at line 168 of file [DCPParserHelper.hpp](#).

### 24.171.2 Constructor & Destructor Documentation

#### 24.171.2.1 AIRINV::DCPParserHelper::storeNonRefundable::storeNonRefundable (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 274 of file [DCPParserHelper.cpp](#).

### 24.171.3 Member Function Documentation

#### 24.171.3.1 void AIRINV::DCPParserHelper::storeNonRefundable::operator() (char iNonRefundable, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 279 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.171.4 Member Data Documentation

#### 24.171.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

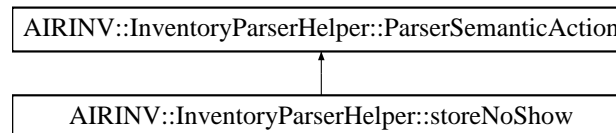
Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPid::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.172 AIRINV::InventoryParserHelper::storeNoShow Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeNoShow::



### Public Member Functions

- [storeNoShow](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (double *iReal*) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.172.1 Detailed Description

Store the parsed No-Show percentage (at booking class level).

Definition at line 333 of file [InventoryParserHelper.hpp](#).

### 24.172.2 Constructor & Destructor Documentation

#### 24.172.2.1 AIRINV::InventoryParserHelper::storeNoShow::storeNoShow ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 612 of file [InventoryParserHelper.cpp](#).

### 24.172.3 Member Function Documentation

#### 24.172.3.1 void AIRINV::InventoryParserHelper::storeNoShow::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 617 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_noShowPercentage](#).

## 24.172.4 Member Data Documentation

## 24.172.4.1 FlightDateStruct&amp; AIRINV::InventoryParserHelper::ParserSemanticAction::\_-flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

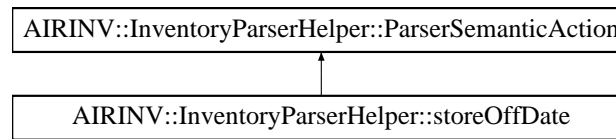
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.173 AIRINV::InventoryParserHelper::storeOffDate Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp>
Inheritance diagram for AIRINV::InventoryParserHelper::storeOffDate::
```





## Public Member Functions

- [storeOffDate](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.173.1 Detailed Description

Store the off date.

Definition at line 133 of file [InventoryParserHelper.hpp](#).

### 24.173.2 Constructor & Destructor Documentation

#### 24.173.2.1 AIRINV::InventoryParserHelper::storeOffDate::storeOffDate ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 232 of file [InventoryParserHelper.cpp](#).

### 24.173.3 Member Function Documentation

#### 24.173.3.1 void AIRINV::InventoryParserHelper::storeOffDate::operator() ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 237 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLeg](#), [AIRINV::LegStruct::\\_offDate](#), and [AIRINV::FlightDateStruct::getDate\(\)](#).

### 24.173.4 Member Data Documentation

#### 24.173.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

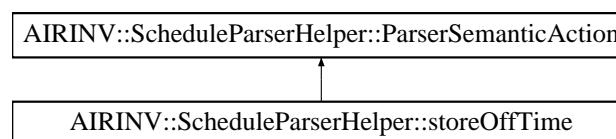
Referenced by AIRINV::InventoryParserHelper::doEndFlightDate::operator(), AIR-  
 INV::InventoryParserHelper::storeFClasses::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(),  
 AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIR-  
 INV::InventoryParserHelper::storeSegmentAvailability::operator(), AIR-  
 INV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(),  
 AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIR-  
 INV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(),  
 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIR-  
 INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),  
 AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNego::operator(),  
 AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),  
 AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIR-  
 INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),  
 AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),  
 AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIR-  
 INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),  
 AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),  
 AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIR-  
 INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),  
 AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),  
 AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-  
 INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),  
 AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-  
 INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),  
 operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),  
 AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-  
 INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-  
 INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-  
 INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),  
 AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-  
 INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),  
 AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-  
 INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-  
 INV::InventoryParserHelper::storeSnapshotDate::operator().

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.174 AIRINV::ScheduleParserHelper::storeOffTime Struct Reference

#include <airinv/command/ScheduleParserHelper.hpp> Inheritance diagram for AIR-  
 INV::ScheduleParserHelper::storeOffTime:



## Public Member Functions

- `storeOffTime (FlightPeriodStruct &)`
- `void operator() (iterator_t iStr, iterator_t iStrEnd) const`

## Public Attributes

- FlightPeriodStruct & \_flightPeriod

### 24.174.1 Detailed Description

Store the off time.

Definition at line 117 of file [ScheduleParserHelper.hpp](#).

### 24.174.2 Constructor & Destructor Documentation

#### 24.174.2.1 AIRINV::ScheduleParserHelper::storeOffTime::storeOffTime (FlightPeriodStruct & ioFlightPeriod)

### Actor Constructor.

Definition at line 208 of file ScheduleParserHelper.cpp.

### 24.174.3 Member Function Documentation

**24.174.3.1** `void AIRINV::ScheduleParserHelper::storeOffTime::operator() (iterator_t iStr, iterator_t iStrEnd) const`

Actor Function (functor).

Definition at line 213 of file ScheduleParserHelper.cpp.

References    `AIRINV::LegStruct::_boardingDateOffset`,    `AIRINV::FlightPeriodStruct::_dateOffset`,  
`AIRINV::ScheduleParserHelper::ParserSemanticAction::_flightPeriod`,    `AIRINV::FlightPeriodStruct::_itLeg`,  
`AIRINV::FlightPeriodStruct::_itSeconds`,    `AIRINV::LegStruct::_offTime`,    and    `AIRINV::FlightPeriodStruct::getTime()`.

#### 24.174.4 Member Data Documentation

#### 24.174.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

**Actor Context.**

Definition at line 33 of file ScheduleParserHelper.hpp.

Referenced by AIRINV::ScheduleParserHelper::doEndFlight::operator(), AIR-  
INV::ScheduleParserHelper::storeFClasses::operator(), AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator()  
AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator(), AIR-  
INV::ScheduleParserHelper::storeFamilyCode::operator(), AIRINV::ScheduleParserHelper::storeClasses::operator(),  
AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator(), AIR-  
INV::ScheduleParserHelper::storeSegmentOffPoint::operator(), AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator()

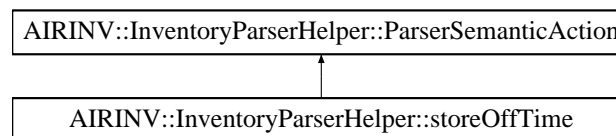
[AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#),  
[AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [opera-](#)  
[tor\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#),  
[AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#),  
[AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIR-](#)  
[INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIR-](#)  
[INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.175 AIRINV::InventoryParserHelper::storeOffTime Struct Reference

#include <[airinv/command/InventoryParserHelper.hpp](#)> Inheritance diagram for AIRINV::InventoryParserHelper::storeOffTime::



### Public Member Functions

- [storeOffTime](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.175.1 Detailed Description

Store the off time.

Definition at line [141](#) of file [InventoryParserHelper.hpp](#).

### 24.175.2 Constructor & Destructor Documentation

#### 24.175.2.1 AIRINV::InventoryParserHelper::storeOffTime::storeOffTime ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line [242](#) of file [InventoryParserHelper.cpp](#).

### 24.175.3 Member Function Documentation

#### 24.175.3.1 void AIRINV::InventoryParserHelper::storeOffTime::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 247 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLeg](#), [AIRINV::FlightDateStruct::\\_itSeconds](#), [AIRINV::LegStruct::\\_offTime](#), and [AIRINV::FlightDateStruct::getTime\(\)](#).

### 24.175.4 Member Data Documentation

#### 24.175.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#).

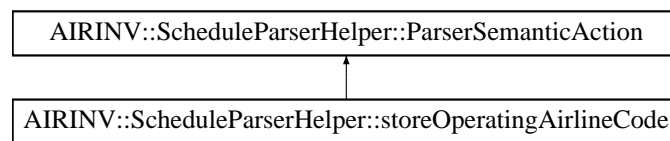
[INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.176 AIRINV::ScheduleParserHelper::storeOperatingAirlineCode Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::



### Public Member Functions

- [storeOperatingAirlineCode](#) ([FlightPeriodStruct](#) &)
- [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.176.1 Detailed Description

Store the parsed operating airline code.

Definition at line 93 of file [ScheduleParserHelper.hpp](#).

#### 24.176.2 Constructor & Destructor Documentation

##### 24.176.2.1 AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::storeOperatingAirlineCode ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 162 of file [ScheduleParserHelper.cpp](#).

#### 24.176.3 Member Function Documentation

##### 24.176.3.1 void AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator() ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 167 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::LegStruct::\\_airlineCode](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), and [AIRINV::FlightPeriodStruct::\\_itLeg](#).

## 24.176.4 Member Data Documentation

### 24.176.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

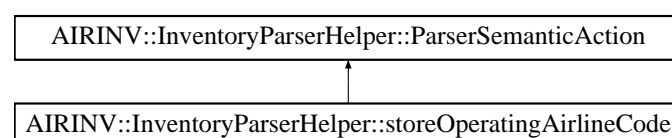
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.177 AIRINV::InventoryParserHelper::storeOperatingAirlineCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for `AIRINV::InventoryParserHelper::storeOperatingAirlineCode`:



## Public Member Functions

- [storeOperatingAirlineCode](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

**Public Attributes**

- [FlightDateStruct](#) & [\\_flightDate](#)

**24.177.1 Detailed Description**

Store the parsed operating airline code.

Definition at line 101 of file [InventoryParserHelper.hpp](#).

**24.177.2 Constructor & Destructor Documentation****24.177.2.1 AIRINV::InventoryParserHelper::storeOperatingAirlineCode::storeOperatingAirlineCode (FlightDateStruct & ioFlightDate)**

Actor Constructor.

Definition at line 176 of file [InventoryParserHelper.cpp](#).

**24.177.3 Member Function Documentation****24.177.3.1 void AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator() (iterator\_t iStr, iterator\_t iStrEnd) const**

Actor Function (functor).

Definition at line 181 of file [InventoryParserHelper.cpp](#).

References [AIRINV::LegStruct::\\_airlineCode](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::\\_itLeg](#).

**24.177.4 Member Data Documentation****24.177.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]**

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingC](#)



```

AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(),
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),
AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
AIRINV::InventoryParserHelper::storeLegOffPoint::operator(),
INV::InventoryParserHelper::storeLegBoardingPoint::operator(),
INV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

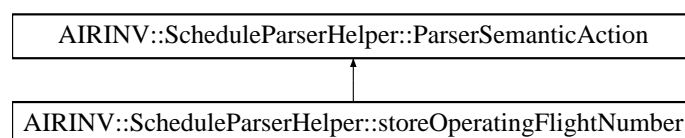
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.178 AIRINV::ScheduleParserHelper::storeOperatingFlightNumber Struct Reference

#include <airinv/command/ScheduleParserHelper.hpp> Inheritance diagram for AIRINV::ScheduleParserHelper::storeOperatingFlightNumber:



### Public Member Functions

- [storeOperatingFlightNumber](#) ([FlightPeriodStruct](#) &)
- [operator\(\)](#) (unsigned int iNumber) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.178.1 Detailed Description

Store the parsed operating flight number.

Definition at line 101 of file [ScheduleParserHelper.hpp](#).

## 24.178.2 Constructor & Destructor Documentation

### 24.178.2.1 AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::storeOperatingFlightNumber (FlightPeriodStruct & *ioFlightPeriod*)

Actor Constructor.

Definition at line 178 of file [ScheduleParserHelper.cpp](#).

## 24.178.3 Member Function Documentation

### 24.178.3.1 void AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 183 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::LegStruct::\\_flightNumber](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_-flightPeriod](#), and [AIRINV::FlightPeriodStruct::\\_itLeg](#).

## 24.178.4 Member Data Documentation

### 24.178.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_-flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

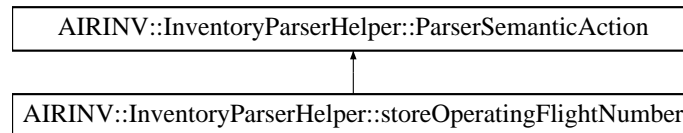
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.179 AIRINV::InventoryParserHelper::storeOperatingFlightNumber Struct Reference

#include <airinv/command/InventoryParserHelper.hpp> Inheritance diagram for AIRINV::InventoryParserHelper::storeOperatingFlightNumber::



### Public Member Functions

- [storeOperatingFlightNumber](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (unsigned int *iNumber*) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.179.1 Detailed Description

Store the parsed operating flight number.

Definition at line 109 of file [InventoryParserHelper.hpp](#).

#### 24.179.2 Constructor & Destructor Documentation

##### 24.179.2.1 AIRINV::InventoryParserHelper::storeOperatingFlightNumber::storeOperatingFlightNumber ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 192 of file [InventoryParserHelper.cpp](#).

#### 24.179.3 Member Function Documentation

##### 24.179.3.1 void AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 197 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::LegStruct::\\_flightNumber](#), and [AIRINV::FlightDateStruct::\\_itLeg](#).

#### 24.179.4 Member Data Documentation

##### 24.179.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

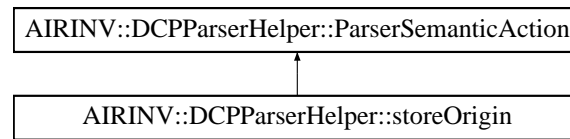
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [and](#) [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

#### 24.180 AIRINV::DCPParserHelper::storeOrigin Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
Inheritance diagram for AIRINV::DCPParserHelper::storeOrigin:
```



## Public Member Functions

- [storeOrigin](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

## Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

### 24.180.1 Detailed Description

Store the parsed origin.

Definition at line 48 of file [DCPParserHelper.hpp](#).

### 24.180.2 Constructor & Destructor Documentation

#### 24.180.2.1 AIRINV::DCPParserHelper::storeOrigin::storeOrigin (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 54 of file [DCPParserHelper.cpp](#).

### 24.180.3 Member Function Documentation

#### 24.180.3.1 void AIRINV::DCPParserHelper::storeOrigin::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 59 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.180.4 Member Data Documentation

#### 24.180.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#),

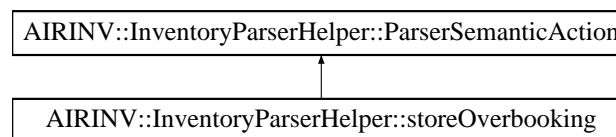
[AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.181 AIRINV::InventoryParserHelper::storeOverbooking Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeOverbooking::



### Public Member Functions

- [storeOverbooking](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.181.1 Detailed Description

Store the parsed Overbooking percentage (at booking class level).

Definition at line 341 of file [InventoryParserHelper.hpp](#).

#### 24.181.2 Constructor & Destructor Documentation

##### 24.181.2.1 AIRINV::InventoryParserHelper::storeOverbooking::storeOverbooking ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 623 of file [InventoryParserHelper.cpp](#).

### 24.181.3 Member Function Documentation

#### 24.181.3.1 void AIRINV::InventoryParserHelper::storeOverbooking::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 628 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_overbookingPercentage](#).

### 24.181.4 Member Data Documentation

#### 24.181.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)\(\)](#), and [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)\(\)](#).

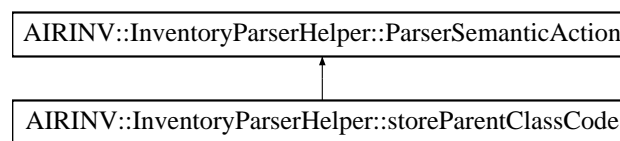
[INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.182 AIRINV::InventoryParserHelper::storeParentClassCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeParentClassCode::



### Public Member Functions

- [storeParentClassCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (char iChar) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.182.1 Detailed Description

Store the parsed class code of the parent sub-class.

Definition at line 293 of file [InventoryParserHelper.hpp](#).

### 24.182.2 Constructor & Destructor Documentation

#### 24.182.2.1 AIRINV::InventoryParserHelper::storeParentClassCode::storeParentClassCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 555 of file [InventoryParserHelper.cpp](#).

### 24.182.3 Member Function Documentation

#### 24.182.3.1 void AIRINV::InventoryParserHelper::storeParentClassCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 560 of file [InventoryParserHelper.cpp](#).



References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_parentClassCode](#).

## 24.182.4 Member Data Documentation

### 24.182.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

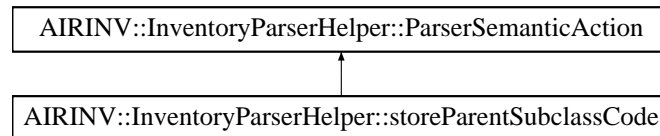
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCount::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.183 AIRINV::InventoryParserHelper::storeParentSubclassCode Struct Reference

#include <airinv/command/InventoryParserHelper.hpp> Inheritance diagram for AIRINV::InventoryParserHelper::storeParentSubclassCode::



### Public Member Functions

- [storeParentSubclassCode](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (unsigned int iNumber) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.183.1 Detailed Description

Store the parsed sub-class code of the parent sub-class.

Definition at line 301 of file [InventoryParserHelper.hpp](#).

#### 24.183.2 Constructor & Destructor Documentation

##### 24.183.2.1 AIRINV::InventoryParserHelper::storeParentSubclassCode::storeParentSubclassCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 567 of file [InventoryParserHelper.cpp](#).

#### 24.183.3 Member Function Documentation

##### 24.183.3.1 void AIRINV::InventoryParserHelper::storeParentSubclassCode::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 572 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_parentSubclassCode](#).

## 24.183.4 Member Data Documentation

## 24.183.4.1 FlightDateStruct&amp; AIRINV::InventoryParserHelper::ParserSemanticAction::\_-flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

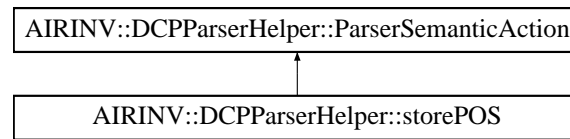
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.184 AIRINV::DCPParserHelper::storePOS Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
Inheritance diagram for AIRINV::DCPParserHelper::storePOS::
```



## Public Member Functions

- [storePOS](#) (DCPRuleStruct &)
- void [operator\(\)](#) (std::vector< char >, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

## Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

### 24.184.1 Detailed Description

Store the parsed customer position.

Definition at line 108 of file [DCPParserHelper.hpp](#).

### 24.184.2 Constructor & Destructor Documentation

#### 24.184.2.1 AIRINV::DCPParserHelper::storePOS::storePOS (DCPRuleStruct & *ioDCPRule*)

Actor Constructor.

Definition at line 150 of file [DCPParserHelper.cpp](#).

### 24.184.3 Member Function Documentation

#### 24.184.3.1 void AIRINV::DCPParserHelper::storePOS::operator() (std::vector< char > *iChar*, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 155 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.184.4 Member Data Documentation

#### 24.184.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#),

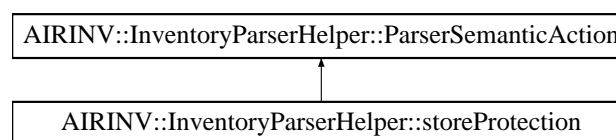
[AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIR-INV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.185 AIRINV::InventoryParserHelper::storeProtection Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeProtection::



### Public Member Functions

- [storeProtection](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.185.1 Detailed Description

Store the parsed protection (at booking class level).

Definition at line 317 of file [InventoryParserHelper.hpp](#).

#### 24.185.2 Constructor & Destructor Documentation

##### 24.185.2.1 AIRINV::InventoryParserHelper::storeProtection::storeProtection ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 590 of file [InventoryParserHelper.cpp](#).

### 24.185.3 Member Function Documentation

#### 24.185.3.1 void AIRINV::InventoryParserHelper::storeProtection::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 595 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_protection](#).

### 24.185.4 Member Data Documentation

#### 24.185.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

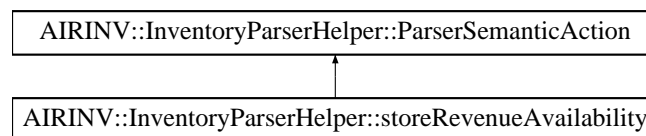
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.186 AIRINV::InventoryParserHelper::storeRevenueAvailability Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeRevenueAvailability::



### Public Member Functions

- [storeRevenueAvailability](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double *iReal*) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.186.1 Detailed Description

Store the parsed number of net revenue availability (at booking class level).

Definition at line 417 of file [InventoryParserHelper.hpp](#).

#### 24.186.2 Constructor & Destructor Documentation

##### 24.186.2.1 AIRINV::InventoryParserHelper::storeRevenueAvailability::storeRevenueAvailability ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 726 of file [InventoryParserHelper.cpp](#).

#### 24.186.3 Member Function Documentation

##### 24.186.3.1 void AIRINV::InventoryParserHelper::storeRevenueAvailability::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 731 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#),  
[AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_netRevenueAvailability](#).

## 24.186.4 Member Data Documentation

### 24.186.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

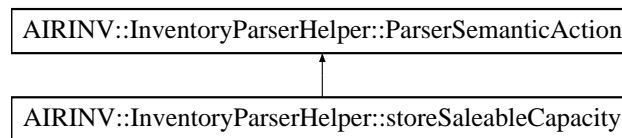
The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)



## 24.187 AIRINV::InventoryParserHelper::storeSaleableCapacity Struct Reference

#include <airinv/command/InventoryParserHelper.hpp> Inheritance diagram for AIRINV::InventoryParserHelper::storeSaleableCapacity::



### Public Member Functions

- [storeSaleableCapacity](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.187.1 Detailed Description

Store the parsed saleable capacity.

Definition at line 157 of file [InventoryParserHelper.hpp](#).

#### 24.187.2 Constructor & Destructor Documentation

##### 24.187.2.1 AIRINV::InventoryParserHelper::storeSaleableCapacity::storeSaleableCapacity (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 284 of file [InventoryParserHelper.cpp](#).

#### 24.187.3 Member Function Documentation

##### 24.187.3.1 void AIRINV::InventoryParserHelper::storeSaleableCapacity::operator() (double iReal) const

Actor Function (functor).

Definition at line 289 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLegCabin](#), and [AIRINV::LegCabinStruct::\\_saleableCapacity](#).

#### 24.187.4 Member Data Documentation

##### 24.187.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_-flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

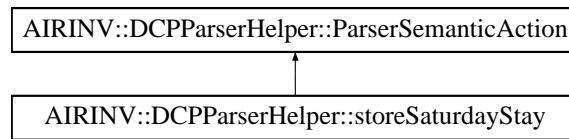
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.188 AIRINV::DCPParserHelper::storeSaturdayStay Struct Reference

```
#include <airinv/command/vault/DCPParserHelper.hpp>
Inheritance diagram for AIRINV::DCPParserHelper::storeSaturdayStay::
```



## Public Member Functions

- [storeSaturdayStay](#) (DCPRuleStruct &)
- void [operator\(\)](#) (char, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

## Public Attributes

- DCPRuleStruct & [\\_DCPRule](#)

### 24.188.1 Detailed Description

Store the parsed saturday night.

Definition at line 148 of file [DCPParserHelper.hpp](#).

### 24.188.2 Constructor & Destructor Documentation

#### 24.188.2.1 AIRINV::DCPParserHelper::storeSaturdayStay::storeSaturdayStay (DCPRuleStruct & ioDCPRule)

Actor Constructor.

Definition at line 223 of file [DCPParserHelper.cpp](#).

### 24.188.3 Member Function Documentation

#### 24.188.3.1 void AIRINV::DCPParserHelper::storeSaturdayStay::operator() (char iSaturdayStay, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

Actor Function (functor).

Definition at line 228 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

### 24.188.4 Member Data Documentation

#### 24.188.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#),

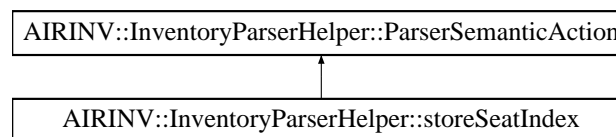
[AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIR-INV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeStartRangeTime::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.189 AIRINV::InventoryParserHelper::storeSeatIndex Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeSeatIndex:



### Public Member Functions

- [storeSeatIndex](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double iReal) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.189.1 Detailed Description

Store the parsed leg-cabin seat index.

Definition at line 237 of file [InventoryParserHelper.hpp](#).

### 24.189.2 Constructor & Destructor Documentation

#### 24.189.2.1 AIRINV::InventoryParserHelper::storeSeatIndex::storeSeatIndex (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 403 of file [InventoryParserHelper.cpp](#).

### 24.189.3 Member Function Documentation

#### 24.189.3.1 void AIRINV::InventoryParserHelper::storeSeatIndex::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 408 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBucket](#), and [AIRINV::BucketStruct::\\_seatIndex](#).

### 24.189.4 Member Data Documentation

#### 24.189.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

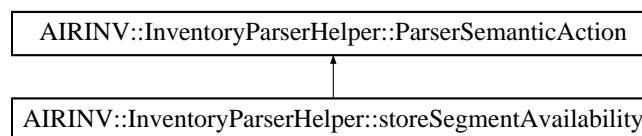
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.190 AIRINV::InventoryParserHelper::storeSegmentAvailability Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentAvailability::



### Public Member Functions

- [storeSegmentAvailability](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double *iReal*) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.190.1 Detailed Description

Store the parsed number of segment availability (at booking class level).

Definition at line 408 of file [InventoryParserHelper.hpp](#).

#### 24.190.2 Constructor & Destructor Documentation

##### 24.190.2.1 AIRINV::InventoryParserHelper::storeSegmentAvailability::storeSegmentAvailability ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 714 of file [InventoryParserHelper.cpp](#).

#### 24.190.3 Member Function Documentation

##### 24.190.3.1 void AIRINV::InventoryParserHelper::storeSegmentAvailability::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 719 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_segmentAvailability](#).

#### 24.190.4 Member Data Documentation

##### 24.190.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

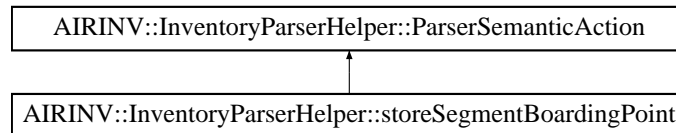
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.191 AIRINV::InventoryParserHelper::storeSegmentBoardingPoint Struct Reference

#include <airinv/command/InventoryParserHelper.hpp> Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::



### Public Member Functions

- [storeSegmentBoardingPoint](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.191.1 Detailed Description

Store the parsed segment boarding point.

Definition at line 245 of file [InventoryParserHelper.hpp](#).

#### 24.191.2 Constructor & Destructor Documentation

##### 24.191.2.1 AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::storeSegmentBoardingPoint([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 415 of file [InventoryParserHelper.cpp](#).

#### 24.191.3 Member Function Documentation

##### 24.191.3.1 void AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator()([iterator\\_t](#) *iStr*, [iterator\\_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 420 of file [InventoryParserHelper.cpp](#).

References [AIRINV::SegmentStruct::\\_boardingPoint](#), [AIRINV::LegCabinStruct::\\_bucketList](#), [AIRINV::LegCabinStruct::\\_cabinCode](#), [AIRINV::SegmentStruct::\\_cabinList](#), [AIRINV::LegStruct::\\_cabinList](#), [AIRINV::BookingClassStruct::\\_classCode](#), [AIRINV::FareFamilyStruct::\\_classList](#), [AIRINV::SegmentCabinStruct::\\_fareFamilies](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), [AIRINV::FlightDateStruct::\\_itBucket](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), [AIRINV::FlightDateStruct::\\_itLeg](#), and [AIRINV::FlightDateStruct::\\_itLegCabin](#).



AIRINV::FlightDateStruct::\_itSegment, AIRINV::FlightDateStruct::\_itSegmentCabin,  
AIRINV::FlightDateStruct::\_legList, and AIRINV::FlightDateStruct::\_segmentList.

#### 24.191.4 Member Data Documentation

##### 24.191.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

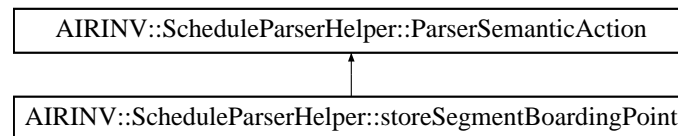
Referenced by AIRINV::InventoryParserHelper::doEndFlightDate::operator(), AIR-  
INV::InventoryParserHelper::storeFClasses::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(),  
AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIR-  
INV::InventoryParserHelper::storeSegmentAvailability::operator(), AIR-  
INV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(),  
AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIR-  
INV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(),  
AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIR-  
INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),  
AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNego::operator(),  
AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),  
AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIR-  
INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),  
AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),  
AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIR-  
INV::InventoryParserHelper::storeSegmentOffPoint::operator(), opera-  
tor(), AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIR-  
INV::InventoryParserHelper::storeBucketAvailability::operator(), AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),  
AIRINV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),  
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),  
AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-  
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),  
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-  
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),  
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),  
AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-  
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-  
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-  
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),  
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-  
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),  
AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-  
INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-  
INV::InventoryParserHelper::storeSnapshotDate::operator().

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.192 AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint Struct Reference

#include <airinv/command/ScheduleParserHelper.hpp> Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::



### Public Member Functions

- [storeSegmentBoardingPoint](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

#### 24.192.1 Detailed Description

Store the parsed segment boarding point.

Definition at line 160 of file [ScheduleParserHelper.hpp](#).

#### 24.192.2 Constructor & Destructor Documentation

##### 24.192.2.1 AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::storeSegmentBoardingPoint ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 307 of file [ScheduleParserHelper.cpp](#).

#### 24.192.3 Member Function Documentation

##### 24.192.3.1 void AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator() ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

Actor Function (functor).

Definition at line 312 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::SegmentStruct::\\_boardingPoint](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), and [AIRINV::FlightPeriodStruct::\\_itSegment](#).

#### 24.192.4 Member Data Documentation

##### 24.192.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_-flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

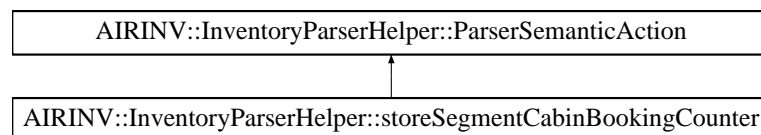
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), [and](#) [AIR-INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

#### 24.193 AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::



##### Public Member Functions

- [storeSegmentCabinBookingCounter](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double iReal) const

##### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

## 24.193 AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter Struct Reference 471

### 24.193.1 Detailed Description

Store the parsed segment cabin number of bookings.

Definition at line 269 of file [InventoryParserHelper.hpp](#).

### 24.193.2 Constructor & Destructor Documentation

#### 24.193.2.1 AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter::storeSegmentCabinBookingCounter( FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 513 of file [InventoryParserHelper.cpp](#).

### 24.193.3 Member Function Documentation

#### 24.193.3.1 void AIR- INV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator() (double iReal) const

Actor Function (functor).

Definition at line 518 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itSegmentCabin](#), and [AIRINV::SegmentCabinStruct::\\_nbOfBookings](#).

### 24.193.4 Member Data Documentation

#### 24.193.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_ flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)\(\)](#), [AIR-  
INV::InventoryParserHelper::storeFClasses::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)\(\)](#), [AIR-  
INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)\(\)](#), [AIR-  
INV::InventoryParserHelper::storeClassAvailability::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)\(\)](#), [AIR-  
INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)\(\)](#), [AIR-  
INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeNoShow::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeProtection::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)\(\)](#), [AIR-  
INV::InventoryParserHelper::storeParentClassCode::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeClassCode::operator\(\)\(\)](#), [operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)\(\)](#), [AIR-  
INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)\(\)](#),  
[AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)\(\)](#)

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AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(),
INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),
AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),
AIRINV::InventoryParserHelper::storeBookingCounter::operator(),
INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),
AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

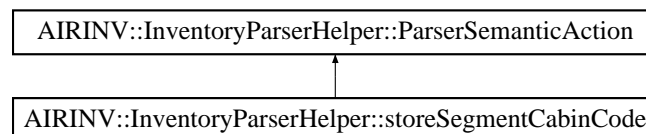
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The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.194 AIRINV::InventoryParserHelper::storeSegmentCabinCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentCabinCode::



### Public Member Functions

- [storeSegmentCabinCode](#) ([FlightDateStruct](#) &)
- [operator\(\)](#) (char iChar) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.194.1 Detailed Description

Store the parsed segment cabin code.

Definition at line 261 of file [InventoryParserHelper.hpp](#).

## 24.194.2 Constructor & Destructor Documentation

### 24.194.2.1 AIRINV::InventoryParserHelper::storeSegmentCabinCode::storeSegmentCabinCode (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 478 of file [InventoryParserHelper.cpp](#).

## 24.194.3 Member Function Documentation

### 24.194.3.1 void AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator() (char iChar) const

Actor Function (functor).

Definition at line 483 of file [InventoryParserHelper.cpp](#).

References [AIRINV::SegmentCabinStruct::\\_cabinCode](#), [AIRINV::SegmentStruct::\\_cabinList](#), [AIRINV::BookingClassStruct::\\_classCode](#), [AIRINV::FareFamilyStruct::\\_classList](#), [AIRINV::SegmentCabinStruct::\\_fareFamilies](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), [AIRINV::SegmentCabinStruct::\\_itFareFamily](#), [AIRINV::FlightDateStruct::\\_itSegment](#), and [AIRINV::FlightDateStruct::\\_itSegmentCabin](#).

## 24.194.4 Member Data Documentation

### 24.194.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), and [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#),

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AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(),
INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),
AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),
AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

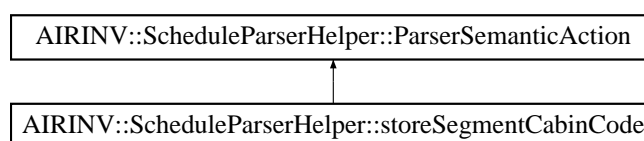
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The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.195 AIRINV::ScheduleParserHelper::storeSegmentCabinCode Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentCabinCode::



### Public Member Functions

- [storeSegmentCabinCode](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([char iChar](#)) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.195.1 Detailed Description

Store the parsed segment cabin code.

Definition at line 176 of file [ScheduleParserHelper.hpp](#).

### 24.195.2 Constructor & Destructor Documentation

#### 24.195.2.1 AIRINV::ScheduleParserHelper::storeSegmentCabinCode::storeSegmentCabinCode ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 333 of file [ScheduleParserHelper.cpp](#).

### 24.195.3 Member Function Documentation

#### 24.195.3.1 void AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 338 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::SegmentCabinStruct::\\_cabinCode](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), and [AIRINV::FlightPeriodStruct::\\_itSegmentCabin](#).

### 24.195.4 Member Data Documentation

#### 24.195.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

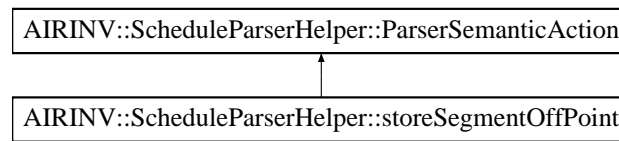
The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.196 AIRINV::ScheduleParserHelper::storeSegmentOffPoint Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>` Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentOffPoint::





## Public Member Functions

- [storeSegmentOffPoint](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

## Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.196.1 Detailed Description

Store the parsed segment off point.

Definition at line 168 of file [ScheduleParserHelper.hpp](#).

### 24.196.2 Constructor & Destructor Documentation

#### 24.196.2.1 AIRINV::ScheduleParserHelper::storeSegmentOffPoint::storeSegmentOffPoint ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 320 of file [ScheduleParserHelper.cpp](#).

### 24.196.3 Member Function Documentation

#### 24.196.3.1 void AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator() ([iterator\\_t](#) *iStr*, [iterator\\_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 325 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), [AIRINV::FlightPeriodStruct::\\_itSegment](#), and [AIRINV::SegmentStruct::\\_offPoint](#).

### 24.196.4 Member Data Documentation

#### 24.196.4.1 [FlightPeriodStruct](#)& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

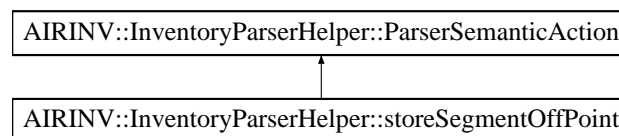
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIR-INV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIR-INV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.197 AIRINV::InventoryParserHelper::storeSegmentOffPoint Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeSegmentOffPoint:



### Public Member Functions

- [storeSegmentOffPoint](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.197.1 Detailed Description

Store the parsed segment off point.

Definition at line 253 of file [InventoryParserHelper.hpp](#).

## 24.197.2 Constructor & Destructor Documentation

### 24.197.2.1 AIRINV::InventoryParserHelper::storeSegmentOffPoint::storeSegmentOffPoint (FlightDateStruct & ioFlightDate)

Actor Constructor.

Definition at line 464 of file [InventoryParserHelper.cpp](#).

## 24.197.3 Member Function Documentation

### 24.197.3.1 void AIRINV::InventoryParserHelper::storeSegmentOffPoint::operator() (iterator\_t iStr, iterator\_t iStrEnd) const

Actor Function (functor).

Definition at line 469 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itSegment](#), and [AIRINV::SegmentStruct::\\_offPoint](#).

## 24.197.4 Member Data Documentation

### 24.197.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFCClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIRINV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#).

```

AIRINV::InventoryParserHelper::storeBoardingDate::operator(),
INV::InventoryParserHelper::storeOperatingFlightNumber::operator(),
INV::InventoryParserHelper::storeOperatingAirlineCode::operator(),
INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),
AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(),
INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),
AIRINV::InventoryParserHelper::storeFlightNumber::operator(),
INV::InventoryParserHelper::storeAirlineCode::operator(),
INV::InventoryParserHelper::storeSnapshotDate::operator().

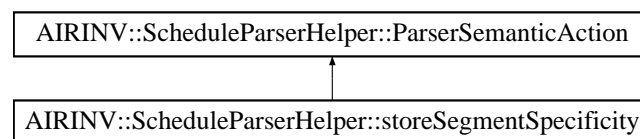
```

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.198 AIRINV::ScheduleParserHelper::storeSegmentSpecificity Struct Reference

`#include <airinv/command/ScheduleParserHelper.hpp>`Inheritance diagram for AIRINV::ScheduleParserHelper::storeSegmentSpecificity::



### Public Member Functions

- [storeSegmentSpecificity](#) ([FlightPeriodStruct](#) &)
- [void operator\(\)](#) ([char iChar](#)) const

### Public Attributes

- [FlightPeriodStruct](#) & [\\_flightPeriod](#)

### 24.198.1 Detailed Description

Store whether or not the segment definitions are specific. Specific means that there is a definition for each segment. General (not specific) means that a single definition defines all the segments.

Definition at line 152 of file [ScheduleParserHelper.hpp](#).

### 24.198.2 Constructor & Destructor Documentation

#### 24.198.2.1 AIRINV::ScheduleParserHelper::storeSegmentSpecificity::storeSegmentSpecificity ([FlightPeriodStruct](#) & *ioFlightPeriod*)

Actor Constructor.

Definition at line 281 of file [ScheduleParserHelper.cpp](#).

### 24.198.3 Member Function Documentation

#### 24.198.3.1 void AIRINV::ScheduleParserHelper::storeSegmentSpecificity::operator() (char *iChar*) const

Actor Function (functor).

Definition at line 286 of file [ScheduleParserHelper.cpp](#).

References [AIRINV::FlightPeriodStruct::\\_airportList](#), [AIRINV::FlightPeriodStruct::\\_airportOrderedList](#), [AIRINV::FlightPeriodStruct::\\_areSegmentDefinitionsSpecific](#), [AIRINV::ScheduleParserHelper::ParserSemanticAction::\\_flightPeriod](#), and [AIRINV::FlightPeriodStruct::buildSegments\(\)](#).

### 24.198.4 Member Data Documentation

#### 24.198.4.1 FlightPeriodStruct& AIRINV::ScheduleParserHelper::ParserSemanticAction::\_flightPeriod [inherited]

Actor Context.

Definition at line 33 of file [ScheduleParserHelper.hpp](#).

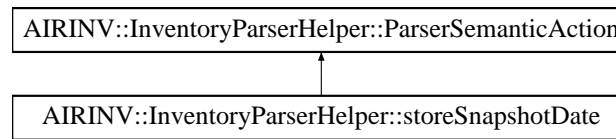
Referenced by [AIRINV::ScheduleParserHelper::doEndFlight::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeClasses::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeCapacity::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeElapsedTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOffTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDow::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeEnd::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::ScheduleParserHelper::storeFlightNumber::operator\(\)](#), and [AIRINV::ScheduleParserHelper::storeAirlineCode::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/ScheduleParserHelper.hpp](#)
- [airinv/command/ScheduleParserHelper.cpp](#)

## 24.199 AIRINV::InventoryParserHelper::storeSnapshotDate Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeSnapshotDate:



## Public Member Functions

- [storeSnapshotDate](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) ([iterator\\_t](#) iStr, [iterator\\_t](#) iStrEnd) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.199.1 Detailed Description

Store the snapshot date.

Definition at line 37 of file [InventoryParserHelper.hpp](#).

### 24.199.2 Constructor & Destructor Documentation

#### 24.199.2.1 AIRINV::InventoryParserHelper::storeSnapshotDate::storeSnapshotDate ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 32 of file [InventoryParserHelper.cpp](#).

### 24.199.3 Member Function Documentation

#### 24.199.3.1 void AIRINV::InventoryParserHelper::storeSnapshotDate::operator() ([iterator\\_t](#) *iStr*, [iterator\\_t](#) *iStrEnd*) const

Actor Function (functor).

Definition at line 37 of file [InventoryParserHelper.cpp](#).

References [AIRINV::FlightDateStruct::\\_flightDate](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), and [AIRINV::FlightDateStruct::getDate\(\)](#).

### 24.199.4 Member Data Documentation

#### 24.199.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

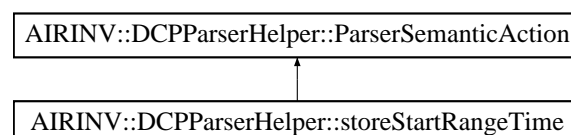
Referenced by AIRINV::InventoryParserHelper::doEndFlightDate::operator(), AIR-  
 INV::InventoryParserHelper::storeFClasses::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(),  
 AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIR-  
 INV::InventoryParserHelper::storeSegmentAvailability::operator(), AIR-  
 INV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(),  
 AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIR-  
 INV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(),  
 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIR-  
 INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),  
 AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNego::operator(),  
 AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),  
 AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIR-  
 INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),  
 AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),  
 AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIR-  
 INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),  
 AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),  
 AIRINV::InventoryParserHelper::storeYieldUpperRange::operator(), AIR-  
 INV::InventoryParserHelper::storeETB::operator(), AIRINV::InventoryParserHelper::storeACP::operator(),  
 AIRINV::InventoryParserHelper::storeGAV::operator(), AIRINV::InventoryParserHelper::storeNAV::operator(),  
 AIRINV::InventoryParserHelper::storeBookingCounter::operator(), AIR-  
 INV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),  
 AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-  
 INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),  
 AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),  
 AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-  
 INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-  
 INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-  
 INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),  
 AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-  
 INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),  
 AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-  
 INV::InventoryParserHelper::storeAirlineCode::operator(), and operator().

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.200 AIRINV::DCPParserHelper::storeStartRangeTime Struct Reference

#include <airinv/command/vault/DCPParserHelper.hpp> Inheritance diagram for AIRINV::DCPParserHelper::storeStartRangeTime:



**Public Member Functions**

- [storeStartRangeTime](#) (DCPRuleStruct &)
- void [operator\(\)](#) (boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const

**Public Attributes**

- DCPRuleStruct & [\\_DCPRule](#)

**24.200.1 Detailed Description**

Store the parsed start range time.

Definition at line 88 of file [DCPParserHelper.hpp](#).

**24.200.2 Constructor & Destructor Documentation****24.200.2.1 AIRINV::DCPParserHelper::storeStartRangeTime::storeStartRangeTime (DCPRuleStruct & ioDCPRule)**

Actor Constructor.

Definition at line 116 of file [DCPParserHelper.cpp](#).

**24.200.3 Member Function Documentation****24.200.3.1 void AIRINV::DCPParserHelper::storeStartRangeTime::operator() (boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type, boost::spirit::qi::unused\_type) const**

Actor Function (functor).

Definition at line 121 of file [DCPParserHelper.cpp](#).

References [AIRINV::DCPParserHelper::ParserSemanticAction::\\_DCPRule](#).

**24.200.4 Member Data Documentation****24.200.4.1 DCPRuleStruct& AIRINV::DCPParserHelper::ParserSemanticAction::\_DCPRule [inherited]**

Actor Context.

Definition at line 34 of file [DCPParserHelper.hpp](#).

Referenced by [AIRINV::DCPParserHelper::doEndDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeClass::operator\(\)](#), [AIRINV::DCPParserHelper::storeAirlineCode::operator\(\)](#), [AIRINV::DCPParserHelper::storeDCP::operator\(\)](#), [AIRINV::DCPParserHelper::storeMinimumStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeNonRefundable::operator\(\)](#), [AIRINV::DCPParserHelper::storeChangeFees::operator\(\)](#), [AIRINV::DCPParserHelper::storeSaturdayStay::operator\(\)](#), [AIRINV::DCPParserHelper::storeAdvancePurchase::operator\(\)](#), [AIRINV::DCPParserHelper::storeChannel::operator\(\)](#), [AIRINV::DCPParserHelper::storeCabinCode::operator\(\)](#), [AIRINV::DCPParserHelper::storePOS::operator\(\)](#), [AIRINV::DCPParserHelper::storeEndRangeTime::operator\(\)](#),



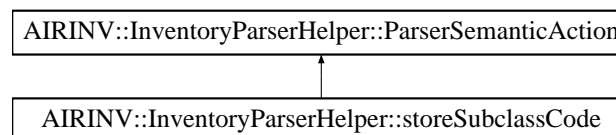
[operator\(\)](#), [AIRINV::DCPParserHelper::storeDateRangeEnd::operator\(\)](#), [AIR-INV::DCPParserHelper::storeDateRangeStart::operator\(\)](#), [AIRINV::DCPParserHelper::storeDestination::operator\(\)](#), [AIRINV::DCPParserHelper::storeOrigin::operator\(\)](#), and [AIRINV::DCPParserHelper::storeDCPID::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/vault/DCPParserHelper.hpp](#)
- [airinv/command/vault/DCPParserHelper.cpp](#)

## 24.201 AIRINV::InventoryParserHelper::storeSubclassCode Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeSubclassCode::



### Public Member Functions

- [storeSubclassCode](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (unsigned int iNumber) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.201.1 Detailed Description

Store the parsed sub-class code.

Definition at line 285 of file [InventoryParserHelper.hpp](#).

#### 24.201.2 Constructor & Destructor Documentation

##### 24.201.2.1 AIRINV::InventoryParserHelper::storeSubclassCode::storeSubclassCode ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 543 of file [InventoryParserHelper.cpp](#).

#### 24.201.3 Member Function Documentation

##### 24.201.3.1 void AIRINV::InventoryParserHelper::storeSubclassCode::operator() (unsigned int *iNumber*) const

Actor Function (functor).

Definition at line 548 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBookingClass](#), and [AIRINV::BookingClassStruct::\\_subclassCode](#).

## 24.201.4 Member Data Documentation

### 24.201.4.1 FlightDateStruct& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

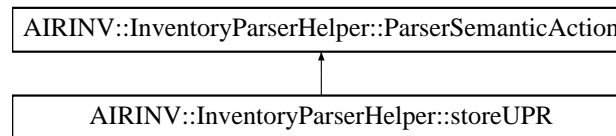
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [opera- tor\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentCabinBookingCounter::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeUPR::operator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), and [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.202 AIRINV::InventoryParserHelper::storeUPR Struct Reference

`#include <airinv/command/InventoryParserHelper.hpp>` Inheritance diagram for AIRINV::InventoryParserHelper::storeUPR:



### Public Member Functions

- [storeUPR](#) ([FlightDateStruct](#) &)
- [void operator\(\)](#) (double *iReal*) const

### Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

#### 24.202.1 Detailed Description

Store the parsed Unsold Protected (UPR).

Definition at line 173 of file [InventoryParserHelper.hpp](#).

#### 24.202.2 Constructor & Destructor Documentation

##### 24.202.2.1 AIRINV::InventoryParserHelper::storeUPR::storeUPR ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 306 of file [InventoryParserHelper.cpp](#).

#### 24.202.3 Member Function Documentation

##### 24.202.3.1 void AIRINV::InventoryParserHelper::storeUPR::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 311 of file [InventoryParserHelper.cpp](#).

References [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itLegCabin](#), and [AIRINV::LegCabinStruct::\\_upr](#).

## 24.202.4 Member Data Documentation

## 24.202.4.1 FlightDateStruct&amp; AIRINV::InventoryParserHelper::ParserSemanticAction::\_-flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

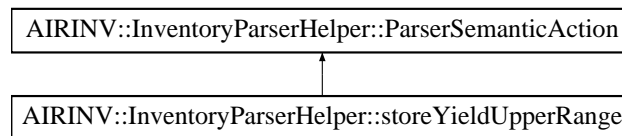
Referenced by [AIRINV::InventoryParserHelper::doEndFlightDate::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFClasses::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFamilyCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeRevenueAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentAvailability::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeClassAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfStaffBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeNbOfBkgs::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOverbooking::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNoShow::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNego::operator\(\)](#), [AIRINV::InventoryParserHelper::storeProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeCumulatedProtection::operator\(\)](#), [AIRINV::InventoryParserHelper::storeParentSubclassCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeParentClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSubclassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeClassCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSegmentOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeSeatIndex::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBucketAvailability::operator\(\)](#), [AIRINV::InventoryParserHelper::storeYieldUpperRange::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeETB::operator\(\)](#), [AIRINV::InventoryParserHelper::storeACP::operator\(\)](#), [AIRINV::InventoryParserHelper::storeGAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeNAV::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBookingCounter::operator\(\)](#), [op-erator\(\)](#), [AIRINV::InventoryParserHelper::storeAU::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeSaleableCapacity::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegCabinCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffTime::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOffDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeBoardingTime::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeBoardingDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingFlightNumber::operator\(\)](#), [AIRINV::InventoryParserHelper::storeOperatingAirlineCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeLegOffPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeFlightTypeCode::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightDate::operator\(\)](#), [AIRINV::InventoryParserHelper::storeFlightNumber::operator\(\)](#), [AIR-INV::InventoryParserHelper::storeAirlineCode::operator\(\)](#), [and](#) [AIR-INV::InventoryParserHelper::storeSnapshotDate::operator\(\)](#).

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.203 AIRINV::InventoryParserHelper::storeYieldUpperRange Struct Reference

```
#include <airinv/command/InventoryParserHelper.hpp> Inheritance diagram for AIRINV::InventoryParserHelper::storeYieldUpperRange::
```



## Public Member Functions

- [storeYieldUpperRange](#) ([FlightDateStruct](#) &)
- void [operator\(\)](#) (double *iReal*) const

## Public Attributes

- [FlightDateStruct](#) & [\\_flightDate](#)

### 24.203.1 Detailed Description

Store the parsed Yield Upper Range value.

Definition at line 221 of file [InventoryParserHelper.hpp](#).

### 24.203.2 Constructor & Destructor Documentation

#### 24.203.2.1 AIRINV::InventoryParserHelper::storeYieldUpperRange::storeYieldUpperRange ([FlightDateStruct](#) & *ioFlightDate*)

Actor Constructor.

Definition at line 372 of file [InventoryParserHelper.cpp](#).

### 24.203.3 Member Function Documentation

#### 24.203.3.1 void AIRINV::InventoryParserHelper::storeYieldUpperRange::operator() (double *iReal*) const

Actor Function (functor).

Definition at line 377 of file [InventoryParserHelper.cpp](#).

References [AIRINV::LegCabinStruct::\\_bucketList](#), [AIRINV::InventoryParserHelper::ParserSemanticAction::\\_flightDate](#), [AIRINV::FlightDateStruct::\\_itBucket](#), [AIRINV::FlightDateStruct::\\_itLegCabin](#), and [AIRINV::BucketStruct::\\_yieldRangeUpperValue](#).

### 24.203.4 Member Data Documentation

#### 24.203.4.1 [FlightDateStruct](#)& AIRINV::InventoryParserHelper::ParserSemanticAction::\_flightDate [inherited]

Actor Context.

Definition at line 33 of file [InventoryParserHelper.hpp](#).

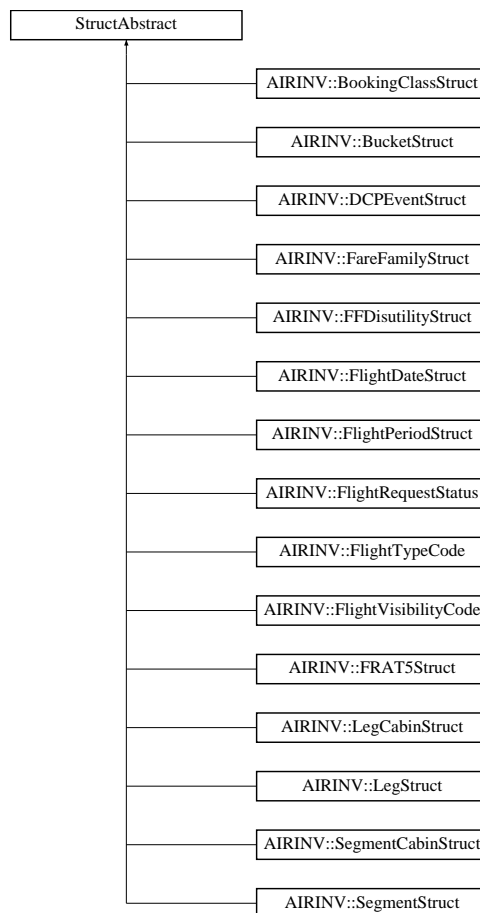
Referenced by AIRINV::InventoryParserHelper::doEndFlightDate::operator(), AIR-  
 INV::InventoryParserHelper::storeFClasses::operator(), AIRINV::InventoryParserHelper::storeFamilyCode::operator(),  
 AIRINV::InventoryParserHelper::storeRevenueAvailability::operator(), AIR-  
 INV::InventoryParserHelper::storeSegmentAvailability::operator(), AIR-  
 INV::InventoryParserHelper::storeClassAvailability::operator(), AIRINV::InventoryParserHelper::storeClassETB::operator(),  
 AIRINV::InventoryParserHelper::storeNbOfWLBkgs::operator(), AIR-  
 INV::InventoryParserHelper::storeNbOfStaffBkgs::operator(), AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs::operator(),  
 AIRINV::InventoryParserHelper::storeNbOfGroupBkgs::operator(), AIR-  
 INV::InventoryParserHelper::storeNbOfBkgs::operator(), AIRINV::InventoryParserHelper::storeOverbooking::operator(),  
 AIRINV::InventoryParserHelper::storeNoShow::operator(), AIRINV::InventoryParserHelper::storeNego::operator(),  
 AIRINV::InventoryParserHelper::storeProtection::operator(), AIRINV::InventoryParserHelper::storeCumulatedProtection::operator(),  
 AIRINV::InventoryParserHelper::storeParentSubclassCode::operator(), AIR-  
 INV::InventoryParserHelper::storeParentClassCode::operator(), AIRINV::InventoryParserHelper::storeSubclassCode::operator(),  
 AIRINV::InventoryParserHelper::storeClassCode::operator(), AIRINV::InventoryParserHelper::storeSegmentCabinBookingCode::operator(),  
 AIRINV::InventoryParserHelper::storeSegmentCabinCode::operator(), AIR-  
 INV::InventoryParserHelper::storeSegmentOffPoint::operator(), AIRINV::InventoryParserHelper::storeSegmentBoardingPoint::operator(),  
 AIRINV::InventoryParserHelper::storeSeatIndex::operator(), AIRINV::InventoryParserHelper::storeBucketAvailability::operator(),  
 operator(), AIRINV::InventoryParserHelper::storeETB::operator(), AIR-  
 INV::InventoryParserHelper::storeACP::operator(), AIRINV::InventoryParserHelper::storeGAV::operator(),  
 AIRINV::InventoryParserHelper::storeNAV::operator(), AIRINV::InventoryParserHelper::storeBookingCounter::operator(),  
 AIRINV::InventoryParserHelper::storeUPR::operator(), AIRINV::InventoryParserHelper::storeAU::operator(),  
 AIRINV::InventoryParserHelper::storeSaleableCapacity::operator(), AIR-  
 INV::InventoryParserHelper::storeLegCabinCode::operator(), AIRINV::InventoryParserHelper::storeOffTime::operator(),  
 AIRINV::InventoryParserHelper::storeOffDate::operator(), AIRINV::InventoryParserHelper::storeBoardingTime::operator(),  
 AIRINV::InventoryParserHelper::storeBoardingDate::operator(), AIR-  
 INV::InventoryParserHelper::storeOperatingFlightNumber::operator(), AIR-  
 INV::InventoryParserHelper::storeOperatingAirlineCode::operator(), AIR-  
 INV::InventoryParserHelper::storeLegOffPoint::operator(), AIRINV::InventoryParserHelper::storeLegBoardingPoint::operator(),  
 AIRINV::InventoryParserHelper::storeFlightVisibilityCode::operator(), AIR-  
 INV::InventoryParserHelper::storeFlightTypeCode::operator(), AIRINV::InventoryParserHelper::storeFlightDate::operator(),  
 AIRINV::InventoryParserHelper::storeFlightNumber::operator(), AIR-  
 INV::InventoryParserHelper::storeAirlineCode::operator(), and AIR-  
 INV::InventoryParserHelper::storeSnapshotDate::operator().

The documentation for this struct was generated from the following files:

- [airinv/command/InventoryParserHelper.hpp](#)
- [airinv/command/InventoryParserHelper.cpp](#)

## 24.204 StructAbstract Class Reference

Inheritance diagram for StructAbstract::

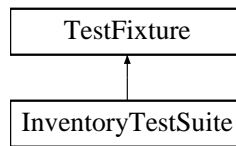


The documentation for this class was generated from the following files:

- [airinv/bom/SegmentStruct.hpp](#)
- [airinv/bom/FFDisutilityStruct.hpp](#)
- [airinv/bom/LegCabinStruct.hpp](#)
- [airinv/bom/LegStruct.hpp](#)
- [airinv/bom/DCPEventStruct.hpp](#)
- [airinv/FlightRequestStatus.hpp](#)
- [airinv/bom/FlightPeriodStruct.hpp](#)
- [airinv/bom/BucketStruct.hpp](#)
- [airinv/bom/FRAT5Struct.hpp](#)
- [airinv/basic/FlightTypeCode.hpp](#)
- [airinv/basic/FlightVisibilityCode.hpp](#)
- [airinv/bom/FlightDateStruct.hpp](#)
- [airinv/bom/FareFamilyStruct.hpp](#)
- [airinv/bom/BookingClassStruct.hpp](#)
- [airinv/bom/SegmentCabinStruct.hpp](#)

## 24.205 TestFixture Class Reference

Inheritance diagram for `TestFixture::`



The documentation for this class was generated from the following file:

- test/airinv/[InventoryTestSuite.hpp](#)

## 25 File Documentation

### 25.1 airinv/AIRINV\_Master\_Service.hpp File Reference

```
#include <string>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_file.hpp>
#include <stdair/stdair_service_types.hpp>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/stdair_maths_types.hpp>
#include <stdair/bom/BomIDTypes.hpp>
#include <airrac/AIRRAC_Types.hpp>
#include <sevmgr/SEVMGR_Types.hpp>
#include <airinv/AIRINV_Types.hpp>
```

#### Classes

- class [AIRINV::AIRINV\\_Master\\_Service](#)  
*Interface for the [AIRINV](#) Services.*

#### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)



## 25.2 AIRINV\_Master\_Service.hpp

```

00001 #ifndef __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP
00002 #define __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/stdair_file.hpp>
00012 #include <stdair/stdair_service_types.hpp>
00013 #include <stdair/stdair_inventory_types.hpp>
00014 #include <stdair/stdair_maths_types.hpp>
00015 #include <stdair/bom/BomIDTypes.hpp>
00016 // AirRAC
00017 #include <airrac/AIRRAC_Types.hpp>
00018 // SEvMgr
00019 #include <sevmgr/SEVMGR_Types.hpp>
00020 // AirInv
00021 #include <airinv/AIRINV_Types.hpp>
00022
00023
00025 namespace stdair {
00026     class BomRoot;
00027     class AirlineFeatureSet;
00028     class Inventory;
00029     class JSONString;
00030     class STDAIR_Service;
00031     struct BasLogParams;
00032     struct BasDBParams;
00033     struct SnapshotStruct;
00034     struct RMEventStruct;
00035     struct TravelSolutionStruct;
00036 }
00037
00038 namespace AIRINV {
00039
00041     class AIRINV_Master_ServiceContext;
00042
00043
00047     class AIRINV_Master_Service {
00048     public:
00049         // //////////////////////////////////
00065         AIRINV_Master_Service (const stdair::BasLogParams&,
00066                               const stdair::BasDBParams&);
00067
00079         AIRINV_Master_Service (const stdair::BasLogParams&);
00080
00096         AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T);
00097
00114         AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T,
00115                               SEVMGR::SEVMGR_ServicePtr_T);
00116
00125         void parseAndLoad (const InventoryFilePath&);
00126
00139         void parseAndLoad (const stdair::ScheduleFilePath&,
00140                           const stdair::ODFilePath&,
00141                           const stdair::FRAT5FilePath&,
00142                           const stdair::FFDisutilityFilePath&,
00143                           const AIRRAC::YieldFilePath&);
00144
00148         ~AIRINV_Master_Service();
00149
00154         void initSnapshotAndRMEvents (const stdair::Date_T&, const stdair::Date_T&);

```

```

00155
00156
00157 public:
00158     // //////////// Business Methods ////////////
00166     void buildSampleBom();
00167
00171     void clonePersistentBom ();
00172
00177     void buildComplementaryLinks (stdair::BomRoot&);
00178
00182     void calculateAvailability (stdair::TravelSolutionStruct&);
00183
00192     bool sell (const std::string& iSegmentDateKey, const stdair::ClassCode_T&,
00193               const stdair::PartySize_T&);
00194
00202     bool sell (const stdair::BookingClassID_T&, const stdair::PartySize_T&);
00203
00213     bool cancel (const std::string& iSegmentDateKey, const stdair::ClassCode_T&,
00214                 const stdair::PartySize_T&);
00215
00223     bool cancel (const stdair::BookingClassID_T&, const stdair::PartySize_T&);
00224
00228     void takeSnapshots (const stdair::SnapshotStruct&);
00229
00233     void optimise (const stdair::RMEventStruct&);
00234
00235
00236 public:
00237
00238     // //////////// Export support methods ////////////
00248     std::string jsonHandler (const stdair::JSONString&) const;
00249
00262     std::string jsonExportFlightDateList (const stdair::AirlineCode_T& iAirlineCo
00263 de = "all",
00263                                     const stdair::FlightNumber_T& iFlightNu
00264 mber = 0) const;
00264
00275     std::string jsonExportFlightDateObjects (const stdair::AirlineCode_T&,
00276                                             const stdair::FlightNumber_T&,
00277                                             const stdair::Date_T& iDepartureDate
00278 ) const;
00279
00280 public:
00281     // //////////// Display support methods ////////////
00295     std::string list (const stdair::AirlineCode_T& iAirlineCode = "all",
00296                     const stdair::FlightNumber_T& iFlightNumber = 0) const;
00297
00307     bool check (const stdair::AirlineCode_T&, const stdair::FlightNumber_T&,
00308               const stdair::Date_T& iDepartureDate) const;
00309
00317     std::string csvDisplay() const;
00318
00330     std::string csvDisplay (const stdair::AirlineCode_T&,
00331                             const stdair::FlightNumber_T&,
00332                             const stdair::Date_T& iDepartureDate) const;
00333
00334
00335 private:
00336     // ////////// Construction and Destruction helper methods //////////
00340     AIRINV_Master_Service();
00341
00345     AIRINV_Master_Service (const AIRINV_Master_Service&);
00346
00356     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&,
00357                                                     const stdair::BasDBParams&);
00358

```

```
00367     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&);
00368
00377     void addStdAirService (stdair::STDAIR_ServicePtr_T,
00378                           const bool iOwnStdairService);
00379
00385     void addSEVMGRService (SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR_ServicePtr,
00386                           const bool iOwnSEVMGRService);
00387
00388
00393     void initServiceContext();
00394
00401     void initSlaveAirinvService();
00402
00406     void finalise();
00407
00408
00409 private:
00410     // ////////// Service Context //////////
00414     AIRINV_Master_ServiceContext* _airinvMasterServiceContext;
00415 };
00416 }
00417 #endif // __AIRINV_SVC_AIRINV_MASTER_SERVICE_HPP
```

## 25.3 airinv/AIRINV\_Service.hpp File Reference

```
#include <string>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_service_types.hpp>
#include <stdair/basic/JSonCommand.hpp>
#include <stdair/bom/RMEventTypes.hpp>
#include <stdair/bom/BomIDTypes.hpp>
#include <airrac/AIRRAC_Types.hpp>
#include <sevmgr/SEVMGR_Types.hpp>
```

### Classes

- class [AIRINV::AIRINV\\_Service](#)  
*Interface for the [AIRINV](#) Services.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.4 AIRINV\_Service.hpp

```

00001 #ifndef __AIRINV_SVC_AIRINV_SERVICE_HPP
00002 #define __AIRINV_SVC_AIRINV_SERVICE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/stdair_service_types.hpp>
00012 #include <stdair/basic/JSONCommand.hpp>
00013 #include <stdair/bom/RMEventTypes.hpp>
00014 #include <stdair/bom/BomIDTypes.hpp>
00015 // AirRAC
00016 #include <airrac/AIRRAC_Types.hpp>
00017 // SEvMgr
00018 #include <sevmgr/SEVMGR_Types.hpp>
00019
00020 namespace stdair {
00021     class AirlineFeatureSet;
00022     class STDAIR_Service;
00023     class Inventory;
00024     class JSONString;
00025     struct TravelSolutionStruct;
00026     struct BasLogParams;
00027     struct BasDBParams;
00028 }
00029
00030 namespace AIRINV {
00031     class AIRINV_ServiceContext;
00032
00033     class AIRINV_Service {
00034     public:
00035         // ////////////////////////////////// Constructors and destructors //////////////////////////////////
00036         AIRINV_Service (const stdair::BasLogParams&, const stdair::BasDBParams&);
00037
00038         AIRINV_Service (const stdair::BasLogParams&);
00039
00040         AIRINV_Service (stdair::STDAIR_ServicePtr_T);
00041
00042         AIRINV_Service (stdair::STDAIR_ServicePtr_T,
00043                        SEVMGR::SEVMGR_ServicePtr_T);
00044
00045         void parseAndLoad (const AIRINV::InventoryFilePath&);
00046
00047         void parseAndLoad (const stdair::ScheduleFilePath&,
00048                            const stdair::ODFilePath&,
00049                            const stdair::FRAT5FilePath&,
00050                            const stdair::FFDisutilityFilePath&,
00051                            const AIRRAC::YieldFilePath&);
00052
00053         ~AIRINV_Service ();
00054
00055     public:
00056         // ////////////////////////////////// Business Methods //////////////////////////////////
00057         void buildSampleBom();
00058
00059         void clonePersistentBom ();
00060
00061         void buildComplementaryLinks (stdair::BomRoot&);
00062
00063     };
00064 }
00065

```

```

00171     stdair::RMEventList_T initRMEvents (const stdair::Date_T& iStartDate,
00172                                         const stdair::Date_T& iEndDate);
00173
00177     void calculateAvailability (stdair::TravelSolutionStruct&);
00178
00187     bool sell (const std::string& iSegmentDateKey, const stdair::ClassCode_T&,
00188               const stdair::PartySize_T&);
00189
00197     bool sell (const stdair::BookingClassID_T&, const stdair::PartySize_T&);
00198
00208     bool cancel (const std::string& iSegmentDateKey, const stdair::ClassCode_T&,
00209                 const stdair::PartySize_T&);
00210
00218     bool cancel (const stdair::BookingClassID_T&, const stdair::PartySize_T&);
00219
00223     void takeSnapshots (const stdair::AirlineCode_T&,
00224                         const stdair::DateTime_T&);
00225
00229     void optimise (const stdair::AirlineCode_T&,
00230                   const stdair::KeyDescription_T&,
00231                   const stdair::DateTime_T&);
00232
00233 public:
00234     // //////////// Export support methods ////////////
00235
00245     std::string jsonHandler (const stdair::JSONString&) const;
00246
00259     std::string jsonExportFlightDateList (const stdair::AirlineCode_T& iAirlineCo
00260 de = "all",
00261                                         const stdair::FlightNumber_T& iFlightNu
00262 mber = 0) const;
00271     std::string jsonExportFlightDateObjects (const stdair::AirlineCode_T&,
00272                                              const stdair::FlightNumber_T&,
00273                                              const stdair::Date_T& iDepartureDate
00274 ) const;
00275
00275 public:
00276     // //////////// Display support methods ////////////
00290     std::string list (const stdair::AirlineCode_T& iAirlineCode = "all",
00291                     const stdair::FlightNumber_T& iFlightNumber = 0) const;
00292
00302     bool check (const stdair::AirlineCode_T&, const stdair::FlightNumber_T&,
00303                const stdair::Date_T& iDepartureDate) const;
00304
00312     std::string csvDisplay() const;
00313
00325     std::string csvDisplay (const stdair::AirlineCode_T&,
00326                             const stdair::FlightNumber_T&,
00327                             const stdair::Date_T& iDepartureDate) const;
00328
00329
00330 private:
00331     // ////////// Construction and Destruction helper methods //////////
00335     AIRINV_Service ();
00336
00340     AIRINV_Service (const AIRINV_Service&);
00341
00351     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&,
00352                                                     const stdair::BasDBParams&);
00353
00362     stdair::STDAIR_ServicePtr_T initStdAirService (const stdair::BasLogParams&);
00363
00367     void initRMOLService();
00368
00372     void initAIRRACService();
00373
00377     void initSEVMGRService();

```

```
00378
00387     void addStdAirService (stdair::STDAIR_ServicePtr_T,
00388                           const bool iOwnStdairService);
00389
00395     void addSEVMGRService (SEVMGR::SEVMGR_ServicePtr_T,
00396                           const bool iOwnSEVMGRService);
00397
00402     void initServiceContext();
00403
00410     void initAirinvService();
00411
00415     void finalise();
00416
00417
00418     private:
00419         // ////////// Service Context //////////
00423         AIRINV_ServiceContext* _airinvServiceContext;
00424     };
00425 }
00426 #endif // __AIRINV_SVC_AIRINV_SERVICE_HPP
```

## 25.5 airinv/AIRINV\_Types.hpp File Reference

```
#include <map>
#include <boost/shared_ptr.hpp>
#include <stdair/stdair_exceptions.hpp>
#include <stdair/stdair_file.hpp>
#include <stdair/stdair_inventory_types.hpp>
```

### Classes

- class [AIRINV::InventoryFileParsingFailedException](#)
- class [AIRINV::ScheduleFileParsingFailedException](#)
- class [AIRINV::MissingPartnerFlightDateWithinScheduleFile](#)
- class [AIRINV::FRAT5FileParsingFailedException](#)
- class [AIRINV::FFDisutilityFileParsingFailedException](#)
- class [AIRINV::SegmentDateNotFoundException](#)
- class [AIRINV::InventoryInputFileNotFoundException](#)
- class [AIRINV::ScheduleInputFileNotFoundException](#)
- class [AIRINV::FRAT5InputFileNotFoundException](#)
- class [AIRINV::FFDisutilityInputFileNotFoundException](#)
- class [AIRINV::FlightDateDuplicationException](#)
- class [AIRINV::BookingException](#)
- class [AIRINV::InventoryNotFoundException](#)
- class [AIRINV::FlightDateNotFoundException](#)
- class [AIRINV::InventoryFilePath](#)

### Namespaces

- namespace [AIRINV](#)

### Typedefs

- typedef boost::shared\_ptr< AIRINV\_Service > [AIRINV::AIRINV\\_ServicePtr\\_T](#)
- typedef boost::shared\_ptr< AIRINV\_Master\_Service > [AIRINV::AIRINV\\_Master\\_ServicePtr\\_T](#)
- typedef std::map< const stdair::AirlineCode\_T, AIRINV\_ServicePtr\_T > [AIRINV::AIRINV\\_ServicePtr\\_Map\\_T](#)
- typedef std::map< const stdair::DTD\_T, double > [AIRINV::FRAT5Curve\\_T](#)



## 25.6 AIRINV\_Types.hpp

```

00001 #ifndef __AIRINV_AIRINV_TYPES_HPP
00002 #define __AIRINV_AIRINV_TYPES_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <map>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_exceptions.hpp>
00013 #include <stdair/stdair_file.hpp>
00014 #include <stdair/stdair_inventory_types.hpp>
00015
00016 namespace AIRINV {
00017
00018     // Forward declarations
00019     class AIRINV_Service;
00020     class AIRINV_Master_Service;
00021
00022
00023     // /////////// Exceptions ///////////
00024
00028     class InventoryFileParsingFailedException
00029     : public stdair::ParsingFileFailedException {
00030     public:
00034         InventoryFileParsingFailedException (const std::string& iWhat)
00035         : stdair::ParsingFileFailedException (iWhat) {}
00036     };
00037
00041     class ScheduleFileParsingFailedException
00042     : public stdair::ParsingFileFailedException {
00043     public:
00047         ScheduleFileParsingFailedException (const std::string& iWhat)
00048         : stdair::ParsingFileFailedException (iWhat) {}
00049     };
00050
00054     class MissingPartnerFlightDateWithinScheduleFile
00055     : public ScheduleFileParsingFailedException {
00056     public:
00060         MissingPartnerFlightDateWithinScheduleFile (const std::string& iWhat)
00061         : ScheduleFileParsingFailedException (iWhat) {}
00062     };
00063
00067     class FRAT5FileParsingFailedException
00068     : public stdair::ParsingFileFailedException {
00069     public:
00073         FRAT5FileParsingFailedException (const std::string& iWhat)
00074         : stdair::ParsingFileFailedException (iWhat) {}
00075     };
00076
00080     class FFDIsutilityFileParsingFailedException
00081     : public stdair::ParsingFileFailedException {
00082     public:
00086         FFDIsutilityFileParsingFailedException (const std::string& iWhat)
00087         : stdair::ParsingFileFailedException (iWhat) {}
00088     };
00089
00094     class SegmentDateNotFoundExpection : public stdair::ParserException {
00095     public:
00099         SegmentDateNotFoundExpection (const std::string& iWhat)
00100         : stdair::ParserException (iWhat) {}
00101     };
00102

```

```

00106     class InventoryInputFileNotFoundException : public stdair::
FileNotFoundException {
00107     public:
00111         InventoryInputFileNotFoundException (const std::string& iWhat)
00112             : stdair::FileNotFoundException (iWhat) {}
00113     };
00114
00118     class ScheduleInputFileNotFoundException : public stdair::
FileNotFoundException {
00119     public:
00123         ScheduleInputFileNotFoundException (const std::string& iWhat)
00124             : stdair::FileNotFoundException (iWhat) {}
00125     };
00126
00130     class FRAT5InputFileNotFoundException : public stdair::FileNotFoundException {
00131     public:
00135         FRAT5InputFileNotFoundException (const std::string& iWhat)
00136             : stdair::FileNotFoundException (iWhat) {}
00137     };
00138
00142     class FFDIsutilityInputFileNotFoundException : public stdair::
FileNotFoundException {
00143     public:
00147         FFDIsutilityInputFileNotFoundException (const std::string& iWhat)
00148             : stdair::FileNotFoundException (iWhat) {}
00149     };
00150
00154     class FlightDateDuplicationException : public stdair::
ObjectCreationDuplicationException {
00155     public:
00159         FlightDateDuplicationException (const std::string& iWhat)
00160             : stdair::ObjectCreationDuplicationException (iWhat) {}
00161     };
00162
00166     class BookingException : public stdair::RootException {
00167     };
00168
00172     class InventoryNotFoundException : public stdair::ObjectNotFoundException {
00173     public:
00177         InventoryNotFoundException (const std::string& iWhat)
00178             : stdair::ObjectNotFoundException (iWhat) {}
00179     };
00180
00184     class FlightDateNotFoundException : public stdair::ObjectNotFoundException {
00185     public:
00189         FlightDateNotFoundException (const std::string& iWhat)
00190             : stdair::ObjectNotFoundException (iWhat) {}
00191     };
00192
00193
00194     // ////////// Type definitions //////////
00198     class InventoryFilePath : public stdair::InputFilePath {
00199     public:
00203         explicit InventoryFilePath (const stdair::Filename_T& iFilename)
00204             : stdair::InputFilePath (iFilename) {}
00205     };
00206
00210     typedef boost::shared_ptr<AIRINV_Service> AIRINV_ServicePtr_T;
00211
00215     typedef boost::shared_ptr<AIRINV_Master_Service> AIRINV_Master_ServicePtr_T;
00216
00221     typedef std::map<const stdair::AirlineCode_T,
00222                     AIRINV_ServicePtr_T> AIRINV_ServicePtr_Map_T;
00223
00227     typedef std::map<const stdair::DTD_T, double> FRAT5Curve_T;
00228
00229 }

```

```
00230 #endif // __AIRINV_AIRINV_TYPES_HPP
```

## 25.7 airinv/basic/BasConst.cpp File Reference

```
#include <airinv/basic/BasConst_General.hpp>
#include <airinv/basic/BasConst_Curves.hpp>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
```

### Namespaces

- namespace [AIRINV](#)

### Variables

- const std::string [AIRINV::DEFAULT\\_AIRLINE\\_CODE](#) = "BA"
- const FRAT5Curve\_T [AIRINV::DEFAULT\\_PICKUP\\_FRAT5\\_CURVE](#)

## 25.8 BasConst.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 #include <airinv/basic/BasConst_General.hpp>
00005 #include <airinv/basic/BasConst_Curves.hpp>
00006 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00007
00008 namespace AIRINV {
00009
00011     const std::string DEFAULT_AIRLINE_CODE = "BA";
00012
00014     const FRAT5Curve_T DEFAULT_PICKUP_FRAT5_CURVE =
00015         DefaultMap::createPickupFRAT5Curve();
00016     FRAT5Curve_T DefaultMap::createPickupFRAT5Curve() {
00017         FRAT5Curve_T oCurve;
00018         oCurve[365] = 1.1; oCurve[63] = 1.2;
00019         oCurve[49] = 1.3; oCurve[35] = 1.4;
00020         oCurve[23] = 1.7; oCurve[16] = 2.0;
00021         oCurve[10] = 2.3; oCurve[5] = 2.44;
00022         oCurve[1] = 2.5; oCurve[0] = 2.5;
00023
00024         return oCurve;
00025     };
00026
00027 }
```

## 25.9 airinv/basic/BasConst\_AIRINV\_Service.hpp File Reference

```
#include <string>
```

### Namespaces

- namespace [AIRINV](#)

## 25.10 BasConst\_AIRINV\_Service.hpp

```
00001 #ifndef __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
00002 #define __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 #include <string>
00008
00009 namespace AIRINV {
00010
00012     extern const std::string DEFAULT_AIRLINE_CODE;
00013
00014 }
00015 #endif // __AIRINV_BAS_BASCONST_AIRINV_SERVICE_HPP
```

## 25.11 airinv/basic/BasConst\_Curves.hpp File Reference

```
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- struct [AIRINV::DefaultMap](#)

### Namespaces

- namespace [AIRINV](#)



## 25.12 BasConst\_Curves.hpp

```
00001 #ifndef __AIRINV_BAS_BASCONST_CURVES_HPP
00002 #define __AIRINV_BAS_BASCONST_CURVES_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // AIRINV
00008 #include <airinv/AIRINV_Types.hpp>
00009
00010 namespace AIRINV {
00011
00012     extern const FRAT5Curve_T DEFAULT_PICKUP_FRAT5_CURVE;
00013
00014     struct DefaultMap {
00015         static FRAT5Curve_T createPickupFRAT5Curve();
00016     };
00017 }
00018
00019 #endif // __AIRINV_BAS_BASCONST_CURVES_HPP
```

## 25.13 airinv/basic/BasConst\_General.hpp File Reference

### Namespaces

- namespace [AIRINV](#)

## 25.14 BasConst\_General.hpp

```
00001 #ifndef __AIRINV_BAS_BASCONST_GENERAL_HPP
00002 #define __AIRINV_BAS_BASCONST_GENERAL_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007
00008 namespace AIRINV {
00009
00010 }
00011 #endif // __AIRINV_BAS_BASCONST_GENERAL_HPP
```

## 25.15 airinv/basic/BasParserTypes.hpp File Reference

```
#include <string>
#include <boost/spirit/home/classic/core.hpp>
#include <boost/spirit/home/classic/attribute.hpp>
#include <boost/spirit/home/classic/utility/functor_parser.hpp>
#include <boost/spirit/home/classic/utility/loops.hpp>
#include <boost/spirit/home/classic/utility/chset.hpp>
#include <boost/spirit/home/classic/utility/confix.hpp>
#include <boost/spirit/home/classic/iterator/file_iterator.hpp>
#include <boost/spirit/home/classic/actor/push_back_actor.hpp>
#include <boost/spirit/home/classic/actor/assign_actor.hpp>
```

### Namespaces

- namespace [AIRINV](#)

### Typedefs

- typedef char [AIRINV::char\\_t](#)
- typedef boost::spirit::classic::file\_iterator< char\_t > [AIRINV::iterator\\_t](#)
- typedef boost::spirit::classic::scanner< iterator\_t > [AIRINV::scanner\\_t](#)
- typedef boost::spirit::classic::rule< scanner\_t > [AIRINV::rule\\_t](#)
- typedef boost::spirit::classic::int\_parser< unsigned int, 10, 1, 1 > [AIRINV::int1\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 2, 2 > [AIRINV::uint2\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 1, 2 > [AIRINV::uint1\\_2\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 1, 3 > [AIRINV::uint1\\_3\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 4, 4 > [AIRINV::uint4\\_p\\_t](#)
- typedef boost::spirit::classic::uint\_parser< unsigned int, 10, 1, 4 > [AIRINV::uint1\\_4\\_p\\_t](#)
- typedef boost::spirit::classic::chset< char\_t > [AIRINV::chset\\_t](#)
- typedef boost::spirit::classic::impl::loop\_traits< chset\_t, unsigned int, unsigned int >::type [AIRINV::repeat\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< uint2\_p\_t, unsigned int > [AIRINV::bounded2\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< uint1\_2\_p\_t, unsigned int > [AIRINV::bounded1\\_2\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< uint1\_3\_p\_t, unsigned int > [AIRINV::bounded1\\_3\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< uint4\_p\_t, unsigned int > [AIRINV::bounded4\\_p\\_t](#)
- typedef boost::spirit::classic::bounded< uint1\_4\_p\_t, unsigned int > [AIRINV::bounded1\\_4\\_p\\_t](#)

## 25.16 BasParserTypes.hpp

```

00001 #ifndef __AIRINV_BAS_BASCOMPARSERTYPES_HPP
00002 #define __AIRINV_BAS_BASCOMPARSERTYPES_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 // #define BOOST_SPIRIT_DEBUG
00011 #include <boost/spirit/home/classic/core.hpp>
00012 #include <boost/spirit/home/classic/attribute.hpp>
00013 #include <boost/spirit/home/classic/utility/functor_parser.hpp>
00014 #include <boost/spirit/home/classic/utility/loops.hpp>
00015 #include <boost/spirit/home/classic/utility/chset.hpp>
00016 #include <boost/spirit/home/classic/utility/confix.hpp>
00017 #include <boost/spirit/home/classic/iterator/file_iterator.hpp>
00018 #include <boost/spirit/home/classic/actor/push_back_actor.hpp>
00019 #include <boost/spirit/home/classic/actor/assign_actor.hpp>
00020
00021 namespace AIRINV {
00022
00023     // //////////////////////////////////////
00024     //
00025     // Definition of Basic Types
00026     //
00027     // //////////////////////////////////////
00028     // For a file, the parsing unit is the character (char). For a string,
00029     // it is a "char const *".
00030     // typedef char const* iterator_t;
00031     typedef char char_t;
00032
00033     // The types of iterator, scanner and rule are then derived from
00034     // the parsing unit.
00035     typedef boost::spirit::classic::file_iterator<char_t> iterator_t;
00036     typedef boost::spirit::classic::scanner<iterator_t> scanner_t;
00037     typedef boost::spirit::classic::rule<scanner_t> rule_t;
00038
00039     // //////////////////////////////////////
00040     //
00041     // Parser related types
00042     //
00043     // //////////////////////////////////////
00044     typedef boost::spirit::classic::int_parser<unsigned int, 10, 1, 1> int1_p_t;
00045
00046     typedef boost::spirit::classic::uint_parser<unsigned int, 10, 2, 2> uint2_p_t;
00047
00048     typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 2>
00049     uint1_2_p_t;
00050
00051     typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 3>
00052     uint1_3_p_t;
00053
00054     typedef boost::spirit::classic::uint_parser<unsigned int, 10, 4, 4> uint4_p_t;
00055
00056     typedef boost::spirit::classic::uint_parser<unsigned int, 10, 1, 4>
00057     uint1_4_p_t;
00058
00059     typedef boost::spirit::classic::chset<char_t> chset_t;
00060
00061     typedef boost::spirit::classic::impl::loop_traits<chset_t,
00062     unsigned int,
00063     unsigned int>::type repeat_p_t;
00064
00065     typedef boost::spirit::classic::bounded<uint2_p_t, unsigned int> bounded2_p_t;

```

```
00073     typedef boost::spirit::classic::bounded<uint1_2_p_t, unsigned int>
        bounded1_2_p_t;
00074     typedef boost::spirit::classic::bounded<uint1_3_p_t, unsigned int>
        bounded1_3_p_t;
00075     typedef boost::spirit::classic::bounded<uint4_p_t, unsigned int> bounded4_p_t;
00076     typedef boost::spirit::classic::bounded<uint1_4_p_t, unsigned int>
        bounded1_4_p_t;
00077 }
00078 #endif // __AIRINV_BAS_BASCOMPARSERTYPES_HPP
```

## 25.17 airinv/basic/FlightRequestStatus.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/FlightRequestStatus.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.18 FlightRequestStatus.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/FlightRequestStatus.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 const std::string FlightRequestStatus::_labels[LAST_VALUE] =
00017     { "OK", "Not Found", "Internal Error" };
00018
00019 const std::string FlightRequestStatus::_codeLabels[LAST_VALUE] =
00020     { "OK", "NF", "IE" };
00021
00022 // //////////////////////////////////////
00023 FlightRequestStatus::
00024 FlightRequestStatus (const EN_FlightRequestStatus& iFlightRequestStatus)
00025     : _code (iFlightRequestStatus) {
00026 }
00027
00028 // //////////////////////////////////////
00029 FlightRequestStatus::FlightRequestStatus (const std::string& iCode) {
00030     _code = LAST_VALUE;
00031
00032     if (iCode == "OK") {
00033         _code = OK;
00034     } else if (iCode == "NF") {
00035         _code = NOT_FOUND;
00036     } else if (iCode == "IE") {
00037         _code = INTERNAL_ERROR;
00038     }
00039
00040     if (_code == LAST_VALUE) {
00041         const std::string& lLabels = describeLabels();
00042         STDAIR_LOG_ERROR ("The flight request status '" << iCode
00043             << "' is not known. Known flight request status: "
00044             << lLabels);
00045         throw stdair::CodeConversionException ("The flight request status '"
00046             + iCode
00047             + "' is not known. Known flight request status: "
00048             + lLabels);
00049     }
00050 }
00051
00052 // //////////////////////////////////////
00053 const std::string& FlightRequestStatus::
00054 getLabel (const EN_FlightRequestStatus& iCode) {
00055     return _labels[iCode];
00056 }
00057
00058 // //////////////////////////////////////
00059 const std::string& FlightRequestStatus::
00060 getCodeLabel (const EN_FlightRequestStatus& iCode) {

```



```
00065     return _codeLabels[iCode];
00066 }
00067
00068 // //////////////////////////////////////
00069 std::string FlightRequestStatus::describeLabels() {
00070     std::ostringstream ostr;
00071     for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00072         if (idx != 0) {
00073             ostr << ", ";
00074         }
00075         ostr << _labels[idx];
00076     }
00077     return ostr.str();
00078 }
00079
00080 // //////////////////////////////////////
00081 FlightRequestStatus::EN_FlightRequestStatus FlightRequestStatus::
00082 getCode() const {
00083     return _code;
00084 }
00085
00086 // //////////////////////////////////////
00087 const std::string FlightRequestStatus::describe() const {
00088     std::ostringstream ostr;
00089     ostr << _labels[_code];
00090     return ostr.str();
00091 }
00092
00093 }
```

## 25.19 airinv/basic/FlightTypeCode.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/FlightTypeCode.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.20 FlightTypeCode.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/basic/FlightTypeCode.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 const std::string FlightTypeCode::_labels[LAST_VALUE] =
00017     { "Domestic", "International", "Ground Handling" };
00018
00019 const std::string FlightTypeCode::_codeLabels[LAST_VALUE] =
00020     { "DOM", "INT", "GRD" };
00021
00022
00023 // //////////////////////////////////////
00024 FlightTypeCode::FlightTypeCode (const EN_FlightTypeCode& iFlightTypeCode)
00025     : _code (iFlightTypeCode) {
00026 }
00027
00028 // //////////////////////////////////////
00029 FlightTypeCode::FlightTypeCode (const std::string& iCode) {
00030     _code = LAST_VALUE;
00031
00032     if (iCode == "DOM") {
00033         _code = DOMESTIC;
00034
00035     } else if (iCode == "INT") {
00036         _code = INTERNATIONAL;
00037
00038     } else if (iCode == "GRD") {
00039         _code = GROUND_HANDLING;
00040     }
00041
00042     if (_code == LAST_VALUE) {
00043         const std::string& lLabels = describeLabels();
00044         STDAIR_LOG_ERROR ("The flight type code '" << iCode
00045             << "' is not known. Known flight type codes: "
00046             << lLabels);
00047         throw stdair::CodeConversionException ("The flight type code '" + iCode
00048             + "' is not known. Known flight type
00049 codes: "
00050             + lLabels);
00051     }
00052
00053 // //////////////////////////////////////
00054 const std::string& FlightTypeCode::getLabel (const EN_FlightTypeCode& iCode) {
00055     return _labels[iCode];
00056 }
00057
00058 // //////////////////////////////////////
00059 const std::string& FlightTypeCode::
00060 getCodeLabel (const EN_FlightTypeCode& iCode) {
00061     return _codeLabels[iCode];
00062 }
00063
00064 // //////////////////////////////////////

```

```
00065 std::string FlightTypeCode::describeLabels() {
00066     std::ostringstream ostr;
00067     for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00068         if (idx != 0) {
00069             ostr << ", ";
00070         }
00071         ostr << _labels[idx];
00072     }
00073     return ostr.str();
00074 }
00075
00076 // //////////////////////////////////////
00077 FlightTypeCode::EN_FlightTypeCode FlightTypeCode::getCode() const {
00078     return _code;
00079 }
00080
00081 // //////////////////////////////////////
00082 const std::string FlightTypeCode::describe() const {
00083     std::ostringstream ostr;
00084     ostr << _labels[_code];
00085     return ostr.str();
00086 }
00087
00088 }
```

## 25.21 airinv/basic/FlightTypeCode.hpp File Reference

```
#include <string>
#include <stdair/basic/StructAbstract.hpp>
```

### Classes

- struct [AIRINV::FlightTypeCode](#)

### Namespaces

- namespace [AIRINV](#)

## 25.22 FlightTypeCode.hpp

```

00001 #ifndef __AIRINV_BAS_FLIGHTTYPECODE_HPP
00002 #define __AIRINV_BAS_FLIGHTTYPECODE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct FlightTypeCode : public stdair::StructAbstract {
00015     public:
00016         typedef enum {
00017             DOMESTIC = 0,
00018             INTERNATIONAL,
00019             GROUND_HANDLING,
00020             LAST_VALUE
00021         } EN_FlightTypeCode;
00022
00023         static const std::string& getLabel (const EN_FlightTypeCode&);
00024
00025         static const std::string& getCodeLabel (const EN_FlightTypeCode&);
00026
00027         static std::string describeLabels();
00028
00029         EN_FlightTypeCode getCode() const;
00030
00031         const std::string describe() const;
00032
00033     public:
00034         FlightTypeCode (const EN_FlightTypeCode&);
00035         FlightTypeCode (const std::string& iCode);
00036
00037     private:
00038         static const std::string _labels[LAST_VALUE];
00039         static const std::string _codeLabels[LAST_VALUE];
00040
00041     private:
00042         // ////////// Attributes //////////
00043         EN_FlightTypeCode _code;
00044     };
00045 }
00046
00047 #endif // __AIRINV_BAS_FLIGHTTYPECODE_HPP

```

## 25.23 airinv/basic/FlightVisibilityCode.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/FlightVisibilityCode.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.24 FlightVisibilityCode.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011 #include <airinv/basic/FlightVisibilityCode.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 const std::string FlightVisibilityCode::_labels[LAST_VALUE] =
00017     { "Normal", "Hidden", "Pseudo" };
00018
00019 const std::string FlightVisibilityCode::_codeLabels[LAST_VALUE] =
00020     { "NOR", "HID", "PSD" };
00021
00022
00023 // //////////////////////////////////////
00024 FlightVisibilityCode::
00025 FlightVisibilityCode (const EN_FlightVisibilityCode& iFlightVisibilityCode)
00026     : _code (iFlightVisibilityCode) {
00027 }
00028
00029 // //////////////////////////////////////
00030 FlightVisibilityCode::FlightVisibilityCode (const std::string& iCode) {
00031     _code = LAST_VALUE;
00032
00033     if (iCode == "NOR") {
00034         _code = NORMAL;
00035     } else if (iCode == "HID") {
00036         _code = HIDDEN;
00037     } else if (iCode == "PSD") {
00038         _code = PSEUDO;
00039     }
00040
00041 }
00042
00043 if (_code == LAST_VALUE) {
00044     const std::string& lLabels = describeLabels();
00045     STDAIR_LOG_ERROR ("The flight visibility code '" << iCode
00046         << "' is not known. Known flight visibility codes: "
00047         << lLabels);
00048     throw stdair::CodeConversionException ("The flight visibility code '"
00049         + iCode
00050         + "' is not known. Known flight visi
00051         bility codes: "
00052         + lLabels);
00053 }
00054
00055 // //////////////////////////////////////
00056 const std::string& FlightVisibilityCode::
00057 getLabel (const EN_FlightVisibilityCode& iCode) {
00058     return _labels[iCode];
00059 }
00060
00061 // //////////////////////////////////////
00062 const std::string& FlightVisibilityCode::
00063 getCodeLabel (const EN_FlightVisibilityCode& iCode) {
00064     return _codeLabels[iCode];

```



```
00065     }
00066
00067     // //////////////////////////////////////
00068     std::string FlightVisibilityCode::describeLabels() {
00069         std::ostringstream ostr;
00070         for (unsigned short idx = 0; idx != LAST_VALUE; ++idx) {
00071             if (idx != 0) {
00072                 ostr << ", ";
00073             }
00074             ostr << _labels[idx];
00075         }
00076         return ostr.str();
00077     }
00078
00079     // //////////////////////////////////////
00080     FlightVisibilityCode::EN_FlightVisibilityCode FlightVisibilityCode::
00081     getCode() const {
00082         return _code;
00083     }
00084
00085     // //////////////////////////////////////
00086     const std::string FlightVisibilityCode::describe() const {
00087         std::ostringstream ostr;
00088         ostr << _labels[_code];
00089         return ostr.str();
00090     }
00091
00092 }
```

## 25.25 airinv/basic/FlightVisibilityCode.hpp File Reference

```
#include <string>
#include <stdair/basic/StructAbstract.hpp>
```

### Classes

- struct [AIRINV::FlightVisibilityCode](#)

### Namespaces

- namespace [AIRINV](#)

## 25.26 FlightVisibilityCode.hpp

```

00001 #ifndef __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP
00002 #define __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct FlightVisibilityCode : public stdair::StructAbstract {
00015     public:
00016         typedef enum {
00017             NORMAL = 0,
00018             HIDDEN,
00019             PSEUDO,
00020             LAST_VALUE
00021         } EN_FlightVisibilityCode;
00022
00023         static const std::string& getLabel (const EN_FlightVisibilityCode&);
00024
00025         static const std::string& getCodeLabel (const EN_FlightVisibilityCode&);
00026
00027         static std::string describeLabels();
00028
00029         EN_FlightVisibilityCode getCode() const;
00030
00031         const std::string describe() const;
00032
00033     public:
00034         FlightVisibilityCode (const EN_FlightVisibilityCode&);
00035         FlightVisibilityCode (const std::string& iCode);
00036
00037     private:
00038         static const std::string _labels[LAST_VALUE];
00039         static const std::string _codeLabels[LAST_VALUE];
00040
00041     private:
00042         // ////////// Attributes //////////
00043         EN_FlightVisibilityCode _code;
00044     };
00045 }
00046
00047 #endif // __AIRINV_BAS_FLIGHTVISIBILITYCODE_HPP

```

**25.27   airinv/batches/airinv\_parseInventory.cpp File Reference**

## 25.28 airinv\_parseInventory.cpp

```

00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 // StdAir
00015 #include <stdair/basic/BasLogParams.hpp>
00016 #include <stdair/basic/BasDBParams.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 // AirInv
00019 #include <airinv/AIRINV_Master_Service.hpp>
00020 #include <airinv/config/airinv-paths.hpp>
00021
00022 // ////////// Constants //////////
00026 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinv_parseInventory.log");
00027
00031 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00032                                                         "/invdump01.csv");
00036 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00037                                                         "/schedule01.csv");
00041 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00042                                                    "/ond01.csv");
00046 const std::string K_AIRINV_DEFAULT_FRAT5_INPUT_FILENAME (STDAIR_SAMPLE_DIR
00047                                                         "/frat5.csv");
00051 const std::string K_AIRINV_DEFAULT_FF_DISUTILITY_INPUT_FILENAME (
00052     STDAIR_SAMPLE_DIR
00053     "/ffDisutility.csv");
00057 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00058                                                     "/yieldstore01.csv");
00059
00063 const std::string K_AIRINV_DEFAULT_SEGMENT_DATE_KEY ("SV,5,2010-03-11,KBP,JFK");
00064
00068 const stdair::ClassCode_T K_AIRINV_DEFAULT_CLASS_CODE ("Y");
00069
00073 const stdair::PartySize_T K_AIRINV_DEFAULT_PARTY_SIZE (2);
00074
00079 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00080
00085 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00086
00090 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00091
00092 // ////////// Parsing of Options & Configuration //////////
00093 // A helper function to simplify the main part.
00094 template<class T> std::ostream& operator<< (std::ostream& os,
00095                                           const std::vector<T>& v) {
00096     std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00097     return os;
00098 }
00099
00103 int readConfiguration (int argc, char* argv[],
00104                       bool& ioIsBuiltin, bool& ioIsForSchedule,
00105                       stdair::Filename_T& ioInventoryFilename,
00106                       stdair::Filename_T& ioScheduleInputFilename,
00107                       stdair::Filename_T& ioODInputFilename,
00108                       stdair::Filename_T& ioFRAT5Filename,
00109                       stdair::Filename_T& ioFFDisutilityFilename,
00110                       stdair::Filename_T& ioYieldInputFilename,

```

```

00111         std::string& ioSegmentDateKey,
00112         stdair::ClassCode_T& ioClassCode,
00113         stdair::PartySize_T& ioPartySize,
00114         std::string& ioLogFilename) {
00115     // Default for the built-in input
00116     ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00117
00118     // Default for the inventory or schedule option
00119     ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00120
00121     // Declare a group of options that will be allowed only on command line
00122     boost::program_options::options_description generic ("Generic options");
00123     generic.add_options()
00124         ("prefix", "print installation prefix")
00125         ("version,v", "print version string")
00126         ("help,h", "produce help message");
00127
00128     // Declare a group of options that will be allowed both on command
00129     // line and in config file
00130
00131     boost::program_options::options_description config ("Configuration");
00132     config.add_options()
00133         ("builtin,b",
00134          "The sample BOM tree can be either built-in or parsed from an input file. Th
00135          at latter must then be given with the -i/--inventory or -s/--schedule option")
00136         ("for_schedule,f",
00137          "The BOM tree should be built from a schedule file (instead of from an inven
00138          tory dump)")
00139         ("inventory,i",
00140          boost::program_options::value< std::string >(&ioInventoryFilename)->default_
00141          value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00142          "(CSV) input file for the inventory")
00143         ("schedule,s",
00144          boost::program_options::value< std::string >(&ioScheduleInputFilename)->defa
00145          ult_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00146          "(CSV) input file for the schedule")
00147         ("ond,o",
00148          boost::program_options::value< std::string >(&ioODInputFilename)->default_va
00149          lue(K_AIRINV_DEFAULT_OND_FILENAME),
00150          "(CSV) input file for the O&D")
00151         ("frat5,F",
00152          boost::program_options::value< std::string >(&ioFRAT5Filename)->default_valu
00153          e(K_AIRINV_DEFAULT_FRAT5_INPUT_FILENAME),
00154          "(CSV) input file for the FRAT5 Curve")
00155         ("ff_disutility,D",
00156          boost::program_options::value< std::string >(&ioFFDisutilityFilename)->defau
00157          lt_value(K_AIRINV_DEFAULT_FF_DISUTILITY_INPUT_FILENAME),
00158          "(CSV) input file for the FF disutility Curve")
00159         ("yield,y",
00160          boost::program_options::value< std::string >(&ioYieldInputFilename)->default
00161          _value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00162          "(CSV) input file for the yield")
00163         ("segment_date_key,k",
00164          boost::program_options::value< std::string >(&ioSegmentDateKey)->default_val
00165          ue(K_AIRINV_DEFAULT_SEGMENT_DATE_KEY),
00166          "Segment-date key")
00167         ("class_code,c",
00168          boost::program_options::value< stdair::ClassCode_T >(&ioClassCode)->default_
00169          value(K_AIRINV_DEFAULT_CLASS_CODE),
00170          "Class code")
00171         ("party_size,p",
00172          boost::program_options::value< stdair::PartySize_T >(&ioPartySize)->default_
00173          value(K_AIRINV_DEFAULT_PARTY_SIZE),
00174          "Party size")
00175         ("log,l",
00176          boost::program_options::value< std::string >(&ioLogFilename)->default_value(
00177          K_AIRINV_DEFAULT_LOG_FILENAME),

```

```

00166     "Filename for the logs")
00167     ;
00168
00169     // Hidden options, will be allowed both on command line and
00170     // in config file, but will not be shown to the user.
00171     boost::program_options::options_description hidden ("Hidden options");
00172     hidden.add_options()
00173         ("copyright",
00174          boost::program_options::value< std::vector<std::string> >(),
00175          "Show the copyright (license)");
00176
00177     boost::program_options::options_description cmdline_options;
00178     cmdline_options.add(generic).add(config).add(hidden);
00179
00180     boost::program_options::options_description config_file_options;
00181     config_file_options.add(config).add(hidden);
00182     boost::program_options::options_description visible ("Allowed options");
00183     visible.add(generic).add(config);
00184
00185     boost::program_options::positional_options_description p;
00186     p.add ("copyright", -1);
00187
00188     boost::program_options::variables_map vm;
00189     boost::program_options::
00190         store (boost::program_options::command_line_parser (argc, argv).
00191               options (cmdline_options).positional(p).run(), vm);
00192
00193     std::ifstream ifs ("airinv.cfg");
00194     boost::program_options::store (parse_config_file (ifs, config_file_options),
00195                                   vm);
00196     boost::program_options::notify (vm);
00197
00198     if (vm.count ("help")) {
00199         std::cout << visible << std::endl;
00200         return K_AIRINV_EARLY_RETURN_STATUS;
00201     }
00202
00203     if (vm.count ("version")) {
00204         std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00205         return K_AIRINV_EARLY_RETURN_STATUS;
00206     }
00207
00208     if (vm.count ("prefix")) {
00209         std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00210         return K_AIRINV_EARLY_RETURN_STATUS;
00211     }
00212
00213     if (vm.count ("builtin")) {
00214         ioIsBuiltin = true;
00215     }
00216     const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00217     std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00218
00219     if (vm.count ("for_schedule")) {
00220         ioIsForSchedule = true;
00221     }
00222     const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00223     std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00224               << std::endl;
00225
00226     if (ioIsBuiltin == false) {
00227
00228         if (ioIsForSchedule == false) {
00229             // The BOM tree should be built from parsing an inventory dump
00230             if (vm.count ("inventory")) {
00231                 ioInventoryFilename = vm["inventory"].as< std::string >();
00232                 std::cout << "Input inventory filename is: " << ioInventoryFilename

```

```

00233         << std::endl;
00234
00235     } else {
00236         // The built-in option is not selected. However, no inventory dump
00237         // file is specified
00238         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00239         << " -f/--for_schedule and -s/--schedule options "
00240         << "must be specified" << std::endl;
00241     }
00242
00243 } else {
00244     // The BOM tree should be built from parsing a schedule (and O&D) file
00245     if (vm.count ("schedule")) {
00246         ioScheduleInputFilename = vm["schedule"].as< std::string >();
00247         std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00248         << std::endl;
00249
00250     } else {
00251         // The built-in option is not selected. However, no schedule file
00252         // is specified
00253         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00254         << " -f/--for_schedule and -s/--schedule options "
00255         << "must be specified" << std::endl;
00256     }
00257
00258     if (vm.count ("ond")) {
00259         ioODInputFilename = vm["ond"].as< std::string >();
00260         std::cout << "Input O&D filename is: " << ioODInputFilename << std::endl;
00261     }
00262
00263     if (vm.count ("frat5")) {
00264         ioFRAT5Filename = vm["frat5"].as< std::string >();
00265         std::cout << "FRAT5 input filename is: " << ioFRAT5Filename << std::endl;
00266
00267     }
00268
00269     if (vm.count ("ff_disutility")) {
00270         ioFFDisutilityFilename = vm["ff_disutility"].as< std::string >();
00271         std::cout << "FF disutility input filename is: "
00272         << ioFFDisutilityFilename << std::endl;
00273
00274     }
00275
00276     if (vm.count ("yield")) {
00277         ioYieldInputFilename = vm["yield"].as< std::string >();
00278         std::cout << "Input yield filename is: "
00279         << ioYieldInputFilename << std::endl;
00280     }
00281 }
00282 }
00283
00284 if (vm.count ("log")) {
00285     ioLogFilename = vm["log"].as< std::string >();
00286     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00287 }
00288
00289 return 0;
00290 }
00291
00292
00293 // ////////// M A I N //////////
00294 int main (int argc, char* argv[]) {
00295
00296     // State whether the BOM tree should be built-in or parsed from an
00297     // input file

```



```

00298     bool isBuiltin;
00299     bool isForSchedule;
00300
00301     // Input file names
00302     stdair::Filename_T lInventoryFilename;
00303     stdair::Filename_T lScheduleInputFilename;
00304     stdair::Filename_T lODInputFilename;
00305     stdair::Filename_T lFRAT5InputFilename;
00306     stdair::Filename_T lFFDisutilityInputFilename;
00307     stdair::Filename_T lYieldInputFilename;
00308
00309     // Parameters for the sale
00310     std::string lSegmentDateKey;
00311     stdair::ClassCode_T lClassCode;
00312     stdair::PartySize_T lPartySize;
00313
00314     // Output log File
00315     stdair::Filename_T lLogFilename;
00316
00317     // Call the command-line option parser
00318     const int lOptionParserStatus =
00319         readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename,
00320                             lScheduleInputFilename, lODInputFilename,
00321                             lFRAT5InputFilename, lFFDisutilityInputFilename,
00322                             lYieldInputFilename, lSegmentDateKey, lClassCode,
00323                             lPartySize, lLogFilename);
00324
00325     if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00326         return 0;
00327     }
00328
00329     // Set the log parameters
00330     std::ofstream logOutputFile;
00331     // Open and clean the log outputfile
00332     logOutputFile.open (lLogFilename.c_str());
00333     logOutputFile.clear();
00334
00335     // Initialise the inventory service
00336     const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00337     AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00338
00339     // DEBUG
00340     STDAIR_LOG_DEBUG ("Welcome to AirInv");
00341
00342     // Check whether or not a (CSV) input file should be read
00343     if (isBuiltin == true) {
00344
00345         // Build the sample BOM tree for RMOl
00346         airinvService.buildSampleBom();
00347
00348         // Define a specific segment-date key for the sample BOM tree
00349         lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00350
00351     } else {
00352         if (isForSchedule == true) {
00353             // Build the BOM tree from parsing a schedule file (and O&D list)
00354             stdair::ScheduleFilePath lScheduleFilePath (lScheduleInputFilename);
00355             stdair::ODFilePath lODFilePath (lODInputFilename);
00356             stdair::FRAT5FilePath lFRAT5FilePath (lFRAT5InputFilename);
00357             stdair::FFDisutilityFilePath lFFDisutilityFilePath (lFFDisutilityInputFilename);
00358             stdair::YieldFilePath lYieldFilePath (lYieldInputFilename);
00359             airinvService.parseAndLoad (lScheduleFilePath, lODFilePath,
00360                                         lFRAT5FilePath, lFFDisutilityFilePath,
00361                                         lYieldFilePath);
00362
00363             if (lSegmentDateKey == K_AIRINV_DEFAULT_SEGMENT_DATE_KEY) {

```

```
00364         // Define a specific segment-date key for the schedule-based inventory
00365         lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00366     }
00367
00368     } else {
00369         // Build the BOM tree from parsing an inventory dump file
00370         AIRINV::InventoryFilePath lInventoryFilePath (lInventoryFilename);
00371         airinvService.parseAndLoad (lInventoryFilePath);
00372     }
00373 }
00374
00375 // Make a booking
00376 const bool isSellSuccessful =
00377     airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00378
00379 // DEBUG
00380 STDAIR_LOG_DEBUG ("Sale ('" << lSegmentDateKey << "', " << lClassCode << ": "
00381                 << lPartySize << ") successful? " << isSellSuccessful);
00382
00383 // DEBUG: Display the whole BOM tree
00384 const std::string& lCSVDump = airinvService.csvDisplay();
00385 STDAIR_LOG_DEBUG (lCSVDump);
00386
00387 // Close the Log outputFile
00388 logOutputFile.close();
00389
00390 /*
00391     Note: as that program is not intended to be run on a server in
00392     production, it is better not to catch the exceptions. When it
00393     happens (that an exception is throwned), that way we get the
00394     call stack.
00395 */
00396
00397 return 0;
00398 }
```

## **25.29   airinv/batches/parseInventory.cpp File Reference**

## 25.30 parseInventory.cpp

```

00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 // StdAir
00015 #include <stdair/basic/BasLogParams.hpp>
00016 #include <stdair/basic/BasDBParams.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 // AirInv
00019 #include <airinv/AIRINV_Master_Service.hpp>
00020 #include <airinv/config/airinv-paths.hpp>
00021
00022 // ////////// Constants //////////
00026 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("parseInventory.log");
00027
00031 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00032                                                         "/invdump01.csv");
00036 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00037                                                         "/schedule01.csv");
00041 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00042                                                    "/ond01.csv");
00043
00047 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00048                                                      "/yieldstore01.csv");
00049
00053 const std::string K_AIRINV_DEFAULT_SEGMENT_DATE_KEY ("SV,5,2010-03-11,KBP,JFK");
00054
00058 stdair::ClassCode_T K_AIRINV_DEFAULT_CLASS_CODE ("Y");
00059
00063 const stdair::PartySize_T K_AIRINV_DEFAULT_PARTY_SIZE (2);
00064
00069 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00070
00075 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00076
00080 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00081
00082 // ////////// Parsing of Options & Configuration //////////
00083 // A helper function to simplify the main part.
00084 template<class T> std::ostream& operator<< (std::ostream& os,
00085                                           const std::vector<T>& v) {
00086     std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00087     return os;
00088 }
00089
00093 int readConfiguration (int argc, char* argv[],
00094                       bool& ioIsBuiltin, bool& ioIsForSchedule,
00095                       stdair::Filename_T& ioInventoryFilename,
00096                       stdair::Filename_T& ioScheduleInputFilename,
00097                       stdair::Filename_T& ioODInputFilename,
00098                       stdair::Filename_T& ioYieldInputFilename,
00099                       std::string& ioSegmentDateKey,
00100                       stdair::ClassCode_T& ioClassCode,
00101                       stdair::PartySize_T& ioPartySize,
00102                       std::string& ioLogFilename) {
00103     // Default for the built-in input
00104     ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00105
00106     // Default for the inventory or schedule option

```

```

00107   ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00108
00109   // Declare a group of options that will be allowed only on command line
00110   boost::program_options::options_description generic ("Generic options");
00111   generic.add_options()
00112       ("prefix", "print installation prefix")
00113       ("version,v", "print version string")
00114       ("help,h", "produce help message");
00115
00116   // Declare a group of options that will be allowed both on command
00117   // line and in config file
00118
00119   boost::program_options::options_description config ("Configuration");
00120   config.add_options()
00121       ("builtin,b",
00122        "The sample BOM tree can be either built-in or parsed from an input file. Th
00123        at latter must then be given with the -i/--inventory or -s/--schedule option")
00124       ("for_schedule,f",
00125        "The BOM tree should be built from a schedule file (instead of from an inven
00126        tory dump)")
00127       ("inventory,i",
00128        boost::program_options::value< std::string >(&ioInventoryFilename)->default_
00129        value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00130        "(CSV) input file for the inventory")
00131       ("schedule,s",
00132        boost::program_options::value< std::string >(&ioScheduleInputFilename)->defa
00133        ult_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00134        "(CSV) input file for the schedule")
00135       ("ond,o",
00136        boost::program_options::value< std::string >(&ioODInputFilename)->default_va
00137        lue(K_AIRINV_DEFAULT_OND_FILENAME),
00138        "(CSV) input file for the O&D")
00139       ("yield,y",
00140        boost::program_options::value< std::string >(&ioYieldInputFilename)->default_
00141        _value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00142        "(CSV) input file for the yield")
00143       ("segment_date_key,k",
00144        boost::program_options::value< std::string >(&ioSegmentDateKey)->default_val
00145        ue(K_AIRINV_DEFAULT_SEGMENT_DATE_KEY),
00146        "Segment-date key")
00147       ("class_code,c",
00148        boost::program_options::value< stdair::ClassCode_T >(&ioClassCode)->default_
00149        value(K_AIRINV_DEFAULT_CLASS_CODE),
00150        "Class code")
00151       ("party_size,p",
00152        boost::program_options::value< stdair::PartySize_T >(&ioPartySize)->default_
00153        value(K_AIRINV_DEFAULT_PARTY_SIZE),
00154        "Party size")
00155       ("log,l",
00156        boost::program_options::value< std::string >(&ioLogFilename)->default_value(
00157        K_AIRINV_DEFAULT_LOG_FILENAME),
00158        "Filename for the logs")
00159   ;
00160
00161   // Hidden options, will be allowed both on command line and
00162   // in config file, but will not be shown to the user.
00163   boost::program_options::options_description hidden ("Hidden options");
00164   hidden.add_options()
00165       ("copyright",
00166        boost::program_options::value< std::vector<std::string> >(),
00167        "Show the copyright (license)");
00168
00169   boost::program_options::options_description cmdline_options;
00170   cmdline_options.add(generic).add(config).add(hidden);
00171
00172   boost::program_options::options_description config_file_options;
00173   config_file_options.add(config).add(hidden);

```

```

00164 boost::program_options::options_description visible ("Allowed options");
00165 visible.add(generic).add(config);
00166
00167 boost::program_options::positional_options_description p;
00168 p.add ("copyright", -1);
00169
00170 boost::program_options::variables_map vm;
00171 boost::program_options::
00172     store (boost::program_options::command_line_parser (argc, argv).
00173         options (cmdline_options).positional(p).run(), vm);
00174
00175 std::ifstream ifs ("airinv.cfg");
00176 boost::program_options::store (parse_config_file (ifs, config_file_options),
00177     vm);
00178 boost::program_options::notify (vm);
00179
00180 if (vm.count ("help")) {
00181     std::cout << visible << std::endl;
00182     return K_AIRINV_EARLY_RETURN_STATUS;
00183 }
00184
00185 if (vm.count ("version")) {
00186     std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00187     return K_AIRINV_EARLY_RETURN_STATUS;
00188 }
00189
00190 if (vm.count ("prefix")) {
00191     std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00192     return K_AIRINV_EARLY_RETURN_STATUS;
00193 }
00194
00195 if (vm.count ("builtin")) {
00196     ioIsBuiltin = true;
00197 }
00198 const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00199 std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00200
00201 if (vm.count ("for_schedule")) {
00202     ioIsForSchedule = true;
00203 }
00204 const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00205 std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00206     << std::endl;
00207
00208 if (ioIsBuiltin == false) {
00209
00210     if (ioIsForSchedule == false) {
00211         // The BOM tree should be built from parsing an inventory dump
00212         if (vm.count ("inventory")) {
00213             ioInventoryFilename = vm["inventory"].as< std::string >();
00214             std::cout << "Input inventory filename is: " << ioInventoryFilename
00215                 << std::endl;
00216         } else {
00217             // The built-in option is not selected. However, no inventory dump
00218             // file is specified
00219             std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00220                 << " -f/--for_schedule and -s/--schedule options "
00221                 << "must be specified" << std::endl;
00222         }
00223     }
00224
00225     } else {
00226         // The BOM tree should be built from parsing a schedule (and O&D) file
00227         if (vm.count ("schedule")) {
00228             ioScheduleInputFilename = vm["schedule"].as< std::string >();
00229             std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00230                 << std::endl;

```

```

00231
00232     } else {
00233         // The built-in option is not selected. However, no schedule file
00234         // is specified
00235         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00236                 << " -f/--for_schedule and -s/--schedule options "
00237                 << "must be specified" << std::endl;
00238     }
00239
00240     if (vm.count ("ond")) {
00241         ioODInputFilename = vm["ond"].as< std::string >();
00242         std::cout << "Input O&D filename is: " << ioODInputFilename << std::endl;
00243     }
00244
00245     if (vm.count ("yield")) {
00246         ioYieldInputFilename = vm["yield"].as< std::string >();
00247         std::cout << "Input yield filename is: "
00248                 << ioYieldInputFilename << std::endl;
00249     }
00250 }
00251 }
00252
00253 if (vm.count ("log")) {
00254     ioLogFilename = vm["log"].as< std::string >();
00255     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00256 }
00257
00258 return 0;
00259 }
00260
00261 // ////////////////////////////////// M A I N //////////////////////////////////
00262 int main (int argc, char* argv[]) {
00263
00264     // State whether the BOM tree should be built-in or parsed from an
00265     // input file
00266     bool isBuiltin;
00267     bool isForSchedule;
00268
00269     // Input file names
00270     stdair::Filename_T lInventoryFilename;
00271     stdair::Filename_T lScheduleInputFilename;
00272     stdair::Filename_T lODInputFilename;
00273     stdair::Filename_T lYieldInputFilename;
00274
00275     // Parameters for the sale
00276     std::string lSegmentDateKey;
00277     stdair::ClassCode_T lClassCode;
00278     stdair::PartySize_T lPartySize;
00279
00280     // Output log File
00281     stdair::Filename_T lLogFilename;
00282
00283     // Call the command-line option parser
00284     const int lOptionParserStatus =
00285         readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename,
00286                             lScheduleInputFilename, lODInputFilename,
00287                             lYieldInputFilename, lSegmentDateKey, lClassCode,
00288                             lPartySize, lLogFilename);
00289
00290     if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00291         return 0;
00292     }
00293
00294     // Set the log parameters
00295     std::ofstream logOutputFile;

```

```

00297 // Open and clean the log outputfile
00298 logOutputFile.open (lLogFilename.c_str());
00299 logOutputFile.clear();
00300
00301 // Initialise the inventory service
00302 const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00303 AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00304
00305 // DEBUG
00306 STDAIR_LOG_DEBUG ("Welcome to AirInv");
00307
00308 // Check whether or not a (CSV) input file should be read
00309 if (isBuiltin == true) {
00310
00311     // Build the sample BOM tree for RMOl
00312     airinvService.buildSampleBom();
00313
00314     // Define a specific segment-date key for the sample BOM tree
00315     //lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00316     lSegmentDateKey = "SQ,11,2010-02-08,SIN,BKK";
00317
00318 } else {
00319     if (isForSchedule == true) {
00320         // Build the BOM tree from parsing a schedule file (and O&D list)
00321         stdair::ScheduleFilePath lScheduleFilePath (lScheduleInputFilename);
00322         stdair::ODFilePath lODFilePath (lODInputFilename);
00323         AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00324         airinvService.parseAndLoad (lScheduleFilePath, lODFilePath,
00325                                     lYieldFilePath);
00326
00327         if (lSegmentDateKey == K_AIRINV_DEFAULT_SEGMENT_DATE_KEY) {
00328             // Define a specific segment-date key for the schedule-based inventory
00329             lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00330         }
00331
00332     } else {
00333         // Build the BOM tree from parsing an inventory dump file
00334         AIRINV::InventoryFilePath lInventoryFilePath (lInventoryFilename);
00335         airinvService.parseAndLoad (lInventoryFilePath);
00336     }
00337 }
00338
00339 // Make a booking
00340 const bool isSellSuccessful =
00341     airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00342
00343 // DEBUG
00344 STDAIR_LOG_DEBUG ("Sale ('" << lSegmentDateKey << "', " << lClassCode << ": "
00345                   << lPartySize << ") successful? " << isSellSuccessful);
00346
00347 // DEBUG: Display the whole BOM tree
00348 const std::string& lCSVDump = airinvService.csvDisplay();
00349 STDAIR_LOG_DEBUG (lCSVDump);
00350
00351 // Close the Log outputfile
00352 logOutputFile.close();
00353
00354 /*
00355     Note: as that program is not intended to be run on a server in
00356     production, it is better not to catch the exceptions. When it
00357     happens (that an exception is throwned), that way we get the
00358     call stack.
00359 */
00360
00361 return 0;
00362 }

```



## 25.31 airinv/bom/AirportList.hpp File Reference

```
#include <set>
#include <vector>
#include <stdair/stdair_basic_types.hpp>
```

### Namespaces

- namespace [AIRINV](#)

### Typedefs

- typedef std::set< stdair::AirportCode\_T > [AIRINV::AirportList\\_T](#)
- typedef std::vector< stdair::AirportCode\_T > [AIRINV::AirportOrderedList\\_T](#)

## 25.32 AirportList.hpp

```
00001 #ifndef __AIRINV_BOM_AIRPORTLIST_HPP
00002 #define __AIRINV_BOM_AIRPORTLIST_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <set>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_basic_types.hpp>
00012
00013 namespace AIRINV {
00014
00016     typedef std::set<stdair::AirportCode_T> AirportList_T;
00017     typedef std::vector<stdair::AirportCode_T> AirportOrderedList_T;
00018
00019 }
00020 #endif // __AIRINV_BOM_AIRPORTLIST_HPP
```

## 25.33 airinv/bom/BomAbstract.cpp File Reference

```
#include <airinv/bom/BomAbstract.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.34 BomAbstract.cpp

```
00001 // ////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////
00004 // AIRINV
00005 #include <airinv/bom/BomAbstract.hpp>
00006
00007 namespace AIRINV {
00008
00009 }
```

## 25.35 airinv/bom/BomAbstract.hpp File Reference

```
#include <iosfwd>
#include <string>
```

### Classes

- class [AIRINV::BomAbstract](#)

### Namespaces

- namespace [AIRINV](#)

### Functions

- `template<class charT , class traits >`  
`std::basic_ostream< charT, traits > & operator<< (std::basic_ostream< charT, traits > &ioOut,`  
`const AIRINV::BomAbstract &iBom)`
- `template<class charT , class traits >`  
`std::basic_istream< charT, traits > & operator>> (std::basic_istream< charT, traits > &ioIn, AIR-`  
`INV::BomAbstract &ioBom)`

#### 25.35.1 Function Documentation

**25.35.1.1** `template<class charT , class traits > std::basic_ostream<charT, traits>& operator<<`  
`(std::basic_ostream< charT, traits > & ioOut, const AIRINV::BomAbstract & iBom)`  
`\[inline\]`

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (p653) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line [56](#) of file [BomAbstract.hpp](#).

**25.35.1.2** `template<class charT , class traits > std::basic_istream<charT, traits>& operator>>`  
`(std::basic_istream< charT, traits > & ioIn, AIRINV::BomAbstract & ioBom)`  
`\[inline\]`

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (pp655-657) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line [84](#) of file [BomAbstract.hpp](#).

References [AIRINV::BomAbstract::fromStream\(\)](#).

## 25.36 BomAbstract.hpp

```

00001 #ifndef __AIRINV_BOM_BOMABSTRACT_HPP
00002 #define __AIRINV_BOM_BOMABSTRACT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <iosfwd>
00009 #include <string>
00010
00011 namespace AIRINV {
00012
00013     class BomAbstract {
00014     friend class FacBomAbstract;
00015     public:
00016         // ////////////////////////////////// Display support methods //////////////////////////////////
00017         virtual void toStream (std::ostream& ioOut) const = 0;
00021
00024         virtual void fromStream (std::istream& ioIn) = 0;
00025
00027         virtual std::string toString() const = 0;
00028
00031         virtual std::string describeKey() const = 0;
00032
00035         virtual std::string describeShortKey() const = 0;
00036
00037     protected:
00038         BomAbstract() {}
00041         BomAbstract(const BomAbstract&) {}
00042
00044         virtual ~BomAbstract() {}
00045     };
00046 }
00047
00053 template <class charT, class traits>
00054 inline
00055 std::basic_ostream<charT, traits>&
00056 operator<< (std::basic_ostream<charT, traits>& ioOut,
00057           const AIRINV::BomAbstract& iBom) {
00063     std::basic_ostringstream<charT,traits> ostr;
00064     ostr.copyfmt (ioOut);
00065     ostr.width (0);
00066
00067     // Fill string stream
00068     iBom.toStream (ostr);
00069
00070     // Print string stream
00071     ioOut << ostr.str();
00072
00073     return ioOut;
00074 }
00075
00081 template <class charT, class traits>
00082 inline
00083 std::basic_istream<charT, traits>&
00084 operator>> (std::basic_istream<charT, traits>& ioIn,
00085           AIRINV::BomAbstract& ioBom) {
00086     // Fill Bom object with input stream
00087     ioBom.fromStream (ioIn);
00088     return ioIn;
00089 }
00090
00091 #endif // __AIRINV_BOM_BOMABSTRACT_HPP

```

## 25.37 airinv/bom/BomRootHelper.cpp File Reference

```
#include <cassert>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <airinv/bom/BomRootHelper.hpp>
#include <airinv/bom/InventoryHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.38 BomRootHelper.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/BomManager.hpp>
00008 #include <stdair/bom/BomRoot.hpp>
00009 #include <stdair/bom/Inventory.hpp>
00010 // AIRINV
00011 #include <airinv/bom/BomRootHelper.hpp>
00012 #include <airinv/bom/InventoryHelper.hpp>
00013
00014 namespace AIRINV {
00015     // //////////////////////////////////////
00016     void BomRootHelper::fillFromRouting (const stdair::BomRoot& iBomRoot) {
00017         const stdair::InventoryList_T& lInventoryList =
00018             stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
00019
00020         // Browse the list of inventories and update each inventory.
00021         for (stdair::InventoryList_T::const_iterator itInventory =
00022             lInventoryList.begin();
00023             itInventory != lInventoryList.end(); ++itInventory) {
00024             const stdair::Inventory* lCurrentInventory_ptr = *itInventory;
00025             assert (lCurrentInventory_ptr != NULL);
00026             InventoryHelper::fillFromRouting (*lCurrentInventory_ptr);
00027         }
00028     }
00029
00030 }
```



## 25.39 airinv/bom/BomRootHelper.hpp File Reference

### Classes

- class [AIRINV::BomRootHelper](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.40 BomRootHelper.hpp

```
00001 #ifndef __AIRINV_BOM_BOMROOTHELPER_HPP
00002 #define __AIRINV_BOM_BOMROOTHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007
00008 // Forward declarations.
00009 namespace stdair {
00010     class BomRoot;
00011 }
00012
00013 namespace AIRINV {
00016     class BomRootHelper {
00017     public:
00018         // ////////// Business Methods //////////
00021         static void fillFromRouting (const stdair::BomRoot&);
00022     };
00023
00024 }
00025 #endif // __AIRINV_BOM_BOMROOTHELPER_HPP
```

## 25.41 airinv/bom/BookingClassHelper.cpp File Reference

```
#include <cassert>
#include <stdair/bom/BookingClass.hpp>
#include <airinv/bom/BookingClassHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.42 BookingClassHelper.cpp

```
00001 // ////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/BookingClass.hpp>
00008 // AIRINV
00009 #include <airinv/bom/BookingClassHelper.hpp>
00010
00011 namespace AIRINV {
00012
00013 }
```

## 25.43 airinv/bom/BookingClassHelper.hpp File Reference

### Classes

- class [AIRINV::BookingClassHelper](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.44 BookingClassHelper.hpp

```
00001 #ifndef __AIRINV_BOM_BOOKINGCLASSHELPER_HPP
00002 #define __AIRINV_BOM_BOOKINGCLASSHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 // #include <stdair/stdair_basic_types.hpp>
00009
00010 // Forward declarations
00011 namespace stdair {
00012     class BookingClass;
00013 }
00014
00015 namespace AIRINV {
00016
00019     class BookingClassHelper {
00020
00021     };
00022
00023 }
00024 #endif // __AIRINV_BOM_BOOKINGCLASSHELPER_HPP
```

## 25.45 airinv/bom/BookingClassStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <airinv/bom/BookingClassStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.46 BookingClassStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/BookingClass.hpp>
00010 // AirInv
00011 #include <airinv/bom/BookingClassStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 BookingClassStruct::BookingClassStruct () {
00017 }
00018
00019 // //////////////////////////////////////
00020 stdair::ClassCode_T BookingClassStruct::getFullSubclassCode() const {
00021     std::ostringstream ostr;
00022     ostr << _classCode << _subclassCode;
00023     return ostr.str();
00024 }
00025
00026 // //////////////////////////////////////
00027 const std::string BookingClassStruct::describe() const {
00028     std::ostringstream ostr;
00029     ostr << "          " << _classCode << _subclassCode
00030         << " (" << _parentClassCode << _parentSubclassCode << ")"
00031         << ", " << _cumulatedProtection << ":" << _protection
00032         << ", " << _nego
00033         << ", " << _noShowPercentage << ":" << _overbookingPercentage
00034         << ", " << _nbOfBookings << ":" << _nbOfGroupBookings
00035         << ":" << _nbOfPendingGroupBookings << ":" << _nbOfStaffBookings
00036         << ":" << _nbOfWLBookings << ":" << _etb
00037         << ", " << _netClassAvailability << ":" << _segmentAvailability
00038         << ":" << _netRevenueAvailability
00039         << std::endl;
00040     return ostr.str();
00041 }
00042
00043 // //////////////////////////////////////
00044 void BookingClassStruct::fill (stdair::BookingClass& ioBookingClass) const {
00045     // Set the Yield Range Upper Value
00046     // ioBookingClass.setYieldRangeValue (_yieldRangeUpperValue);
00047
00048     // Set the Availability
00049     // ioBookingClass.setAvailability (_availability);
00050
00051     // Set the number of seats
00052     // ioBookingClass.setNbOfSeats (_nbOfSeats);
00053
00054     // Set the Seat Index
00055     // ioBookingClass.setSeatIndex (_seatIndex);
00056 }
00057
00058 }

```



## 25.47 airinv/bom/BookingClassStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- struct [AIRINV::BookingClassStruct](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

### Typedefs

- typedef std::vector< BookingClassStruct > [AIRINV::BookingClassStructList\\_T](#)

## 25.48 BookingClassStruct.hpp

```

00001 #ifndef __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP
00002 #define __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/AIRINV_Types.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BookingClass;
00019 }
00020
00021 namespace AIRINV {
00022
00023     struct BookingClassStruct : public stdair::StructAbstract {
00024         // Attributes
00025         stdair::ClassCode_T _classCode;
00026         stdair::SubclassCode_T _subclassCode;
00027         stdair::ClassCode_T _parentClassCode;
00028         stdair::SubclassCode_T _parentSubclassCode;
00029         stdair::AuthorizationLevel_T _cumulatedProtection;
00030         stdair::AuthorizationLevel_T _protection;
00031         stdair::NbOfSeats_T _nego;
00032         stdair::OverbookingRate_T _noShowPercentage;
00033         stdair::OverbookingRate_T _overbookingPercentage;
00034         stdair::NbOfBookings_T _nbOfBookings;
00035         stdair::NbOfBookings_T _nbOfGroupBookings;
00036         stdair::NbOfBookings_T _nbOfPendingGroupBookings;
00037         stdair::NbOfBookings_T _nbOfStaffBookings;
00038         stdair::NbOfBookings_T _nbOfWLBookings;
00039         stdair::NbOfBookings_T _etb;
00040         stdair::Availability_T _netClassAvailability;
00041         stdair::Availability_T _segmentAvailability;
00042         stdair::Availability_T _netRevenueAvailability;
00043
00044         stdair::ClassCode_T getFullSubclassCode() const;
00045
00046         void fill (stdair::BookingClass&) const;
00047
00048         const std::string describe() const;
00049
00050         BookingClassStruct ();
00051     };
00052
00053     typedef std::vector<BookingClassStruct> BookingClassStructList_T;
00054
00055 }
00056 #endif // __AIRINV_BOM_BOOKINGCLASSSTRUCT_HPP

```

## 25.49 airinv/bom/BucketStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/bom/Bucket.hpp>
#include <airinv/bom/BucketStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.50 BucketStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/Bucket.hpp>
00010 // AirInv
00011 #include <airinv/bom/BucketStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 BucketStruct::BucketStruct() : _nbOfSeats (0.0) {
00017 }
00018
00019 // //////////////////////////////////////
00020 const std::string BucketStruct::describe() const {
00021     std::ostringstream ostr;
00022     ostr << "          " << _yieldRangeUpperValue << ":" << _availability
00023         << ":" << _nbOfSeats << ":" << _seatIndex
00024         << std::endl;
00025     return ostr.str();
00026 }
00027
00028 // //////////////////////////////////////
00029 void BucketStruct::fill (stdair::Bucket& ioBucket) const {
00030     // Set the Yield Range Upper Value
00031     ioBucket.setYieldRangeUpperValue (_yieldRangeUpperValue);
00032
00033     // Set the Availability
00034     ioBucket.setAvailability (_availability);
00035
00036     // Set the number of sold seats
00037     ioBucket.setSoldSeats (_nbOfSeats);
00038 }
00039
00040 }

```

## 25.51 airinv/bom/BucketStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- struct [AIRINV::BucketStruct](#)  
*Utility Structure for the parsing of Bucket structures.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

### Typedefs

- typedef std::vector< BucketStruct > [AIRINV::BucketStructList\\_T](#)

## 25.52 BucketStruct.hpp

```

00001 #ifndef __AIRINV_BOM_BUCKETSTRUCT_HPP
00002 #define __AIRINV_BOM_BUCKETSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/AIRINV_Types.hpp>
00015
00016 namespace stdair {
00017     class Bucket;
00018 }
00019
00020 namespace AIRINV {
00021
00022     00026 struct BucketStruct : public stdair::StructAbstract {
00027         // Attributes
00028         stdair::Yield_T _yieldRangeUpperValue;
00029         stdair::CabinCapacity_T _availability;
00030         stdair::NbOfSeats_T _nbOfSeats;
00031         stdair::SeatIndex_T _seatIndex;
00032
00033         void fill (stdair::Bucket& const);
00034
00035         const std::string describe() const;
00036
00037         BucketStruct();
00038     };
00039
00040     typedef std::vector<BucketStruct> BucketStructList_T;
00041
00042 }
00043
00044 #endif // __AIRINV_BOM_BUCKETSTRUCT_HPP

```

## 25.53 airinv/bom/DCPEventStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <vector>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/DCPEventStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.54 DCPEventStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 #include <vector>
00008 // StdAir
00009 #include <stdair/basic/BasConst_General.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/bom/DCPEventStruct.hpp>
00014
00015 namespace AIRINV {
00016
00017 // //////////////////////////////////////
00018 DCPEventStruct::DCPEventStruct ()
00019 : _origin(""),
00020   _destination(""),
00021   _dateRangeStart(stdair::DEFAULT_DATE),
00022   _dateRangeEnd(stdair::DEFAULT_DATE),
00023   _timeRangeStart(stdair::DEFAULT_EPSILON_DURATION),
00024   _timeRangeEnd(stdair::DEFAULT_EPSILON_DURATION),
00025   _cabinCode(""),
00026   _pos(""),
00027   _advancePurchase(0),
00028   _saturdayStay("T"),
00029   _changeFees("T"),
00030   _nonRefundable("T"),
00031   _minimumStay(0),
00032   _DCP(0),
00033   _airlineCode(""),
00034   _classCode("") {
00035 }
00036
00037 // //////////////////////////////////////
00038 stdair::Date_T DCPEventStruct::getDate() const {
00039     _itYear.check(); _itMonth.check(); _itDay.check();
00040     return stdair::Date_T (_itYear._value, _itMonth._value, _itDay._value);
00041 }
00042
00043 // //////////////////////////////////////
00044 stdair::Duration_T DCPEventStruct::getTime() const {
00045     _itHours.check(); _itMinutes.check(); _itSeconds.check();
00046     return boost::posix_time::hours (_itHours._value)
00047         + boost::posix_time::minutes (_itMinutes._value)
00048         + boost::posix_time::seconds (_itSeconds._value);
00049 }
00050
00051
00052 // //////////////////////////////////////
00053 const std::string DCPEventStruct::describe () const {
00054     std::ostringstream ostr;
00055     ostr << "DCPEvent: "
00056         << _origin << "-" << _destination
00057         << ", POS(" << _pos << " ), ["
00058         << _dateRangeStart << "/" << _dateRangeEnd << "]" - ["
00059         << boost::posix_time::to_simple_string(_timeRangeStart) << "/"
00060         << boost::posix_time::to_simple_string(_timeRangeEnd) << "]\n"
00061         << "-Cabin code- " << _cabinCode << "\n"
00062         << "-Channel- " << _channel << "\n"
00063         << "-Conditions- " << _saturdayStay << ", " << _changeFees << ", "
00064         << _nonRefundable << ", " << _advancePurchase << ", "
00065         << _minimumStay << "\n"

```



```

00066         << "-DCP-          " << _DCP << "\n          ";
00067     assert (_airlineCodeList.size() == _classCodeList.size());
00068     stdair::ClassList_StringList_T::const_iterator lItCurrentClassCode =
00069         _classCodeList.begin();
00070     stdair::AirlineCode_T lAirlineCode;
00071     std::string lClassCode;
00072     for (stdair::AirlineCodeList_T::const_iterator lItCurrentAirlineCode =
00073         _airlineCodeList.begin();
00074         lItCurrentAirlineCode != _airlineCodeList.end();
00075         lItCurrentAirlineCode++) {
00076         lAirlineCode = *lItCurrentAirlineCode;
00077         lClassCode = *lItCurrentClassCode;
00078         ostr << lAirlineCode << ", " << lClassCode;
00079         ostr << "          ";
00080         lItCurrentClassCode++;
00081     }
00082     ostr << std::endl;
00083     return ostr.str();
00084 }
00085
00086 // //////////////////////////////////////
00087 const stdair::AirlineCode_T& DCPEventStruct::getFirstAirlineCode () const {
00088     assert (_airlineCodeList.size() > 0);
00089     stdair::AirlineCodeList_T::const_iterator itFirstAirlineCode =
00090         _airlineCodeList.begin();
00091     return *itFirstAirlineCode;
00092 }
00093
00094 // //////////////////////////////////////
00095 void DCPEventStruct::beginAirline () {
00096     _itCurrentAirlineCode = _airlineCodeList.begin();
00097 }
00098
00099 // //////////////////////////////////////
00100 bool DCPEventStruct::hasNotReachedEndAirline () const {
00101     bool result = (_itCurrentAirlineCode != _airlineCodeList.end());
00102     return result;
00103 }
00104
00105 // //////////////////////////////////////
00106 stdair::AirlineCode_T DCPEventStruct::getCurrentAirlineCode () const {
00107     assert (_itCurrentAirlineCode != _airlineCodeList.end());
00108     return (*_itCurrentAirlineCode);
00109 }
00110
00111 // //////////////////////////////////////
00112 void DCPEventStruct::iterateAirline () {
00113     if (_itCurrentAirlineCode != _classCodeList.end()) {
00114         _itCurrentAirlineCode++;
00115     }
00116 }
00117
00118 // //////////////////////////////////////
00119 const std::string& DCPEventStruct::getFirstClassCode () const {
00120     assert (_classCodeList.size() > 0);
00121     stdair::ClassList_StringList_T::const_iterator itFirstClassCode =
00122         _classCodeList.begin();
00123     return *itFirstClassCode;
00124 }
00125
00126 // //////////////////////////////////////
00127 void DCPEventStruct::beginClassCode () {
00128     _itCurrentClassCode = _classCodeList.begin();
00129 }
00130
00131 // //////////////////////////////////////
00132 bool DCPEventStruct::hasNotReachedEndClassCode () const {

```

```
00133     bool result = (_itCurrentClassCode != _classCodeList.end());
00134     return result;
00135 }
00136
00137 // //////////////////////////////////////
00138 std::string DCPEventStruct::getCurrentClassCode () const {
00139     assert (_itCurrentClassCode != _classCodeList.end());
00140     return (*_itCurrentClassCode);
00141 }
00142
00143 // //////////////////////////////////////
00144 void DCPEventStruct::iterateClassCode () {
00145     if (_itCurrentClassCode != _classCodeList.end()) {
00146         _itCurrentClassCode++;
00147     }
00148 }
00149 }
00150
00151 }
00152
```

## 25.55 airinv/bom/DCPEventStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_demand_types.hpp>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <stdair/basic/BasParserTypes.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- struct [AIRINV::DCPEventStruct](#)

### Namespaces

- namespace [AIRINV](#)

## 25.56 DCPEventStruct.hpp

```

00001 #ifndef __AIRINV_BOM_DCPEVENTSTRUCT_HPP
00002 #define __AIRINV_BOM_DCPEVENTSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_demand_types.hpp>
00012 #include <stdair/stdair_inventory_types.hpp>
00013 #include <stdair/basic/StructAbstract.hpp>
00014 #include <stdair/basic/BasParserTypes.hpp>
00015 // AirInv
00016 #include <airinv/AIRINV_Types.hpp>
00017
00018 namespace AIRINV {
00019
00021     struct DCPEventStruct : public stdair::StructAbstract {
00022     public:
00023
00025         DCPEventStruct ();
00026
00028         stdair::Date_T getDate() const;
00029
00031         stdair::Duration_T getTime() const;
00032
00034         const std::string describe() const;
00035
00037         const unsigned int getAirlineListSize () const {
00038             return _airlineCodeList.size();
00039         }
00040
00042         const unsigned int getClassCodeListSize () const {
00043             return _classCodeList.size();
00044         }
00045
00047         const stdair::AirlineCode_T& getFirstAirlineCode () const;
00048
00052         void beginAirline ();
00053
00056         bool hasNotReachedEndAirline () const;
00057
00059         stdair::AirlineCode_T getCurrentAirlineCode () const;
00060
00063         void iterateAirline ();
00064
00066         const std::string& getFirstClassCode () const;
00067
00071         void beginClassCode ();
00072
00075         bool hasNotReachedEndClassCode () const;
00076
00078         std::string getCurrentClassCode () const;
00079
00082         void iterateClassCode ();
00083
00084     public:
00085         // ////////////////////////////////// Attributes //////////////////////////////////
00087         stdair::year_t _itYear;
00088         stdair::month_t _itMonth;
00089         stdair::day_t _itDay;
00090
00092         //long _itHours;

```

```
00093     stdair::hour_t _itHours;
00094     stdair::minute_t _itMinutes;
00095     stdair::second_t _itSeconds;
00096
00097     stdair::AirlineCodeList_T::iterator _itCurrentAirlineCode;
00098
00099     stdair::ClassList_StringList_T::iterator _itCurrentClassCode;
00100
00101     stdair::AirportCode_T _origin;
00102
00103     stdair::AirportCode_T _destination;
00104
00105     stdair::Date_T _dateRangeStart;
00106
00107     stdair::Date_T _dateRangeEnd;
00108
00109     stdair::Duration_T _timeRangeStart;
00110
00111     stdair::Duration_T _timeRangeEnd;
00112
00113     stdair::CabinCode_T _cabinCode;
00114
00115     stdair::CityCode_T _pos;
00116
00117     stdair::ChannelLabel_T _channel;
00118
00119     stdair::DayDuration_T _advancePurchase;
00120
00121     stdair::SaturdayStay_T _saturdayStay;
00122
00123     stdair::ChangeFees_T _changeFees;
00124
00125     stdair::NonRefundable_T _nonRefundable;
00126
00127     stdair::DayDuration_T _minimumStay;
00128
00129     stdair::PriceValue_T _DCP;
00130
00131     stdair::AirlineCode_T _airlineCode;
00132
00133     stdair::ClassCode_T _classCode;
00134
00135     stdair::AirlineCodeList_T _airlineCodeList;
00136
00137     //unsigned long int _nbOfAirlines;
00138
00139     stdair::ClassList_StringList_T _classCodeList;
00140
00141 };
00142
00143 }
00144
00145 #endif // __AIRINV_BOM_DCPEVENTSTRUCT_HPP
```

## 25.57 airinv/bom/FareFamilyStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <airinv/bom/FareFamilyStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.58 FareFamilyStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Inventory.hpp>
00009 #include <stdair/bom/FareFamily.hpp>
00010 // AirInv
00011 #include <airinv/bom/FareFamilyStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 FareFamilyStruct::FareFamilyStruct()
00017     : _familyCode (stdair::DEFAULT_NULL_FARE_FAMILY_CODE),
00018       _classes (stdair::DEFAULT_NULL_CLASS_CODE) {
00019 }
00020
00021 // //////////////////////////////////////
00022 FareFamilyStruct::
00023 FareFamilyStruct (const stdair::FamilyCode_T& iFamilyCode,
00024                  const stdair::CurveKey_T& iFRAT5Key,
00025                  const stdair::CurveKey_T& iFFDisutilityKey,
00026                  const stdair::ClassList_String_T& iClasses)
00027     : _familyCode (iFamilyCode), _frat5CurveKey (iFRAT5Key),
00028       _ffDisutilityCurveKey (iFFDisutilityKey), _classes (iClasses) {
00029 }
00030
00031 // //////////////////////////////////////
00032 const std::string FareFamilyStruct::describe() const {
00033     std::ostringstream ostr;
00034
00035     ostr << "          " << _familyCode << " "
00036           << _frat5CurveKey << " " << _ffDisutilityCurveKey
00037           << " " << _classes << " , ";
00038
00039     for (BookingClassStructList_T::const_iterator itBkgClass= _classList.begin();
00040
00041          itBkgClass != _classList.end(); ++itBkgClass) {
00042         const BookingClassStruct& lBkgClass = *itBkgClass;
00043         ostr << lBkgClass.describe();
00044     }
00045     if (_classList.empty() == false) {
00046         ostr << std::endl;
00047     }
00048     return ostr.str();
00049 }
00050
00051 // //////////////////////////////////////
00052 void FareFamilyStruct::fill (stdair::FareFamily& ioFareFamily) const {
00053     // Set attributes
00054     // ioFareFamily.setSomeAttribute (_someAttribute);
00055 }
00056
00057 }

```

## 25.59 airinv/bom/FareFamilyStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/BookingClassStruct.hpp>
```

### Classes

- struct [AIRINV::FareFamilyStruct](#)  
*Utility Structure for the parsing of fare family details.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

### Typedefs

- typedef std::vector< FareFamilyStruct > [AIRINV::FareFamilyStructList\\_T](#)



## 25.60 FareFamilyStruct.hpp

```

00001 #ifndef __AIRINV_BOM_FAREFAMILYSTRUCT_HPP
00002 #define __AIRINV_BOM_FAREFAMILYSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/BookingClassStruct.hpp>
00015
00016 namespace stdair {
00017     class FareFamily;
00018 }
00019
00020 namespace AIRINV {
00021
00022     struct FareFamilyStruct : public stdair::StructAbstract {
00023         // Attributes
00024         stdair::FamilyCode_T _familyCode;
00025         stdair::CurveKey_T _frat5CurveKey;
00026         stdair::CurveKey_T _ffDisutilityCurveKey;
00027         stdair::ClassList_String_T _classes;
00028         BookingClassStructList_T _classList;
00029
00030         FareFamilyStruct();
00031         FareFamilyStruct (const stdair::FamilyCode_T&,
00032                         const stdair::CurveKey_T&, const stdair::CurveKey_T&,
00033                         const stdair::ClassList_String_T&);
00034
00035         void fill (stdair::FareFamily&) const;
00036
00037         const std::string describe() const;
00038     };
00039
00040     typedef std::vector<FareFamilyStruct> FareFamilyStructList_T;
00041
00042 }
00043 #endif // __AIRINV_BOM_FAREFAMILYSTRUCT_HPP

```

## 25.61 airinv/bom/FFDisutilityStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/service/Logger.hpp>
#include <airinv/bom/FFDisutilityStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.62 FFDisutilityStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // AIRINV
00010 #include <airinv/bom/FFDisutilityStruct.hpp>
00011
00012 namespace AIRINV {
00013
00014 // //////////////////////////////////////
00015 FFDisutilityStruct::FFDisutilityStruct() {
00016 }
00017
00018 // //////////////////////////////////////
00019 FFDisutilityStruct::~FFDisutilityStruct() {
00020 }
00021
00022 // //////////////////////////////////////
00023 const std::string FFDisutilityStruct::describe() const {
00024     std::ostringstream ostr;
00025     ostr << _key << "; ";
00026     for (stdair::FFDisutilityCurve_T::const_reverse_iterator itFFDisutility =
00027         _curve.rbegin(); itFFDisutility != _curve.rend(); ++itFFDisutility) {
00028         const stdair::DTD_T& lDTD = itFFDisutility->first;
00029         const double& lFFDisutility = itFFDisutility->second;
00030         ostr << lDTD << ":" << lFFDisutility << ";";
00031     }
00032
00033     return ostr.str();
00034 }
00035
00036 }

```

## 25.63 airinv/bom/FFDisutilityStruct.hpp File Reference

```
#include <string>
#include <stdair/stdair_rm_types.hpp>
```

### Classes

- struct [AIRINV::FFDisutilityStruct](#)

### Namespaces

- namespace [AIRINV](#)

## 25.64 FFDisutilityStruct.hpp

```

00001 #ifndef __AIRINV_BOM_FFDISUTILITYSTRUCT_HPP
00002 #define __AIRINV_BOM_FFDISUTILITYSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_rm_types.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct FFDisutilityStruct : public stdair::StructAbstract {
00015     public:
00016         // ////////////////////////////////// Display Support Methods //////////////////////////////////
00017         const std::string describe() const;
00018
00019     public:
00020         // ////////////////////////////////// Constructors and destructors //////////////////////////////////
00021         FFDisutilityStruct();
00022         ~FFDisutilityStruct();
00023     private:
00024         FFDisutilityStruct (const FFDisutilityStruct&);
00025
00026     public:
00027         // ////////////////////////////////// Attributes //////////////////////////////////
00028         std::string _key;
00029
00030         stdair::FFDisutilityCurve_T _curve;
00031
00032     public:
00033         // ////////////////////////////////// Staging //////////////////////////////////
00034         stdair::DTD_T _dtd;
00035     };
00036 }
00037 #endif // __AIRINV_BOM_FFDISUTILITYSTRUCT_HPP

```

## 25.65 airinv/bom/FlightDateHelper.cpp File Reference

```
#include <cassert>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
#include <airinv/bom/SegmentDateHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.66 FlightDateHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/basic/BasConst_Inventory.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/FlightDate.hpp>
00010 #include <stdair/bom/SegmentDate.hpp>
00011 #include <stdair/bom/SegmentCabin.hpp>
00012 #include <stdair/bom/LegCabin.hpp>
00013 // AIRINV
00014 #include <airinv/bom/FlightDateHelper.hpp>
00015 #include <airinv/bom/SegmentDateHelper.hpp>
00016 #include <airinv/bom/SegmentCabinHelper.hpp>
00017
00018 namespace AIRINV {
00019
00020 // //////////////////////////////////////
00021 void FlightDateHelper::
00022 updateBookingControls (stdair::FlightDate& ioFlightDate) {
00023
00024     // Parse the segment-cabin list and build the pseudo bid price vector.
00025     const stdair::SegmentDateList_T& lSDList =
00026         stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00027     for (stdair::SegmentDateList_T::const_iterator itSD = lSDList.begin();
00028          itSD != lSDList.end(); ++itSD) {
00029         const stdair::SegmentDate* lSD_ptr = *itSD;
00030         assert (lSD_ptr != NULL);
00031
00032         //
00033         const stdair::SegmentCabinList_T& lSCList =
00034             stdair::BomManager::getList<stdair::SegmentCabin> (*lSD_ptr);
00035         for (stdair::SegmentCabinList_T::const_iterator itSC = lSCList.begin();
00036              itSC != lSCList.end(); ++itSC) {
00037             stdair::SegmentCabin* lSC_ptr = *itSC;
00038             assert (lSC_ptr != NULL);
00039
00040             // Build the pseudo bid price vector for the segment-cabin.
00041             SegmentCabinHelper::buildPseudoBidPriceVector (*lSC_ptr);
00042
00043             // Update the booking controls using the pseudo bid price vector.
00044             SegmentCabinHelper::
00045                 updateBookingControlsUsingPseudoBidPriceVector (*lSC_ptr);
00046         }
00047     }
00048 }
00049
00050 // //////////////////////////////////////
00051 void FlightDateHelper::fillFromRouting(const stdair::FlightDate& iFlightDate){
00052     const stdair::SegmentDateList_T& lSegmentDateList =
00053         stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00054
00055     // Browse the list of segment-dates and update each segment-date.
00056     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00057          lSegmentDateList.begin();
00058          itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00059         stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00060         assert (lCurrentSegmentDate_ptr != NULL);
00061         SegmentDateHelper::fillFromRouting (*lCurrentSegmentDate_ptr);
00062     }
00063 }
00064
00065 // //////////////////////////////////////

```

```

00066 void FlightDateHelper::
00067 updateAvailability (const stdair::FlightDate& iFlightDate,
00068                    const stdair::SegmentCabin& iSegmentCabin,
00069                    const stdair::PartySize_T& iNbOfBookings) {
00070     // Update the committed space of the member leg-cabins.
00071     const stdair::LegCabinList_T& lLegCabinList =
00072         stdair::BomManager::getList<stdair::LegCabin> (iSegmentCabin);
00073     for (stdair::LegCabinList_T::const_iterator itLegCabin =
00074          lLegCabinList.begin();
00075          itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00076         stdair::LegCabin* lLegCabin_ptr = *itLegCabin;
00077         assert (lLegCabin_ptr != NULL);
00078         lLegCabin_ptr->updateFromReservation (iNbOfBookings);
00079     }
00080
00081     // Update the availability pool of all the segment-cabin which belong to the
00082     // same flight-date.
00083     const stdair::CabinCode_T& lCabinCode = iSegmentCabin.getCabinCode();
00084     FlightDateHelper::updateAvailabilityPool (iFlightDate, lCabinCode);
00085
00086     // Recalculate the availability of all classes of the given cabin (code).
00087     FlightDateHelper::recalculateAvailability (iFlightDate, lCabinCode);
00088 }
00089
00090 // //////////////////////////////////////
00091 void FlightDateHelper::
00092 updateAvailabilityPool (const stdair::FlightDate& iFlightDate,
00093                       const stdair::CabinCode_T& iCabinCode){
00094     const stdair::SegmentDateList_T& lSegmentDateList =
00095         stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00096     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00097          lSegmentDateList.begin(); itSegmentDate != lSegmentDateList.end();
00098          ++itSegmentDate) {
00099         const stdair::SegmentDate* lSegmentDate_ptr = *itSegmentDate;
00100         assert (lSegmentDate_ptr != NULL);
00101         stdair::SegmentCabin& lSegmentCabin =
00102             stdair::BomManager::getObject<stdair::SegmentCabin> (*lSegmentDate_ptr,
00103                                                                    iCabinCode);
00104
00105         // Update the availability pool of the segment-cabin to the minimal
00106         // availability pool of the member leg-cabins.
00107         const stdair::LegCabinList_T& lLegCabinList =
00108             stdair::BomManager::getList<stdair::LegCabin> (lSegmentCabin);
00109         stdair::Availability_T lAvailabilityPool = stdair::MAXIMAL_AVAILABILITY;
00110         for (stdair::LegCabinList_T::const_iterator itLegCabin =
00111              lLegCabinList.begin();
00112              itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00113             const stdair::LegCabin* lLegCabin_ptr = *itLegCabin;
00114             assert (lLegCabin_ptr != NULL);
00115             const stdair::Availability_T& lLegCabinAvailabilityPool =
00116                 lLegCabin_ptr->getAvailabilityPool();
00117             if (lAvailabilityPool > lLegCabinAvailabilityPool) {
00118                 lAvailabilityPool = lLegCabinAvailabilityPool;
00119             }
00120         }
00121         lSegmentCabin.setAvailabilityPool (lAvailabilityPool);
00122     }
00123 }
00124
00125 // //////////////////////////////////////
00126 void FlightDateHelper::
00127 recalculateAvailability (const stdair::FlightDate& iFlightDate,
00128                        const stdair::CabinCode_T& iCabinCode){
00129     const stdair::SegmentDateList_T& lSegmentDateList =
00130         stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00131     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00132          lSegmentDateList.begin(); itSegmentDate != lSegmentDateList.end();

```



```

00133         ++itSegmentDate) {
00134     const stdair::SegmentDate* lSegmentDate_ptr = *itSegmentDate;
00135     assert (lSegmentDate_ptr != NULL);
00136     stdair::SegmentCabin& lSegmentCabin =
00137         stdair::BomManager::getObject<stdair::SegmentCabin> (*lSegmentDate_ptr,
00138             iCabinCode);
00139     SegmentCabinHelper::updateAvailabilities (lSegmentCabin);
00140 }
00141 }
00142
00143 // //////////////////////////////////////
00144 void FlightDateHelper::
00145 recalculateAvailability (const stdair::FlightDate& iFlightDate) {
00146     const stdair::SegmentDateList_T& lSegmentDateList =
00147         stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00148     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00149         lSegmentDateList.begin(); itSegmentDate != lSegmentDateList.end();
00150         ++itSegmentDate) {
00151         const stdair::SegmentDate* lSegmentDate_ptr = *itSegmentDate;
00152         assert (lSegmentDate_ptr != NULL);
00153         const stdair::SegmentCabinList_T& lSegmentCabinList =
00154             stdair::BomManager::getList<stdair::SegmentCabin> (*lSegmentDate_ptr);
00155         for (stdair::SegmentCabinList_T::const_iterator itSegmentCabin =
00156             lSegmentCabinList.begin();
00157             itSegmentCabin != lSegmentCabinList.end(); ++itSegmentCabin) {
00158             const stdair::SegmentCabin* lSegmentCabin_ptr = *itSegmentCabin;
00159             assert (lSegmentCabin_ptr != NULL);
00160             SegmentCabinHelper::updateAvailabilities (*lSegmentCabin_ptr);
00161         }
00162     }
00163 }
00164
00165 }

```

## 25.67 airinv/bom/FlightDateHelper.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
```

### Classes

- class [AIRINV::FlightDateHelper](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.68 FlightDateHelper.hpp

```
00001 #ifndef __AIRINV_BOM_FLIGHTDATEHELPER_HPP
00002 #define __AIRINV_BOM_FLIGHTDATEHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009
00010 // Forward declarations
00011 namespace stdair {
00012     class FlightDate;
00013 }
00014
00015 namespace AIRINV {
00016
00019     class FlightDateHelper {
00020     public:
00021         // ////////// Business Methods //////////
00024         static void fillFromRouting (const stdair::FlightDate&);
00025
00027         static void updateAvailability (const stdair::FlightDate&,
00028                                         const stdair::SegmentCabin&,
00029                                         const stdair::PartySize_T& iNbOfBookings);
00030
00033         static void updateAvailabilityPool (const stdair::FlightDate&,
00034                                             const stdair::CabinCode_T&);
00035
00038         static void recalculateAvailability (const stdair::FlightDate&,
00039                                             const stdair::CabinCode_T&);
00040
00042         static void updateBookingControls (stdair::FlightDate&);
00043
00046         static void recalculateAvailability (const stdair::FlightDate&);
00047     };
00048
00049 }
00050 #endif // __AIRINV_BOM_FLIGHTDATEHELPER_HPP
```

## 25.69 airinv/bom/FlightDateStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/FlightDateStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.70 FlightDateStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/service/Logger.hpp>
00010 // AIRINV
00011 #include <airinv/AIRINV_Types.hpp>
00012 #include <airinv/bom/FlightDateStruct.hpp>
00013
00014 namespace AIRINV {
00015
00016 // //////////////////////////////////////
00017 FlightDateStruct::FlightDateStruct ()
00018 : _flightDate (stdair::DEFAULT_DATE),
00019   _flightTypeCode (FlightTypeCode::DOMESTIC),
00020   _flightVisibilityCode (FlightVisibilityCode::NORMAL),
00021   _itSeconds (0), _legAlreadyDefined (false) {
00022 }
00023
00024 // //////////////////////////////////////
00025 stdair::Date_T FlightDateStruct::getDate() const {
00026     return stdair::Date_T (_itYear + 2000, _itMonth, _itDay);
00027 }
00028
00029 // //////////////////////////////////////
00030 stdair::Duration_T FlightDateStruct::getTime() const {
00031     return boost::posix_time::hours (_itHours)
00032         + boost::posix_time::minutes (_itMinutes)
00033         + boost::posix_time::seconds (_itSeconds);
00034 }
00035
00036 // //////////////////////////////////////
00037 const std::string FlightDateStruct::describe() const {
00038     std::ostringstream ostr;
00039     ostr << _airlineCode << _flightNumber << ", " << _flightDate
00040         << " (" << _flightTypeCode;
00041     if (_flightVisibilityCode.getCode() != FlightVisibilityCode::NORMAL) {
00042         ostr << "/" << _flightVisibilityCode;
00043     }
00044     ostr << ")" << std::endl;
00045
00046     for (LegStructList_T::const_iterator itLeg = _legList.begin();
00047          itLeg != _legList.end(); ++itLeg) {
00048         const LegStruct& lLeg = *itLeg;
00049         ostr << lLeg.describe();
00050     }
00051
00052     for (SegmentStructList_T::const_iterator itSegment = _segmentList.begin();
00053          itSegment != _segmentList.end(); ++itSegment) {
00054         const SegmentStruct& lSegment = *itSegment;
00055         ostr << lSegment.describe();
00056     }
00057
00058     //ostr << "[Debug] - Staging Leg: ";
00059     //ostr << _itLeg.describe();
00060     //ostr << "[Debug] - Staging Cabin: ";
00061     //ostr << _itCabin.describe();
00062
00063     return ostr.str();
00064 }
00065

```

```

00066 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00067 void FlightDateStruct::addAirport (const stdair::AirportCode_T& iAirport) {
00068     AirportList_T::const_iterator itAirport = _airportList.find (iAirport);
00069     if (itAirport == _airportList.end()) {
00070         // Add the airport code to the airport set
00071         const bool insertSuccessful = _airportList.insert (iAirport).second;
00072
00073         if (insertSuccessful == false) {
00074             // TODO: throw an exception
00075         }
00076
00077         // Add the airport code to the airport vector
00078         _airportOrderedList.push_back (iAirport);
00079     }
00080 }
00081
00082 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00083 void FlightDateStruct::buildSegments () {
00084     // The list of airports encompasses all the airports on which
00085     // the flight takes off or lands. Moreover, that list is
00086     // time-ordered: the first airport is the initial departure of
00087     // the flight, and the last airport is the eventual point of
00088     // rest of the flight.
00089     // Be l the size of the ordered list of airports.
00090     // We want to generate all the segment combinations from the legs
00091     // and, hence, from all the possible (time-ordered) airport pairs.
00092     // Thus, we both iterator on i=0...l-1 and j=i+1...l
00093     assert (_airportOrderedList.size() >= 2);
00094
00095     _segmentList.clear();
00096     for (AirportOrderedList_T::const_iterator itAirport_i =
00097         _airportOrderedList.begin();
00098         itAirport_i != _airportOrderedList.end()-1; ++itAirport_i) {
00099         for (AirportOrderedList_T::const_iterator itAirport_j = itAirport_i + 1;
00100             itAirport_j != _airportOrderedList.end(); ++itAirport_j) {
00101             SegmentStruct lSegmentStruct;
00102             lSegmentStruct._boardingPoint = *itAirport_i;
00103             lSegmentStruct._offPoint = *itAirport_j;
00104
00105             _segmentList.push_back (lSegmentStruct);
00106         }
00107     }
00108
00109     // Clear the lists of airports, so that it is ready for the next flight
00110     _airportList.clear();
00111     _airportOrderedList.clear();
00112 }
00113
00114 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00115 void FlightDateStruct::
00116 addSegmentCabin (const SegmentStruct& iSegment,
00117                 const SegmentCabinStruct& iCabin) {
00118     // Retrieve the Segment structure corresponding to the (boarding, off) point
00119     // pair.
00120     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00121     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00122         const SegmentStruct& lSegment = *itSegment;
00123
00124         const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00125         const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00126         if (lSegment._boardingPoint == lBoardingPoint
00127             && lSegment._offPoint == lOffPoint) {
00128             break;
00129         }
00130     }
00131
00132     // If the segment key (airport pair) given in the schedule input file

```

```

00133     // does not correspond to the leg (boarding, off) points, throw an exception
00134     // so that the user knows the schedule input file is corrupted.
00135     if (itSegment == _segmentList.end()) {
00136         STDAIR_LOG_ERROR ("Within the inventory input file, there is a "
00137             << "flight for which the airports of segments "
00138             << "and those of the legs do not correspond.");
00139         throw SegmentDateNotFoundException ("Within the inventory input file, "
00140             "there is a flight for which the "
00141             "airports of segments and those of "
00142             "the legs do not correspond.");
00143     }
00144
00145     // Add the Cabin structure to the Segment Cabin structure.
00146     assert (itSegment != _segmentList.end());
00147     SegmentStruct& lSegment = *itSegment;
00148     lSegment._cabinList.push_back (iCabin);
00149 }
00150
00151 // //////////////////////////////////////
00152 void FlightDateStruct::
00153 addSegmentCabin (const SegmentCabinStruct& iCabin) {
00154     // Iterate on all the Segment structures (as they get the same cabin
00155     // definitions)
00156
00157     for (SegmentStructList_T::iterator itSegment = _segmentList.begin();
00158         itSegment != _segmentList.end(); ++itSegment) {
00159         SegmentStruct& lSegment = *itSegment;
00160
00161         lSegment._cabinList.push_back (iCabin);
00162     }
00163 }
00164
00165 // //////////////////////////////////////
00166 void FlightDateStruct::
00167 addFareFamily (const SegmentStruct& iSegment,
00168     const SegmentCabinStruct& iCabin,
00169     const FareFamilyStruct& iFareFamily) {
00170     // Retrieve the Segment structure corresponding to the (boarding, off) point
00171     // pair.
00172     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00173     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00174         const SegmentStruct& lSegment = *itSegment;
00175
00176         const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00177         const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00178         if (lSegment._boardingPoint == lBoardingPoint
00179             && lSegment._offPoint == lOffPoint) {
00180             break;
00181         }
00182     }
00183
00184     // If the segment key (airport pair) given in the schedule input file
00185     // does not correspond to the leg (boarding, off) points, throw an exception
00186     // so that the user knows the schedule input file is corrupted.
00187     if (itSegment == _segmentList.end()) {
00188         STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00189             << "for which the airports of segments and "
00190             << "those of the legs do not correspond.");
00191         throw SegmentDateNotFoundException ("Within the schedule input file, "
00192             "there is a flight for which the "
00193             "airports of segments and those of "
00194             "the legs do not correspond.");
00195     }
00196
00197     // Add the Cabin structure to the Segment Cabin structure.
00198     assert (itSegment != _segmentList.end());
00199     SegmentStruct& lSegment = *itSegment;

```

```

00200
00201 // Retrieve the Segment cabin structure given the cabin code
00202 SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.begin();
00203 for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00204     const SegmentCabinStruct& lCabin = *itCabin;
00205
00206     const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00207     if (iCabin._cabinCode == lCabinCode) {
00208         break;
00209     }
00210 }
00211
00212 // If the segmentCabin key (cabin code) given in the schedule input file
00213 // does not correspond to the stored cabin codes, throw an exception
00214 // so that the user knows the schedule input file is corrupted.
00215 if (itCabin == lSegment._cabinList.end()) {
00216     STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00217         << "for which the cabin code does not exist.");
00218     throw SegmentDateNotFoundException ("Within the schedule input file, "
00219         "there is a flight for which the "
00220         "cabin code does not exist.");
00221 }
00222
00223 // Add the Cabin structure to the Segment Cabin structure.
00224 assert (itCabin != lSegment._cabinList.end());
00225 SegmentCabinStruct& lCabin = *itCabin;
00226 lCabin._fareFamilies.push_back (iFareFamily);
00227 }
00228
00229 // //////////////////////////////////////
00230 void FlightDateStruct::
00231 addFareFamily (const SegmentCabinStruct& iCabin,
00232     const FareFamilyStruct& iFareFamily) {
00233     // Iterate on all the Segment structures (as they get the same cabin
00234     // definitions)
00235
00236     for (SegmentStructList_T::iterator itSegment = _segmentList.begin();
00237         itSegment != _segmentList.end(); ++itSegment) {
00238         SegmentStruct& lSegment = *itSegment;
00239
00240         // Retrieve the Segment cabin structure given the cabin code
00241         SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.begin();
00242         for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00243             const SegmentCabinStruct& lCabin = *itCabin;
00244
00245             const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00246             if (iCabin._cabinCode == lCabinCode) {
00247                 break;
00248             }
00249         }
00250
00251         // If the segmentCabin key (cabin code) given in the schedule input file
00252         // does not correspond to the stored cabin codes, throw an exception
00253         // so that the user knows the schedule input file is corrupted.
00254         if (itCabin == lSegment._cabinList.end()) {
00255             STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00256                 << " for which the cabin code does not exist.");
00257             throw SegmentDateNotFoundException ("Within the schedule input file, "
00258                 "there is a flight for which the "
00259                 "cabin code does not exist.");
00260         }
00261
00262         // Add the Cabin structure to the Segment Cabin structure.
00263         assert (itCabin != lSegment._cabinList.end());
00264         SegmentCabinStruct& lCabin = *itCabin;
00265         lCabin._fareFamilies.push_back (iFareFamily);
00266     }

```



```
00267     }  
00268  
00269 }
```

## 25.71 airinv/bom/FlightDateStruct.hpp File Reference

```
#include <string>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <stdair/bom/DoWStruct.hpp>
#include <airinv/basic/FlightTypeCode.hpp>
#include <airinv/basic/FlightVisibilityCode.hpp>
#include <airinv/bom/LegStruct.hpp>
#include <airinv/bom/LegCabinStruct.hpp>
#include <airinv/bom/BucketStruct.hpp>
#include <airinv/bom/SegmentStruct.hpp>
#include <airinv/bom/SegmentCabinStruct.hpp>
#include <airinv/bom/FareFamilyStruct.hpp>
#include <airinv/bom/AirportList.hpp>
```

### Classes

- struct [AIRINV::FlightDateStruct](#)

### Namespaces

- namespace [AIRINV](#)

## 25.72 FlightDateStruct.hpp

```

00001 #ifndef __AIRINV_BOM_FLIGHTDATESTRUCT_HPP
00002 #define __AIRINV_BOM_FLIGHTDATESTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_inventory_types.hpp>
00011 #include <stdair/basic/StructAbstract.hpp>
00012 #include <stdair/bom/DoWStruct.hpp>
00013 // AirInv
00014 #include <airinv/basic/FlightTypeCode.hpp>
00015 #include <airinv/basic/FlightVisibilityCode.hpp>
00016 #include <airinv/bom/LegStruct.hpp>
00017 #include <airinv/bom/LegCabinStruct.hpp>
00018 #include <airinv/bom/BucketStruct.hpp>
00019 #include <airinv/bom/SegmentStruct.hpp>
00020 #include <airinv/bom/SegmentCabinStruct.hpp>
00021 #include <airinv/bom/FareFamilyStruct.hpp>
00022 #include <airinv/bom/AirportList.hpp>
00023
00024 namespace AIRINV {
00025
00027     struct FlightDateStruct : public stdair::StructAbstract {
00028
00030         stdair::Date_T getDate() const;
00031
00033         stdair::Duration_T getTime() const;
00034
00036         const std::string describe() const;
00037
00040         void addAirport (const stdair::AirportCode_T&);
00041
00043         void buildSegments ();
00044
00051         void addSegmentCabin (const SegmentStruct&,
00052                               const SegmentCabinStruct&);
00053
00059         void addSegmentCabin (const SegmentCabinStruct&);
00060
00067         void addFareFamily (const SegmentStruct&, const SegmentCabinStruct&,
00068                             const FareFamilyStruct&);
00069
00075         void addFareFamily (const SegmentCabinStruct&, const FareFamilyStruct&);
00076
00078         FlightDateStruct ();
00079
00080         // Attributes
00081         stdair::AirlineCode_T _airlineCode;
00082         stdair::FlightNumber_T _flightNumber;
00083         stdair::Date_T _flightDate;
00084         FlightTypeCode _flightTypeCode;
00085         FlightVisibilityCode _flightVisibilityCode;
00086         LegStructList_T _legList;
00087         SegmentStructList_T _segmentList;
00088
00090         unsigned int _itYear;
00091         unsigned int _itMonth;
00092         unsigned int _itDay;
00093         int _dateOffset;
00094
00096         long _itHours;
00097         long _itMinutes;

```

```
00098     long _itSeconds;
00099
00102     AirportList_T _airportList;
00103     AirportOrderedList_T _airportOrderedList;
00104
00107     bool _legAlreadyDefined;
00108     LegStruct _itLeg;
00109     LegCabinStruct _itLegCabin;
00110     BucketStruct _itBucket;
00111
00113     bool _areSegmentDefinitionsSpecific;
00114     SegmentStruct _itSegment;
00115     SegmentCabinStruct _itSegmentCabin;
00116     BookingClassStruct _itBookingClass;
00117 };
00118
00119 }
00120 #endif // __AIRINV_BOM_FLIGHTDATESTRUCT_HPP
```

## 25.73 airinv/bom/FlightPeriodStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_Period_BOM.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/FlightPeriodStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.74 FlightPeriodStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Period_BOM.hpp>
00009 #include <stdair/service/Logger.hpp>
00010 // AIRINV
00011 #include <airinv/AIRINV_Types.hpp>
00012 #include <airinv/bom/FlightPeriodStruct.hpp>
00013
00014 namespace AIRINV {
00015
00016 // //////////////////////////////////////
00017 FlightPeriodStruct::FlightPeriodStruct ()
00018     : _dateRange (stdair::BOOST_DEFAULT_DATE_PERIOD),
00019       _dow (stdair::DEFAULT_DOW_STRING),
00020       _legAlreadyDefined (false), _itSeconds (0) {
00021 }
00022
00023 // //////////////////////////////////////
00024 stdair::Date_T FlightPeriodStruct::getDate() const {
00025     return stdair::Date_T (_itYear, _itMonth, _itDay);
00026 }
00027
00028 // //////////////////////////////////////
00029 stdair::Duration_T FlightPeriodStruct::getTime() const {
00030     return boost::posix_time::hours (_itHours)
00031         + boost::posix_time::minutes (_itMinutes)
00032         + boost::posix_time::seconds (_itSeconds);
00033 }
00034
00035 // //////////////////////////////////////
00036 const std::string FlightPeriodStruct::describe() const {
00037     std::ostringstream ostr;
00038     ostr << _airlineCode << _flightNumber << ", " << _dateRange
00039         << " - " << _dow << std::endl;
00040
00041     for (LegStructList_T::const_iterator itLeg = _legList.begin();
00042          itLeg != _legList.end(); ++itLeg) {
00043         const LegStruct& lLeg = *itLeg;
00044         ostr << lLeg.describe();
00045     }
00046
00047     for (SegmentStructList_T::const_iterator itSegment = _segmentList.begin();
00048          itSegment != _segmentList.end(); ++itSegment) {
00049         const SegmentStruct& lSegment = *itSegment;
00050         ostr << lSegment.describe();
00051     }
00052
00053     //ostr << "[Debug] - Staging Leg: ";
00054     //ostr << _itLeg.describe();
00055     //ostr << "[Debug] - Staging Cabin: ";
00056     //ostr << _itCabin.describe();
00057
00058     return ostr.str();
00059 }
00060
00061 // //////////////////////////////////////
00062 void FlightPeriodStruct::addAirport (const stdair::AirportCode_T& iAirport) {
00063     AirportList_T::const_iterator itAirport = _airportList.find (iAirport);
00064     if (itAirport == _airportList.end()) {
00065         // Add the airport code to the airport set

```

```

00066         const bool insertSuccessful = _airportList.insert (iAirport).second;
00067
00068         if (insertSuccessful == false) {
00069             // TODO: throw an exception
00070         }
00071
00072         // Add the airport code to the airport vector
00073         _airportOrderedList.push_back (iAirport);
00074     }
00075 }
00076
00077 // //////////////////////////////////////
00078 void FlightPeriodStruct::buildSegments () {
00079     // The list of airports encompasses all the airports on which
00080     // the flight takes off or lands. Moreover, that list is
00081     // time-ordered: the first airport is the initial departure of
00082     // the flight, and the last airport is the eventual point of
00083     // rest of the flight.
00084     // Be l the size of the ordered list of airports.
00085     // We want to generate all the segment combinations from the legs
00086     // and, hence, from all the possible (time-ordered) airport pairs.
00087     // Thus, we both iterator on i=0...l-1 and j=i+1...l
00088     assert (_airportOrderedList.size() >= 2);
00089
00090     _segmentList.clear();
00091     for (AirportOrderedList_T::const_iterator itAirport_i =
00092         _airportOrderedList.begin();
00093         itAirport_i != _airportOrderedList.end()-1; ++itAirport_i) {
00094         for (AirportOrderedList_T::const_iterator itAirport_j = itAirport_i + 1;
00095             itAirport_j != _airportOrderedList.end(); ++itAirport_j) {
00096             SegmentStruct lSegmentStruct;
00097             lSegmentStruct._boardingPoint = *itAirport_i;
00098             lSegmentStruct._offPoint = *itAirport_j;
00099
00100             _segmentList.push_back (lSegmentStruct);
00101         }
00102     }
00103
00104     // Clear the lists of airports, so that it is ready for the next flight
00105     _airportList.clear();
00106     _airportOrderedList.clear();
00107 }
00108
00109 // //////////////////////////////////////
00110 void FlightPeriodStruct::
00111 addSegmentCabin (const SegmentStruct& iSegment,
00112                 const SegmentCabinStruct& iCabin) {
00113     // Retrieve the Segment structure corresponding to the (boarding, off) point
00114     // pair.
00115     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00116     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00117         const SegmentStruct& lSegment = *itSegment;
00118
00119         const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00120         const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00121         if (lSegment._boardingPoint == lBoardingPoint
00122             && lSegment._offPoint == lOffPoint) {
00123             break;
00124         }
00125     }
00126
00127     // If the segment key (airport pair) given in the schedule input file
00128     // does not correspond to the leg (boarding, off) points, throw an exception
00129     // so that the user knows the schedule input file is corrupted.
00130     if (itSegment == _segmentList.end()) {
00131         STDAIR_LOG_ERROR ("Within the schedule input file, there is a "
00132             << "flight for which the airports of segments "

```

```

00133         << "and those of the legs do not correspond.");
00134     throw SegmentDateNotFoundException ("Within the schedule input file, "
00135         "there is a flight for which the "
00136         "airports of segments and those of "
00137         "the legs do not correspond.");
00138 }
00139
00140 // Add the Cabin structure to the Segment Cabin structure.
00141 assert (itSegment != _segmentList.end());
00142 SegmentStruct& lSegment = *itSegment;
00143 lSegment._cabinList.push_back (iCabin);
00144 }
00145
00146 // //////////////////////////////////////
00147 void FlightPeriodStruct::
00148 addSegmentCabin (const SegmentCabinStruct& iCabin) {
00149     // Iterate on all the Segment structures (as they get the same cabin
00150     // definitions)
00151     for (SegmentStructList_T::iterator itSegment = _segmentList.begin();
00152         itSegment != _segmentList.end(); ++itSegment) {
00153         SegmentStruct& lSegment = *itSegment;
00154
00155         lSegment._cabinList.push_back (iCabin);
00156     }
00157 }
00158
00159 // //////////////////////////////////////
00160 void FlightPeriodStruct::
00161 addFareFamily (const SegmentStruct& iSegment,
00162               const SegmentCabinStruct& iCabin,
00163               const FareFamilyStruct& iFareFamily) {
00164     // Retrieve the Segment structure corresponding to the (boarding, off) point
00165     // pair.
00166     SegmentStructList_T::iterator itSegment = _segmentList.begin();
00167     for ( ; itSegment != _segmentList.end(); ++itSegment) {
00168         const SegmentStruct& lSegment = *itSegment;
00169
00170         const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00171         const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00172         if (lSegment._boardingPoint == lBoardingPoint
00173             && lSegment._offPoint == lOffPoint) {
00174             break;
00175         }
00176     }
00177
00178     // If the segment key (airport pair) given in the schedule input file
00179     // does not correspond to the leg (boarding, off) points, throw an exception
00180     // so that the user knows the schedule input file is corrupted.
00181     if (itSegment == _segmentList.end()) {
00182         STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00183             << "for which the airports do not correspond."
00184             << "those of the legs do not correspond.");
00185         throw SegmentDateNotFoundException ("Within the schedule input file, "
00186             "there is a flight for which the "
00187             "airports of segments and those of "
00188             "the legs do not correspond.");
00189     }
00190
00191     // Add the Cabin structure to the Segment Cabin structure.
00192     assert (itSegment != _segmentList.end());
00193     SegmentStruct& lSegment = *itSegment;
00194
00195     // Retrieve the Segment cabin structure given the cabin code
00196     SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.begin();
00197     for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00198         const SegmentCabinStruct& lCabin = *itCabin;
00199

```



```

00200         const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00201         if (iCabin._cabinCode == lCabinCode) {
00202             break;
00203         }
00204     }
00205
00206     // If the segmentCabin key (cabin code) given in the schedule input file
00207     // does not correspond to the stored cabin codes, throw an exception
00208     // so that the user knows the schedule input file is corrupted.
00209     if (itCabin == lSegment._cabinList.end()) {
00210         STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00211             << "for which the cabin code does not exist.");
00212         throw SegmentDateNotFoundException ("Within the schedule input file, "
00213             "there is a flight for which the "
00214             "cabin code does not exist.");
00215     }
00216
00217     // Add the Cabin structure to the Segment Cabin structure.
00218     assert (itCabin != lSegment._cabinList.end());
00219     SegmentCabinStruct& lCabin = *itCabin;
00220     lCabin._fareFamilies.push_back(iFareFamily);
00221 }
00222
00223 // ////////////////////////////////////////
00224 void FlightPeriodStruct::
00225 addFareFamily (const SegmentCabinStruct& iCabin,
00226               const FareFamilyStruct& iFareFamily) {
00227     // Iterate on all the Segment structures (as they get the same cabin
00228     // definitions)
00229
00230     for (SegmentStructList_T::iterator itSegment = _segmentList.begin();
00231          itSegment != _segmentList.end(); ++itSegment) {
00232         SegmentStruct& lSegment = *itSegment;
00233
00234         // Retrieve the Segment cabin structure given the cabin code
00235         SegmentCabinStructList_T::iterator itCabin = lSegment._cabinList.begin();
00236         for ( ; itCabin != lSegment._cabinList.end(); ++itCabin) {
00237             const SegmentCabinStruct& lCabin = *itCabin;
00238
00239             const stdair::CabinCode_T& lCabinCode = lCabin._cabinCode;
00240             if (iCabin._cabinCode == lCabinCode) {
00241                 break;
00242             }
00243         }
00244
00245         // If the segmentCabin key (cabin code) given in the schedule input file
00246         // does not correspond to the stored cabin codes, throw an exception
00247         // so that the user knows the schedule input file is corrupted.
00248         if (itCabin == lSegment._cabinList.end()) {
00249             STDAIR_LOG_ERROR ("Within the schedule input file, there is a flight "
00250                 << " for which the cabin code does not exist.");
00251             throw SegmentDateNotFoundException ("Within the schedule input file, "
00252                 "there is a flight for which the "
00253                 "cabin code does not exist.");
00254         }
00255
00256         // Add the Cabin structure to the Segment Cabin structure.
00257         assert (itCabin != lSegment._cabinList.end());
00258         SegmentCabinStruct& lCabin = *itCabin;
00259         lCabin._fareFamilies.push_back(iFareFamily);
00260     }
00261 }
00262
00263 }

```

## 25.75 airinv/bom/FlightPeriodStruct.hpp File Reference

```
#include <string>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <stdair/bom/DoWStruct.hpp>
#include <airinv/bom/LegCabinStruct.hpp>
#include <airinv/bom/LegStruct.hpp>
#include <airinv/bom/SegmentStruct.hpp>
#include <airinv/bom/SegmentCabinStruct.hpp>
#include <airinv/bom/FareFamilyStruct.hpp>
#include <airinv/bom/AirportList.hpp>
```

### Classes

- struct [AIRINV::FlightPeriodStruct](#)

### Namespaces

- namespace [AIRINV](#)

## 25.76 FlightPeriodStruct.hpp

```

00001 #ifndef __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP
00002 #define __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_inventory_types.hpp>
00011 #include <stdair/basic/StructAbstract.hpp>
00012 #include <stdair/bom/DoWStruct.hpp>
00013 // AirInv
00014 #include <airinv/bom/LegCabinStruct.hpp>
00015 #include <airinv/bom/LegStruct.hpp>
00016 #include <airinv/bom/SegmentStruct.hpp>
00017 #include <airinv/bom/SegmentCabinStruct.hpp>
00018 #include <airinv/bom/FareFamilyStruct.hpp>
00019 #include <airinv/bom/AirportList.hpp>
00020
00021 namespace AIRINV {
00022
00023     struct FlightPeriodStruct : public stdair::StructAbstract {
00024
00025         stdair::Date_T getDate() const;
00026
00027         stdair::Duration_T getTime() const;
00028
00029         const std::string describe() const;
00030
00031         void addAirport (const stdair::AirportCode_T&);
00032
00033         void buildSegments ();
00034
00035         void addSegmentCabin (const SegmentStruct&,
00036                             const SegmentCabinStruct&);
00037
00038         void addSegmentCabin (const SegmentCabinStruct&);
00039
00040         void addFareFamily (const SegmentStruct&,
00041                             const SegmentCabinStruct&,
00042                             const FareFamilyStruct&);
00043
00044         void addFareFamily (const SegmentCabinStruct&,
00045                             const FareFamilyStruct&);
00046
00047         FlightPeriodStruct ();
00048
00049         // Attributes
00050         stdair::AirlineCode_T _airlineCode;
00051         stdair::FlightNumber_T _flightNumber;
00052         stdair::DatePeriod_T _dateRange;
00053         stdair::DoWStruct _dow;
00054         LegStructList_T _legList;
00055         SegmentStructList_T _segmentList;
00056
00057         bool _legAlreadyDefined;
00058         LegStruct _itLeg;
00059         LegCabinStruct _itLegCabin;
00060
00061         stdair::Date_T _dateRangeStart;
00062         stdair::Date_T _dateRangeEnd;
00063         unsigned int _itYear;
00064         unsigned int _itMonth;
00065         unsigned int _itDay;
00066     };
00067
00068 }
00069
00070 #endif

```

```
00099     int _dateOffset;
00100
00102     long _itHours;
00103     long _itMinutes;
00104     long _itSeconds;
00105
00108     AirportList_T _airportList;
00109     AirportOrderedList_T _airportOrderedList;
00110
00112     bool _areSegmentDefinitionsSpecific;
00113     SegmentStruct _itSegment;
00114     SegmentCabinStruct _itSegmentCabin;
00115 };
00116
00117 }
00118 #endif // __AIRINV_BOM_FLIGHTPERIODSTRUCT_HPP
```

## 25.77 airinv/bom/FRAT5Struct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/service/Logger.hpp>
#include <airinv/bom/FRAT5Struct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.78 FRAT5Struct.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // AIRINV
00010 #include <airinv/bom/FRAT5Struct.hpp>
00011
00012 namespace AIRINV {
00013
00014 // //////////////////////////////////////
00015 FRAT5Struct::FRAT5Struct() {
00016 }
00017
00018 // //////////////////////////////////////
00019 FRAT5Struct::~FRAT5Struct() {
00020 }
00021
00022 // //////////////////////////////////////
00023 const std::string FRAT5Struct::describe() const {
00024     std::ostringstream oStr;
00025     oStr << "_key" << "; ";
00026     for (stdair::FRAT5Curve_T::const_reverse_iterator itFRAT5 = _curve.rbegin();
00027          itFRAT5 != _curve.rend(); ++itFRAT5) {
00028         const stdair::DTD_T& lDTD = itFRAT5->first;
00029         const double& lFRAT5 = itFRAT5->second;
00030         oStr << lDTD << ":" << lFRAT5 << ";";
00031     }
00032
00033     return oStr.str();
00034 }
00035
00036 }

```

## 25.79 airinv/bom/FRAT5Struct.hpp File Reference

```
#include <string>
#include <stdair/stdair_rm_types.hpp>
```

### Classes

- struct [AIRINV::FRAT5Struct](#)

### Namespaces

- namespace [AIRINV](#)

**25.80 FRAT5Struct.hpp**

```

00001 #ifndef __AIRINV_BOM_FRAT5STRUCT_HPP
00002 #define __AIRINV_BOM_FRAT5STRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_rm_types.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct FRAT5Struct : public stdair::StructAbstract {
00015     public:
00016         // ////////////////////////////////// Display Support Methods //////////////////////////////////
00017         const std::string describe() const;
00018
00019     public:
00020         // ////////////////////////////////// Constructors and destructors //////////////////////////////////
00021         FRAT5Struct();
00022         ~FRAT5Struct();
00023     private:
00024         FRAT5Struct (const FRAT5Struct&);
00025
00026     public:
00027         // ////////////////////////////////// Attributes //////////////////////////////////
00028         std::string _key;
00029
00030         stdair::FRAT5Curve_T _curve;
00031
00032     public:
00033         // ////////////////////////////////// Staging //////////////////////////////////
00034         stdair::DTD_T _dtd;
00035     };
00036 }
00037 #endif // __AIRINV_BOM_FRAT5STRUCT_HPP

```



## 25.81 airinv/bom/InventoryHelper.cpp File Reference

```
#include <cassert>
#include <stdair/bom/BomRetriever.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/SegmentSnapshotTable.hpp>
#include <stdair/bom/TravelSolutionStruct.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <airinv/bom/InventoryHelper.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
#include <airinv/bom/SegmentSnapshotTableHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.82 InventoryHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/bom/BomRetriever.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/Inventory.hpp>
00010 #include <stdair/bom/FlightDate.hpp>
00011 #include <stdair/bom/SegmentDate.hpp>
00012 #include <stdair/bom/SegmentCabin.hpp>
00013 #include <stdair/bom/FareFamily.hpp>
00014 #include <stdair/bom/BookingClass.hpp>
00015 #include <stdair/bom/SegmentSnapshotTable.hpp>
00016 #include <stdair/bom/TravelSolutionStruct.hpp>
00017 #include <stdair/service/Logger.hpp>
00018 #include <stdair/bom/LegCabin.hpp>
00019 // AirInv
00020 #include <airinv/bom/InventoryHelper.hpp>
00021 #include <airinv/bom/FlightDateHelper.hpp>
00022 #include <airinv/bom/SegmentSnapshotTableHelper.hpp>
00023 #include <airinv/bom/SegmentCabinHelper.hpp>
00024
00025 namespace AIRINV {
00026
00027 // //////////////////////////////////////
00028 void InventoryHelper::fillFromRouting (const stdair::Inventory& iInventory) {
00029     const stdair::FlightDateList_T& lFlightDateList =
00030         stdair::BomManager::getList<stdair::FlightDate> (iInventory);
00031
00032     // Browse the list of flight-dates and update each flight-date.
00033     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00034         lFlightDateList.begin();
00035         itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00036         const stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00037         assert (lCurrentFlightDate_ptr != NULL);
00038         FlightDateHelper::fillFromRouting (*lCurrentFlightDate_ptr);
00039     }
00040 }
00041
00042 // //////////////////////////////////////
00043 void InventoryHelper::
00044 calculateAvailability (const stdair::Inventory& iInventory,
00045     const std::string& iFullSegmentDateKey,
00046     stdair::TravelSolutionStruct& ioTravelSolution) {
00047
00048     // Create the map of class/availability for the given segment date.
00049     stdair::ClassAvailabilityMap_T lClassAvailabilityMap;
00050
00051     // Create the map of class/object ID for the given segment date.
00052     stdair::ClassObjectIDMap_T lClassObjectIDMap;
00053
00054     // DEBUG
00055     STDAIR_LOG_DEBUG (iFullSegmentDateKey);
00056     //
00057     stdair::SegmentDate* lSegmentDate_ptr =
00058         stdair::BomRetriever::retrieveSegmentDateFromLongKey(iInventory,
00059             iFullSegmentDateKey);
00060     assert (lSegmentDate_ptr != NULL);
00061
00062     // Browse the segment-cabins and fill the map with the availability of
00063     // each booking class.
00064     const stdair::SegmentCabinList_T& lSegmentCabinList =
00065         stdair::BomManager::getList<stdair::SegmentCabin> (*lSegmentDate_ptr);

```

```

00066     for (stdair::SegmentCabinList_T::const_iterator itCabin =
00067         lSegmentCabinList.begin();
00068         itCabin != lSegmentCabinList.end(); ++itCabin) {
00069         stdair::SegmentCabin* lSegmentCabin_ptr = *itCabin;
00070         assert (lSegmentCabin_ptr != NULL);
00071
00072
00073         // Compute the availability using the AU and the cumulative
00074         // booking counter.
00075         // SegmentCabinHelper::updateAvailabilities (*lSegmentCabin_ptr);
00076         const stdair::BookingClassList_T& lBCList =
00077             stdair::BomManager::getList<stdair::BookingClass> (*lSegmentCabin_ptr);
00078         for (stdair::BookingClassList_T::const_reverse_iterator itBC =
00079             lBCList.rbegin(); itBC != lBCList.rend(); ++itBC) {
00080             stdair::BookingClass* lBC_ptr = *itBC;
00081             assert (lBC_ptr != NULL);
00082
00083             const stdair::Availability_T lAvl = lBC_ptr->getSegmentAvailability();
00084
00085             const stdair::ClassCode_T& lClassCode = lBC_ptr->getClassCode();
00086             bool insertSuccessful = lClassAvailabilityMap.
00087                 insert (stdair::ClassAvailabilityMap_T::value_type (lClassCode,
00088                                                                     lAvl)).second;
00089             assert (insertSuccessful == true);
00090
00091             stdair::BookingClassID_T lBCID (*lBC_ptr);
00092             insertSuccessful = lClassObjectIDMap.
00093                 insert (stdair::ClassObjectIDMap_T::value_type (lClassCode,
00094                                                                     lBCID)).second;
00095             assert (insertSuccessful == true);
00096         }
00097     }
00098
00099     //
00100     ioTravelSolution.addClassAvailabilityMap (lClassAvailabilityMap);
00101     ioTravelSolution.addClassObjectIDMap (lClassObjectIDMap);
00102 }
00103
00104
00105 // //////////////////////////////////////
00106 void InventoryHelper::
00107 getYieldAndBidPrice (const stdair::Inventory& iInventory,
00108                     const std::string& iFullSegmentDateKey,
00109                     stdair::TravelSolutionStruct& ioTravelSolution) {
00110
00111     // Create the map of class/availability for the given segment date.
00112     // stdair::ClassAvailabilityMap_T lClassAvailabilityMap;
00113
00114     stdair::ClassYieldMap_T lClassYieldMap;
00115
00116     stdair::ClassBpvMap_T lClassBpvMap;
00117
00118     // DEBUG
00119     STDAIR_LOG_DEBUG (iFullSegmentDateKey);
00120     //
00121     stdair::SegmentDate* lSegmentDate_ptr =
00122         stdair::BomRetriever::retrieveSegmentDateFromLongKey (iInventory,
00123                                                             iFullSegmentDateKey);
00124
00125     assert (lSegmentDate_ptr != NULL);
00126
00127     // Browse the segment-cabins and fill the maps with the bid price vector refe
00128     // and yield of each booking class.
00129     const stdair::SegmentCabinList_T& lSegmentCabinList =
00130         stdair::BomManager::getList<stdair::SegmentCabin> (*lSegmentDate_ptr);
00131     for (stdair::SegmentCabinList_T::const_iterator itCabin =

```

```

00131         lSegmentCabinList.begin();
00132         itCabin != lSegmentCabinList.end(); ++itCabin) {
00133             stdair::SegmentCabin* lSegmentCabin_ptr = *itCabin;
00134             assert (lSegmentCabin_ptr != NULL);
00135
00136             stdair::BidPriceVector_T lBPV;
00137
00138
00139             //stdair::BidPriceVector_T lBPV;
00140             stdair::LegCabinList_T lLegCabinList =
00141                 stdair::BomManager::getList<stdair::LegCabin> (*lSegmentCabin_ptr);
00142             assert (!lLegCabinList.empty());
00143             if (lLegCabinList.size() > 1) {
00144                 // Compute the sum of bid prices and return a vector containing that valu
00145                 e.
00146                 stdair::BidPrice_T lBidPriceValue = 0;
00147                 for (stdair::LegCabinList_T::const_iterator itLC = lLegCabinList.begin();
00148                     itLC != lLegCabinList.end(); ++itLC) {
00149                     const stdair::LegCabin* lLegCabin_ptr = *itLC;
00150                     const stdair::BidPriceVector_T& lLegCabinBPV = lLegCabin_ptr->getBidPri
00151                     ceVector();
00152                     if (!lLegCabinBPV.empty()) {
00153                         lBidPriceValue += lLegCabinBPV.back();
00154                     } else {
00155                         // If the remaining capacity is zero (empty bid price vector) on one
00156                         of the legs,
00157                         // then the remaining capacity of the segment is also zero (return an
00158                         empty bid price).
00159                         lBidPriceValue = std::numeric_limits<stdair::BidPrice_T>::max();
00160                         break;
00161                     }
00162                 }
00163                 if (lBidPriceValue < std::numeric_limits<stdair::BidPrice_T>::max()) {
00164                     lBPV.push_back(lBidPriceValue);
00165                 }
00166             } else {
00167                 const stdair::LegCabin* lLegCabin_ptr = lLegCabinList.front();
00168                 lBPV = lLegCabin_ptr->getBidPriceVector();
00169             }
00170
00171             // const stdair::CabinCapacity_T& lCabinCapacity = lSegmentCabin_ptr->getCa
00172             pacity();
00173             // const stdair::CommittedSpace_T& lCommittedSpace = lSegmentCabin_ptr->get
00174             CommittedSpace();
00175             // assert (lCabinCapacity - lCommittedSpace > 0);
00176             // lBPV.resize(lCabinCapacity - lCommittedSpace);
00177
00178             const stdair::Availability_T& lAvailabilityPool =
00179                 lSegmentCabin_ptr->getAvailabilityPool();
00180             //assert (lAvailabilityPool > 0);
00181
00182             if (lAvailabilityPool < lBPV.size()) {
00183                 lBPV.resize(lAvailabilityPool);
00184             }
00185
00186             //
00187             ioTravelSolution.addBidPriceVector (lBPV);
00188
00189             const stdair::BidPriceVectorHolder_T& lBidPriceVectorHolder =
00190                 ioTravelSolution.getBidPriceVectorHolder();
00191             const stdair::BidPriceVectorHolder_T::const_reverse_iterator itBPV =
00192                 lBidPriceVectorHolder.rbegin();
00193             const stdair::BidPriceVector_T& lBpvRef = *itBPV;

```

```

00191
00192     const stdair::FareFamilyList_T& lFFList =
00193         stdair::BomManager::getList<stdair::FareFamily> (*lSegmentCabin_ptr);
00194     for (stdair::FareFamilyList_T::const_iterator itFF = lFFList.begin();
00195          itFF != lFFList.end(); ++itFF) {
00196         const stdair::FareFamily* lFareFamily_ptr = *itFF;
00197         assert (lFareFamily_ptr != NULL);
00198
00199         const stdair::BookingClassList_T& lBCList =
00200             stdair::BomManager::getList<stdair::BookingClass> (*lFareFamily_ptr);
00201         for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00202              itBC != lBCList.end(); ++itBC) {
00203             const stdair::BookingClass* lBC_ptr = *itBC;
00204             assert (lBC_ptr != NULL);
00205
00206             const stdair::ClassCode_T& lClassCode = lBC_ptr->getClassCode();
00207
00208             const stdair::YieldValue_T lYld = lBC_ptr->getYld();
00209             const bool insertYieldMapSuccessful = lClassYieldMap.
00210                 insert (stdair::ClassYieldMap_T::value_type (lClassCode,
00211                                                             lYld)).second;
00212             assert (insertYieldMapSuccessful == true);
00213
00214             const bool insertBpvMapSuccessful = lClassBpvMap.
00215                 insert (stdair::ClassBpvMap_T::value_type (lClassCode,
00216                                                            &lBpvRef)).second;
00217             assert (insertBpvMapSuccessful == true);
00218
00219             // DEBUG
00220             // STDAIR_LOG_DEBUG ("Class: " << lClassCode
00221             //                    << ", " << "Yield: " << lYld << ", "
00222             //                    << "Bid price: " << lBpvRef.back() << ", "
00223             //                    << "Remaining capacity: "
00224             //                    << lCabinCapacity - lCommittedSpace);
00225
00226             //
00227             stdair::BidPrice_T lBpvVal = std::numeric_limits<double>::max();
00228             if (lBpvRef.empty() == false) {
00229                 lBpvVal = lBpvRef.back();
00230             }
00231
00232             //lBpvVal = boost::lexical_cast<std::string> (lBpvRef.back());
00233             STDAIR_LOG_DEBUG ("Class: " << lClassCode
00234                               << ", " << "Yield: " << lYld << ", "
00235                               << "Bid price: " << lBpvVal << ", "
00236                               << "Remaining capacity: " << lAvailabilityPool
00237                               << " Segment date: " << iFullSegmentDateKey);
00238         }
00239     }
00240 }
00241
00242 //
00243 ioTravelSolution.addClassYieldMap (lClassYieldMap);
00244 ioTravelSolution.addClassBpvMap (lClassBpvMap);
00245 }
00246
00247 // //////////////////////////////////////
00248 bool InventoryHelper::sell (stdair::Inventory& ioInventory,
00249                             const std::string& iFullSegmentDateKey,
00250                             const stdair::ClassCode_T& iClassCode,
00251                             const stdair::PartySize_T& iPartySize) {
00252     bool hasSaleBeenSuccessful = false;
00253
00254     // DEBUG
00255     STDAIR_LOG_DEBUG ("Full key: ' " << iFullSegmentDateKey
00256                       << "', " << iClassCode);
00257

```

```

00258     //
00259     stdair::BookingClass* lBookingClass_ptr =
00260         stdair::BomRetriever::retrieveBookingClassFromLongKey(ioInventory,
00261             iFullSegmentDateKey,
00262             iClassCode);
00263
00264     // DEBUG
00265     const std::string hasFoundBookingClassStr =
00266         (lBookingClass_ptr != NULL)?"Yes":"No";
00267     STDAIR_LOG_DEBUG ("Found booking class? " << hasFoundBookingClassStr);
00268
00269     if (lBookingClass_ptr != NULL) {
00270
00271         // Register the sale in the class.
00272         hasSaleBeenSuccessful =
00273             InventoryHelper::sell (*lBookingClass_ptr, iPartySize);
00274
00275         return hasSaleBeenSuccessful;
00276     }
00277
00278     return hasSaleBeenSuccessful;
00279 }
00280
00281 // //////////////////////////////////////
00282 bool InventoryHelper::sell (const stdair::BookingClassID_T& iClassID,
00283     const stdair::PartySize_T& iPartySize) {
00284
00285     //
00286     stdair::BookingClass& lBookingClass = iClassID.getObject();
00287
00288     // Register the sale in the class.
00289     const bool hasSaleBeenSuccessful =
00290         InventoryHelper::sell (lBookingClass, iPartySize);
00291
00292     return hasSaleBeenSuccessful;
00293 }
00294
00295 // //////////////////////////////////////
00296 bool InventoryHelper::sell (stdair::BookingClass& iBookingClass,
00297     const stdair::PartySize_T& iPartySize) {
00298
00299     // Register the sale in the class.
00300     iBookingClass.sell (iPartySize);
00301
00302     //
00303     stdair::FareFamily& lFareFamily =
00304         stdair::BomManager::getParent<stdair::FareFamily> (iBookingClass);
00305
00306     //
00307     stdair::SegmentCabin& lSegmentCabin =
00308         stdair::BomManager::getParent<stdair::SegmentCabin> (lFareFamily);
00309
00310     //
00311     stdair::SegmentDate& lSegmentDate =
00312         stdair::BomManager::getParent<stdair::SegmentDate,
00313             stdair::SegmentCabin> (lSegmentCabin);
00314
00315     //
00316     stdair::FlightDate& lFlightDate =
00317         stdair::BomManager::getParent<stdair::FlightDate,
00318             stdair::SegmentDate> (lSegmentDate);
00319
00320     // Update the committed space of the segment-cabins and the leg-cabins.
00321     SegmentCabinHelper::updateFromReservation (lFlightDate, lSegmentCabin,
00322         iPartySize);
00323
00324     return true;

```

```

00325 }
00326
00327 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00328 bool InventoryHelper::cancel (stdair::Inventory& ioInventory,
00329                             const std::string& iFullSegmentDateKey,
00330                             const stdair::ClassCode_T& iClassCode,
00331                             const stdair::PartySize_T& iPartySize) {
00332     bool hasCancellationBeenSuccessful = false;
00333
00334     // DEBUG
00335     STDAIR_LOG_DEBUG ("Full key: '" << iFullSegmentDateKey
00336                     << "', " << iClassCode);
00337
00338     //
00339     stdair::BookingClass* lBookingClass_ptr =
00340         stdair::BomRetriever::retrieveBookingClassFromLongKey(ioInventory,
00341                                                             iFullSegmentDateKey,
00342                                                             iClassCode);
00343
00344     // DEBUG
00345     const std::string hasFoundBookingClassStr =
00346         (lBookingClass_ptr != NULL)?"Yes":"No";
00347     STDAIR_LOG_DEBUG ("Found booking class? " << hasFoundBookingClassStr);
00348
00349     if (lBookingClass_ptr != NULL) {
00350
00351         // Register the cancellation in the class.
00352         hasCancellationBeenSuccessful =
00353             cancel (*lBookingClass_ptr, iPartySize);
00354
00355         return hasCancellationBeenSuccessful;
00356     }
00357
00358     return hasCancellationBeenSuccessful;
00359 }
00360
00361 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00362 bool InventoryHelper::cancel (const stdair::BookingClassID_T& iClassID,
00363                             const stdair::PartySize_T& iPartySize) {
00364
00365     stdair::BookingClass& lBookingClass = iClassID.getObject();
00366
00367     // Register the cancellation in the class.
00368     const bool hasCancellationBeenSuccessful =
00369         cancel (lBookingClass, iPartySize);
00370
00371     return hasCancellationBeenSuccessful;
00372 }
00373
00374 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00375 bool InventoryHelper::cancel (stdair::BookingClass& iBookingClass,
00376                             const stdair::PartySize_T& iPartySize) {
00377
00378     // Register the cancellation in the class.
00379     iBookingClass.cancel (iPartySize);
00380
00381     //
00382     stdair::FareFamily& lFareFamily =
00383         stdair::BomManager::getParent<stdair::FareFamily> (iBookingClass);
00384
00385     //
00386     stdair::SegmentCabin& lSegmentCabin =
00387         stdair::BomManager::getParent<stdair::SegmentCabin> (lFareFamily);
00388
00389     //
00390     stdair::SegmentDate& lSegmentDate =
00391         stdair::BomManager::getParent<stdair::SegmentDate,

```

```
00392                                     stdair::SegmentCabin> (lSegmentCabin);
00393
00394     //
00395     stdair::FlightDate& lFlightDate =
00396         stdair::BomManager::getParent<stdair::FlightDate,
00397                                     stdair::SegmentDate> (lSegmentDate);
00398
00399     // Update the committed space of the segment-cabins and the leg-cabins.
00400     SegmentCabinHelper::updateFromReservation (lFlightDate, lSegmentCabin,
00401                                                -iPartySize);
00402
00403     return true;
00404 }
00405
00406 // //////////////////////////////////////
00407 void InventoryHelper::takeSnapshots(const stdair::Inventory& iInventory,
00408                                     const stdair::DateTime_T& iSnapshotTime) {
00409     // Browse the guillotine block list and take the snapshots for
00410     // each guillotine.
00411     const stdair::SegmentSnapshotTableList_T& lSegmentSnapshotTableList =
00412         stdair::BomManager::getList<stdair::SegmentSnapshotTable> (iInventory);
00413     for (stdair::SegmentSnapshotTableList_T::const_iterator itGB =
00414         lSegmentSnapshotTableList.begin();
00415         itGB != lSegmentSnapshotTableList.end(); ++itGB) {
00416         stdair::SegmentSnapshotTable* lSegmentSnapshotTable_ptr = *itGB;
00417
00418         SegmentSnapshotTableHelper::takeSnapshots(*lSegmentSnapshotTable_ptr,
00419                                                    iSnapshotTime);
00420     }
00421 }
00422 }
```



## 25.83 airinv/bom/InventoryHelper.hpp File Reference

```
#include <string>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/bom/BomIDTypes.hpp>
```

### Classes

- class [AIRINV::InventoryHelper](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

**25.84 InventoryHelper.hpp**

```

00001 #ifndef __AIRINV_BOM_INVENTORYHELPER_HPP
00002 #define __AIRINV_BOM_INVENTORYHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/bom/BomIDTypes.hpp>
00012
00013 // Forward declarations
00014 namespace stdair {
00015     struct TravelSolutionStruct;
00016     class Inventory;
00017 }
00018
00019 namespace AIRINV {
00020
00023     class InventoryHelper {
00024     public:
00025         // ////////// Business Methods //////////
00028         static void fillFromRouting (const stdair::Inventory&);
00029
00031         static void calculateAvailability (const stdair::Inventory&,
00032                                           const std::string&,
00033                                           stdair::TravelSolutionStruct&);
00034
00036         static void getYieldAndBidPrice (const stdair::Inventory&,
00037                                          const std::string&,
00038                                          stdair::TravelSolutionStruct&);
00039
00041         static bool sell (stdair::Inventory&, const std::string& iSegmentDateKey,
00042                          const stdair::ClassCode_T&, const stdair::PartySize_T&);
00043
00045         static bool sell (const stdair::BookingClassID_T&,
00046                          const stdair::PartySize_T&);
00047
00049         static bool cancel (stdair::Inventory&, const std::string& iSegmentDateKey,
00050                             const stdair::ClassCode_T&, const stdair::PartySize_T&);
00051
00053         static bool cancel (const stdair::BookingClassID_T&,
00054                             const stdair::PartySize_T&);
00055
00057         static void takeSnapshots (const stdair::Inventory&,
00058                                    const stdair::DateTime_T&);
00059     private:
00060
00062         static bool sell (stdair::BookingClass&, const stdair::PartySize_T&);
00063
00065         static bool cancel (stdair::BookingClass&, const stdair::PartySize_T&);
00066     };
00067
00068 }
00069 #endif // __AIRINV_BOM_INVENTORYHELPER_HPP

```

## 25.85 airinv/bom/LegCabinHelper.cpp File Reference

```
#include <cassert>
#include <stdair/bom/LegCabin.hpp>
#include <airinv/bom/LegCabinHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.86 LegCabinHelper.cpp

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/LegCabin.hpp>
00008 // AIRINV
00009 #include <airinv/bom/LegCabinHelper.hpp>
00010
00011 namespace AIRINV {
00012
00013 }
```

## 25.87 airinv/bom/LegCabinHelper.hpp File Reference

### Classes

- class [AIRINV::LegCabinHelper](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.88 LegCabinHelper.hpp

```
00001 #ifndef __AIRINV_BOM_LEGCABINHELPER_HPP
00002 #define __AIRINV_BOM_LEGCABINHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007
00008 // Forward declarations
00009 namespace stdair {
00010     class LegCabin;
00011 }
00012
00013 namespace AIRINV {
00016     class LegCabinHelper {
00017
00018     };
00019
00020 }
00021 #endif // __AIRINV_BOM_LEGCABINHELPER_HPP
```

## 25.89 airinv/bom/LegCabinStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/bom/LegCabin.hpp>
#include <airinv/bom/LegCabinStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.90 LegCabinStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/bom/LegCabin.hpp>
00009 // AirInv
00010 #include <airinv/bom/LegCabinStruct.hpp>
00011
00012 namespace AIRINV {
00013
00014 // //////////////////////////////////////
00015 const std::string LegCabinStruct::describe() const {
00016     std::ostringstream ostr;
00017     ostr << " " << _cabinCode << ", " << _saleableCapacity
00018         << ", " << _adjustment << ", " << _dcsRegrade
00019         << ", " << _au << ", " << _avPool
00020         << ", " << _upr << ", " << _nbOfBookings << ", " << _nav
00021         << ", " << _gav << ", " << _acp << ", " << _etb
00022         << ", " << _staffNbOfBookings << ", " << _wlNbOfBookings
00023         << ", " << _groupNbOfBookings
00024         << std::endl;
00025
00026     for (BucketStructList_T::const_iterator itBucket = _bucketList.begin();
00027          itBucket != _bucketList.end(); ++itBucket) {
00028         const BucketStruct& lBucket = *itBucket;
00029         ostr << lBucket.describe();
00030     }
00031     if (_bucketList.empty() == false) {
00032         ostr << std::endl;
00033     }
00034     return ostr.str();
00035 }
00036
00037 // //////////////////////////////////////
00038 void LegCabinStruct::fill (stdair::LegCabin& ioLegCabin) const {
00039     // Set the Capacity
00040     ioLegCabin.setCapacities (_saleableCapacity);
00041 }
00042
00043 }

```



## 25.91 airinv/bom/LegCabinStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/BucketStruct.hpp>
```

### Classes

- struct [AIRINV::LegCabinStruct](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

### Typedefs

- typedef std::vector< LegCabinStruct > [AIRINV::LegCabinStructList\\_T](#)

## 25.92 LegCabinStruct.hpp

```

00001 #ifndef __AIRINV_BOM_LEGCABINSTRUCT_HPP
00002 #define __AIRINV_BOM_LEGCABINSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/BucketStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class LegCabin;
00019 }
00020
00021 namespace AIRINV {
00022
00023     struct LegCabinStruct : public stdair::StructAbstract {
00024         // Attributes
00025         stdair::CabinCode_T _cabinCode;
00026         stdair::CabinCapacity_T _saleableCapacity;
00027         stdair::CapacityAdjustment_T _adjustment;
00028         stdair::CapacityAdjustment_T _dcsRegrade;
00029         stdair::AuthorizationLevel_T _au;
00030         stdair::Availability_T _avPool;
00031         stdair::UPR_T _upr;
00032         stdair::NbOfBookings_T _nbOfBookings;
00033         stdair::Availability_T _nav;
00034         stdair::Availability_T _gav;
00035         stdair::OverbookingRate_T _acp;
00036         stdair::NbOfBookings_T _etb;
00037         stdair::NbOfBookings_T _staffNbOfBookings;
00038         stdair::NbOfBookings_T _wlNbOfBookings;
00039         stdair::NbOfBookings_T _groupNbOfBookings;
00040         BucketStructList_T _bucketList;
00041
00042         void fill (stdair::LegCabin&) const;
00043
00044         const std::string describe() const;
00045     };
00046
00047     typedef std::vector<LegCabinStruct> LegCabinStructList_T;
00048 }
00049
00050 #endif // __AIRINV_BOM_LEGCABINSTRUCT_HPP

```

## 25.93 airinv/bom/LegStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/bom/LegDate.hpp>
#include <airinv/bom/LegStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.94 LegStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // STDAIR
00008 #include <stdair/basic/BasConst_General.hpp>
00009 #include <stdair/bom/LegDate.hpp>
00010 // AIRINV
00011 #include <airinv/bom/LegStruct.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 LegStruct::LegStruct ()
00017 : _boardingDate (stdair::DEFAULT_DATE), _offDate (stdair::DEFAULT_DATE) {
00018 }
00019
00020 // //////////////////////////////////////
00021 const std::string LegStruct::describe() const {
00022     std::ostringstream ostr;
00023     ostr << " " << _boardingPoint << " / " << _boardingDate << " "
00024         << boost::posix_time::to_simple_string(_boardingTime)
00025         << " -- " << _offPoint << " / " << _offDate << " "
00026         << boost::posix_time::to_simple_string(_offTime)
00027         << " --> "
00028         << boost::posix_time::to_simple_string(_elapsed)
00029         << std::endl;
00030     for (LegCabinStructList_T::const_iterator itCabin = _cabinList.begin();
00031          itCabin != _cabinList.end(); itCabin++) {
00032         const LegCabinStruct& lCabin = *itCabin;
00033         ostr << lCabin.describe();
00034     }
00035     ostr << std::endl;
00036
00037     return ostr.str();
00038 }
00039
00040 // //////////////////////////////////////
00041 void LegStruct::fill (const stdair::Date_T& iRefDate,
00042                     stdair::LegDate& ioLegDate) const {
00043     // Set the Off Point
00044     ioLegDate.setOffPoint (_offPoint);
00045     // Set the Boarding Date
00046     ioLegDate.setBoardingDate (iRefDate + _boardingDateOffset);
00047     // Set the Boarding Time
00048     ioLegDate.setBoardingTime (_boardingTime);
00049     // Set the Off Date
00050     ioLegDate.setOffDate (iRefDate + _offDateOffset);
00051     // Set the Off Time
00052     ioLegDate.setOffTime (_offTime);
00053     // Set the Elapsed Time
00054     ioLegDate.setElapsedTime (_elapsed);
00055     // Set the operating airline code
00056     ioLegDate.setOperatingAirlineCode (_airlineCode);
00057     // Set the operating flight number
00058     ioLegDate.setOperatingFlightNumber (_flightNumber);
00059 }
00060
00061 // //////////////////////////////////////
00062 void LegStruct::fill (stdair::LegDate& ioLegDate) const {
00063     // Set the Off Point
00064     ioLegDate.setOffPoint (_offPoint);
00065     // Set the Boarding Date

```

```
00066     ioLegDate.setBoardingDate (_offDate);
00067     // Set the Boarding Time
00068     ioLegDate.setBoardingTime (_boardingTime);
00069     // Set the Off Date
00070     ioLegDate.setOffDate (_offDate);
00071     // Set the Off Time
00072     ioLegDate.setOffTime (_offTime);
00073     // Set the Elapsed Time
00074     ioLegDate.setElapsedTime (_elapsed);
00075     // Set the operating airline code
00076     ioLegDate.setOperatingAirlineCode (_airlineCode);
00077     // Set the operating flight number
00078     ioLegDate.setOperatingFlightNumber (_flightNumber);
00079 }
00080
00081 }
```

## 25.95 airinv/bom/LegStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/LegCabinStruct.hpp>
```

### Classes

- struct [AIRINV::LegStruct](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

### Typedefs

- typedef std::vector< LegStruct > [AIRINV::LegStructList\\_T](#)

## 25.96 LegStruct.hpp

```

00001 #ifndef __AIRINV_BOM_LEGSTRUCT_HPP
00002 #define __AIRINV_BOM_LEGSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AIRINV
00014 #include <airinv/bom/LegCabinStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class LegDate;
00019 }
00020
00021 namespace AIRINV {
00022
00023     struct LegStruct : public stdair::StructAbstract {
00024         // Attributes
00025         stdair::AirlineCode_T _airlineCode;
00026         stdair::FlightNumber_T _flightNumber;
00027         stdair::AirportCode_T _boardingPoint;
00028         stdair::DateOffset_T _boardingDateOffset;
00029         stdair::Date_T _boardingDate;
00030         stdair::Duration_T _boardingTime;
00031         stdair::AirportCode_T _offPoint;
00032         stdair::DateOffset_T _offDateOffset;
00033         stdair::Date_T _offDate;
00034         stdair::Duration_T _offTime;
00035         stdair::Duration_T _elapsed;
00036         LegCabinStructList_T _cabinList;
00037
00038         void fill (const stdair::Date_T& iRefDate, stdair::LegDate&) const;
00039
00040         void fill (stdair::LegDate&) const;
00041
00042         const std::string describe() const;
00043
00044         LegStruct();
00045     };
00046
00047     typedef std::vector<LegStruct> LegStructList_T;
00048 }
00049
00050 #endif // __AIRINV_BOM_LEGSTRUCT_HPP

```

## 25.97 airinv/bom/SegmentCabinHelper.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <limits>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/basic/float_utils.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/SimpleNestingStructure.hpp>
#include <stdair/bom/NestingNode.hpp>
#include <stdair/bom/Policy.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)



## 25.98 SegmentCabinHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 #include <limits>
00008 // StdAir
00009 #include <stdair/basic/BasConst_Inventory.hpp>
00010 #include <stdair/basic/float_utils.hpp>
00011 #include <stdair/bom/BomManager.hpp>
00012 #include <stdair/bom/FlightDate.hpp>
00013 #include <stdair/bom/LegCabin.hpp>
00014 #include <stdair/bom/SegmentCabin.hpp>
00015 #include <stdair/bom/FareFamily.hpp>
00016 #include <stdair/bom/BookingClass.hpp>
00017 #include <stdair/bom/SimpleNestingStructure.hpp>
00018 #include <stdair/bom/NestingNode.hpp>
00019 #include <stdair/bom/Policy.hpp>
00020 #include <stdair/factory/FacBomManager.hpp>
00021 // AirInv
00022 #include <airinv/bom/SegmentCabinHelper.hpp>
00023 #include <airinv/bom/FlightDateHelper.hpp>
00024
00025 namespace AIRINV {
00026
00027 // //////////////////////////////////////
00028 void SegmentCabinHelper::initialiseAU (stdair::SegmentCabin& iSegmentCabin) {
00029
00030     // Initialise the capacity and availability pool.
00031     const stdair::LegCabinList_T& lCList =
00032         stdair::BomManager::getList<stdair::LegCabin> (iSegmentCabin);
00033
00034     stdair::CabinCapacity_T lCapacity =
00035         std::numeric_limits<stdair::CabinCapacity_T>::max();
00036     for (stdair::LegCabinList_T::const_iterator itLC = lCList.begin();
00037          itLC != lCList.end(); ++itLC) {
00038
00039         const stdair::LegCabin* lLC_ptr = *itLC;
00040         assert (lLC_ptr != NULL);
00041
00042         const stdair::CabinCapacity_T& lCabinCap = lLC_ptr->getOfferedCapacity();
00043         if (lCapacity > lCabinCap) {
00044             lCapacity = lCabinCap;
00045         }
00046     }
00047     iSegmentCabin.setCapacity (lCapacity);
00048     iSegmentCabin.setAvailabilityPool (lCapacity);
00049
00050     // Browse the list of booking classes and set the AU of each booking
00051     // class to the availability pool of the cabin.
00052     const stdair::BookingClassList_T& lBCList =
00053         stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00054     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00055          itBC != lBCList.end(); ++itBC) {
00056         stdair::BookingClass* lBC_ptr = *itBC;
00057         assert (lBC_ptr != NULL);
00058         lBC_ptr->setAuthorizationLevel (lCapacity);
00059     }
00060 }
00061
00062 // //////////////////////////////////////
00063 void SegmentCabinHelper::
00064 updateFromReservation (const stdair::FlightDate& iFlightDate,
00065                        stdair::SegmentCabin& ioSegmentCabin,

```

```

00066         const stdair::PartySize_T& iNbOfBookings){
00067     // Update the committed space of the segment-cabin.
00068     ioSegmentCabin.updateFromReservation (iNbOfBookings);
00069
00070     // Update the availability of the flight-date.
00071     FlightDateHelper::updateAvailability (iFlightDate, ioSegmentCabin,
00072                                         iNbOfBookings);
00073 }
00074
00075 // //////////////////////////////////////
00076 void SegmentCabinHelper::
00077 buildPseudoBidPriceVector (stdair::SegmentCabin& ioSegmentCabin) {
00078     // Retrieve the segment-cabin capacity.
00079     const stdair::Availability_T& lAvlPool =
00080         ioSegmentCabin.getAvailabilityPool();
00081     unsigned int lAvlPoolInt;
00082     if (lAvlPool < 0) {
00083         lAvlPoolInt = 0;
00084     } else {
00085         assert (lAvlPool >= 0);
00086         lAvlPoolInt = static_cast<unsigned int> (lAvlPool);
00087     }
00088     stdair::BidPriceVector_T lPseudoBidPriceVector (lAvlPoolInt, 0.0);
00089
00090     // Browse the leg-cabin list.
00091     const stdair::LegCabinList_T& lLCList =
00092         stdair::BomManager::getList<stdair::LegCabin> (ioSegmentCabin);
00093     for (stdair::LegCabinList_T::const_iterator itLC = lLCList.begin();
00094          itLC != lLCList.end(); ++itLC) {
00095         const stdair::LegCabin* lLC_ptr = *itLC;
00096         assert (lLC_ptr != NULL);
00097
00098         const stdair::BidPriceVector_T& lBPV = lLC_ptr->getBidPriceVector();
00099         stdair::BidPriceVector_T::const_reverse_iterator itBP = lBPV.rbegin();
00100         for (stdair::BidPriceVector_T::reverse_iterator itPBP =
00101              lPseudoBidPriceVector.rbegin();
00102              itPBP != lPseudoBidPriceVector.rend(); ++itPBP, ++itBP) {
00103             assert (itBP != lBPV.rend());
00104             stdair::BidPrice_T& lCurrentPBP = *itPBP;
00105             const stdair::BidPrice_T& lCurrentBP = *itBP;
00106             lCurrentPBP += lCurrentBP;
00107         }
00108     }
00109
00110     ioSegmentCabin.setBidPriceVector (lPseudoBidPriceVector);
00111
00112     // // DEBUG
00113     // std::ostream oStr;
00114     // oStr << "Pseudo BPV: ";
00115     // for (stdair::BidPriceVector_T::const_iterator itBP =
00116     //      lPseudoBidPriceVector.begin(); itBP != lPseudoBidPriceVector.end();
00117     //      ++itBP) {
00118     //     const stdair::BidPrice_T& lCurrentBP = *itBP;
00119     //     oStr << lCurrentBP << " ";
00120     // }
00121     // oStr << std::endl;
00122     // // STDAIR_LOG_DEBUG (oStr.str());
00123     // std::cout << oStr.str() << std::endl;
00124 }
00125
00126 // //////////////////////////////////////
00127 void SegmentCabinHelper::
00128 updateBookingControlsUsingPseudoBidPriceVector (const stdair::SegmentCabin& iSegmentCabin) {
00129     // Retrieve the pseudo bid price vector.
00130     const stdair::BidPriceVector_T& lPseudoBPV =
00131         iSegmentCabin.getBidPriceVector();

```

```

00132     const stdair::Availability_T& lAvlPool= iSegmentCabin.getAvailabilityPool();
00133
00134     // Update the cumulative booking limit for all booking classes.
00135     // Browse the nesting structure
00136     const stdair::SimpleNestingStructure& lYieldBasedNestingStructure =
00137         stdair::BomManager::getObject<stdair::SimpleNestingStructure>(iSegmentCabin
00138 , stdair::YIELD_BASED_NESTING_STRUCTURE_CODE);
00139     const stdair::NestingNodeList_T& lNestingNodeList =
00140         stdair::BomManager::getList<stdair::NestingNode>(lYieldBasedNestingStructur
00141 e);
00142     for (stdair::NestingNodeList_T::const_iterator itNS =
00143         lNestingNodeList.begin();
00144         itNS != lNestingNodeList.end(); ++itNS) {
00145         stdair::NestingNode* lNestingNode_ptr = *itNS;
00146         assert (lNestingNode_ptr != NULL);
00147         const stdair::Yield_T lNodeYield =
00148             lNestingNode_ptr->getYield();
00149         if (lNodeYield < 0) {
00150             continue;
00151         }
00152         const stdair::BookingClassList_T& lBCList =
00153             stdair::BomManager::getList<stdair::BookingClass> (*lNestingNode_ptr);
00154         stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00155         assert(itBC != lBCList.end());
00156         // Browse the booking class list of the current node
00157         const stdair::Yield_T lYield = lNestingNode_ptr->getYield();
00158         const FloatingPoint<double> lYieldFlotingPoint (lYield);
00159         stdair::BookingLimit_T lCumuBL = lAvlPool;
00160         for (stdair::BidPriceVector_T::const_reverse_iterator itBP =
00161             lPseudoBPV.rbegin(); itBP != lPseudoBPV.rend(); ++itBP) {
00162             const stdair::BidPrice_T lBP = *itBP;
00163             const FloatingPoint<double> lBPFlotingPoint (lBP);
00164             const bool isAlmostEqual =
00165                 lYieldFlotingPoint.AlmostEquals(lBPFlotingPoint);
00166             if ((lYield < lBP) && (isAlmostEqual == false)) {
00167                 lCumuBL = itBP - lPseudoBPV.rbegin();
00168                 break;
00169             }
00170         }
00171         for (; itBC != lBCList.end(); ++itBC) {
00172             stdair::BookingClass* lBC_ptr = *itBC;
00173             assert (lBC_ptr != NULL);
00174             lBC_ptr->setCumulatedBookingLimit (lCumuBL);
00175             // DEBUG
00176             // STDAIR_LOG_DEBUG("Updating the BL for class: "
00177             //                  << lBC_ptr->describeKey()
00178             //                  << ", with yield " << lNodeYield
00179             //                  << " and BL: " << lCumuBL);
00180         }
00181     }
00182     // Update the authorization levels from the booking limits
00183     updateAUs (iSegmentCabin);
00184 }
00185
00186 // //////////////////////////////////////
00187 void SegmentCabinHelper::updateAUs(const stdair::SegmentCabin& iSegmentCabin){
00188     // Browse the nesting structure and compute the AU from the
00189     // cumulative booking counter and the cumulative booking limit.
00190     stdair::NbOfBookings_T lCumulativeBookingCounter = 0.0;
00191     // Browse the nesting structure
00192     const stdair::SimpleNestingStructure& lYieldBasedNestingStructure =
00193         stdair::BomManager::getObject<stdair::SimpleNestingStructure>(iSegmentCabin
00194 , stdair::YIELD_BASED_NESTING_STRUCTURE_CODE);
00195     const stdair::NestingNodeList_T& lNestingNodeList =
00196         stdair::BomManager::getList<stdair::NestingNode>(lYieldBasedNestingStructur
00197 e);

```

```

00195     for (stdair::NestingNodeList_T::const_reverse_iterator itNS =
00196           lNestingNodeList.rbegin();
00197           itNS != lNestingNodeList.rend(); ++itNS) {
00198         stdair::NestingNode* lNestingNode_ptr = *itNS;
00199         assert (lNestingNode_ptr != NULL);
00200         const stdair::Yield_T lNodeYield =
00201             lNestingNode_ptr->getYield();
00202         if (lNodeYield < 0) {
00203             continue;
00204         }
00205         const stdair::BookingClassList_T& lBCList =
00206             stdair::BomManager::getList<stdair::BookingClass> (*lNestingNode_ptr);
00207         stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00208         assert(itBC != lBCList.end());
00209         const stdair::BookingLimit_T& lCumulativeBookingLimit =
00210             (*itBC)->getCumulativeBookingLimit();
00211         // Browse the booking class list of the current node to update the
00212         // cumulative booking counter
00213         for (; itBC != lBCList.end(); ++itBC) {
00214             stdair::BookingClass* lBC_ptr = *itBC;
00215             assert (lBC_ptr != NULL);
00216             assert(lCumulativeBookingLimit == lBC_ptr->getCumulativeBookingLimit());
00217             const stdair::NbOfBookings_T& lNbOfBookings = lBC_ptr->getNbOfBookings();

00218             lCumulativeBookingCounter += lNbOfBookings;
00219         }
00220         stdair::AuthorizationLevel_T lAU =
00221             lCumulativeBookingCounter + lCumulativeBookingLimit;
00222         // Browse the booking class list of the current node to set
00223         // the authorization level of all booking classes of the node
00224         for (itBC = lBCList.begin(); itBC != lBCList.end(); ++itBC) {
00225             stdair::BookingClass* lBC_ptr = *itBC;
00226             assert (lBC_ptr != NULL);
00227             lBC_ptr->setAuthorizationLevel (lAU);
00228             // DEBUG
00229             // STDAIR_LOG_DEBUG ("Updating the AU for class: "
00230             //                     << lBC_ptr->describeKey()
00231             //                     << ", with BL: " << lCumulativeBookingLimit
00232             //                     << ", CumuBkg: " << lCumulativeBookingCounter
00233             //                     << ", AU: " << lAU);
00234         }
00235     }
00236 }
00237
00238 // //////////////////////////////////////
00239 void SegmentCabinHelper::
00240 updateAvailabilities (const stdair::SegmentCabin& iSegmentCabin) {
00241     // Browse the nesting structure and compute the avl from the
00242     // cumulative booking counter and the AU.
00243     stdair::NbOfBookings_T lCumulativeBookingCounter = 0.0;
00244     const stdair::SimpleNestingStructure& lYieldBasedNestingStructure =
00245         stdair::BomManager::getObject<stdair::SimpleNestingStructure>(iSegmentCabin
, stdair::YIELD_BASED_NESTING_STRUCTURE_CODE);
00246     const stdair::NestingNodeList_T& lNestingNodeList =
00247         stdair::BomManager::getList<stdair::NestingNode>(lYieldBasedNestingStructur
e);
00248     for (stdair::NestingNodeList_T::const_reverse_iterator itNS =
00249           lNestingNodeList.rbegin();
00250           itNS != lNestingNodeList.rend(); ++itNS) {
00251         stdair::NestingNode* lNestingNode_ptr = *itNS;
00252         assert (lNestingNode_ptr != NULL);
00253         const stdair::Yield_T& lNodeYield = lNestingNode_ptr->getYield();
00254         if (lNodeYield < 0) {
00255             continue;
00256         }
00257         const stdair::BookingClassList_T& lBCList =
00258             stdair::BomManager::getList<stdair::BookingClass> (*lNestingNode_ptr);

```

```

00259     stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00260     assert(itBC != lBCList.end());
00261     stdair::BookingClass* lFirstBC_ptr = *itBC;
00262     assert (lFirstBC_ptr != NULL);
00263     const stdair::AuthorizationLevel_T& lNodeAU =
00264         lFirstBC_ptr->getAuthorizationLevel();
00265     // Browse the booking class list of the current node to update the
00266     // cumulative booking counter
00267     for (; itBC != lBCList.end(); ++itBC) {
00268         stdair::BookingClass* lBC_ptr = *itBC;
00269         assert (lBC_ptr != NULL);
00270         assert(lNodeAU == lBC_ptr->getAuthorizationLevel());
00271         const stdair::NbOfBookings_T& lNbOfBookings = lBC_ptr->getNbOfBookings();

00272         lCumulativeBookingCounter += lNbOfBookings;
00273     }
00274     const stdair::Availability_T lNodeAvl = lNodeAU - lCumulativeBookingCounter
;
00275     // Browse the booking class list of the current node to set
00276     // the availability of all booking classes of the node
00277     for (itBC = lBCList.begin(); itBC != lBCList.end(); ++itBC) {
00278         stdair::BookingClass* lBC_ptr = *itBC;
00279         assert (lBC_ptr != NULL);
00280         lBC_ptr->setSegmentAvailability (lNodeAvl);
00281     }
00282 }
00283
00284 // Cascading
00285 stdair::NestingNodeList_T::const_iterator itCurrentNode =
00286     lNestingNodeList.begin();
00287 assert (itCurrentNode != lNestingNodeList.end());
00288 stdair::NestingNodeList_T::const_iterator itNextNode = itCurrentNode;
00289 ++itNextNode;
00290 for (; itNextNode != lNestingNodeList.end(); ++itCurrentNode, ++itNextNode) {

00291     assert(itCurrentNode != lNestingNodeList.end());
00292     stdair::NestingNode* lCurrentNode_ptr = *itCurrentNode;
00293     assert (lCurrentNode_ptr != NULL);
00294     const stdair::Yield_T& lCurrentNodeYield = lCurrentNode_ptr->getYield();
00295     if (lCurrentNodeYield < 0) {
00296         break;
00297     }
00298     const stdair::BookingClassList_T& lCurrentBCList =
00299         stdair::BomManager::getList<stdair::BookingClass> (*lCurrentNode_ptr);
00300     stdair::BookingClassList_T::const_iterator itCurrentBC =
00301         lCurrentBCList.begin();
00302     stdair::BookingClass* lCurrentBC_ptr = *(itCurrentBC);
00303     assert (lCurrentBC_ptr != NULL);
00304     assert(itNextNode != lNestingNodeList.end());
00305     stdair::NestingNode* lNextNode_ptr = *itNextNode;
00306     assert (lNextNode_ptr != NULL);
00307     const stdair::Yield_T& lNextNodeYield = lNextNode_ptr->getYield();
00308     if (lNextNodeYield < 0) {
00309         break;
00310     }
00311     const stdair::BookingClassList_T& lNextBCList =
00312         stdair::BomManager::getList<stdair::BookingClass> (*lNextNode_ptr);
00313     stdair::BookingClassList_T::const_iterator itNextBC =
00314         lNextBCList.begin();
00315     stdair::BookingClass* lNextBC_ptr = *(itNextBC);
00316     assert (lNextBC_ptr != NULL);
00317     const stdair::Availability_T& lCurrentAvl =
00318         lCurrentBC_ptr->getSegmentAvailability();
00319     const stdair::Availability_T& lNextAvl =
00320         lNextBC_ptr->getSegmentAvailability();
00321     if (lCurrentAvl < lNextAvl) {
00322         for (; itNextBC != lNextBCList.end(); ++itNextBC) {

```

```

00323         lNextBC_ptr = *itNextBC;
00324         assert (lNextBC_ptr != NULL);
00325         lNextBC_ptr->setSegmentAvailability (lCurrentAvl);
00326     }
00327 }
00328 }
00329 }
00330
00331 // //////////////////////////////////////
00332 void SegmentCabinHelper::
00333 initYieldBasedNestingStructure (stdair::SegmentCabin& ioSegmentCabin) {
00334     // Create the nesting structure.
00335     stdair::NestingStructureKey lKey (stdair::YIELD_BASED_NESTING_STRUCTURE_CODE)
;
00336     stdair::SimpleNestingStructure& lNestingStructure =
00337         stdair::FacBom<stdair::SimpleNestingStructure>::instance().create(lKey);
00338     stdair::FacBomManager::addToListAndMap (ioSegmentCabin, lNestingStructure);
00339     stdair::FacBomManager::linkWithParent (ioSegmentCabin, lNestingStructure);
00340
00341     // Build a multimap of booking classes with their yields as keys.
00342     std::multimap<const stdair::Yield_T, stdair::BookingClass*> lClassMap;
00343     const stdair::BookingClassList_T& lBCList =
00344         stdair::BomManager::getList<stdair::BookingClass> (ioSegmentCabin);
00345     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00346          itBC != lBCList.end(); ++itBC) {
00347         stdair::BookingClass* lBC_ptr = *itBC;
00348         assert (lBC_ptr != NULL);
00349         const stdair::Yield_T& lYield = lBC_ptr->getYield();
00350         lClassMap.insert(std::multimap<const stdair::Yield_T, stdair::BookingClass*
00351 >::value_type(lYield, lBC_ptr));
00352     }
00353     stdair::Yield_T lLastYield = -1.0;
00354     stdair::NestingNode* lCurrentNode_ptr = NULL;
00355     for (std::multimap<const stdair::Yield_T, stdair::BookingClass*>::reverse_ite
rator itBC = lClassMap.rbegin();
00356          itBC != lClassMap.rend(); ++itBC) {
00357         const stdair::Yield_T& lCurrentYield = itBC->first;
00358         stdair::BookingClass* lBC_ptr = itBC->second;
00359
00360         // Compare the current yield and the last one.
00361         // TODO: use float utils
00362         //if (lCurrentYield.AlmostEquals (lLastYield) == false) {
00363         if (lCurrentYield != lLastYield) {
00364             // Create a nesting node
00365             stdair::NestingNodeCode_T lNodeCode (lBC_ptr->describeKey());
00366             stdair::NestingNodeKey lNodeKey (lNodeCode);
00367             stdair::NestingNode& lNestingNode =
00368                 stdair::FacBom<stdair::NestingNode>::instance().create (lNodeKey);
00369             stdair::FacBomManager::addToList (lNestingStructure, lNestingNode);
00370             stdair::FacBomManager::linkWithParent (lNestingStructure, lNestingNode);
00371             lCurrentNode_ptr = &lNestingNode;
00372             lCurrentNode_ptr->setYield(lCurrentYield);
00373             // Add the booking class to the node.
00374             stdair::FacBomManager::addToList (lNestingNode, *lBC_ptr);
00375             lLastYield = lCurrentYield;
00376         } else {
00377             // Add the booking class to the current node.
00378             stdair::FacBomManager::addToList (*lCurrentNode_ptr, *lBC_ptr);
00379         }
00380     }
00381 }
00382
00383 // //////////////////////////////////////
00384 void SegmentCabinHelper::
00385 initListOfUsablePolicies (stdair::SegmentCabin& ioSegmentCabin) {
00386     const stdair::FareFamilyList_T& lFareFamilyList =

```

```

00387         stdair::BomManager::getList<stdair::FareFamily> (ioSegmentCabin);
00388         stdair::FareFamilyList_T::const_iterator itFF = lFareFamilyList.begin();
00389
00390         unsigned int lPolicyCounter = 0;
00391         std::ostream oStr;
00392         oStr << lPolicyCounter;
00393         stdair::PolicyKey lKey (oStr.str());
00394         stdair::Policy& lPolicy =
00395             stdair::FacBom<stdair::Policy>::instance().create(lKey);
00396         stdair::FacBomManager::addToList (ioSegmentCabin, lPolicy);
00397         stdair::FacBomManager::linkWithParent (ioSegmentCabin, lPolicy);
00398         createPolicies (ioSegmentCabin, lFareFamilyList, itFF, lPolicy,
00399             lPolicyCounter,
00400             std::numeric_limits<stdair::Yield_T>::max());
00401     }
00402
00403     // //////////////////////////////////////
00404     void SegmentCabinHelper::
00405         createPolicies (stdair::SegmentCabin& ioSegmentCabin,
00406             const stdair::FareFamilyList_T& iFareFamilyList,
00407             const stdair::FareFamilyList_T::const_iterator& itFF,
00408             stdair::Policy& ioCurrentPolicy,
00409             unsigned int& ioPolicyCounter,
00410             const stdair::Yield_T& iPreviousYield) {
00411         if (itFF != iFareFamilyList.end()) {
00412             // We add a booking class of the next Fare Family if it is cheapest than
00413             // the previous booking class in the policy.
00414             // Assumption: the fare family list is sorted according to their fares:
00415             // Fare_1 > Fare_2 > ... > Fare_n
00416             const stdair::FareFamily* lFF_ptr = *itFF;
00417             //Retrieve the booking class list of the current fare family
00418             const stdair::BookingClassList_T& lBookingClassList =
00419                 stdair::BomManager::getList<stdair::BookingClass> (*lFF_ptr);
00420             stdair::BookingClassList_T::const_iterator itBC =
00421                 lBookingClassList.begin();
00422             stdair::FareFamilyList_T::const_iterator litFF = itFF;
00423             litFF++;
00424
00425             // Browse the booking class list
00426             for (; itBC != lBookingClassList.end(); ++itBC) {
00427                 stdair::BookingClass* lBC_ptr = *itBC;
00428                 assert(lBC_ptr != NULL);
00429                 const stdair::Yield_T& lCurrentYield = lBC_ptr->getYield();
00430                 if (lCurrentYield >= iPreviousYield) {
00431                     continue;
00432                 }
00433                 assert(lCurrentYield < iPreviousYield);
00434                 // Add the current booking class to the list, update the current policy
00435                 // and call the same method for the next fare family
00436                 ++ioPolicyCounter;
00437                 std::ostream oStr;
00438                 oStr << ioPolicyCounter;
00439                 stdair::PolicyKey lKey (oStr.str());
00440                 stdair::Policy& lNewPolicy =
00441                     stdair::FacBom<stdair::Policy>::instance().create(lKey);
00442                 stdair::FacBomManager::addToList (ioSegmentCabin, lNewPolicy);
00443                 stdair::FacBomManager::linkWithParent (ioSegmentCabin, lNewPolicy);
00444
00445                 // Copy the list of booking classes of the current policy to the new one
00446                 bool hasAListOfBC =
00447                     stdair::BomManager::hasList<stdair::BookingClass> (ioCurrentPolicy);
00448                 if (hasAListOfBC == true) {
00449                     const stdair::BookingClassList_T& lToBeCopiedBCList =
00450                         stdair::BomManager::getList<stdair::BookingClass> (ioCurrentPolicy);
00451                     for (stdair::BookingClassList_T::const_iterator itBCToBeCopied =
00452                         lToBeCopiedBCList.begin();
00453                         itBCToBeCopied != lToBeCopiedBCList.end(); ++itBCToBeCopied) {

```

```
00454         stdair::BookingClass* lBCToBeCopied_ptr = *itBCToBeCopied;
00455         assert (lBCToBeCopied_ptr != NULL);
00456         stdair::FacBomManager::addToList (lNewPolicy, *lBCToBeCopied_ptr);
00457     }
00458 }
00459 stdair::FacBomManager::addToList (lNewPolicy, *lBC_ptr);
00460
00461     createPolicies (ioSegmentCabin, iFareFamilyList, lItFF, lNewPolicy,
00462                     ioPolicyCounter, lCurrentYield);
00463 }
00464 }
00465
00466 }
00467
00468 }
```



## 25.99 airinv/bom/SegmentCabinHelper.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/bom/FareFamilyTypes.hpp>
```

### Classes

- class [AIRINV::SegmentCabinHelper](#)  
*Class representing the actual business functions for an airline segment-cabin.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

**25.100 SegmentCabinHelper.hpp**

```

00001 #ifndef __AIRINV_BOM_SEGMENTCABINHELPER_HPP
00002 #define __AIRINV_BOM_SEGMENTCABINHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/bom/FareFamilyTypes.hpp>
00010
00011 // Forward declarations
00012 namespace stdair {
00013     class FlightDate;
00014     class SegmentCabin;
00015     class FareFamily;
00016     class Policy;
00017 }
00018
00019 namespace AIRINV {
00020
00025     class SegmentCabinHelper {
00026     public:
00027         // ////////// Business Methods //////////
00031         static void updateFromReservation (const stdair::FlightDate&,
00032                                           stdair::SegmentCabin&,
00033                                           const stdair::PartySize_T&);
00034
00038         static void buildPseudoBidPriceVector (stdair::SegmentCabin&);
00039
00043         static void updateBookingControlsUsingPseudoBidPriceVector (const stdair::Seg
00044 mentCabin&);
00047         static void updateAUs (const stdair::SegmentCabin&);
00048
00051         static void updateAvailabilities (const stdair::SegmentCabin&);
00052
00056         static void initialiseAU (stdair::SegmentCabin&);
00057
00061         static void initYieldBasedNestingStructure (stdair::SegmentCabin&);
00062
00066         static void initListOfUsablePolicies (stdair::SegmentCabin&);
00067
00068     private:
00072         static void createPolicies (stdair::SegmentCabin&,
00073                                     const stdair::FareFamilyList_T&,
00074                                     const stdair::FareFamilyList_T::const_iterator&,
00075                                     stdair::Policy&, unsigned int&,
00076                                     const stdair::Yield_T&);
00077     };
00078
00079 }
00080 #endif // __AIRINV_BOM_SEGMENTCABINHELPER_HPP

```

## 25.101 airinv/bom/SegmentCabinStruct.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/bom/SegmentCabin.hpp>
#include <airinv/bom/SegmentCabinStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.102 SegmentCabinStruct.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/bom/SegmentCabin.hpp>
00009 // AirInv
00010 #include <airinv/bom/SegmentCabinStruct.hpp>
00011
00012 namespace AIRINV {
00013
00014 // //////////////////////////////////////
00015 const std::string SegmentCabinStruct::describe() const {
00016     std::ostringstream ostr;
00017
00018     ostr << "          " << _cabinCode << ", " << _nbOfBookings << std::endl;
00019
00020     for (FareFamilyStructList_T::const_iterator itFF = _fareFamilies.begin();
00021          itFF != _fareFamilies.end(); ++itFF) {
00022         const FareFamilyStruct& lFF = *itFF;
00023         ostr << lFF.describe();
00024     }
00025     if (_fareFamilies.empty() == false) {
00026         ostr << std::endl;
00027     }
00028
00029     return ostr.str();
00030 }
00031
00032 // //////////////////////////////////////
00033 void SegmentCabinStruct::fill (stdair::SegmentCabin& ioSegmentCabin) const {
00034     // Set the total number of bookings
00035     // ioSegmentCabin.setNbOfBookings (_nbOfBookings);
00036 }
00037
00038 }

```

## 25.103 airinv/bom/SegmentCabinStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/FareFamilyStruct.hpp>
```

### Classes

- struct [AIRINV::SegmentCabinStruct](#)  
*Utility Structure for the parsing of SegmentCabin details.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

### Typedefs

- typedef std::vector< SegmentCabinStruct > [AIRINV::SegmentCabinStructList\\_T](#)

## 25.104 SegmentCabinStruct.hpp

```
00001 #ifndef __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP
00002 #define __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AirInv
00014 #include <airinv/bom/FareFamilyStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class SegmentCabin;
00019 }
00020
00021 namespace AIRINV {
00022
00026     struct SegmentCabinStruct : public stdair::StructAbstract {
00027         // Attributes
00028         stdair::CabinCode_T _cabinCode;
00029         stdair::NbOfBookings_T _nbOfBookings;
00030         FareFamilyStruct _itFareFamily;
00031         FareFamilyStructList_T _fareFamilies;
00032
00037         void fill (stdair::SegmentCabin&) const;
00038
00042         const std::string describe() const;
00043     };
00044
00048     typedef std::vector<SegmentCabinStruct> SegmentCabinStructList_T;
00049
00050 }
00051 #endif // __AIRINV_BOM_SEGMENTCABINSTRUCT_HPP
```

## 25.105 airinv/bom/SegmentDateHelper.cpp File Reference

```
#include <cassert>
#include <stdair/basic/BasConst_General.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/LegDate.hpp>
#include <airinv/bom/SegmentDateHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.106 SegmentDateHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/basic/BasConst_General.hpp>
00008 #include <stdair/bom/BomManager.hpp>
00009 #include <stdair/bom/SegmentDate.hpp>
00010 #include <stdair/bom/SegmentCabin.hpp>
00011 #include <stdair/bom/LegDate.hpp>
00012 // AIRINV
00013 #include <airinv/bom/SegmentDateHelper.hpp>
00014 #include <airinv/bom/SegmentCabinHelper.hpp>
00015
00016 namespace AIRINV {
00017 // //////////////////////////////////////
00018 void SegmentDateHelper::fillFromRouting (stdair::SegmentDate& ioSegmentDate) {
00019     /*
00020      * If the segment is just marketed by this carrier,
00021      * retrieve the operating segment and call the fillFromRouting
00022      * method on it.
00023      */
00024     stdair::SegmentDate* lOperatingSegmentDate_ptr =
00025         ioSegmentDate.getOperatingSegmentDate ();
00026     if (lOperatingSegmentDate_ptr != NULL) {
00027         return;
00028     }
00029     // Retrieve the first and the last legs of the routing.
00030     // Note that in the majority of the cases, as flights are mono-legs,
00031     // the first and last legs are thus the same.
00032     const stdair::LegDateList_T& lLegDateList =
00033         stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00034     stdair::LegDateList_T::const_iterator itFirstLeg = lLegDateList.begin();
00035     const stdair::LegDate* lFirstLeg_ptr = *itFirstLeg;
00036     assert (lFirstLeg_ptr != NULL);
00037     stdair::LegDateList_T::const_reverse_iterator itLastLeg =
00038         lLegDateList.rbegin();
00039     const stdair::LegDate* lLastLeg_ptr = *itLastLeg;
00040     assert (lLastLeg_ptr != NULL);
00041
00042     // Set the Boarding Date
00043     const stdair::Date_T& lBoardingDate = lFirstLeg_ptr->getBoardingDate();
00044     ioSegmentDate.setBoardingDate (lBoardingDate);
00045     // Set the Boarding Time
00046     const stdair::Duration_T& lBoardingTime = lFirstLeg_ptr->getBoardingTime();
00047     ioSegmentDate.setBoardingTime (lBoardingTime);
00048     // Set the Off Date
00049     const stdair::Date_T& lOffDate = lLastLeg_ptr->getOffDate();
00050     ioSegmentDate.setOffDate (lOffDate);
00051     // Set the Off Time
00052     const stdair::Duration_T& lOffTime = lLastLeg_ptr->getOffTime();
00053     ioSegmentDate.setOffTime (lOffTime);
00054     // Set the Elapsed Time for the whole path
00055     updateElapsedTimeFromRouting (ioSegmentDate);
00056
00057     // Initialise the AU for all classes.
00058     const stdair::SegmentCabinList_T& lSegmentCabinList =
00059         stdair::BomManager::getList<stdair::SegmentCabin> (ioSegmentDate);
00060     for (stdair::SegmentCabinList_T::const_iterator itSC =
00061         lSegmentCabinList.begin(); itSC != lSegmentCabinList.end(); ++itSC) {
00062         stdair::SegmentCabin* lSC_ptr = *itSC;
00063         assert (lSC_ptr != NULL);
00064
00065         // Initialise the AU for children booking classes.

```



```

00066         SegmentCabinHelper::initialiseAU (*lSC_ptr);
00067     }
00068 }
00069
00070 // //////////////////////////////////////
00071 void SegmentDateHelper::
00072 updateElapsedTimeFromRouting (stdair::SegmentDate& ioSegmentDate) {
00073     const stdair::LegDateList_T& lLegDateList =
00074         stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00075
00076     stdair::LegDateList_T::const_iterator itLegDate = lLegDateList.begin();
00077     const stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00078     assert (lCurrentLegDate_ptr != NULL);
00079
00080     // Retrieve the elapsed time of the first leg
00081     stdair::Duration_T lElapsedTime = lCurrentLegDate_ptr->getElapsedTime();
00082
00083     // Go to the next leg, if existing. If not existing, the following
00084     // loop will not be entered (as it means: currentLeg == _legDateList.end()).
00085     ++itLegDate;
00086
00087     for (const stdair::LegDate* lPreviousLegDate_ptr = lCurrentLegDate_ptr;
00088         itLegDate != lLegDateList.end();
00089         ++itLegDate, lPreviousLegDate_ptr = lCurrentLegDate_ptr) {
00090         lCurrentLegDate_ptr = *itLegDate;
00091
00092         // As the boarding point of the current leg is the same as the off point
00093         // of the previous leg (by construction), there is no time difference.
00094         assert (lCurrentLegDate_ptr->getBoardingPoint()
00095             == lPreviousLegDate_ptr->getOffPoint());
00096         const stdair::Duration_T& lStopOverTime =
00097             lCurrentLegDate_ptr->getBoardingTime() - lPreviousLegDate_ptr->getOffTime
00098     );
00099         lElapsedTime += lStopOverTime;
00100
00101         // Add the elapsed time of the current leg
00102         const stdair::Duration_T& currentElapsedTime =
00103             lCurrentLegDate_ptr->getElapsedTime();
00104         lElapsedTime += currentElapsedTime;
00105     }
00106
00107     // Store the result
00108     ioSegmentDate.setElapsedTime (lElapsedTime);
00109     // From the elapsed time, update the distance
00110     updateDistanceFromElapsedTime (ioSegmentDate);
00111 }
00112
00113 // //////////////////////////////////////
00114 void SegmentDateHelper::
00115 updateDistanceFromElapsedTime (stdair::SegmentDate& ioSegmentDate) {
00116     const stdair::Duration_T& lElapsedTime = ioSegmentDate.getElapsedTime();
00117     const double lElapseInHours=static_cast<const double>(lElapsedTime.hours());
00118     const long int lDistance =
00119         static_cast<const long int>(stdair::DEFAULT_FLIGHT_SPEED*lElapseInHours);
00120     ioSegmentDate.setDistance (lDistance);
00121 }
00122
00123 }

```

## 25.107 airinv/bom/SegmentDateHelper.hpp File Reference

### Classes

- class [AIRINV::SegmentDateHelper](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

**25.108 SegmentDateHelper.hpp**

```
00001 #ifndef __AIRINV_BOM_SEGMENTDATEHELPER_HPP
00002 #define __AIRINV_BOM_SEGMENTDATEHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007
00008 // Forward declarations
00009 namespace stdair {
00010     class SegmentDate;
00011 }
00012
00013 namespace AIRINV {
00016     class SegmentDateHelper {
00017     public:
00018         // ////////////////////////////////// Business Methods //////////////////////////////////
00021         static void fillFromRouting (stdair::SegmentDate&);
00022
00032         static void updateElapsedTimeFromRouting (stdair::SegmentDate&);
00033
00035         static void updateDistanceFromElapsedTime (stdair::SegmentDate&);
00036     };
00037
00038 }
00039 #endif // __AIRINV_BOM_SEGMENTDATEHELPER_HPP
```

## 25.109 airinv/bom/SegmentSnapshotTableHelper.cpp File Reference

```
#include <cassert>
#include <cmath>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/BomRetriever.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/SegmentSnapshotTable.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/basic/BasConst_Curves.hpp>
#include <airinv/bom/SegmentSnapshotTableHelper.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.110 SegmentSnapshotTableHelper.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <cmath>
00007 // StdAir
00008 #include <stdair/basic/BasConst_Inventory.hpp>
00009 #include <stdair/bom/BomRetriever.hpp>
00010 #include <stdair/bom/BomManager.hpp>
00011 #include <stdair/bom/SegmentDate.hpp>
00012 #include <stdair/bom/SegmentCabin.hpp>
00013 #include <stdair/bom/FareFamily.hpp>
00014 #include <stdair/bom/BookingClass.hpp>
00015 #include <stdair/bom/SegmentSnapshotTable.hpp>
00016 #include <stdair/service/Logger.hpp>
00017 // AirInv
00018 #include <airinv/basic/BasConst_Curves.hpp>
00019 #include <airinv/bom/SegmentSnapshotTableHelper.hpp>
00020 #include <airinv/bom/FlightDateHelper.hpp>
00021 #include <airinv/bom/SegmentCabinHelper.hpp>
00022
00023 namespace AIRINV {
00024
00025 // //////////////////////////////////////
00026 void SegmentSnapshotTableHelper::
00027 takeSnapshots (stdair::SegmentSnapshotTable& ioSegmentSnapshotTable,
00028               const stdair::DateTime_T& iSnapshotTime) {
00029     // Retrieve the segment-cabin index and take the snapshots for
00030     // each segment-cabin.
00031     const stdair::SegmentCabinIndexMap_T& lSegmentCabinIndexMap =
00032         ioSegmentSnapshotTable.getSegmentCabinIndexMap();
00033     for (stdair::SegmentCabinIndexMap_T::const_iterator itSCIdx =
00034          lSegmentCabinIndexMap.begin();
00035          itSCIdx != lSegmentCabinIndexMap.end(); ++itSCIdx) {
00036         const stdair::SegmentCabin* lSC_ptr = itSCIdx->first;
00037         assert (lSC_ptr != NULL);
00038         const stdair::SegmentDataID_T& lSCIdx = itSCIdx->second;
00039
00040         const stdair::Date_T& lSnapshotDate = iSnapshotTime.date();
00041
00042         // Compare the date of the snapshot time and the departure date of
00043         // the segment-cabin in order to verify the necessity of taking snapshots.
00044         const stdair::SegmentDate& lSegmentDate =
00045             stdair::BomManager::getParent<stdair::SegmentDate> (*lSC_ptr);
00046         const stdair::Date_T& lDepartureDate = lSegmentDate.getBoardingDate();
00047         const stdair::DateOffset_T lDateOffset = lDepartureDate - lSnapshotDate;
00048         const stdair::DTD_T lDTD = lDateOffset.days() + 1;
00049
00050         if (lDTD >= 0 && lDTD <= stdair::DEFAULT_MAX_DTD) {
00051             SegmentCabinHelper::updateAvailabilities (*lSC_ptr);
00052             takeSnapshots (ioSegmentSnapshotTable, lDTD, *lSC_ptr, lSCIdx);
00053             registerProductAndPriceOrientedBookings (ioSegmentSnapshotTable,
00054                                                       lDTD, *lSC_ptr, lSCIdx);
00055         }
00056     }
00057 }
00058
00059 // //////////////////////////////////////
00060 void SegmentSnapshotTableHelper::
00061 takeSnapshots (stdair::SegmentSnapshotTable& ioSegmentSnapshotTable,
00062               const stdair::DTD_T& iDTD,
00063               const stdair::SegmentCabin& iSegmentCabin,
00064               const stdair::SegmentDataID_T iSegmentCabinIdx) {
00065

```

```

00066 // Extract the views for the corresponding DTD and segment-cabin.
00067 stdair::SegmentCabinDTDSnapshotView_T lBookingView = ioSegmentSnapshotTable.
00068     getSegmentCabinDTDBookingSnapshotView (iSegmentCabinIdx,
00069     iSegmentCabinIdx, iDTD);
00070 stdair::SegmentCabinDTDSnapshotView_T lCancellationView = ioSegmentSnapshotTa
ble.
00071     getSegmentCabinDTDCancellationSnapshotView (iSegmentCabinIdx,
00072     iSegmentCabinIdx, iDTD);
00073 stdair::SegmentCabinDTDSnapshotView_T lAvailabilityView = ioSegmentSnapshotTa
ble.
00074     getSegmentCabinDTDAvailabilitySnapshotView (iSegmentCabinIdx,
00075     iSegmentCabinIdx, iDTD);
00076
00077 // Retrieve the block index of the segment-cabin.
00078 std::ostream lSCMapKey;
00079 lSCMapKey << stdair::DEFAULT_SEGMENT_CABIN_VALUE_TYPE
00080     << iSegmentCabin.describeKey();
00081 const stdair::ClassIndex_T& lCabinIdx =
00082     ioSegmentSnapshotTable.getClassIndex (lSCMapKey.str());
00083 lAvailabilityView[lCabinIdx] = iSegmentCabin.getAvailabilityPool();
00084 lBookingView[lCabinIdx] = iSegmentCabin.getCommittedSpace();
00085
00086
00087 // Browse the booking class list
00088 const stdair::BookingClassList_T& lBCList =
00089     stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00090 for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00091     itBC != lBCList.end(); ++itBC) {
00092     const stdair::BookingClass* lBookingClass_ptr = *itBC;
00093     assert (lBookingClass_ptr != NULL);
00094
00095     // Retrieve the block index of the booking class.
00096     const stdair::ClassIndex_T& lIdx =
00097         ioSegmentSnapshotTable.getClassIndex (lBookingClass_ptr->describeKey());
00098
00099     // DEBUG
00100     // STDAIR_LOG_DEBUG ("Taking snapshot for "
00101     // << iSegmentCabin.describeKey() << ", "
00102     // << lBookingClass_ptr->describeKey()
00103     // << ", DTD: " << iDTD << ", nb of bookings: "
00104     // << lBookingClass_ptr->getNbOfBookings());
00105
00106     // Write the snapshot.
00107     lBookingView[lIdx]=lBookingClass_ptr->getNbOfBookings();
00108     lCancellationView[lIdx] =
00109         lBookingClass_ptr->getNbOfCancellations();
00110     lAvailabilityView[lIdx] =
00111         lBookingClass_ptr->getSegmentAvailability();
00112 }
00113 }
00114
00115 // //////////////////////////////////////
00116 void SegmentSnapshotTableHelper::registerProductAndPriceOrientedBookings
00117 (stdair::SegmentSnapshotTable& ioSegmentSnapshotTable, const stdair::DTD_T& iDT
D,
00118     const stdair::SegmentCabin& iSegmentCabin,
00119     const stdair::SegmentDataID_T iSegmentCabinIdx) {
00120
00121     // Extract the views for the corresponding DTD and segment-cabin.
00122     stdair::SegmentCabinDTDRangeSnapshotView_T lRangeBookingView =
00123         ioSegmentSnapshotTable.getSegmentCabinDTDRangeBookingSnapshotView (iSegment
CabinIdx, iSegmentCabinIdx, iDTD, iDTD + 1);
00124     stdair::SegmentCabinDTDRangeSnapshotView_T lRangeCancellationView =
00125         ioSegmentSnapshotTable.getSegmentCabinDTDRangeCancellationSnapshotView (iSe
gmentCabinIdx, iSegmentCabinIdx, iDTD, iDTD + 1);
00126     stdair::SegmentCabinDTDSnapshotView_T lProductOrientedGrossBookingView =
00127         ioSegmentSnapshotTable.getSegmentCabinDTDProductOrientedGrossBookingSnapsho

```

```

    tView (iSegmentCabinIdx, iSegmentCabinIdx, iDTD);
00128     stdair::SegmentCabinDTDSnapshotView_T lPriceOrientedGrossBookingView =
00129     ioSegmentSnapshotTable.getSegmentCabinDTDSnapshotView_T (iSegmentCabinIdx, iSegmentCabinIdx, iDTD);
00130     stdair::SegmentCabinDTDSnapshotView_T lProductOrientedNetBookingView =
00131     ioSegmentSnapshotTable.getSegmentCabinDTDSnapshotView_T (iSegmentCabinIdx, iSegmentCabinIdx, iDTD);
00132     stdair::SegmentCabinDTDSnapshotView_T lPriceOrientedNetBookingView =
00133     ioSegmentSnapshotTable.getSegmentCabinDTDSnapshotView_T (iSegmentCabinIdx, iSegmentCabinIdx, iDTD);
00134
00135     // Retrieve the lowest yield and the lowest class and treat the number of gross
00136     // bookings of this class the price oriented bookings.
00137     const stdair::BookingClassList_T& lBCList =
00138     stdair::BomManager::getList<stdair::BookingClass> (iSegmentCabin);
00139     stdair::BookingClassList_T::const_iterator iterBC = lBCList.begin();
00140     assert (iterBC != lBCList.end());
00141     stdair::BookingClass* lLowestClass_ptr = *iterBC;
00142     assert (lLowestClass_ptr != NULL);
00143     stdair::Yield_T lLowestYield = lLowestClass_ptr->getYield();
00144     for (; iterBC != lBCList.end(); iterBC++) {
00145         const stdair::BookingClass* lBookingClass_ptr = *iterBC;
00146         assert (lBookingClass_ptr != NULL);
00147         const stdair::Yield_T& lYield = lBookingClass_ptr->getYield();
00148         if (lYield < lLowestYield) {
00149             lLowestYield = lYield;
00150             lLowestClass_ptr = *iterBC;
00151         }
00152     }
00153     assert (lLowestClass_ptr != NULL);
00154
00155     // Retrieve the block index of the booking class.
00156     const stdair::ClassIndex_T& lClassIdx =
00157     ioSegmentSnapshotTable.getClassIndex (lLowestClass_ptr->describeKey());
00158
00159     // Compute the number of gross bookings for this class.
00160     const stdair::NbOfBookings_T lNbOfNetBkgs =
00161     lRangeBookingView[lClassIdx][0] - lRangeBookingView[lClassIdx][1];
00162     const stdair::NbOfCancellations_T lNbOfCx =
00163     lRangeCancellationView[lClassIdx][0] - lRangeCancellationView[lClassIdx][1];
00164     const stdair::NbOfBookings_T lNbOfGrossBkgs = lNbOfNetBkgs + lNbOfCx;
00165
00166     // Write these numbers of bookings to the price-oriented value.
00167     lPriceOrientedGrossBookingView[lClassIdx] = lNbOfGrossBkgs;
00168     lPriceOrientedNetBookingView[lClassIdx] = lNbOfNetBkgs;
00169
00170     // Boolean for "no lower class available" verification.
00171     bool noLowerClassAvl = true;
00172     if (lLowestClass_ptr->getSegmentAvailability() >= 1.0) {
00173         noLowerClassAvl = false;
00174     }
00175
00176     // Browse the booking class list
00177     stdair::BookingClassList_T::const_reverse_iterator itBC = lBCList.rbegin();
00178     for (; itBC != lBCList.rend(); itBC++) {
00179         const stdair::BookingClass* lBookingClass_ptr = *itBC;
00180         assert (lBookingClass_ptr != NULL);
00181
00182         // Retrieve the yield of this class.
00183         const stdair::Yield_T& lYield = lBookingClass_ptr->getYield();
00184         assert (lYield >= lLowestYield);
00185         if (lYield > lLowestYield) {
00186
00187             // Retrieve the block index of the booking class.
00188             const stdair::ClassIndex_T& lIdx =
00189             ioSegmentSnapshotTable.getClassIndex (lBookingClass_ptr->describeKey())

```

```
00190 ;
00191 // Compute the number of gross bookings for this class.
00192 const stdair::NbOfBookings_T lNetBkgs =
00193     lRangeBookingView[lIdx][0] - lRangeBookingView[lIdx][1];
00194 const stdair::NbOfCancellations_T lCx =
00195     lRangeCancellationView[lIdx][0] - lRangeCancellationView[lIdx][1];
00196 const stdair::NbOfBookings_T lGrossBkgs = lNetBkgs + lCx;
00197
00198 // If there is a lower class available, these gross bookings
00199 // will be considered product-oriented. Otherwise, they will be
00200 // considered price-oriented
00201 if (noLowerClassAvl == false) {
00202     lProductOrientedGrossBookingView[lIdx] = lGrossBkgs;
00203     lProductOrientedNetBookingView[lIdx] = lNetBkgs;
00204 } else {
00205     lPriceOrientedGrossBookingView[lIdx] = lGrossBkgs;
00206     lPriceOrientedNetBookingView[lIdx] = lNetBkgs;
00207
00208     if (lBookingClass_ptr->getSegmentAvailability() >= 1.0) {
00209         noLowerClassAvl = false;
00210     }
00211 }
00212 }
00213 }
00214 }
00215
00216 }
```



## 25.111 airinv/bom/SegmentSnapshotTableHelper.hpp File Reference

```
#include <string>
#include <stdair/stdair_basic_types.hpp>
```

### Classes

- class [AIRINV::SegmentSnapshotTableHelper](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

**25.112 SegmentSnapshotTableHelper.hpp**

```

00001 #ifndef __AIRINV_BOM_SEGMENTSNAPOSHOTTABLEHELPER_HPP
00002 #define __AIRINV_BOM_SEGMENTSNAPOSHOTTABLEHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/stdair_basic_types.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014     class SegmentSnapshotTable;
00015     class SegmentCabin;
00016 }
00017
00018 namespace AIRINV {
00019
00022     class SegmentSnapshotTableHelper {
00023     public:
00024         // ////////// Business Methods //////////
00026         static void takeSnapshots (stdair::SegmentSnapshotTable&,
00027                                   const stdair::DateTime_T&);
00028     private:
00029         // ////////// Helpers for business methods. //////////
00031         static void takeSnapshots (stdair::SegmentSnapshotTable&,
00032                                   const stdair::DTD_T&,
00033                                   const stdair::SegmentCabin&,
00034                                   const stdair::SegmentDataID_T);
00035
00037         static void registerProductAndPriceOrientedBookings
00038             (stdair::SegmentSnapshotTable&, const stdair::DTD_T&,
00039              const stdair::SegmentCabin&, const stdair::SegmentDataID_T);
00040     };
00041
00042 }
00043 #endif // __AIRINV_BOM_SEGMENTSNAPOSHOTTABLEHELPER_HPP

```

## 25.113 airinv/bom/SegmentStruct.cpp File Reference

```
#include <cassert>
#include <stdair/bom/SegmentDate.hpp>
#include <airinv/bom/SegmentStruct.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.114 SegmentStruct.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // STDAIR
00007 #include <stdair/bom/SegmentDate.hpp>
00008 // AIRINV
00009 #include <airinv/bom/SegmentStruct.hpp>
00010
00011 namespace AIRINV {
00012
00013 // //////////////////////////////////////
00014 const std::string SegmentStruct::describe() const {
00015     std::ostringstream ostr;
00016
00017     ostr << "      " << _boardingPoint << " / "
00018         << boost::posix_time::to_simple_string(_boardingTime)
00019         << " -- " << _offPoint << " / "
00020         << boost::posix_time::to_simple_string(_offTime)
00021         << " --> "
00022         << boost::posix_time::to_simple_string(_elapsed)
00023         << std::endl;
00024
00025     for (SegmentCabinStructList_T::const_iterator itCabin =
00026         _cabinList.begin(); itCabin != _cabinList.end(); itCabin++) {
00027         const SegmentCabinStruct& lCabin = *itCabin;
00028         ostr << lCabin.describe();
00029     }
00030     ostr << std::endl;
00031
00032     return ostr.str();
00033 }
00034
00035 // //////////////////////////////////////
00036 void SegmentStruct::fill (stdair::SegmentDate& ioSegmentDate) const {
00037     // Set the Boarding Date
00038     ioSegmentDate.setBoardingDate (_offDate);
00039     // Set the Boarding Time
00040     ioSegmentDate.setBoardingTime (_boardingTime);
00041     // Set the Off Date
00042     ioSegmentDate.setOffDate (_offDate);
00043     // Set the Off Time
00044     ioSegmentDate.setOffTime (_offTime);
00045     // Set the Elapsed Time
00046     ioSegmentDate.setElapsedTime (_elapsed);
00047 }
00048
00049 }

```

## 25.115 airinv/bom/SegmentStruct.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_inventory_types.hpp>
#include <stdair/basic/StructAbstract.hpp>
#include <airinv/bom/SegmentCabinStruct.hpp>
```

### Classes

- struct [AIRINV::SegmentStruct](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

### Typedefs

- typedef std::vector< SegmentStruct > [AIRINV::SegmentStructList\\_T](#)

**25.116 SegmentStruct.hpp**

```

00001 #ifndef __AIRINV_BOM_SEGMENTSTRUCT_HPP
00002 #define __AIRINV_BOM_SEGMENTSTRUCT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // STDAIR
00011 #include <stdair/stdair_inventory_types.hpp>
00012 #include <stdair/basic/StructAbstract.hpp>
00013 // AIRINV
00014 #include <airinv/bom/SegmentCabinStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class SegmentDate;
00019 }
00020
00021 namespace AIRINV {
00022     struct SegmentStruct : public stdair::StructAbstract {
00023         // Attributes
00024         stdair::AirportCode_T _boardingPoint;
00025         stdair::AirportCode_T _offPoint;
00026         stdair::Date_T _boardingDate;
00027         stdair::Duration_T _boardingTime;
00028         stdair::Date_T _offDate;
00029         stdair::Duration_T _offTime;
00030         stdair::Duration_T _elapsed;
00031         SegmentCabinStructList_T _cabinList;
00032
00033         void fill (stdair::SegmentDate&) const;
00034
00035         const std::string describe() const;
00036     };
00037
00038     typedef std::vector<SegmentStruct> SegmentStructList_T;
00039 }
00040 #endif // __AIRINV_BOM_SEGMENTSTRUCT_HPP

```

## 25.117 airinv/command/FFDisutilityParser.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/FFDisutilityParserHelper.hpp>
#include <airinv/command/FFDisutilityParser.hpp>
#include <airinv/command/InventoryManager.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.118 FFDisutilityParser.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasFileMgr.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/command/FFDisutilityParserHelper.hpp>
00013 #include <airinv/command/FFDisutilityParser.hpp>
00014 #include <airinv/command/InventoryManager.hpp>
00015
00016 namespace AIRINV {
00017
00018     // //////////////////////////////////////
00019     void FFDisutilityParser::
00020     parse (const stdair::FFDisutilityFilePath& iFFDisutilityFilename,
00021           stdair::BomRoot& ioBomRoot) {
00022
00023         const stdair::Filename_T lFilename = iFFDisutilityFilename.name();
00024
00025         // Check that the file path given as input corresponds to an actual file
00026         bool doesExistAndIsReadable =
00027             stdair::BasFileMgr::doesExistAndIsReadable (lFilename);
00028         if (doesExistAndIsReadable == false) {
00029             std::ostringstream oMessage;
00030             oMessage << "The FF disutility input file, '" << lFilename
00031                 << "', can not be retrieved on the file-system";
00032             STDAIR_LOG_ERROR (oMessage.str());
00033             throw FFDisutilityInputFileNotFoundException (oMessage.str());
00034         }
00035
00036         // Initialise the FFDisutility file parser.
00037         FFDisutilityFileParser lFFDisutilityParser (ioBomRoot, lFilename);
00038
00039         // Parse the CSV-formatted FFDisutility input file, and generate the
00040         // corresponding FFDisutility curves.
00041         lFFDisutilityParser.generateFFDisutilityCurves ();
00042     }
00043 }

```



## 25.119 airinv/command/FFDisutilityParser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_file.hpp>
#include <stdair/command/CmdAbstract.hpp>
```

### Classes

- class [AIRINV::FFDisutilityParser](#)  
*Class wrapping the parser entry point.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.120 FFDisutilityParser.hpp

```
00001 #ifndef __AIRINV_CMD_FFDISUTILITYPARSER_HPP
00002 #define __AIRINV_CMD_FFDISUTILITYPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/stdair_file.hpp>
00010 #include <stdair/command/CmdAbstract.hpp>
00011
00012 namespace stdair {
00013     class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00018     class FFDisutilityParser : public stdair::CmdAbstract {
00019     public:
00020         static void parse (const stdair::FFDisutilityFilePath& iFFDisutilityInputFile
00021             name,
00022                 stdair::BomRoot&);
00023     };
00024 }
00025
00026 #endif // __AIRINV_CMD_FFDISUTILITYPARSER_HPP
```

## 25.121 airinv/command/FFDisutilityParserHelper.cpp File Reference

```
#include <cassert>
#include <ostream>
#include <stdair/stdair_exceptions.hpp>
#include <stdair/stdair_types.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/FFDisutilityParserHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)
- namespace [AIRINV::FFDisutilityParserHelper](#)

### Functions

- `repeat_p_t` [AIRINV::FFDisutilityParserHelper::key\\_p](#) (`chset_t("0-9A-Z").derived()`, 1, 10)

**25.122 FFDisutilityParserHelper.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <ostream>
00007 // StdAir
00008 #include <stdair/stdair_exceptions.hpp>
00009 #include <stdair/stdair_types.hpp>
00010 #include <stdair/bom/BomRoot.hpp>
00011 #include <stdair/service/Logger.hpp>
00012 // #define BOOST_SPIRIT_DEBUG
00013 #include <airinv/command/FFDisutilityParserHelper.hpp>
00014
00015 //
00016 namespace bsc = boost::spirit::classic;
00017
00018 namespace AIRINV {
00019
00020     namespace FFDisutilityParserHelper {
00021
00022         // //////////////////////////////////////
00023         // Semantic actions
00024         // //////////////////////////////////////
00025
00026         ParserSemanticAction::
00027         ParserSemanticAction (FFDisutilityStruct& ioFFDisutility)
00028             : _ffDisutility (ioFFDisutility) {
00029         }
00030
00031         // //////////////////////////////////////
00032         storeCurveKey::
00033         storeCurveKey (FFDisutilityStruct& ioFFDisutility)
00034             : ParserSemanticAction (ioFFDisutility) {
00035         }
00036
00037         // //////////////////////////////////////
00038         void storeCurveKey::operator() (iterator_t iStr,
00039                                         iterator_t iStrEnd) const {
00040             const std::string lKey (iStr, iStrEnd);
00041             _ffDisutility._key = lKey;
00042         }
00043
00044         // //////////////////////////////////////
00045         storeDTD::storeDTD (FFDisutilityStruct& ioFFDisutility)
00046             : ParserSemanticAction (ioFFDisutility) {
00047         }
00048
00049         // //////////////////////////////////////
00050         void storeDTD::operator() (int iDTD) const {
00051             _ffDisutility._dtd = iDTD;
00052             //STDAIR_LOG_DEBUG ("DTD: " << iDTD);
00053         }
00054
00055         // //////////////////////////////////////
00056         storeFFDisutilityValue::storeFFDisutilityValue (FFDisutilityStruct& ioFFDisut
00057         ility)
00058             : ParserSemanticAction (ioFFDisutility) {
00059         }
00060
00061         // //////////////////////////////////////
00062         void storeFFDisutilityValue::operator() (double iReal) const {
00063             const bool hasInsertBeenSuccessfull =
00064                 _ffDisutility._curve.
00065                 insert (stdair::FFDisutilityCurve_T::

```

```

00065         value_type (_ffDisutility._dtd, iReal)).second;
00066     if (hasInsertBeenSuccessfull == false) {
00067         std::ostringstream ostr;
00068         ostr << "The same DTD ('" << _ffDisutility._dtd
00069             << "') has probably been given twice";
00070         STDAIR_LOG_ERROR (ostr.str());
00071         throw stdair::KeyDuplicationException (ostr.str());
00072     }
00073
00074     //STDAIR_LOG_DEBUG ("PosProbMass: " << iReal);
00075 }
00076
00077 ///////////////////////////////////////////////////////////////////
00078 doEndCurve::
00079 doEndCurve (stdair::BomRoot& ioBomRoot,
00080             FFDisutilityStruct& ioFFDisutility)
00081     : ParserSemanticAction (ioFFDisutility),
00082       _bomRoot (ioBomRoot) {
00083 }
00084
00085 ///////////////////////////////////////////////////////////////////
00086 // void doEndCurve::operator() (char iChar) const {
00087 void doEndCurve::operator() (iterator_t iStr,
00088                             iterator_t iStrEnd) const {
00089     // DEBUG: Display the result
00090     STDAIR_LOG_DEBUG ("FFDisutility: " << _ffDisutility.describe());
00091
00092     // Add the curve to the BomRoot.
00093     _bomRoot.addFFDisutilityCurve (_ffDisutility._key, _ffDisutility._curve);
00094
00095     // As that's the end of a curve, the values must be cleared.
00096     _ffDisutility._curve.clear();
00097 }
00098
00099
00100 ///////////////////////////////////////////////////////////////////
00101 //
00102 // Utility Parsers
00103 //
00104 ///////////////////////////////////////////////////////////////////
00106 repeat_p_t key_p (chset_t("0-9A-Z").derived(), 1, 10);
00107
00108 ///////////////////////////////////////////////////////////////////
00109 // (Boost Spirit) Grammar Definition
00110 ///////////////////////////////////////////////////////////////////
00111
00112 ///////////////////////////////////////////////////////////////////
00113 FFDisutilityParser::
00114 FFDisutilityParser (stdair::BomRoot& ioBomRoot,
00115                     FFDisutilityStruct& ioFFDisutility)
00116     : _bomRoot (ioBomRoot),
00117       _ffDisutility (ioFFDisutility) {
00118 }
00119
00120 ///////////////////////////////////////////////////////////////////
00121 template<typename ScannerT>
00122 FFDisutilityParser::definition<ScannerT>::
00123 definition (FFDisutilityParser const& self) {
00124
00125     curve_list = *( not_to_be_parsed | curve )
00126         ;
00127
00128     not_to_be_parsed =
00129         bsc::lexeme_d[ bsc::comment_p("//") | bsc::comment_p("/*", "*/")
00130             | bsc::space_p ]
00131         ;
00132

```

```

00133     curve = key >> ';' >> map
00134             >> curve_end[doEndCurve(self._bomRoot, self._ffDisutility)]
00135     ;
00136
00137     curve_end = bsc::ch_p(';')
00138     ;
00139
00140     key =
00141         bsc::lexeme_d[(key_p)[storeCurveKey(self._ffDisutility)]]
00142     ;
00143
00144     map =
00145         value_pair >> *( ';' >> value_pair)
00146     ;
00147
00148     value_pair = bsc::uint_p[storeDTD(self._ffDisutility)]
00149         >> ":" >> bsc::ureal_p[storeFFDisutilityValue(self._ffDisutility)]
00150     ;
00151
00152     // BOOST_SPIRIT_DEBUG_NODE (FFDisutilityParser);
00153     BOOST_SPIRIT_DEBUG_NODE (curve_list);
00154     BOOST_SPIRIT_DEBUG_NODE (not_to_be_parsed);
00155     BOOST_SPIRIT_DEBUG_NODE (key);
00156     BOOST_SPIRIT_DEBUG_NODE (map);
00157     BOOST_SPIRIT_DEBUG_NODE (value_pair);
00158 }
00159
00160 // //////////////////////////////////////
00161 template<typename ScannerT>
00162 bsc::rule<ScannerT> const&
00163 FFDisutilityParser::definition<ScannerT>::start() const {
00164     return curve_list;
00165 }
00166 }
00167
00168 //
00169 // Entry class for the file parser
00170 //
00171
00172 // //////////////////////////////////////
00173 FFDisutilityFileParser::
00174 FFDisutilityFileParser (stdair::BomRoot& ioBomRoot,
00175                         const stdair::Filename_T& iFilename)
00176 : _filename (iFilename), _bomRoot (ioBomRoot) {
00177     init();
00178 }
00179
00180 // //////////////////////////////////////
00181 void FFDisutilityFileParser::init() {
00182     // Open the file
00183     _startIterator = iterator_t (_filename);
00184
00185     // Check the filename exists and can be open
00186     if (!_startIterator) {
00187         std::ostream oMessage;
00188         oMessage << "The file " << _filename << " can not be open." << std::endl;
00189         STDAIR_LOG_ERROR (oMessage.str());
00190         throw FFDisutilityInputFileNotFoundException (oMessage.str());
00191     }
00192
00193     // Create an EOF iterator
00194     _endIterator = _startIterator.make_end();
00195 }
00196
00197 // //////////////////////////////////////
00198 bool FFDisutilityFileParser::generateFFDisutilityCurves () {

```

```

00202     bool oResult = false;
00203
00204     STDAIR_LOG_DEBUG ("Parsing FFDisutility input file: " << _filename);
00205
00206     // Initialise the parser (grammar) with the helper/staging structure.
00207     FFDisutilityParserHelper::FFDisutilityParser lFFDisutilityParser (_bomRoot, _
ffDisutility);
00208
00209     // Launch the parsing of the file and, thanks to the doEndCurve
00210     // call-back structure, the building of the whole BomRoot BOM
00211     // (i.e., including Inventory, FlightDate, LegDate, SegmentDate, etc.)
00212     bsc::parse_info<iterator_t> info = bsc::parse (_startIterator, _endIterator,
00213                                                  lFFDisutilityParser,
00214                                                  bsc::space_p - bsc::eol_p);
00215
00216     // Retrieves whether or not the parsing was successful
00217     oResult = info.hit;
00218
00219     const bool isFull = info.full;
00220
00221     const std::string hasBeenFullyReadStr = (isFull == true)?"":"not ";
00222     if (oResult == true && isFull == true) {
00223         STDAIR_LOG_DEBUG ("Parsing of FFDisutility input file: " << _filename
00224                           << " succeeded: read " << info.length
00225                           << " characters. The input file has "
00226                           << hasBeenFullyReadStr
00227                           << "been fully read. Stop point: " << info.stop);
00228     } else {
00229         STDAIR_LOG_ERROR ("Parsing of FFDisutility input file: " << _filename
00230                           << " failed: read " << info.length
00231                           << " characters. The input file has "
00232                           << hasBeenFullyReadStr
00233                           << "been fully read. Stop point: " << info.stop);
00234         throw FFDisutilityFileParsingFailedException ("Parsing of FFDisutility inpu
00235 t file: " + _filename + " failed.");
00236     }
00237
00238     return oResult;
00239 }
00240
00241 }

```

## 25.123 airinv/command/FFDisutilityParserHelper.hpp File Reference

```
#include <string>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/BasParserTypes.hpp>
#include <airinv/bom/FFDisutilityStruct.hpp>
```

### Classes

- struct [AIRINV::FFDisutilityParserHelper::ParserSemanticAction](#)
- struct [AIRINV::FFDisutilityParserHelper::storeCurveKey](#)
- struct [AIRINV::FFDisutilityParserHelper::storeDTD](#)
- struct [AIRINV::FFDisutilityParserHelper::storeFFDisutilityValue](#)
- struct [AIRINV::FFDisutilityParserHelper::doEndCurve](#)
- struct [AIRINV::FFDisutilityParserHelper::FFDisutilityParser](#)
- struct [AIRINV::FFDisutilityParserHelper::FFDisutilityParser::definition< ScannerT >](#)
- class [AIRINV::FFDisutilityFileParser](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::FFDisutilityParserHelper](#)



**25.124 FFDisutilityParserHelper.hpp**

```

00001 #ifndef __AIRINV_CMD_FFDisUTILITYPARSERHELPER_HPP
00002 #define __AIRINV_CMD_FFDisUTILITYPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/command/CmdAbstract.hpp>
00011 // Airinv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/basic/BasParserTypes.hpp>
00014 #include <airinv/bom/FFDisutilityStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022
00023     namespace FFDisutilityParserHelper {
00024
00025         // //////////////////////////////////////
00026         // Semantic actions
00027         // //////////////////////////////////////
00029         struct ParserSemanticAction {
00031             ParserSemanticAction (FFDisutilityStruct&);
00033             FFDisutilityStruct& _ffDisutility;
00034         };
00035
00037         struct storeCurveKey : public ParserSemanticAction {
00039             storeCurveKey (FFDisutilityStruct&);
00041             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00042         };
00043
00045         struct storeDTD : public ParserSemanticAction {
00047             storeDTD (FFDisutilityStruct&);
00049             void operator() (int iDTD) const;
00050         };
00051
00053         struct storeFFDisutilityValue : public ParserSemanticAction {
00055             storeFFDisutilityValue (FFDisutilityStruct&);
00057             void operator() (double iReal) const;
00058         };
00059
00061         struct doEndCurve : public ParserSemanticAction {
00063             doEndCurve (stdair::BomRoot&, FFDisutilityStruct&);
00065             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00067             stdair::BomRoot& _bomRoot;
00068         };
00069
00071         //
00072         // (Boost Spirit) Grammar Definition
00073         //
00075
00089         struct FFDisutilityParser :
00090             public boost::spirit::classic::grammar<FFDisutilityParser> {
00091
00092             FFDisutilityParser (stdair::BomRoot&, FFDisutilityStruct&);
00093
00094             template <typename ScannerT>
00095             struct definition {
00096                 definition (FFDisutilityParser const& self);

```

```
00097
00098         // Instantiation of rules
00099         boost::spirit::classic::rule<ScannerT> curve_list,
00100             not_to_be_parsed, curve, key, map, value_pair, curve_end;
00101
00103         boost::spirit::classic::rule<ScannerT> const& start() const;
00104     };
00105
00106     // Parser Context
00107     stdair::BomRoot& _bomRoot;
00108     FFDisutilityStruct& _ffDisutility;
00109 };
00110 }
00111
00116
00117 //
00118 // Entry class for the file parser
00119 //
00121
00126 class FFDisutilityFileParser : public stdair::CmdAbstract {
00127 public:
00129     FFDisutilityFileParser (stdair::BomRoot& ioBomRoot,
00130         const stdair::Filename_T& iFilename);
00131
00133     bool generateFFDisutilityCurves ();
00134
00135 private:
00137     void init();
00138
00139 private:
00140     // Attributes
00142     stdair::Filename_T _filename;
00143
00145     iterator_t _startIterator;
00146
00148     iterator_t _endIterator;
00149
00151     stdair::BomRoot& _bomRoot;
00152
00154     FFDisutilityStruct _ffDisutility;
00155 };
00156
00157 }
00158 #endif // __AIRINV_CMD_FFDISUTILITYPARSERHELPER_HPP
```

## 25.125 airinv/command/FRAT5Parser.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/FRAT5ParserHelper.hpp>
#include <airinv/command/FRAT5Parser.hpp>
#include <airinv/command/InventoryManager.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.126 FRAT5Parser.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasFileMgr.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/command/FRAT5ParserHelper.hpp>
00013 #include <airinv/command/FRAT5Parser.hpp>
00014 #include <airinv/command/InventoryManager.hpp>
00015
00016 namespace AIRINV {
00017
00018 // //////////////////////////////////////
00019 void FRAT5Parser::
00020 parse (const stdair::FRAT5FilePath& iFRAT5Filename,
00021        stdair::BomRoot& ioBomRoot) {
00022
00023     const stdair::Filename_T lFilename = iFRAT5Filename.name();
00024
00025     // Check that the file path given as input corresponds to an actual file
00026     bool doesExistAndIsReadable =
00027         stdair::BasFileMgr::doesExistAndIsReadable (lFilename);
00028     if (doesExistAndIsReadable == false) {
00029         std::ostringstream oMessage;
00030         oMessage << "The FRAT5 input file, '" << lFilename
00031             << "', can not be retrieved on the file-system";
00032         STDAIR_LOG_ERROR (oMessage.str());
00033         throw FRAT5InputFileNotFoundExpection (oMessage.str());
00034     }
00035
00036     // Initialise the FRAT5 file parser.
00037     FRAT5FileParser lFRAT5Parser (ioBomRoot, lFilename);
00038
00039     // Parse the CSV-formatted FRAT5 input file, and generate the
00040     // corresponding FRAT5 curves.
00041     lFRAT5Parser.generateFRAT5Curves ();
00042 }
00043 }

```

## 25.127 airinv/command/FRAT5Parser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_file.hpp>
#include <stdair/command/CmdAbstract.hpp>
```

### Classes

- class [AIRINV::FRAT5Parser](#)  
*Class wrapping the parser entry point.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.128 FRAT5Parser.hpp

```
00001 #ifndef __AIRINV_CMD_FRAT5PARSER_HPP
00002 #define __AIRINV_CMD_FRAT5PARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/stdair_file.hpp>
00010 #include <stdair/command/CmdAbstract.hpp>
00011
00012 namespace stdair {
00013     class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00018     class FRAT5Parser : public stdair::CmdAbstract {
00019     public:
00020         static void parse (const stdair::FRAT5FilePath& iFRAT5InputFilename,
00021                             stdair::BomRoot&);
00022     };
00023 }
00024
00025 #endif // __AIRINV_CMD_FRAT5PARSER_HPP
```

## 25.129 airinv/command/FRAT5ParserHelper.cpp File Reference

```
#include <cassert>
#include <ostream>
#include <stdair/stdair_exceptions.hpp>
#include <stdair/stdair_types.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/FRAT5ParserHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)
- namespace [AIRINV::FRAT5ParserHelper](#)

### Functions

- `repeat_p_t` [AIRINV::FRAT5ParserHelper::key\\_p](#) (`chset_t("0-9A-Z").derived()`, 1, 10)

## 25.130 FRAT5ParserHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <ostream>
00007 // StdAir
00008 #include <stdair/stdair_exceptions.hpp>
00009 #include <stdair/stdair_types.hpp>
00010 #include <stdair/bom/BomRoot.hpp>
00011 #include <stdair/service/Logger.hpp>
00012 // #define BOOST_SPIRIT_DEBUG
00013 #include <airinv/command/FRAT5ParserHelper.hpp>
00014
00015 //
00016 namespace bsc = boost::spirit::classic;
00017
00018 namespace AIRINV {
00019
00020     namespace FRAT5ParserHelper {
00021
00022         // //////////////////////////////////////
00023         // Semantic actions
00024         // //////////////////////////////////////
00025
00026         ParserSemanticAction::
00027         ParserSemanticAction (FRAT5Struct& ioFRAT5)
00028             : _frat5 (ioFRAT5) {
00029         }
00030
00031         // //////////////////////////////////////
00032         storeCurveKey::
00033         storeCurveKey (FRAT5Struct& ioFRAT5)
00034             : ParserSemanticAction (ioFRAT5) {
00035         }
00036
00037         // //////////////////////////////////////
00038         void storeCurveKey::operator() (iterator_t iStr,
00039                                         iterator_t iStrEnd) const {
00040             const std::string lKey (iStr, iStrEnd);
00041             _frat5._key = lKey;
00042             //STDAIR_LOG_DEBUG ("Key: " << lKey);
00043         }
00044
00045         // //////////////////////////////////////
00046         storeDTD::storeDTD (FRAT5Struct& ioFRAT5)
00047             : ParserSemanticAction (ioFRAT5) {
00048         }
00049
00050         // //////////////////////////////////////
00051         void storeDTD::operator() (int iDTD) const {
00052             _frat5._dtd = iDTD;
00053             //STDAIR_LOG_DEBUG ("DTD: " << iDTD);
00054         }
00055
00056         // //////////////////////////////////////
00057         storeFRAT5Value::storeFRAT5Value (FRAT5Struct& ioFRAT5)
00058             : ParserSemanticAction (ioFRAT5) {
00059         }
00060
00061         // //////////////////////////////////////
00062         void storeFRAT5Value::operator() (double iReal) const {
00063             const bool hasInsertBeenSuccessfull =
00064                 _frat5._curve.
00065                 insert (stdair::FRAT5Curve_T::

```



```

00066         value_type (_frat5._dtd, iReal)).second;
00067     if (hasInsertBeenSuccessfull == false) {
00068         std::ostringstream ostr;
00069         ostr << "The same DTD ('" << _frat5._dtd
00070             << "') has probably been given twice";
00071         STDAIR_LOG_ERROR (ostr.str());
00072         throw stdair::KeyDuplicationException (ostr.str());
00073     }
00074
00075     //STDAIR_LOG_DEBUG ("Value: " << iReal);
00076 }
00077
00078 ///////////////////////////////////////////////////////////////////
00079 doEndCurve::
00080 doEndCurve (stdair::BomRoot& ioBomRoot,
00081             FRAT5Struct& ioFRAT5)
00082     : ParserSemanticAction (ioFRAT5),
00083       _bomRoot (ioBomRoot) {
00084 }
00085
00086 ///////////////////////////////////////////////////////////////////
00087 // void doEndCurve::operator() (char iChar) const {
00088 void doEndCurve::operator() (iterator_t iStr,
00089                             iterator_t iStrEnd) const {
00090     // DEBUG: Display the result
00091     STDAIR_LOG_DEBUG ("FRAT5: " << _frat5.describe());
00092
00093     // Add the curve to the BomRoot.
00094     _bomRoot.addFRAT5Curve (_frat5._key, _frat5._curve);
00095
00096     // As that's the end of a curve, the values must be cleared.
00097     _frat5._curve.clear();
00098 }
00099
00100
00101 ///////////////////////////////////////////////////////////////////
00102 //
00103 //   Utility Parsers
00104 //
00105 ///////////////////////////////////////////////////////////////////
00106 repeat_p_t key_p (chset_t("0-9A-Z").derived(), 1, 10);
00107
00108 ///////////////////////////////////////////////////////////////////
00109 // (Boost Spirit) Grammar Definition
00110 ///////////////////////////////////////////////////////////////////
00111
00112 ///////////////////////////////////////////////////////////////////
00113
00114 FRAT5Parser::
00115 FRAT5Parser (stdair::BomRoot& ioBomRoot,
00116             FRAT5Struct& ioFRAT5)
00117     : _bomRoot (ioBomRoot),
00118       _frat5 (ioFRAT5) {
00119 }
00120
00121 ///////////////////////////////////////////////////////////////////
00122 template<typename ScannerT>
00123 FRAT5Parser::definition<ScannerT>::
00124 definition (FRAT5Parser const& self) {
00125
00126     curve_list = *( not_to_be_parsed | curve )
00127         ;
00128
00129     not_to_be_parsed =
00130         bsc::lexeme_d[ bsc::comment_p("//") | bsc::comment_p("/*", "*/")
00131             | bsc::space_p ]
00132         ;
00133

```

```

00134     curve = key >> ';' >> map
00135             >> curve_end[doEndCurve(self._bomRoot, self._frat5)]
00136     ;
00137
00138     curve_end = bsc::ch_p(';')
00139     ;
00140
00141     key =
00142         bsc::lexeme_d[(key_p)[storeCurveKey(self._frat5)]]
00143     ;
00144
00145     map =
00146         value_pair >> *(';' >> value_pair)
00147     ;
00148
00149     value_pair = bsc::uint_p[storeDTD(self._frat5)]
00150         >> ":" >> bsc::ureal_p[storeFRAT5Value(self._frat5)]
00151     ;
00152
00153     // BOOST_SPIRIT_DEBUG_NODE (FRAT5Parser);
00154     BOOST_SPIRIT_DEBUG_NODE (curve_list);
00155     BOOST_SPIRIT_DEBUG_NODE (not_to_be_parsed);
00156     BOOST_SPIRIT_DEBUG_NODE (key);
00157     BOOST_SPIRIT_DEBUG_NODE (map);
00158     BOOST_SPIRIT_DEBUG_NODE (value_pair);
00159 }
00160
00161 // //////////////////////////////////////
00162 template<typename ScannerT>
00163 bsc::rule<ScannerT> const&
00164 FRAT5Parser::definition<ScannerT>::start() const {
00165     return curve_list;
00166 }
00167 }
00168
00169
00171 //
00172 // Entry class for the file parser
00173 //
00175
00176 // //////////////////////////////////////
00177 FRAT5FileParser::
00178 FRAT5FileParser (stdair::BomRoot& ioBomRoot,
00179                 const stdair::Filename_T& iFilename)
00180 : _filename (iFilename), _bomRoot (ioBomRoot) {
00181     init();
00182 }
00183
00184 // //////////////////////////////////////
00185 void FRAT5FileParser::init() {
00186     // Open the file
00187     _startIterator = iterator_t (_filename);
00188
00189     // Check the filename exists and can be open
00190     if (!_startIterator) {
00191         std::ostream oMessage;
00192         oMessage << "The file " << _filename << " can not be open." << std::endl;
00193         STDAIR_LOG_ERROR (oMessage.str());
00194         throw FRAT5InputFileNotFoundExpection (oMessage.str());
00195     }
00196
00197     // Create an EOF iterator
00198     _endIterator = _startIterator.make_end();
00199 }
00200
00201 // //////////////////////////////////////
00202 bool FRAT5FileParser::generateFRAT5Curves () {

```

```
00203     bool oResult = false;
00204
00205     STDAIR_LOG_DEBUG ("Parsing FRAT5 input file: " << _filename);
00206
00207     // Initialise the parser (grammar) with the helper/staging structure.
00208     FRAT5ParserHelper::FRAT5Parser lFRAT5Parser (_bomRoot, _frat5);
00209
00210     // Launch the parsing of the file and, thanks to the doEndCurve
00211     // call-back structure, the building of the whole BomRoot BOM
00212     // (i.e., including Inventory, FlightDate, LegDate, SegmentDate, etc.)
00213     bsc::parse_info<iterator_t> info = bsc::parse (_startIterator, _endIterator,
00214                                                  lFRAT5Parser,
00215                                                  bsc::space_p - bsc::eol_p);
00216
00217     // Retrieves whether or not the parsing was successful
00218     oResult = info.hit;
00219
00220     const bool isFull = info.full;
00221
00222     const std::string hasBeenFullyReadStr = (isFull == true)?"":"not ";
00223     if (oResult == true && isFull == true) {
00224         STDAIR_LOG_DEBUG ("Parsing of FRAT5 input file: " << _filename
00225                          << " succeeded: read " << info.length
00226                          << " characters. The input file has "
00227                          << hasBeenFullyReadStr
00228                          << "been fully read. Stop point: " << info.stop);
00229     } else {
00230         STDAIR_LOG_ERROR ("Parsing of FRAT5 input file: " << _filename
00231                          << " failed: read " << info.length
00232                          << " characters. The input file has "
00233                          << hasBeenFullyReadStr
00234                          << "been fully read. Stop point: " << info.stop);
00235         throw FRAT5FileParsingFailedException ("Parsing of FRAT5 input file: "
00236                                               + _filename + " failed.");
00237     }
00238
00239     return oResult;
00240 }
00241
00242
00243 }
```

## 25.131 airinv/command/FRAT5ParserHelper.hpp File Reference

```
#include <string>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/BasParserTypes.hpp>
#include <airinv/bom/FRAT5Struct.hpp>
```

### Classes

- struct [AIRINV::FRAT5ParserHelper::ParserSemanticAction](#)
- struct [AIRINV::FRAT5ParserHelper::storeCurveKey](#)
- struct [AIRINV::FRAT5ParserHelper::storeDTD](#)
- struct [AIRINV::FRAT5ParserHelper::storeFRAT5Value](#)
- struct [AIRINV::FRAT5ParserHelper::doEndCurve](#)
- struct [AIRINV::FRAT5ParserHelper::FRAT5Parser](#)
- struct [AIRINV::FRAT5ParserHelper::FRAT5Parser::definition< ScannerT >](#)
- class [AIRINV::FRAT5FileParser](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::FRAT5ParserHelper](#)

**25.132 FRAT5ParserHelper.hpp**

```

00001 #ifndef __AIRINV_CMD_FRAT5PARSERHELPER_HPP
00002 #define __AIRINV_CMD_FRAT5PARSERHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/command/CmdAbstract.hpp>
00011 // Airinv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/basic/BasParserTypes.hpp>
00014 #include <airinv/bom/FRAT5Struct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022     namespace FRAT5ParserHelper {
00023
00024         // //////////////////////////////////////
00025         // Semantic actions
00026         // //////////////////////////////////////
00027         struct ParserSemanticAction {
00029             ParserSemanticAction (FRAT5Struct&);
00031             FRAT5Struct& _frat5;
00033         };
00035
00037         struct storeCurveKey : public ParserSemanticAction {
00039             storeCurveKey (FRAT5Struct&);
00041             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00043         };
00045
00047         struct storeDTD : public ParserSemanticAction {
00049             storeDTD (FRAT5Struct&);
00051             void operator() (int iDTD) const;
00053         };
00055
00057         struct storeFRAT5Value : public ParserSemanticAction {
00059             storeFRAT5Value (FRAT5Struct&);
00061             void operator() (double iReal) const;
00063         };
00065
00067         struct doEndCurve : public ParserSemanticAction {
00069             doEndCurve (stdair::BomRoot&, FRAT5Struct&);
00071             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00073             stdair::BomRoot& _bomRoot;
00075         };
00077
00079         // (Boost Spirit) Grammar Definition
00081
00083         struct FRAT5Parser :
00085             public boost::spirit::classic::grammar<FRAT5Parser> {
00087
00089             FRAT5Parser (stdair::BomRoot&, FRAT5Struct&);
00091
00093             template <typename ScannerT>
00095             struct definition {
00097                 definition (FRAT5Parser const& self);

```

```
00097
00098         // Instantiation of rules
00099         boost::spirit::classic::rule<ScannerT> curve_list,
00100             not_to_be_parsed, curve, key, map, value_pair, curve_end;
00101
00103         boost::spirit::classic::rule<ScannerT> const& start() const;
00104     };
00105
00106     // Parser Context
00107     stdair::BomRoot& _bomRoot;
00108     FRAT5Struct& _frat5;
00109 };
00110 }
00111
00116
00117 //
00118 // Entry class for the file parser
00119 //
00121
00126 class FRAT5FileParser : public stdair::CmdAbstract {
00127 public:
00129     FRAT5FileParser (stdair::BomRoot& ioBomRoot,
00130         const stdair::Filename_T& iFilename);
00131
00133     bool generateFRAT5Curves ();
00134
00135 private:
00137     void init();
00138
00139 private:
00140     // Attributes
00142     stdair::Filename_T _filename;
00143
00145     iterator_t _startIterator;
00146
00148     iterator_t _endIterator;
00149
00151     stdair::BomRoot& _bomRoot;
00152
00154     FRAT5Struct _frat5;
00155 };
00156
00157 }
00158 #endif // __AIRINV_CMD_FRAT5PARSERHELPER_HPP
```

## 25.133 airinv/command/InventoryBuilder.cpp File Reference

```
#include <cassert>
#include <boost/date_time/date_iterator.hpp>
#include <stdair/basic/BasConst_BookingClass.hpp>
#include <stdair/basic/BasConst_Yield.hpp>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/AirlineFeature.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/LegDate.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <stdair/bom/Bucket.hpp>
#include <stdair/bom/BomKeyManager.hpp>
#include <stdair/bom/ParsedKey.hpp>
#include <stdair/bom/BomRetriever.hpp>
#include <stdair/command/CmdCloneBomManager.hpp>
#include <stdair/factory/FacBom.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/FlightDateStruct.hpp>
#include <airinv/command/InventoryBuilder.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.134 InventoryBuilder.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/date_time/date_iterator.hpp>
00008 // StdAir
00009 #include <stdair/basic/BasConst_BookingClass.hpp>
00010 #include <stdair/basic/BasConst_Yield.hpp>
00011 #include <stdair/basic/BasConst_Inventory.hpp>
00012 #include <stdair/bom/BomManager.hpp>
00013 #include <stdair/bom/BomRoot.hpp>
00014 #include <stdair/bom/Inventory.hpp>
00015 #include <stdair/bom/AirlineFeature.hpp>
00016 #include <stdair/bom/FlightDate.hpp>
00017 #include <stdair/bom/SegmentDate.hpp>
00018 #include <stdair/bom/SegmentCabin.hpp>
00019 #include <stdair/bom/FareFamily.hpp>
00020 #include <stdair/bom/BookingClass.hpp>
00021 #include <stdair/bom/LegDate.hpp>
00022 #include <stdair/bom/LegCabin.hpp>
00023 #include <stdair/bom/Bucket.hpp>
00024 #include <stdair/bom/BomKeyManager.hpp>
00025 #include <stdair/bom/ParsedKey.hpp>
00026 #include <stdair/bom/BomRetriever.hpp>
00027 #include <stdair/command/CmdCloneBomManager.hpp>
00028 #include <stdair/factory/FacBom.hpp>
00029 #include <stdair/factory/FacBomManager.hpp>
00030 #include <stdair/service/Logger.hpp>
00031 // AirInv
00032 #include <airinv/AIRINV_Types.hpp>
00033 #include <airinv/bom/FlightDateStruct.hpp>
00034 #include <airinv/command/InventoryBuilder.hpp>
00035
00036 namespace AIRINV {
00037
00038 // //////////////////////////////////////
00039 void InventoryBuilder::
00040 buildInventory (stdair::BomRoot& ioBomRoot,
00041                const FlightDateStruct& iFlightDateStruct) {
00042     const stdair::AirlineCode_T& lAirlineCode = iFlightDateStruct._airlineCode;
00043
00044     // Instantiate an inventory object (if not exist)
00045     // for the given key (airline code)
00046     stdair::Inventory* lInventory_ptr = stdair::BomManager::
00047         getObjectPtr<stdair::Inventory> (ioBomRoot, lAirlineCode);
00048     if (lInventory_ptr == NULL) {
00049         stdair::InventoryKey lKey (lAirlineCode);
00050         lInventory_ptr =
00051             &stdair::FacBom<stdair::Inventory>::instance().create (lKey);
00052         stdair::FacBomManager::addToListAndMap (ioBomRoot, *lInventory_ptr);
00053         stdair::FacBomManager::linkWithParent (ioBomRoot, *lInventory_ptr);
00054
00055         // Add the airline feature object to the inventory
00056         const stdair::AirlineFeatureKey lAirlineFeatureKey (lAirlineCode);
00057         stdair::AirlineFeature& lAirlineFeature =
00058             stdair::FacBom<stdair::AirlineFeature>::instance().create (lAirlineFeatur
00059 eKey);
00059         stdair::FacBomManager::setAirlineFeature (*lInventory_ptr,
00060                                                    lAirlineFeature);
00061         stdair::FacBomManager::linkWithParent (*lInventory_ptr, lAirlineFeature);
00062         // Link the airline feature object with the top of the BOM tree
00063         stdair::FacBomManager::addToListAndMap (ioBomRoot, lAirlineFeature);
00064     }

```



```

00065     assert (lInventory_ptr != NULL);
00066
00067     // Build the flight-date within the inventory.
00068     buildFlightDate (*lInventory_ptr, iFlightDateStruct);
00069 }
00070
00071 // //////////////////////////////////////
00072 void InventoryBuilder::
00073 buildFlightDate (stdair::Inventory& ioInventory,
00074                 const FlightDateStruct& iFlightDateStruct) {
00075     // Create the FlightDateKey
00076     const stdair::FlightDateKey lFlightDateKey (iFlightDateStruct._flightNumber,
00077                                                 iFlightDateStruct._flightDate);
00078
00079     // Check that the flight-date object is not already existing. If a
00080     // flight-date object with the same key has already been created,
00081     // then just update it, ifnot, create a flight-date and update it.
00082     stdair::FlightDate* lFlightDate_ptr = stdair::BomManager::
00083         getObjectPtr<stdair::FlightDate> (ioInventory, lFlightDateKey.toString());
00084     if (lFlightDate_ptr == NULL) {
00085         // Instantiate a flighty-date object for the given key (flight number and
00086         // flight date)
00087         lFlightDate_ptr =
00088             &stdair::FacBom<stdair::FlightDate>::instance().create (lFlightDateKey);
00089         stdair::FacBomManager::addToListAndMap (ioInventory, *lFlightDate_ptr);
00090         stdair::FacBomManager::linkWithParent (ioInventory, *lFlightDate_ptr);
00091     }
00092     assert (lFlightDate_ptr != NULL);
00093
00094     // Update the BOM flight-date with the attributes of the flight-date struct.
00095
00096     // Browse the list of leg-date struct and segment-date struct and
00097     // create the corresponding BOM.
00098     for (LegStructList_T::const_iterator itLegDate =
00099         iFlightDateStruct._legList.begin();
00100         itLegDate != iFlightDateStruct._legList.end(); ++itLegDate) {
00101         const LegStruct& lCurrentLegDateStruct = *itLegDate;
00102         buildLegDate (*lFlightDate_ptr, lCurrentLegDateStruct);
00103     }
00104
00105     for (SegmentStructList_T::const_iterator itSegmentDate =
00106         iFlightDateStruct._segmentList.begin();
00107         itSegmentDate != iFlightDateStruct._segmentList.end();
00108         ++itSegmentDate) {
00109         const SegmentStruct& lCurrentSegmentDateStruct = *itSegmentDate;
00110         buildSegmentDate (*lFlightDate_ptr, lCurrentSegmentDateStruct);
00111     }
00112
00113     buildRoutingLegKey (*lFlightDate_ptr);
00114 }
00115
00116 // //////////////////////////////////////
00117 void InventoryBuilder::
00118 buildLegDate (stdair::FlightDate& ioFlightDate,
00119              const LegStruct& iLegDateStruct) {
00120     // Check that the leg-date object is not already existing. If a
00121     // leg-date object with the same key has already been created,
00122     // then just update it, ifnot, create a leg-date and update it.
00123     stdair::LegDate* lLegDate_ptr = stdair::BomManager::
00124         getObjectPtr<stdair::LegDate> (ioFlightDate, iLegDateStruct._boardingPoint);
00125
00126     if (lLegDate_ptr == NULL) {
00127         // Instantiate a leg-date object for the given key (boarding point);
00128         stdair::LegDateKey lKey (iLegDateStruct._boardingPoint);
00129         lLegDate_ptr = &stdair::FacBom<stdair::LegDate>::instance().create (lKey);
00130         stdair::FacBomManager::addToListAndMap (ioFlightDate, *lLegDate_ptr);

```

```

00131         stdair::FacBomManager::linkWithParent (ioFlightDate, *lLegDate_ptr);
00132     }
00133     assert (lLegDate_ptr != NULL);
00134
00135     // Update the BOM leg-date with the attributes of the leg-date struct.
00136     iLegDateStruct.fill (*lLegDate_ptr);
00137
00138     // Browse the list of leg-cabin structs and create the corresponding BOM.
00139     for (LegCabinStructList_T::const_iterator itLegCabin =
00140         iLegDateStruct._cabinList.begin();
00141         itLegCabin != iLegDateStruct._cabinList.end(); ++itLegCabin) {
00142         const LegCabinStruct& lCurrentLegCabinStruct = *itLegCabin;
00143         buildLegCabin (*lLegDate_ptr, lCurrentLegCabinStruct);
00144     }
00145 }
00146
00147 // //////////////////////////////////////
00148 void InventoryBuilder::
00149 buildRoutingLegKey (stdair::FlightDate& ioFlightDate) {
00150
00151     // Browse the list of segment-dates and create direct accesses
00152     // within each segment-date.
00153     const stdair::SegmentDateList_T& lSegmentDateList =
00154         stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00155     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00156         lSegmentDateList.begin();
00157         itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00158
00159         stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00160         assert (lCurrentSegmentDate_ptr != NULL);
00161
00162         /*
00163          * If the segment is just marketed by this carrier,
00164          * retrieve the operating segment and call the createDirectAcces
00165          * method on its parent (flight date).
00166          */
00167         const stdair::SegmentDate* lOperatingSegmentDate_ptr =
00168             lCurrentSegmentDate_ptr->getOperatingSegmentDate ();
00169         if (lOperatingSegmentDate_ptr == NULL) {
00170
00171             const stdair::AirportCode_T& lBoardingPoint =
00172                 lCurrentSegmentDate_ptr->getBoardingPoint ();
00173
00174             stdair::AirportCode_T currentBoardingPoint = lBoardingPoint;
00175             const stdair::AirportCode_T& lOffPoint =
00176                 lCurrentSegmentDate_ptr->getOffPoint ();
00177
00178             // Add a sanity check so as to ensure that the loop stops. If
00179             // there are more than MAXIMAL_NUMBER_OF_LEGS legs, there is
00180             // an issue somewhere in the code (not in the parser, as the
00181             // segments are derived from the legs thanks to the
00182             // FlightPeriodStruct::buildSegments() method).
00183             unsigned short i = 1;
00184             while (currentBoardingPoint != lOffPoint
00185                 && i <= stdair::MAXIMAL_NUMBER_OF_LEGS_IN_FLIGHT) {
00186                 // Retrieve the (unique) LegDate getting that Boarding Point
00187                 stdair::LegDate& lLegDate = stdair::BomManager::
00188                     getObject<stdair::LegDate> (ioFlightDate, currentBoardingPoint);
00189
00190                 // Link the SegmentDate and LegDate together
00191                 const std::string& lRoutingKeyStr = lLegDate.describeRoutingKey();
00192                 lCurrentSegmentDate_ptr->addLegKey(lRoutingKeyStr);
00193
00194                 // Prepare the next iteration
00195                 currentBoardingPoint = lLegDate.getOffPoint ();
00196                 ++i;
00197             }

```

```

00198         assert (i <= stdair::MAXIMAL_NUMBER_OF_LEGS_IN_FLIGHT);
00199     }
00200 }
00201 }
00202
00203 // //////////////////////////////////////
00204 void InventoryBuilder::
00205 buildLegCabin (stdair::LegDate& ioLegDate,
00206               const LegCabinStruct& iLegCabinStruct) {
00207     // Check that the leg-cabin object is not already existing. If a
00208     // leg-cabin object with the same key has already been created,
00209     // then just update it, ifnot, create a leg-cabin and update it.
00210     stdair::LegCabin* lLegCabin_ptr = stdair::BomManager::
00211         getObjectPtr<stdair::LegCabin> (ioLegDate, iLegCabinStruct._cabinCode);
00212     if (lLegCabin_ptr == NULL) {
00213         // Instantiate a leg-cabin object for the given key (cabin code);
00214         stdair::LegCabinKey lKey (iLegCabinStruct._cabinCode);
00215         lLegCabin_ptr = &stdair::FacBom<stdair::LegCabin>::instance().create(lKey);
00216
00217         stdair::FacBomManager::addToListAndMap (ioLegDate, *lLegCabin_ptr);
00218         stdair::FacBomManager::linkWithParent (ioLegDate, *lLegCabin_ptr);
00219     }
00220     assert (lLegCabin_ptr != NULL);
00221
00222     // TODO: Update the BOM leg-cabin with the attributes of the
00223     // leg-cabin struct.
00224     iLegCabinStruct.fill (*lLegCabin_ptr);
00225
00226     // Browse the list of bucket structs and create the corresponding BOM.
00227     for (BucketStructList_T::const_iterator itBucket =
00228         iLegCabinStruct._bucketList.begin();
00229         itBucket != iLegCabinStruct._bucketList.end(); ++itBucket) {
00230         const BucketStruct& lCurrentBucketStruct = *itBucket;
00231         buildBucket (*lLegCabin_ptr, lCurrentBucketStruct);
00232     }
00233 }
00234
00235 // //////////////////////////////////////
00236 void InventoryBuilder::buildBucket (stdair::LegCabin& ioLegCabin,
00237                                   const BucketStruct& iBucketStruct) {
00238     // Create the BucketKey
00239     const stdair::BucketKey lBucketKey (iBucketStruct._seatIndex);
00240
00241     // Check that the bucket object is not already existing. If a
00242     // bucket object with the same key has already been created,
00243     // then just update it, ifnot, create a bucket and update it.
00244     stdair::Bucket* lBucket_ptr = stdair::BomManager::
00245         getObjectPtr<stdair::Bucket> (ioLegCabin, lBucketKey.toString());
00246     if (lBucket_ptr == NULL) {
00247         // Instantiate a bucket object for the given key (seat index);
00248         stdair::BucketKey lKey (iBucketStruct._seatIndex);
00249         lBucket_ptr = &stdair::FacBom<stdair::Bucket>::instance().create (lKey);
00250         stdair::FacBomManager::addToListAndMap (ioLegCabin, *lBucket_ptr);
00251         stdair::FacBomManager::linkWithParent (ioLegCabin, *lBucket_ptr);
00252     }
00253     assert (lBucket_ptr != NULL);
00254
00255     //
00256     iBucketStruct.fill (*lBucket_ptr);
00257 }
00258
00259 // //////////////////////////////////////
00260 void InventoryBuilder::
00261 buildSegmentDate (stdair::FlightDate& ioFlightDate,
00262                  const SegmentStruct& iSegmentDateStruct) {
00263     // Check that the segment-date object is not already existing. If a
00264     // segment-date object with the same key has already been created,

```

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00264 // then just update it, ifnot, create a segment-date and update it.
00265 const stdair::SegmentDateKey
00266     lSegmentDateKey (iSegmentDateStruct._boardingPoint,
00267                     iSegmentDateStruct._offPoint);
00268 stdair::SegmentDate* lSegmentDate_ptr = stdair::BomManager::
00269     getObjectPtr<stdair::SegmentDate>(ioFlightDate,lSegmentDateKey.toString());

00270 if (lSegmentDate_ptr == NULL) {
00271     // Instantiate a segment-date object for the given key (boarding
00272     // and off points);
00273     lSegmentDate_ptr = &stdair::FacBom<stdair::SegmentDate>::
00274         instance().create (lSegmentDateKey);
00275     stdair::FacBomManager::addToListAndMap (ioFlightDate, *lSegmentDate_ptr);
00276     stdair::FacBomManager::linkWithParent (ioFlightDate, *lSegmentDate_ptr);
00277 }
00278 assert (lSegmentDate_ptr != NULL);
00279
00280 // Update the BOM segment-date with the attributes of the
00281 // segment-date struct.
00282 iSegmentDateStruct.fill (*lSegmentDate_ptr);
00283
00284 // Browse the list of segment-cabin struct and create the corresponding BOM.
00285 for (SegmentCabinStructList_T::const_iterator itSegmentCabin =
00286     iSegmentDateStruct._cabinList.begin();
00287     itSegmentCabin != iSegmentDateStruct._cabinList.end();
00288     ++itSegmentCabin) {
00289     const SegmentCabinStruct& lCurrentSegmentCabinStruct = *itSegmentCabin;
00290     buildSegmentCabin (*lSegmentDate_ptr, lCurrentSegmentCabinStruct);
00291 }
00292 }
00293
00294 // //////////////////////////////////////
00295 void InventoryBuilder::
00296 buildSegmentCabin (stdair::SegmentDate& ioSegmentDate,
00297                   const SegmentCabinStruct& iSegmentCabinStruct) {
00298     // Check that the segment-cabin object is not already existing. If a
00299     // segment-cabin object with the same key has already been created,
00300     // then just update it, ifnot, create a segment-cabin and update it.
00301     stdair::SegmentCabin* lSegmentCabin_ptr = stdair::BomManager::
00302         getObjectPtr<stdair::SegmentCabin> (ioSegmentDate,
00303                                             iSegmentCabinStruct._cabinCode);
00304     if (lSegmentCabin_ptr == NULL) {
00305         // Instantiate a segment-cabin object for the given key (cabin code);
00306         stdair::SegmentCabinKey lKey (iSegmentCabinStruct._cabinCode);
00307         lSegmentCabin_ptr =
00308             &stdair::FacBom<stdair::SegmentCabin>::instance().create (lKey);
00309
00310         // Link the segment-cabin to the segment-date
00311         stdair::FacBomManager::addToListAndMap (ioSegmentDate, *lSegmentCabin_ptr);
00312
00313         stdair::FacBomManager::linkWithParent (ioSegmentDate, *lSegmentCabin_ptr);
00314     }
00315     assert (lSegmentCabin_ptr != NULL);
00316
00317     // TODO: Update the BOM segment-cabin with the attributes of the
00318     // segment-cabin struct.
00319     iSegmentCabinStruct.fill (*lSegmentCabin_ptr);
00320
00321     // Browse the list of fare family struct and create the corresponding BOM.
00322     for (FareFamilyStructList_T::const_iterator itFareFamily =
00323         iSegmentCabinStruct._fareFamilies.begin();
00324         itFareFamily != iSegmentCabinStruct._fareFamilies.end();
00325         ++itFareFamily) {
00326         const FareFamilyStruct& lCurrentFareFamilyStruct = *itFareFamily;
00327         buildFareFamily (*lSegmentCabin_ptr, lCurrentFareFamilyStruct);
00328     }
}

```

```

00329
00330 // //////////////////////////////////////
00331 void InventoryBuilder::
00332 buildFareFamily (stdair::SegmentCabin& ioSegmentCabin,
00333                 const FareFamilyStruct& iFareFamilyStruct) {
00334
00335     // Check that the fare family object is not already existing. If a
00336     // fare family object with the same key has already been created,
00337     // then just update it. If not, create a fare family and update it.
00338     stdair::FareFamily* lFareFamily_ptr = stdair::BomManager::
00339         getObjectPtr<stdair::FareFamily> (ioSegmentCabin,
00340                                           iFareFamilyStruct._familyCode);
00341     if (lFareFamily_ptr == NULL) {
00342         // Instantiate a fare family object for the given key (fare family code);
00343         const stdair::FareFamilyKey lFFKey (iFareFamilyStruct._familyCode);
00344         lFareFamily_ptr =
00345             &stdair::FacBom<stdair::FareFamily>::instance().create (lFFKey);
00346
00347         // Link the fare family to the segment-cabin
00348         stdair::FacBomManager::addToListAndMap (ioSegmentCabin, *lFareFamily_ptr);
00349         stdair::FacBomManager::linkWithParent (ioSegmentCabin, *lFareFamily_ptr);
00350     }
00351     assert (lFareFamily_ptr != NULL);
00352
00353     // TODO: Upcabin the BOM fare family with the attributes of the
00354     // fare family struct.
00355     iFareFamilyStruct.fill (*lFareFamily_ptr);
00356
00357     // Browse the list of booking-class struct and create the corresponding BOM.
00358     for (BookingClassStructList_T::const_iterator itBookingClass =
00359         iFareFamilyStruct._classList.begin();
00360         itBookingClass != iFareFamilyStruct._classList.end();
00361         ++itBookingClass) {
00362         const BookingClassStruct& lCurrentBookingClassStruct = *itBookingClass;
00363         buildBookingClass (*lFareFamily_ptr, lCurrentBookingClassStruct);
00364     }
00365 }
00366
00367 // //////////////////////////////////////
00368 void InventoryBuilder::
00369 buildBookingClass (stdair::FareFamily& ioFareFamily,
00370                   const BookingClassStruct& iBookingClassStruct) {
00371
00372     // Check that the booking class object is not already existing. If a
00373     // booking-class object with the same key has already been created,
00374     // then just update it. If not, create a booking-class and update it.
00375     stdair::BookingClass* lBookingClass_ptr = stdair::BomManager::
00376         getObjectPtr<stdair::BookingClass> (ioFareFamily,
00377                                             iBookingClassStruct._classCode);
00378     if (lBookingClass_ptr == NULL) {
00379         // Instantiate a booking class object for the given key (class code);
00380         const stdair::BookingClassKey lClassKey (iBookingClassStruct._classCode);
00381         lBookingClass_ptr =
00382             &stdair::FacBom<stdair::BookingClass>::instance().create (lClassKey);
00383
00384         // Link the booking-class to the fare family
00385         stdair::FacBomManager::addToListAndMap (ioFareFamily, *lBookingClass_ptr);
00386         stdair::FacBomManager::linkWithParent (ioFareFamily, *lBookingClass_ptr);
00387
00388         // Link the booking-class to the segment-cabin
00389         stdair::SegmentCabin& lSegmentCabin =
00390             stdair::BomManager::getParent<stdair::SegmentCabin> (ioFareFamily);
00391         stdair::FacBomManager::addToListAndMap (lSegmentCabin, *lBookingClass_ptr);
00392
00393         // Link the booking-class to the segment-date
00394         stdair::SegmentDate& lSegmentDate =

```

```

00395         stdair::BomManager::getParent<stdair::SegmentDate> (lSegmentCabin);
00396         stdair::FacBomManager::addToListAndMap (lSegmentDate, *lBookingClass_ptr);
00397     }
00398     assert (lBookingClass_ptr != NULL);
00399
00400     // TODO: Upcabin the BOM booking-class with the attributes of the
00401     // booking-class struct.
00402     iBookingClassStruct.fill (*lBookingClass_ptr);
00403 }
00404
00405 // //////////////////////////////////////
00406 void InventoryBuilder::buildPartnerInventories (stdair::BomRoot& ioBomRoot) {
00407
00408     // Browse the list of inventories to build partner inventories
00409     // within each inventory.
00410     const stdair::InventoryList_T& lInvList =
00411         stdair::BomManager::getList<stdair::Inventory> (ioBomRoot);
00412     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00413          itInv != lInvList.end(); ++itInv) {
00414         stdair::Inventory* lCurrentInv_ptr = *itInv;
00415         assert (lCurrentInv_ptr != NULL);
00416
00417         buildPartnerInventories (ioBomRoot, *lCurrentInv_ptr);
00418     }
00419 }
00420
00421 // //////////////////////////////////////
00422 void InventoryBuilder::buildPartnerInventories (stdair::BomRoot& ioBomRoot,
00423                                                stdair::Inventory& ioInventory)
00424 {
00425     // Browse the list of flight-dates to build partner inventories.
00426     const stdair::FlightDateList_T& lFlightDateList =
00427         stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00428     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00429          lFlightDateList.begin();
00430          itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00431         stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00432         assert (lCurrentFlightDate_ptr != NULL);
00433
00434         buildPartnerInventories (ioBomRoot, ioInventory, *lCurrentFlightDate_ptr);
00435     }
00436 }
00437
00438 // //////////////////////////////////////
00439 void InventoryBuilder::buildPartnerInventories (stdair::BomRoot& ioBomRoot,
00440                                                stdair::Inventory& ioInventory,
00441                                                stdair::FlightDate& iFlightDate
00442 ) {
00443
00444     // Browse the list of flight-dates to build partner inventories.
00445     const stdair::SegmentDateList_T& lSegmentDateList =
00446         stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00447     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00448          lSegmentDateList.begin();
00449          itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00450
00451         stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00452         assert (lCurrentSegmentDate_ptr != NULL);
00453
00454         const stdair::RoutingLegKeyList_T& lRoutingLegKeyList =
00455             lCurrentSegmentDate_ptr->getLegKeyList ();
00456
00457         // Browse the list of routing leg keys.
00458         for (stdair::RoutingLegKeyList_T::const_iterator itRoutingLegKey =

```

```

00459         lRoutingLegKeyList.begin();
00460         itRoutingLegKey != lRoutingLegKeyList.end(); ++itRoutingLegKey) {
00461
00462             // Extract the operating airline code
00463             const stdair::ParsedKey& lParsedKey =
00464                 stdair::BomKeyManager::extractKeys (*itRoutingLegKey);
00465             const stdair::InventoryKey& lInventoryKey =
00466                 lParsedKey.getInventoryKey();
00467             const stdair::AirlineCode_T lOperatingAirlineCode =
00468                 lInventoryKey.getAirlineCode();
00469
00470             // Extract the current airline code
00471             const stdair::AirlineCode_T lAirlineCode =
00472                 iFlightDate.getAirlineCode();
00473
00474             // If the operating airline is not the current one
00475             if (lOperatingAirlineCode != lAirlineCode) {
00476
00477                 // Look for the inventory of the partner within the Bom root
00478                 stdair::Inventory* lInventory_ptr =
00479                     stdair::BomRetriever::
00480                         retrieveInventoryFromKey (ioBomRoot, lOperatingAirlineCode);
00481
00482                 // Build the current segment full key
00483                 std::ostringstream lRoutingSegment;
00484                 lRoutingSegment << iFlightDate.getAirlineCode() << ";";
00485                 << iFlightDate.describeKey() << ";";
00486                 << lCurrentSegmentDate_ptr->getBoardingPoint() << ";";
00487                 << lCurrentSegmentDate_ptr->getOffPoint();
00488
00489                 // If such inventory does not exist, throw an exception
00490                 if (lInventory_ptr == NULL) {
00491                     std::ostringstream oMessage;
00492                     oMessage << "The input file does not contain information about "
00493                         << "the '" << *itRoutingLegKey << "' leg date needed by "
00494                         << "the '" << lRoutingSegment.str() << "' segment.";
00495                     STDAIR_LOG_ERROR (oMessage.str());
00496                     throw MissingPartnerFlightDateWithinScheduleFile (oMessage.str());
00497                 }
00498                 assert (lInventory_ptr != NULL);
00499
00500                 // Build the partner inventory within the current inventory
00501                 buildInventory (ioBomRoot, ioInventory, *itRoutingLegKey);
00502
00503                 // Build the current inventory as a partner of the partner inventory
00504                 buildInventory (ioBomRoot, *lInventory_ptr, lRoutingSegment.str());
00505             }
00506         }
00507     }
00508 }
00509
00510 // //////////////////////////////////////
00511 void InventoryBuilder::
00512 buildInventory (stdair::BomRoot& ioBomRoot,
00513                 stdair::Inventory& ioInventory,
00514                 const std::string& iFullKeyStr) {
00515
00516     // Check that the inventory object is not already existing. If an
00517     // inventory object with the same key has already been created,
00518     // then just update it, ifnot, create an inventory and update it.
00519     // for the given key (iFullKeyStr)
00520     stdair::Inventory* lInventory_ptr =
00521         stdair::BomRetriever::retrieveInventoryFromLongKey (ioInventory,
00522                                                             iFullKeyStr);
00523     if (lInventory_ptr == NULL) {
00524         // Instantiate a flighy-date object for the given key (airline code
00525         // within the iFullKeyStr)

```

```

00526     stdair::Inventory* lOperatingInventory_ptr =
00527         stdair::BomRetriever::retrieveInventoryFromLongKey (ioBomRoot,
00528                                                             iFullKeyStr);
00529     assert (lOperatingInventory_ptr != NULL);
00530     lInventory_ptr =
00531         &stdair::FacBom<stdair::Inventory>::instance().create (*lOperatingInventory_ptr);
00532     stdair::FacBomManager::addToListAndMap (ioInventory, *lInventory_ptr);
00533     stdair::FacBomManager::linkWithParent (ioInventory, *lInventory_ptr);
00534 }
00535 assert (lInventory_ptr != NULL);
00536
00537 // Build the flight-date within the inventory.
00538 buildFlightDate (ioBomRoot, *lInventory_ptr, iFullKeyStr);
00539 }
00540
00541 // //////////////////////////////////////
00542 void InventoryBuilder::
00543     buildFlightDate (stdair::BomRoot& ioBomRoot,
00544                     stdair::Inventory& ioInventory,
00545                     const std::string& iFullKeyStr) {
00546
00547     // Check that the flight-date object is not already existing. If a
00548     // flight-date object with the same key has already been created,
00549     // then just update it, ifnot, create a flight-date and update it.
00550     stdair::FlightDate* lFlightDate_ptr =
00551         stdair::BomRetriever::retrieveFlightDateFromLongKey (ioInventory,
00552                                                             iFullKeyStr);
00553     if (lFlightDate_ptr == NULL) {
00554         // Instantiate a flighty-date object for the given key (flight number and
00555         // flight date within the iFullKeyStr)
00556         stdair::FlightDate* lOperatingFlightDate_ptr =
00557             stdair::BomRetriever::retrieveFlightDateFromLongKey (ioBomRoot,
00558                                                             iFullKeyStr);
00559         assert (lOperatingFlightDate_ptr != NULL);
00560         stdair::FlightDate& lFlightDate =
00561             cloneFlightDate (*lOperatingFlightDate_ptr);
00562         stdair::FacBomManager::addToListAndMap (ioInventory, lFlightDate);
00563         stdair::FacBomManager::linkWithParent (ioInventory, lFlightDate);
00564     }
00565 }
00566
00567 // //////////////////////////////////////
00568 stdair::FlightDate& InventoryBuilder::
00569     cloneFlightDate (const stdair::FlightDate& iFlightDate) {
00570
00571     stdair::FlightDate& lCloneFlightDate =
00572         stdair::FacBom<stdair::FlightDate>::instance().create (iFlightDate);
00573
00574     // Check whether there are LegDate objects
00575     const bool hasLegDateList = stdair::BomManager::hasList<stdair::LegDate> (iFlightDate);
00576     if (hasLegDateList == true) {
00577
00578         // Browse the leg-dates
00579         const stdair::LegDateList_T& lLegDateList =
00580             stdair::BomManager::getList<stdair::LegDate> (iFlightDate);
00581         for (stdair::LegDateList_T::const_iterator itLD = lLegDateList.begin();
00582             itLD != lLegDateList.end(); ++itLD) {
00583             const stdair::LegDate* lLD_ptr = *itLD;
00584             assert (lLD_ptr != NULL);
00585
00586             // Clone the current leg-date
00587             stdair::LegDate& lCloneLegDate = cloneLegDate (*lLD_ptr);
00588             stdair::FacBomManager::addToListAndMap (lCloneFlightDate, lCloneLegDate);
00589
00590             stdair::FacBomManager::linkWithParent (lCloneFlightDate, lCloneLegDate);
00591
00592

```



```

00593     }
00594 }
00595
00596 // Check whether there are SegmentDate objects
00597 const bool hasSegmentDateList =
00598     stdair::BomManager::hasList<stdair::SegmentDate> (iFlightDate);
00599 if (hasSegmentDateList == true) {
00600
00601     // Browse the segment-dates
00602     const stdair::SegmentDateList_T& lSegmentDateList =
00603         stdair::BomManager::getList<stdair::SegmentDate> (iFlightDate);
00604     for (stdair::SegmentDateList_T::const_iterator itSD = lSegmentDateList.begi
n());
00605         itSD != lSegmentDateList.end(); ++itSD) {
00606         const stdair::SegmentDate* lSD_ptr = *itSD;
00607         assert (lSD_ptr != NULL);
00608
00609         // Clone the current segment-date
00610         stdair::SegmentDate& lCloneSegmentDate = cloneSegmentDate (*lSD_ptr);
00611         stdair::FacBomManager::addToListAndMap (lCloneFlightDate, lCloneSegmentDa
te);
00612         stdair::FacBomManager::linkWithParent (lCloneFlightDate, lCloneSegmentDat
e);
00613     }
00614 }
00615 }
00616
00617 return lCloneFlightDate;
00618 }
00619
00620 // //////////////////////////////////////
00621 stdair::LegDate& InventoryBuilder::cloneLegDate (const stdair::LegDate& iLegDat
e) {
00622
00623     stdair::LegDate& lCloneLegDate =
00624         stdair::FacBom<stdair::LegDate>::instance().create (iLegDate);
00625
00626     // Check whether there are LegCabin objects
00627     const bool hasLegCabinList = stdair::BomManager::hasList<stdair::LegCabin> (i
LegDate);
00628     if (hasLegCabinList == true) {
00629         // Browse the leg-cabins
00630         const stdair::LegCabinList_T& lLegCabinList =
00631             stdair::BomManager::getList<stdair::LegCabin> (iLegDate);
00632         for (stdair::LegCabinList_T::const_iterator itLC = lLegCabinList.begin();
00633             itLC != lLegCabinList.end(); ++itLC) {
00634             const stdair::LegCabin* lLC_ptr = *itLC;
00635             assert (lLC_ptr != NULL);
00636
00637             // Clone the current leg-cabin
00638             stdair::LegCabin& lCloneLegCabin = cloneLegCabin (*lLC_ptr);
00639             stdair::FacBomManager::addToListAndMap (lCloneLegDate, lCloneLegCabin);
00640             stdair::FacBomManager::linkWithParent (lCloneLegDate, lCloneLegCabin);
00641         }
00642     }
00643     return lCloneLegDate;
00644 }
00645
00646 // //////////////////////////////////////
00647 stdair::LegCabin& InventoryBuilder::cloneLegCabin (const stdair::LegCabin& iLeg
Cabin) {
00648
00649     stdair::LegCabin& lCloneLegCabin =
00650         stdair::FacBom<stdair::LegCabin>::instance().create (iLegCabin);
00651
00652     // Check whether there are Bucket objects

```

```

00660     const bool hasBucketList = stdair::BomManager::hasList<stdair::Bucket> (iLegC
abin);
00661     if (hasBucketList == true) {
00662         // Browse the buckets
00663         const stdair::BucketList_T& lBucketList =
00664             stdair::BomManager::getList<stdair::Bucket> (iLegCabin);
00665         for (stdair::BucketList_T::const_iterator itBucket = lBucketList.begin();
00666             itBucket != lBucketList.end(); ++itBucket) {
00667             const stdair::Bucket* lBucket_ptr = *itBucket;
00668             assert (lBucket_ptr != NULL);
00669
00670             // Clone the current bucket
00671             stdair::Bucket& lCloneBucket = cloneBucket (*lBucket_ptr);
00672             stdair::FacBomManager::addToListAndMap (lCloneLegCabin, lCloneBucket);
00673             stdair::FacBomManager::linkWithParent (lCloneLegCabin, lCloneBucket);
00674         }
00675     }
00676
00677     return lCloneLegCabin;
00678 }
00679
00680 // //////////////////////////////////////
00681 stdair::Bucket& InventoryBuilder::cloneBucket (const stdair::Bucket& iBucket) {
00682
00683     stdair::Bucket& lCloneBucket =
00684         stdair::FacBom<stdair::Bucket>::instance().create (iBucket);
00685
00686     return lCloneBucket;
00687 }
00688
00689 // //////////////////////////////////////
00690 stdair::SegmentDate& InventoryBuilder::
00691 cloneSegmentDate (const stdair::SegmentDate& iSegmentDate) {
00692
00693     stdair::SegmentDate& lCloneSegmentDate =
00694         stdair::FacBom<stdair::SegmentDate>::instance().create (iSegmentDate);
00695
00696     // Check whether there are SegmentCabin objects
00697     const bool hasSegmentCabinList =
00698         stdair::BomManager::hasList<stdair::SegmentCabin> (iSegmentDate);
00699     if (hasSegmentCabinList == true) {
00700         // Browse the segment-cabins
00701         const stdair::SegmentCabinList_T& lSegmentCabinList =
00702             stdair::BomManager::getList<stdair::SegmentCabin> (iSegmentDate);
00703         for (stdair::SegmentCabinList_T::const_iterator itSC = lSegmentCabinList.be
gin();
00704             itSC != lSegmentCabinList.end(); ++itSC) {
00705             const stdair::SegmentCabin* lSC_ptr = *itSC;
00706             assert (lSC_ptr != NULL);
00707
00708             // Clone the current segment-cabin
00709             stdair::SegmentCabin& lCloneSegmentCabin = cloneSegmentCabin (*lSC_ptr);
00710             stdair::FacBomManager::addToListAndMap (lCloneSegmentDate, lCloneSegmentC
abin);
00711             stdair::FacBomManager::linkWithParent (lCloneSegmentDate, lCloneSegmentCa
bin);
00712
00713             linkBookingClassesWithSegment (lCloneSegmentDate,
00714                 lCloneSegmentCabin);
00715         }
00716     }
00717     return lCloneSegmentDate;
00718 }
00719
00720 // //////////////////////////////////////

```

```

00728 void InventoryBuilder::
00729 linkBookingClassesWithSegment (stdair::SegmentDate& iCloneSegmentDate,
00730                                stdair::SegmentCabin& iCloneSegmentCabin) {
00731
00732     // Browse the fare families to link the booking-classes to the
00733     // segment-cabin and to the segment-date
00734     const bool hasFareFamilyList =
00735         stdair::BomManager::hasList<stdair::FareFamily> (iCloneSegmentCabin);
00736     if (hasFareFamilyList == true) {
00737         const stdair::FareFamilyList_T& lCloneFFList =
00738             stdair::BomManager::getList<stdair::FareFamily> (iCloneSegmentCabin);
00739         for (stdair::FareFamilyList_T::const_iterator itCloneFF = lCloneFFList.begi
n();
00740             itCloneFF != lCloneFFList.end(); ++itCloneFF) {
00741             const stdair::FareFamily* lCloneFF_ptr = *itCloneFF;
00742             assert (lCloneFF_ptr != NULL);
00743
00744             // Browse the list of booking classes
00745             const bool hasBookingClasslist =
00746                 stdair::BomManager::hasList<stdair::BookingClass> (*lCloneFF_ptr);
00747             if (hasBookingClasslist == true) {
00748                 const stdair::BookingClassList_T& lCloneBCList =
00749                     stdair::BomManager::getList<stdair::BookingClass> (*lCloneFF_ptr);
00750                 for (stdair::BookingClassList_T::const_iterator itCloneBC =
lCloneBCList.begin();
00751                     itCloneBC != lCloneBCList.end(); ++itCloneBC) {
00752                     const stdair::BookingClass* lCloneBC_ptr = *itCloneBC;
00753                     assert (lCloneBC_ptr != NULL);
00754
00755                     // Link the booking-class to the segment-cabin
00756                     stdair::FacBomManager::addToListAndMap (iCloneSegmentCabin,
00757                                                             *lCloneBC_ptr);
00758
00759                     // Link the booking-class to the segment-date
00760                     stdair::FacBomManager::addToListAndMap (iCloneSegmentDate,
00761                                                             *lCloneBC_ptr);
00762                 }
00763             }
00764         }
00765     }
00766 }
00767
00768 // //////////////////////////////////////
00769 stdair::SegmentCabin& InventoryBuilder::
00770 cloneSegmentCabin (const stdair::SegmentCabin& iSegmentCabin) {
00771
00772     stdair::SegmentCabin& lCloneSegmentCabin =
00773         stdair::FacBom<stdair::SegmentCabin>::instance().create (iSegmentCabin);
00774
00775     // Check whether there are fare family objects
00776     const bool hasFareFamilyList =
00777         stdair::BomManager::hasList<stdair::FareFamily> (iSegmentCabin);
00778     if (hasFareFamilyList == true) {
00779         // Browse the fare families
00780         const stdair::FareFamilyList_T& lFareFamilyList =
00781             stdair::BomManager::getList<stdair::FareFamily> (iSegmentCabin);
00782         for (stdair::FareFamilyList_T::const_iterator itFF = lFareFamilyList.begin(
);
00783             itFF != lFareFamilyList.end(); ++itFF) {
00784             const stdair::FareFamily* lFF_ptr = *itFF;
00785             assert (lFF_ptr != NULL);
00786
00787             // Clone the current fare-family
00788             stdair::FareFamily& lCloneFareFamily = cloneFareFamily (*lFF_ptr);
00789             stdair::FacBomManager::addToListAndMap (lCloneSegmentCabin, lCloneFareFam
ily);
00790
00791             stdair::FacBomManager::linkWithParent (lCloneSegmentCabin, lCloneFareFam

```

```

ly);
00795     }
00796     }
00797
00798     return lCloneSegmentCabin;
00799 }
00800
00801 // //////////////////////////////////////
00802 stdair::FareFamily& InventoryBuilder::
00803 cloneFareFamily (const stdair::FareFamily& iFareFamily) {
00804     stdair::FareFamily& lCloneFareFamily =
00805         stdair::FacBom<stdair::FareFamily>::instance().create (iFareFamily);
00806
00807     // Check whether there are booking classes objects
00808     const bool hasBookingClassList =
00809         stdair::BomManager::hasList<stdair::BookingClass> (iFareFamily);
00810     if (hasBookingClassList == true) {
00811         // Browse the list of booking classes
00812         const stdair::BookingClassList_T& lBookingClassList =
00813             stdair::BomManager::getList<stdair::BookingClass> (iFareFamily);
00814         for (stdair::BookingClassList_T::const_iterator itBookingClass =
00815             lBookingClassList.begin();
00816             itBookingClass != lBookingClassList.end(); ++itBookingClass) {
00817             const stdair::BookingClass* lBC_ptr = *itBookingClass;
00818             assert (lBC_ptr != NULL);
00819
00820             // Clone the current booking class
00821             stdair::BookingClass& lCloneBookingClass = cloneBookingClass (*lBC_ptr);
00822             stdair::FacBomManager::addToListAndMap (lCloneFareFamily, lCloneBookingCl
00823 ass);
00824             stdair::FacBomManager::linkWithParent (lCloneFareFamily, lCloneBookingCl
00825 ss);
00826         }
00827     }
00828 }
00829
00830     return lCloneFareFamily;
00831 }
00832
00833 // //////////////////////////////////////
00834 stdair::BookingClass& InventoryBuilder::
00835 cloneBookingClass (const stdair::BookingClass& iBookingClass) {
00836
00837     stdair::BookingClass& lCloneBookingClass =
00838         stdair::FacBom<stdair::BookingClass>::instance().create (iBookingClass);
00839
00840     return lCloneBookingClass;
00841 }
00842 }
00843 }
00844 }
00845 }
00846

```

## 25.135 airinv/command/InventoryBuilder.hpp File Reference

```
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- class [AIRINV::InventoryBuilder](#)  
*Class handling the generation / instantiation of the Inventory BOM.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::InventoryParserHelper](#)

**25.136 InventoryBuilder.hpp**

```

00001 #ifndef __AIRINV_CMD_INVENTORYBUILDER_HPP
00002 #define __AIRINV_CMD_INVENTORYBUILDER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // AirInv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00012 namespace stdair {
00013     class BomRoot;
00014     class Inventory;
00015     class FlightDate;
00016     class LegDate;
00017     class LegCabin;
00018     class Bucket;
00019     class SegmentDate;
00020     class SegmentCabin;
00021     class FareFamily;
00022     struct ParsedKey;
00023     class BookingClass;
00024 }
00025
00026 namespace AIRINV {
00027     struct FlightDateStruct;
00028     struct LegStruct;
00029     struct LegCabinStruct;
00030     struct BucketStruct;
00031     struct SegmentStruct;
00032     struct SegmentCabinStruct;
00033     struct FareFamilyStruct;
00034     struct BookingClassStruct;
00035     namespace InventoryParserHelper {
00036         struct doEndFlightDate;
00037     }
00038
00039     class InventoryBuilder : public stdair::CmdAbstract {
00040     friend class AIRINV_Service;
00041     friend struct InventoryParserHelper::doEndFlightDate;
00042
00043     private:
00044         static void buildInventory (stdair::BomRoot&, const FlightDateStruct&);
00045
00046         static void buildFlightDate (stdair::Inventory&, const FlightDateStruct&);
00047
00048         static void buildLegDate (stdair::FlightDate&, const LegStruct&);
00049
00050         static void buildRoutingLegKey (stdair::FlightDate&);
00051
00052         static void buildLegCabin (stdair::LegDate&, const LegCabinStruct&);
00053
00054         static void buildBucket (stdair::LegCabin&, const BucketStruct&);
00055
00056         static void buildSegmentDate (stdair::FlightDate&, const SegmentStruct&);
00057
00058         static void buildSegmentCabin (stdair::SegmentDate&,
00059                                         const SegmentCabinStruct&);
00060
00061         static void buildFareFamily (stdair::SegmentCabin&,
00062                                         const FareFamilyStruct&);
00063
00064         static void buildBookingClass (stdair::FareFamily&,

```

```
00115         const BookingClassStruct&);
00116
00120     static void buildPartnerInventories (stdair::BomRoot&);
00121
00125     static void buildPartnerInventories (stdair::BomRoot&,
00126                                         stdair::Inventory&);
00127
00131     static void buildPartnerInventories (stdair::BomRoot&,
00132                                         stdair::Inventory&,
00133                                         stdair::FlightDate&);
00134
00135
00136     static void buildInventory (stdair::BomRoot&,
00137                                stdair::Inventory&,
00138                                const std::string& iFullKeyStr);
00139
00140     static void buildFlightDate (stdair::BomRoot&,
00141                                stdair::Inventory&,
00142                                const std::string& iFullKeyStr);
00143
00151     static stdair::FlightDate& cloneFlightDate (const stdair::FlightDate&);
00152
00160     static stdair::LegDate& cloneLegDate (const stdair::LegDate&);
00161
00169     static stdair::LegCabin& cloneLegCabin (const stdair::LegCabin&);
00170
00178     static stdair::Bucket& cloneBucket (const stdair::Bucket&);
00179
00187     static stdair::SegmentDate& cloneSegmentDate (const stdair::SegmentDate&);
00188
00196     static void linkBookingClassesWithSegment (stdair::SegmentDate&,
00197                                                stdair::SegmentCabin&);
00198
00206     static stdair::SegmentCabin& cloneSegmentCabin (const stdair::SegmentCabin&);
00207
00215     static stdair::FareFamily& cloneFareFamily (const stdair::FareFamily&);
00216
00224     static stdair::BookingClass& cloneBookingClass (const stdair::BookingClass&);
00225
00226 };
00227
00228 }
00229 #endif // __AIRINV_CMD_INVENTORYBUILDER_HPP
```

## 25.137 airinv/command/InventoryGenerator.cpp File Reference

```
#include <cassert>
#include <boost/date_time/date_iterator.hpp>
#include <stdair/stdair_types.hpp>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/basic/BasConst_SellUpCurves.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/AirlineFeature.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/LegDate.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <stdair/bom/SimpleNestingStructure.hpp>
#include <stdair/bom/NestingNode.hpp>
#include <stdair/bom/Policy.hpp>
#include <stdair/bom/Bucket.hpp>
#include <stdair/bom/BomKeyManager.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/bom/FlightPeriodStruct.hpp>
#include <airinv/command/InventoryGenerator.hpp>
```

### Namespaces

- namespace [AIRINV](#)



## 25.138 InventoryGenerator.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/date_time/date_iterator.hpp>
00008 // StdAir
00009 #include <stdair/stdair_types.hpp>
00010 #include <stdair/basic/BasConst_Inventory.hpp>
00011 #include <stdair/basic/BasConst_SellUpCurves.hpp>
00012 #include <stdair/bom/BomManager.hpp>
00013 #include <stdair/bom/BomRoot.hpp>
00014 #include <stdair/bom/Inventory.hpp>
00015 #include <stdair/bom/AirlineFeature.hpp>
00016 #include <stdair/bom/FlightDate.hpp>
00017 #include <stdair/bom/SegmentDate.hpp>
00018 #include <stdair/bom/SegmentCabin.hpp>
00019 #include <stdair/bom/FareFamily.hpp>
00020 #include <stdair/bom/BookingClass.hpp>
00021 #include <stdair/bom/LegDate.hpp>
00022 #include <stdair/bom/LegCabin.hpp>
00023 #include <stdair/bom/SimpleNestingStructure.hpp>
00024 #include <stdair/bom/NestingNode.hpp>
00025 #include <stdair/bom/Policy.hpp>
00026 #include <stdair/bom/Bucket.hpp>
00027 #include <stdair/bom/BomKeyManager.hpp>
00028 #include <stdair/factory/FacBomManager.hpp>
00029 #include <stdair/service/Logger.hpp>
00030 // AirInv
00031 #include <airinv/bom/FlightPeriodStruct.hpp>
00032 #include <airinv/command/InventoryGenerator.hpp>
00033
00034 namespace AIRINV {
00035
00036 // //////////////////////////////////////
00037 void InventoryGenerator::
00038     createFlightDate (stdair::BomRoot& ioBomRoot,
00039                     const FlightPeriodStruct& iFlightPeriod) {
00040     const stdair::AirlineCode_T& lAirlineCode = iFlightPeriod._airlineCode;
00041
00042     // Instantiate an inventory object (if not exist)
00043     // for the given key (airline code)
00044     stdair::Inventory* lInventory_ptr = stdair::BomManager::
00045         getObjectPtr<stdair::Inventory> (ioBomRoot, lAirlineCode);
00046     if (lInventory_ptr == NULL) {
00047         stdair::InventoryKey lKey (lAirlineCode);
00048         lInventory_ptr =
00049             &stdair::FacBom<stdair::Inventory>::instance().create (lKey);
00050         stdair::FacBomManager::addToListAndMap (ioBomRoot, *lInventory_ptr);
00051         stdair::FacBomManager::linkWithParent (ioBomRoot, *lInventory_ptr);
00052
00053         // Add the airline feature object to the inventory
00054         const stdair::AirlineFeatureKey lAirlineFeatureKey (lAirlineCode);
00055         stdair::AirlineFeature& lAirlineFeature =
00056             stdair::FacBom<stdair::AirlineFeature>::instance().create (lAirlineFeatur
00057 eKey);
00058         stdair::FacBomManager::setAirlineFeature (*lInventory_ptr,
00059                                                     lAirlineFeature);
00059         stdair::FacBomManager::linkWithParent (*lInventory_ptr, lAirlineFeature);
00060         // Link the airline feature object with the top of the BOM tree
00061         stdair::FacBomManager::addToListAndMap (ioBomRoot, lAirlineFeature);
00062     }
00063     assert (lInventory_ptr != NULL);
00064

```

```

00065 // Generate all the dates corresponding to the period
00066 // and create the corresponding flight-dates.
00067 const stdair::DatePeriod_T lDateRange = iFlightPeriod._dateRange;
00068
00069 for (boost::gregorian::day_iterator itDate = lDateRange.begin();
00070      itDate != lDateRange.end(); ++itDate) {
00071     const stdair::Date_T& currentDate = *itDate;
00072
00073     // Retrieve, for the current day, the Day-Of-the-Week (thanks to Boost)
00074     const unsigned short currentDoW = currentDate.day_of_week().as_number();
00075
00076     // The FlightPeriod structure stores which Days (-Of-the-Week) are
00077     // active within the week. For each day (Mon., Tue., etc.), a boolean
00078     // states whether the Flight is active for that day.
00079     const stdair::DoWStruct& lDoWList = iFlightPeriod._dow;
00080     const bool isDoWActive = lDoWList.getStandardDayOfWeek (currentDoW);
00081
00082     if (isDoWActive == true) {
00083         createFlightDate (ioBomRoot, *lInventory_ptr, currentDate,
00084                          iFlightPeriod);
00085     }
00086 }
00087 }
00088
00089 // ////////////////////////////////////////
00090 void InventoryGenerator::
00091 createFlightDate (stdair::BomRoot& ioBomRoot,
00092                  stdair::Inventory& ioInventory,
00093                  const stdair::Date_T& iFlightDate,
00094                  const FlightPeriodStruct& iFlightPeriod) {
00095     // Create the FlightDateKey
00096     const stdair::FlightNumber_T& lFlightNumber = iFlightPeriod._flightNumber;
00097     stdair::FlightDateKey lFlightDateKey (lFlightNumber, iFlightDate);
00098
00099     // DEBUG
00100     // STDAIR_LOG_DEBUG ("Creating flight-date: " << lFlightDateKey.toString());
00101
00102     // Check that the flight-date object is not already existing. If a
00103     // FlightDate object with the same key has already been created,
00104     // it means that the schedule input file is invalid (two flight-periods
00105     // are overlapping).
00106     stdair::FlightDate* lFlightDate_ptr = stdair::BomManager::
00107         getObjectPtr<stdair::FlightDate> (ioInventory, lFlightDateKey.toString());
00108     if (lFlightDate_ptr != NULL) {
00109         std::ostringstream oMessage;
00110         oMessage << ioInventory.describeKey() << ", "
00111                 << lFlightDate_ptr->describeKey();
00112         throw FlightDateDuplicationException (oMessage.str());
00113     }
00114
00115     // Instantiate a flight-date object with the given key (flight number and
00116     // flight date)
00117     lFlightDate_ptr =
00118         &stdair::FacBom<stdair::FlightDate>::instance().create (lFlightDateKey);
00119     stdair::FacBomManager::addToListAndMap (ioInventory, *lFlightDate_ptr);
00120     stdair::FacBomManager::linkWithParent (ioInventory, *lFlightDate_ptr);
00121
00122     // Iterate on the leg-dates
00123     stdair::Duration_T currentOffTime (0, 0, 0);
00124     stdair::AirportCode_T previousOffPoint;
00125     const LegStructList_T& lLegList = iFlightPeriod._legList;
00126     for (LegStructList_T::const_iterator itLeg = lLegList.begin();
00127          itLeg != lLegList.end(); ++itLeg) {
00128         const LegStruct& lLeg = *itLeg;
00129
00130         // Create the leg-branch of the flight-date BOM
00131         stdair::LegDate& lLegDate =

```

```

00132         createLegDate (*lFlightDate_ptr, iFlightDate, lLeg);
00133
00134         // TODO: Check that the boarding date/time of the next leg is greater
00135         // than the off date/time of the current leg. Throw an exception
00136         // otherwise.
00137
00138         // TODO: specify, in the schedule input file specifications, that the
00139         // legs should be given in their natural order.
00140         // Then, replace the assertion by a thrown exception.
00141         //
00142         // Check that the legs are given in their natural order. If the schedule
00143         // input does not respect that assumption, the following assertion will
00144         // fail.
00145         if (itLeg != lLegList.begin()) {
00146             const stdair::AirportCode_T& currentBoardingPoint =
00147                 lLegDate.getBoardingPoint();
00148             assert (currentBoardingPoint == previousOffPoint);
00149         }
00150
00151         // Set the local variable for the next iteration
00152         previousOffPoint = lLegDate.getOffPoint();
00153     }
00154
00155     // Iterate on the segment structures
00156     const SegmentStructList_T& lSegmentList = iFlightPeriod._segmentList;
00157     for (SegmentStructList_T::const_iterator itSegment = lSegmentList.begin();
00158         itSegment != lSegmentList.end(); ++itSegment) {
00159         const SegmentStruct& lSegment = *itSegment;
00160
00161         createSegmentDate (ioBomRoot, *lFlightDate_ptr, lSegment);
00162     }
00163
00164     createRoutingLegKey (*lFlightDate_ptr);
00165 }
00166
00167 // //////////////////////////////////////
00168 void InventoryGenerator::
00169 createRoutingLegKey (stdair::FlightDate& ioFlightDate) {
00170
00171     // Browse the list of segment-dates and create direct accesses
00172     // within each segment-date.
00173     const stdair::SegmentDateList_T& lSegmentDateList =
00174         stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00175     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00176         lSegmentDateList.begin();
00177         itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00178
00179         stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00180         assert (lCurrentSegmentDate_ptr != NULL);
00181
00182         const stdair::AirportCode_T& lBoardingPoint =
00183             lCurrentSegmentDate_ptr->getBoardingPoint();
00184
00185         stdair::AirportCode_T currentBoardingPoint = lBoardingPoint;
00186         const stdair::AirportCode_T& lOffPoint =
00187             lCurrentSegmentDate_ptr->getOffPoint();
00188
00189         // Add a sanity check so as to ensure that the loop stops. If
00190         // there are more than MAXIMAL_NUMBER_OF_LEGS legs, there is
00191         // an issue somewhere in the code (not in the parser, as the
00192         // segments are derived from the legs thanks to the
00193         // FlightPeriodStruct::buildSegments() method).
00194         unsigned short i = 1;
00195         while (currentBoardingPoint != lOffPoint
00196             && i <= stdair::MAXIMAL_NUMBER_OF_LEGS_IN_FLIGHT) {
00197             // Retrieve the (unique) LegDate getting that Boarding Point
00198             stdair::LegDate& lLegDate = stdair::BomManager::

```

```

00199         getObject<stdair::LegDate> (ioFlightDate, currentBoardingPoint);
00200
00201         // Link the SegmentDate and LegDate together
00202         const std::string& lRoutingKeyStr = lLegDate.describeRoutingKey();
00203         lCurrentSegmentDate_ptr->addLegKey(lRoutingKeyStr);
00204
00205         // Prepare the next iteration
00206         currentBoardingPoint = lLegDate.getOffPoint();
00207         ++i;
00208     }
00209     assert (i <= stdair::MAXIMAL_NUMBER_OF_LEGS_IN_FLIGHT);
00210 }
00211 }
00212
00213 // //////////////////////////////////////
00214 stdair::LegDate& InventoryGenerator::
00215 createLegDate (stdair::FlightDate& ioFlightDate,
00216               const stdair::Date_T& iReferenceDate,
00217               const LegStruct& iLeg) {
00218     // Create the leg-date corresponding to the boarding point.
00219     stdair::LegDateKey lKey (iLeg._boardingPoint);
00220     stdair::LegDate& lLegDate =
00221         stdair::FacBom<stdair::LegDate>::instance().create (lKey);
00222     stdair::FacBomManager::addToListAndMap (ioFlightDate, lLegDate);
00223     stdair::FacBomManager::linkWithParent (ioFlightDate, lLegDate);
00224
00225     // Set the leg-date attributes
00226     iLeg.fill (iReferenceDate, lLegDate);
00227
00228     // Iterate on the cabins
00229     const LegCabinStructList_T& lCabinList = iLeg._cabinList;
00230     for (LegCabinStructList_T::const_iterator itCabin = lCabinList.begin();
00231          itCabin != lCabinList.end(); ++itCabin) {
00232         const LegCabinStruct& lCabin = *itCabin;
00233
00234         // Create the leg-cabin-branch of the leg-date
00235         createLegCabin (lLegDate, lCabin);
00236     }
00237
00238     return lLegDate;
00239 }
00240
00241 // //////////////////////////////////////
00242 void InventoryGenerator::
00243 createLegCabin (stdair::LegDate& ioLegDate,
00244               const LegCabinStruct& iCabin) {
00245     // Instantiate an leg-cabin object with the corresponding cabin code
00246     const stdair::LegCabinKey lKey (iCabin._cabinCode);
00247     stdair::LegCabin& lLegCabin =
00248         stdair::FacBom<stdair::LegCabin>::instance().create (lKey);
00249     stdair::FacBomManager::addToListAndMap (ioLegDate, lLegCabin);
00250     stdair::FacBomManager::linkWithParent (ioLegDate, lLegCabin);
00251
00252     // Set the Leg-Cabin attributes
00253     iCabin.fill (lLegCabin);
00254
00255     // Iterate on the bucket
00256     const BucketStructList_T& lBucketList = iCabin._bucketList;
00257     for (BucketStructList_T::const_iterator itBucket = lBucketList.begin();
00258          itBucket != lBucketList.end(); ++itBucket) {
00259         const BucketStruct& lBucket = *itBucket;
00260
00261         // Create the bucket of the leg-cabin
00262         createBucket (lLegCabin, lBucket);
00263     }
00264 }
00265

```

```

00266 // //////////////////////////////////////
00267 void InventoryGenerator::createBucket (stdair::LegCabin& ioLegCabin,
00268                                     const BucketStruct& iBucket) {
00269     // Instantiate a bucket object with the corresponding seat index
00270     const stdair::BucketKey lKey (iBucket._seatIndex);
00271     stdair::Bucket& lBucket =
00272         stdair::FacBom<stdair::Bucket>::instance().create (lKey);
00273     stdair::FacBomManager::addToListAndMap (ioLegCabin, lBucket);
00274     stdair::FacBomManager::linkWithParent (ioLegCabin, lBucket);
00275
00276     // Set the Bucket attributes
00277     iBucket.fill (lBucket);
00278 }
00279
00280 // //////////////////////////////////////
00281 void InventoryGenerator::
00282 createSegmentDate (stdair::BomRoot& ioBomRoot,
00283                   stdair::FlightDate& ioFlightDate,
00284                   const SegmentStruct& iSegment) {
00285     // Set the segment-date primary key
00286     const stdair::AirportCode_T& lBoardingPoint = iSegment._boardingPoint;
00287     const stdair::AirportCode_T& lOffPoint = iSegment._offPoint;
00288     stdair::SegmentDateKey lSegmentDateKey (lBoardingPoint, lOffPoint);
00289     // Instantiate an segment-date object with the key.
00290     stdair::SegmentDate& lSegmentDate =
00291         stdair::FacBom<stdair::SegmentDate>::instance().create (lSegmentDateKey);
00292     stdair::FacBomManager::addToListAndMap (ioFlightDate, lSegmentDate);
00293     stdair::FacBomManager::linkWithParent (ioFlightDate, lSegmentDate);
00294
00295     // Set the segment-date attributes
00296     iSegment.fill (lSegmentDate);
00297
00298     // Iterate on the Cabins
00299     const SegmentCabinStructList_T& lCabinList = iSegment._cabinList;
00300     for (SegmentCabinStructList_T::const_iterator itCabin =
00301         lCabinList.begin(); itCabin != lCabinList.end(); ++itCabin) {
00302         const SegmentCabinStruct& lCabin = *itCabin;
00303
00304         // Create the segment-cabin-branch of the segment-date BOM
00305         createSegmentCabin (ioBomRoot, lSegmentDate, lCabin);
00306     }
00307 }
00308
00309 // //////////////////////////////////////
00310 void InventoryGenerator::
00311 createSegmentCabin (stdair::BomRoot& ioBomRoot,
00312                   stdair::SegmentDate& ioSegmentDate,
00313                   const SegmentCabinStruct& iCabin) {
00314
00315     // Instantiate an segment-cabin object with the corresponding cabin code
00316     stdair::SegmentCabinKey lKey (iCabin._cabinCode);
00317     stdair::SegmentCabin& lSegmentCabin =
00318         stdair::FacBom<stdair::SegmentCabin>::instance().create (lKey);
00319
00320     // Link the segment-cabin to its parent, the segment-date
00321     stdair::FacBomManager::addToListAndMap (ioSegmentDate, lSegmentCabin);
00322     stdair::FacBomManager::linkWithParent (ioSegmentDate, lSegmentCabin);
00323
00324     // Set the segment-cabin attributes
00325     iCabin.fill (lSegmentCabin);
00326
00327     // Create the list of fare families
00328     for (FareFamilyStructList_T::const_iterator itFareFamily =
00329         iCabin._fareFamilies.begin();
00330         itFareFamily != iCabin._fareFamilies.end(); itFareFamily++) {
00331         const FareFamilyStruct& lFareFamilyStruct = *itFareFamily;
00332     }
00333 }

```

```

00333     // Create the fare families and the booking classes.
00334     createFareFamily (ioBomRoot, lSegmentCabin, lFareFamilyStruct);
00335 }
00336
00337     const unsigned int lNbOfFareFamilies = iCabin._fareFamilies.size();
00338     if (lNbOfFareFamilies > 1) {
00339         lSegmentCabin.activateFareFamily();
00340     }
00341
00342     // Create the display nesting structure.
00343     createDisplayNestingStructure (lSegmentCabin);
00344 }
00345
00346 // //////////////////////////////////////
00347 void InventoryGenerator::
00348 createFareFamily (stdair::BomRoot& ioBomRoot,
00349                 stdair::SegmentCabin& ioSegmentCabin,
00350                 const FareFamilyStruct& iFF) {
00351     // Instantiate an segment-cabin object with the corresponding cabin code
00352     stdair::FareFamilyKey lKey (iFF._familyCode);
00353     stdair::FareFamily& lFareFamily =
00354         stdair::FacBom<stdair::FareFamily>::instance().create (lKey);
00355
00356     // Link the fare family to its parent, the segment-cabin
00357     stdair::FacBomManager::addToListAndMap (ioSegmentCabin, lFareFamily);
00358     stdair::FacBomManager::linkWithParent (ioSegmentCabin, lFareFamily);
00359
00360     // Set the fare family attributes
00361     iFF.fill (lFareFamily);
00362     const stdair::FRAT5Curve_T& lFRAT5Curve =
00363         ioBomRoot.getFRAT5Curve (iFF._frat5CurveKey);
00364     lFareFamily.setFrat5Curve (lFRAT5Curve);
00365     const stdair::FFDisutilityCurve_T& lDisutilityCurve =
00366         ioBomRoot.getFFDisutilityCurve (iFF._ffDisutilityCurveKey);
00367     lFareFamily.setDisutilityCurve (lDisutilityCurve);
00368
00369     // Iterate on the classes
00370     const stdair::ClassList_String_T& lClassList = iFF._classes;
00371     for (stdair::ClassList_String_T::const_iterator itClass =
00372         lClassList.begin(); itClass != lClassList.end(); ++itClass) {
00373         // Transform the single-character class code into a STL string
00374         std::ostream ostr;
00375         ostr << *itClass;
00376         const stdair::ClassCode_T lClassCode (ostr.str());
00377
00378         // Create the booking class branch of the segment-cabin BOM
00379         createClass (lFareFamily, lClassCode);
00380     }
00381 }
00382
00383 // //////////////////////////////////////
00384 void InventoryGenerator::createClass (stdair::FareFamily& ioFareFamily,
00385                                     const stdair::ClassCode_T& iClassCode) {
00386
00387     // Instantiate a booking class object with the given class code
00388     const stdair::BookingClassKey lClassKey (iClassCode);
00389     stdair::BookingClass& lClass =
00390         stdair::FacBom<stdair::BookingClass>::instance().create (lClassKey);
00391
00392     // Link the booking-class to the fare family
00393     stdair::FacBomManager::addToListAndMap (ioFareFamily, lClass);
00394     stdair::FacBomManager::linkWithParent (ioFareFamily, lClass);
00395
00396     // Link the booking-class to the segment-cabin
00397     stdair::SegmentCabin& lSegmentCabin =
00398         stdair::BomManager::getParent<stdair::SegmentCabin> (ioFareFamily);
00399     stdair::FacBomManager::addToListAndMap (lSegmentCabin, lClass);

```

```

00400
00401     // Link the booking-class to the segment-date
00402     stdair::SegmentDate& lSegmentDate =
00403         stdair::BomManager::getParent<stdair::SegmentDate> (lSegmentCabin);
00404     stdair::FacBomManager::addToListAndMap (lSegmentDate, lClass);
00405 }
00406
00407 // //////////////////////////////////////
00408 void InventoryGenerator::
00409 createDisplayNestingStructure (stdair::SegmentCabin& ioSegmentCabin) {
00410     // Create the nesting structure.
00411     stdair::NestingStructureKey lKey (stdair::DISPLAY_NESTING_STRUCTURE_CODE);
00412     stdair::SimpleNestingStructure& lNestingStructure =
00413         stdair::FacBom<stdair::SimpleNestingStructure>::instance().create(lKey);
00414     stdair::FacBomManager::addToListAndMap (ioSegmentCabin, lNestingStructure);
00415     stdair::FacBomManager::linkWithParent (ioSegmentCabin, lNestingStructure);
00416
00417     // Browse the list of booking classes and create the nesting structure
00418     // based on that list. Each nesting node consists of a booking class.
00419     const stdair::BookingClassList_T& lBCList =
00420         stdair::BomManager::getList<stdair::BookingClass>(ioSegmentCabin);
00421     for (stdair::BookingClassList_T::const_iterator itBC = lBCList.begin();
00422          itBC != lBCList.end(); ++itBC) {
00423         stdair::BookingClass* lBC_ptr = *itBC;
00424         assert (lBC_ptr != NULL);
00425
00426         // Create a nesting node
00427         stdair::NestingNodeCode_T lNodeCode (lBC_ptr->describeKey());
00428         stdair::NestingNodeKey lNodeKey (lNodeCode);
00429         stdair::NestingNode& lNestingNode =
00430             stdair::FacBom<stdair::NestingNode>::instance().create (lNodeKey);
00431         stdair::FacBomManager::addToList (lNestingStructure, lNestingNode);
00432         stdair::FacBomManager::linkWithParent (lNestingStructure, lNestingNode);
00433
00434         // Add the booking class to the node.
00435         stdair::FacBomManager::addToList (lNestingNode, *lBC_ptr);
00436     }
00437 }
00438 }

```

## 25.139 airinv/command/InventoryGenerator.hpp File Reference

```
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- class [AIRINV::InventoryGenerator](#)  
*Class handling the generation / instantiation of the Inventory BOM.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::ScheduleParserHelper](#)



**25.140 InventoryGenerator.hpp**

```

00001 #ifndef __AIRINV_CMD_INVENTORYGENERATOR_HPP
00002 #define __AIRINV_CMD_INVENTORYGENERATOR_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // Airinv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00012 namespace stdair {
00013     class BomRoot;
00014     class Inventory;
00015     class FlightDate;
00016     class LegDate;
00017     class LegCabin;
00018     class SegmentDate;
00019     class SegmentCabin;
00020     class FareFamily;
00021 }
00022
00023 namespace AIRINV {
00024     // Forward declarations
00025     struct FlightPeriodStruct;
00026     struct LegStruct;
00027     struct SegmentStruct;
00028     struct LegCabinStruct;
00029     struct SegmentCabinStruct;
00030     struct FareFamilyStruct;
00031     struct BucketStruct;
00032     namespace ScheduleParserHelper {
00033         struct doEndFlight;
00034     }
00035
00036     class InventoryGenerator : public stdair::CmdAbstract {
00037     friend class FlightPeriodFileParser;
00038     friend class FFFlightPeriodFileParser;
00039     friend struct ScheduleParserHelper::doEndFlight;
00040     friend class ScheduleParser;
00041
00042 private:
00043     static void createFlightDate (stdair::BomRoot&,
00044                                 const FlightPeriodStruct&);
00045
00046     static void createFlightDate (stdair::BomRoot&, stdair::Inventory&,
00047                                 const stdair::Date_T&,
00048                                 const FlightPeriodStruct&);
00049
00050     static void createRoutingLegKey (stdair::FlightDate&);
00051
00052     static stdair::LegDate& createLegDate (stdair::FlightDate&,
00053                                           const stdair::Date_T&,
00054                                           const LegStruct&);
00055
00056     static void createLegCabin (stdair::LegDate&, const LegCabinStruct&);
00057
00058     static void createBucket (stdair::LegCabin&, const BucketStruct&);
00059
00060     static void createSegmentDate (stdair::BomRoot&, stdair::FlightDate&,
00061                                   const SegmentStruct&);
00062
00063     static void createSegmentCabin (stdair::BomRoot&, stdair::SegmentDate&,
00064                                    const SegmentCabinStruct&);

```

```
00101
00105     static void createFareFamily (stdair::BomRoot&, stdair::SegmentCabin&,
00106                                   const FareFamilyStruct&);
00107
00111     static void createClass (stdair::FareFamily&,
00112                              const stdair::ClassCode_T&);
00113
00117     static void createDisplayNestingStructure (stdair::SegmentCabin&);
00118 };
00119
00120 }
00121 #endif // __AIRINV_CMD_INVENTORYGENERATOR_HPP
```

## 25.141 airinv/command/InventoryManager.cpp File Reference

```
#include <exception>
#include <algorithm>
#include <boost/make_shared.hpp>
#include <stdair/basic/BasConst_Inventory.hpp>
#include <stdair/basic/BasConst_BomDisplay.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomKeyManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/LegDate.hpp>
#include <stdair/bom/LegCabin.hpp>
#include <stdair/bom/FareFamily.hpp>
#include <stdair/bom/BookingClass.hpp>
#include <stdair/bom/SegmentSnapshotTable.hpp>
#include <stdair/bom/TravelSolutionStruct.hpp>
#include <stdair/bom/FareOptionStruct.hpp>
#include <stdair/bom/EventStruct.hpp>
#include <stdair/bom/SnapshotStruct.hpp>
#include <stdair/bom/RMEventStruct.hpp>
#include <stdair/bom/BomRetriever.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/factory/FacBom.hpp>
#include <stdair/service/Logger.hpp>
#include <sevmgr/SEVMGR_Service.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/BomRootHelper.hpp>
#include <airinv/bom/InventoryHelper.hpp>
#include <airinv/bom/FlightDateHelper.hpp>
#include <airinv/bom/SegmentCabinHelper.hpp>
#include <airinv/command/InventoryManager.hpp>
```

## Namespaces

- namespace [AIRINV](#)

## 25.142 InventoryManager.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <exception>
00006 #include <algorithm> // To use min
00007 // Boost
00008 #include <boost/make_shared.hpp>
00009 // StdAir
00010 #include <stdair/basic/BasConst_Inventory.hpp>
00011 #include <stdair/basic/BasConst_BomDisplay.hpp>
00012 #include <stdair/bom/BomManager.hpp>
00013 #include <stdair/bom/BomKeyManager.hpp>
00014 #include <stdair/bom/BomRoot.hpp>
00015 #include <stdair/bom/Inventory.hpp>
00016 #include <stdair/bom/FlightDate.hpp>
00017 #include <stdair/bom/SegmentDate.hpp>
00018 #include <stdair/bom/SegmentCabin.hpp>
00019 #include <stdair/bom/LegDate.hpp>
00020 #include <stdair/bom/LegCabin.hpp>
00021 #include <stdair/bom/FareFamily.hpp>
00022 #include <stdair/bom/BookingClass.hpp>
00023 #include <stdair/bom/SegmentSnapshotTable.hpp>
00024 #include <stdair/bom/TravelSolutionStruct.hpp>
00025 #include <stdair/bom/FareOptionStruct.hpp>
00026 #include <stdair/bom/EventStruct.hpp>
00027 #include <stdair/bom/SnapshotStruct.hpp>
00028 #include <stdair/bom/RMEventStruct.hpp>
00029 #include <stdair/bom/FareFamily.hpp> // Contains the definition of FareFamilyList
00030 _T
00031 #include <stdair/bom/BookingClass.hpp> //
00032 #include <stdair/bom/BomRetriever.hpp>
00033 #include <stdair/factory/FacBomManager.hpp>
00034 #include <stdair/factory/FacBom.hpp>
00035 #include <stdair/service/Logger.hpp> // SEvMgr
00036 #include <sevmgr/SEVMGR_Service.hpp>
00037 // AirInv
00038 #include <airinv/AIRINV_Types.hpp>
00039 #include <airinv/bom/BomRootHelper.hpp>
00040 #include <airinv/bom/InventoryHelper.hpp>
00041 #include <airinv/bom/FlightDateHelper.hpp>
00042 #include <airinv/bom/SegmentCabinHelper.hpp>
00043 #include <airinv/command/InventoryManager.hpp>
00044 namespace AIRINV {
00045
00046 // //////////////////////////////////////
00047 void InventoryManager::
00048 calculateAvailability (const stdair::BomRoot& iBomRoot,
00049                      stdair::TravelSolutionStruct& ioTravelSolution) {
00050
00051     stdair::PartnershipTechnique::EN_PartnershipTechnique lENPartnershipTechnique
00052     =
00053         stdair::PartnershipTechnique::NONE;
00054
00055     // Browse the list of segments and get the availability for the
00056     // children classes.
00057     const stdair::SegmentPath_T& lSegmentPath =
00058         ioTravelSolution.getSegmentPath();
00059     for (stdair::SegmentPath_T::const_iterator itSK = lSegmentPath.begin();
00060          itSK != lSegmentPath.end(); ++itSK) {
00061         const std::string& lSegmentKey = *itSK;
00062         const stdair::InventoryKey lInvKey =
00063             stdair::BomKeyManager::extractInventoryKey (lSegmentKey);
00064         stdair::Inventory& lInventory =

```

```

00064         stdair::BomManager::getObject<stdair::Inventory>(iBomRoot,
00065                                                         lInvKey.toString());
00066
00067         lENPartnershipTechnique = lInventory.getPartnershipTechnique();
00068
00069         switch (lENPartnershipTechnique) {
00070
00071         case stdair::PartnershipTechnique::NONE:{
00072             InventoryHelper::calculateAvailability (lInventory, lSegmentKey,
00073                                                    ioTravelSolution);
00074             break;
00075         }
00076         default:{
00077             InventoryHelper::getYieldAndBidPrice (lInventory, lSegmentKey,
00078                                                  ioTravelSolution);
00079             break;
00080         }
00081         }
00082     }
00083 }
00084
00085 switch (lENPartnershipTechnique) {
00086 case stdair::PartnershipTechnique::NONE:{
00087     // Compute the availability for each fare option using the AU's.
00088     calculateAvailabilityByAU (ioTravelSolution);
00089     break;
00090 }
00091 case stdair::PartnershipTechnique::RAE_DA:
00092 case stdair::PartnershipTechnique::RAE_YP:{
00093     // 1. Compute the availability for each fare option using RAE
00094     calculateAvailabilityByRAE (ioTravelSolution);
00095     break;
00096 }
00097 case stdair::PartnershipTechnique::IBP_DA:
00098 case stdair::PartnershipTechnique::IBP_YP:{
00099     // 2. Compute the availability for each fare option using protective IBP
00100     calculateAvailabilityByProtectiveIBP (ioTravelSolution);
00101     break;
00102 }
00103 case stdair::PartnershipTechnique::IBP_YP_U:
00104 case stdair::PartnershipTechnique::RMC:
00105 case stdair::PartnershipTechnique::A_RMC:{
00106     // 3. Compute the availability for each fare option using IBP
00107     calculateAvailabilityByIBP (ioTravelSolution);
00108     break;
00109 }
00110 default: {
00111     assert (false);
00112     break;
00113 }
00114 }
00115
00116 }
00117
00118 // ////////////////////////////////////////
00119 void InventoryManager::
00120 calculateAvailabilityByAU (stdair::TravelSolutionStruct& ioTravelSolution) {
00121
00122     // MODIF: segment path string for availability display
00123     std::ostringstream oStr;
00124     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00125     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00126          itSP != lSP.end(); itSP++) {
00127         oStr << *itSP << ";";
00128     }
00129
00130     // Browse the fare options

```

```

00131     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef();
00132     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00133         itFO != lFOList.end(); ++itFO) {
00134
00135         stdair::FareOptionStruct& lFO = *itFO;
00136
00137         // Check the availability
00138         const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00139
00140         const stdair::ClassAvailabilityMapHolder_T& lClassAvailabilityMapHolder =
00141             ioTravelSolution.getClassAvailabilityMapHolder();
00142
00143         // Initialise the flag stating whether the availability is enough
00144         stdair::Availability_T lAvl =
00145             std::numeric_limits<stdair::Availability_T>::max();
00146
00147         // Sanity check: the travel solution must contain two lists,
00148         // one for the booking class availabilities, the other for the
00149         // fare options.
00150         assert (lClassAvailabilityMapHolder.empty() == false
00151             && lClassPath.empty() == false);
00152
00153         // List of booking class availability maps (one map per segment)
00154         stdair::ClassAvailabilityMapHolder_T::const_iterator itCAMH =
00155             lClassAvailabilityMapHolder.begin();
00156
00157         // List of fare options
00158         stdair::ClassList_StringList_T::const_iterator itClassList =
00159             lClassPath.begin();
00160
00161         // Browse both lists at the same time, i.e., one element per segment
00162         for (; itCAMH != lClassAvailabilityMapHolder.end()
00163             && itClassList != lClassPath.end(); ++itCAMH, ++itClassList) {
00164
00165             // Retrieve the booking class list for the current segment
00166             const stdair::ClassList_String_T& lCurrentClassList = *itClassList;
00167             assert (lCurrentClassList.size() > 0);
00168
00169             // TODO: instead of just extracting the first booking class,
00170             //         perform a choice on the full list of classes.
00171             // Extract one booking class key (class code)
00172             stdair::ClassCode_T lFirstClass;
00173             lFirstClass.append (lCurrentClassList, 0, 1);
00174
00175             // Retrieve the booking class map for the current segment
00176             const stdair::ClassAvailabilityMap_T& lClassAvlMap = *itCAMH;
00177
00178             // Retrieve the availability of the chosen booking class
00179             const stdair::ClassAvailabilityMap_T::const_iterator itClassAvl =
00180                 lClassAvlMap.find (lFirstClass);
00181
00182             if (itClassAvl == lClassAvlMap.end()) {
00183                 // DEBUG
00184                 STDAIR_LOG_DEBUG ("No availability has been set up for the class '"
00185                     << lFirstClass << "'. Travel solution: "
00186                     << ioTravelSolution.display());
00187             }
00188             assert (itClassAvl != lClassAvlMap.end());
00189
00190             const stdair::Availability_T& lCurrentAvl = itClassAvl->second;
00191             if (lAvl > lCurrentAvl) {
00192                 lAvl = lCurrentAvl;
00193             }
00194         }
00195
00196         lFO.setAvailability (lAvl);
00197

```

```

00198         //MODIF: availability display
00199         STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00200                          << "Availability " << lFO.getAvailability() << ", "
00201                          << "Segment Path " << oStr.str());
00202     }
00203 }
00204
00205 // \todo: the following code must be either re-written or removed.
00206 //       There is indeed a lot of code duplication.
00207 // //////////////////////////////////////
00208 void InventoryManager::
00209 calculateAvailabilityByRAE (stdair::TravelSolutionStruct& ioTravelSolution) {
00210
00211     std::ostringstream oStr;
00212     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00213     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00214          itSP != lSP.end(); itSP++) {
00215         oStr << *itSP << ";";
00216     }
00217
00218     //Retrieve bid price vector and yield maps
00219     const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00220         ioTravelSolution.getClassYieldMapHolder();
00221     const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00222         ioTravelSolution.getClassBpvMapHolder();
00223
00224     //Retrieve the list of fare options and browse it
00225     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef();
00226     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00227          itFO != lFOList.end(); ++itFO) {
00228
00229         stdair::FareOptionStruct& lFO = *itFO;
00230
00231         stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00232             lClassYieldMapHolder.begin();
00233         stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00234             lClassBpvMapHolder.begin();
00235
00236         const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00237
00238         // Sanity checks
00239         assert (lClassPath.size() == lClassYieldMapHolder.size());
00240         assert (lClassPath.size() == lClassBpvMapHolder.size());
00241
00242         // Browse class path, class-yield maps, class-(bid price vector) maps.
00243         // Each iteration corresponds to one segment.
00244
00245         std::ostringstream oCPStr;
00246         for (stdair::ClassList_StringList_T::const_iterator itCL =
00247              lClassPath.begin();
00248              itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00249
00250             // Class path determination
00251             if (itCL == lClassPath.begin()) {
00252                 oCPStr << *itCL;
00253             } else {
00254                 oCPStr << "-" << *itCL;
00255             }
00256
00257             const stdair::ClassList_String_T& lCL = *itCL;
00258             stdair::ClassCode_T lCC;
00259             lCC.append (lCL, 0, 1);
00260
00261             const stdair::ClassYieldMap_T& lCYM = *itCYM;
00262             stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);

```



```

00265         assert (itCCCYM != lCYM.end());
00266
00267         const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00268         stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00269         assert (itCCCBPM != lCBPM.end());
00270
00271         const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00272         assert (lBidPriceVector_ptr != NULL);
00273
00274         // Initialization of fare option availability
00275         if (itCL == lClassPath.begin()) {
00276             lFO.setAvailability (lBidPriceVector_ptr->size());
00277         }
00278
00279         // Availability update
00280         if (lFO.getAvailability() > 0) {
00281
00282             //Segment availability calculation
00283             stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00284             std::reverse_copy (lBidPriceVector_ptr->begin(),
00285                             lBidPriceVector_ptr->end(),
00286                             lReverseBPV.begin());
00287
00288             const stdair::YieldValue_T& lYield = itCCCYM->second;
00289             stdair::BidPriceVector_T::const_iterator lBidPrice =
00290                 std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);
00291
00292             const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00293
00294             // Availability update
00295             lFO.setAvailability (std::min (lFO.getAvailability(), lAvl));
00296         }
00297     }
00298
00299     // DEBUG
00300     STDAIR_LOG_DEBUG ("Fare option: " << lFO.describe() << ", "
00301                     << "Availability: " << lFO.getAvailability() << ", "
00302                     << "Segment Path: " << oStr.str() << ", ");
00303 }
00304 }
00305
00306 // \todo: the following code must be either re-written or removed.
00307 //       There is indeed a lot of code duplication.
00308 // //////////////////////////////////////
00309 void InventoryManager::
00310 calculateAvailabilityByIBP (stdair::TravelSolutionStruct& ioTravelSolution) {
00311     std::ostream oStr;
00312
00313     // Yield valuation coefficient for multi-segment travel solutions
00314     double alpha = 1.0;
00315
00316     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00317     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00318          itSP != lSP.end(); itSP++) {
00319         oStr << *itSP << ";";
00320     }
00321
00322     //Retrieve bid price vector and yield maps
00323     const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00324         ioTravelSolution.getClassYieldMapHolder();
00325     const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00326         ioTravelSolution.getClassBpvMapHolder();
00327
00328     // Retrieve the list of fare options and browse it
00329     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef();
00330     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00331          itFO != lFOList.end(); ++itFO) {

```

```

00332
00333     stdair::FareOptionStruct& lFO = *itFO;
00334
00335     stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00336         lClassYieldMapHolder.begin();
00337     stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00338         lClassBpvMapHolder.begin();
00339
00340     const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00341
00342     // Sanity checks
00343     assert (lClassPath.size() == lClassYieldMapHolder.size());
00344     assert (lClassPath.size() == lClassBpvMapHolder.size());
00345
00346     // Yield is taken to be equal to fare (connecting flights)
00347
00348     // \todo: take yield instead
00349     stdair::YieldValue_T lTotalYield = lFO.getFare();
00350     // Bid price initialisation
00351     stdair::BidPrice_T lTotalBidPrice = 0;
00352
00353     // Browse class path, class-yield maps, class-(bid price vector) maps.
00354     // Each iteration corresponds to one segment.
00355
00356     std::ostringstream oCPStr;
00357     for (stdair::ClassList_StringList_T::const_iterator itCL =
00358         lClassPath.begin();
00359         itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00360
00361         // Class path determination
00362         if (itCL == lClassPath.begin()) {
00363             oCPStr << *itCL;
00364
00365         } else {
00366             oCPStr << "-" << *itCL;
00367         }
00368
00369         const stdair::ClassList_String_T& lCL = *itCL;
00370         stdair::ClassCode_T lCC;
00371         lCC.append (lCL, 0, 1);
00372
00373         const stdair::ClassYieldMap_T& lCYM = *itCYM;
00374         stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);
00375         assert (itCCCYM != lCYM.end());
00376
00377         const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00378         stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00379         assert (itCCCBPM != lCBPM.end());
00380
00381         const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00382         assert (lBidPriceVector_ptr != NULL);
00383
00384         //Initialization of fare option availability
00385         if (itCL == lClassPath.begin()) {
00386             lFO.setAvailability (lBidPriceVector_ptr->size());
00387         }
00388
00389         // Availability update
00390         if (lFO.getAvailability() > 0) {
00391             //Segment availability calculation
00392             stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00393             std::reverse_copy (lBidPriceVector_ptr->begin(),
00394                             lBidPriceVector_ptr->end(), lReverseBPV.begin());
00395
00396             const stdair::YieldValue_T& lYield = itCCCYM->second;
00397             stdair::BidPriceVector_T::const_iterator lBidPrice =
00398                 std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);

```

```

00399
00400         const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00401
00402         // Availability update
00403         lFO.setAvailability (std::min(lFO.getAvailability(), lAvl));
00404     }
00405
00406     // Total bid price calculation
00407     if (lBidPriceVector_ptr->size() > 0) {
00408         lTotalBidPrice += lBidPriceVector_ptr->back();
00409     } else {
00410         lTotalBidPrice = std::numeric_limits<stdair::BidPrice_T>::max();
00411     }
00412
00413     // Total yield calculation (has been replaced by total fare).
00414     //lTotalYield += lYield;
00415 }
00416 // Multi-segment bid price control
00417
00418 if (lClassPath.size() > 1) {
00419     if (lFO.getAvailability() > 0) {
00420         const stdair::Availability_T lAvl =
00421             alpha * lTotalYield >= lTotalBidPrice;
00422         lFO.setAvailability (lAvl * lFO.getAvailability());
00423     } else {
00424         const stdair::Availability_T lAvl =
00425             alpha * lTotalYield >= lTotalBidPrice;
00426         lFO.setAvailability (lAvl);
00427     }
00428 }
00429
00430 // DEBUG
00431 STDAIR_LOG_DEBUG ("Class: " << oCPStr.str()
00432                  << ", " << "Yield: " << alpha*lTotalYield << ", "
00433                  << "Bid price: " << lTotalBidPrice << ", "
00434                  << "Remaining capacity: " << "Undefined" << " "
00435                  << "Segment date: " << oStr.str());
00436 }
00437
00438 // DEBUG
00439 STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00440                  << "Availability " << lFO.getAvailability() << ", "
00441                  << "Segment Path " << oStr.str() << ", ");
00442 }
00443 }
00444 }
00445
00446 // \todo: the following code must be either re-written or removed.
00447 //       There is indeed a lot of code duplication.
00448 // //////////////////////////////////////
00449 void InventoryManager::
00450 calculateAvailabilityByProtectiveIBP (stdair::TravelSolutionStruct& ioTravelSol
00451 ution) {
00452     std::ostringstream oStr;
00453
00454     // Yield valuation coefficient for multi-segment travel solutions
00455     double alpha = 1.0;
00456
00457     const stdair::SegmentPath_T& lSP = ioTravelSolution.getSegmentPath();
00458     for (stdair::SegmentPath_T::const_iterator itSP = lSP.begin();
00459          itSP != lSP.end(); itSP++) {
00460         oStr << *itSP << ";";
00461     }
00462
00463     //Retrieve bid price vector and yield maps
00464     const stdair::ClassYieldMapHolder_T& lClassYieldMapHolder =
00465         ioTravelSolution.getClassYieldMapHolder();

```

```

00465     const stdair::ClassBpvMapHolder_T& lClassBpvMapHolder =
00466         ioTravelSolution.getClassBpvMapHolder();
00467
00468     //Retrieve the list of fare options and browse it
00469     stdair::FareOptionList_T& lFOList = ioTravelSolution.getFareOptionListRef();
00470     for (stdair::FareOptionList_T::iterator itFO = lFOList.begin();
00471          itFO != lFOList.end(); ++itFO) {
00472
00473         stdair::FareOptionStruct& lFO = *itFO;
00474
00475         stdair::ClassYieldMapHolder_T::const_iterator itCYM =
00476             lClassYieldMapHolder.begin();
00477         stdair::ClassBpvMapHolder_T::const_iterator itCBPM =
00478             lClassBpvMapHolder.begin();
00479
00480         const stdair::ClassList_StringList_T& lClassPath = lFO.getClassPath();
00481
00482         // Sanity checks
00483         assert (lClassPath.size() == lClassYieldMapHolder.size());
00484         assert (lClassPath.size() == lClassBpvMapHolder.size());
00485
00486         // Yield is taken to be equal to fare (connecting flights)
00487         // TODO : take yield instead
00488         stdair::YieldValue_T lTotalYield = lFO.getFare();
00489         // Bid price initialisation
00490         stdair::BidPrice_T lTotalBidPrice = 0;
00491         // Maximal bid price initialisation
00492         stdair::BidPrice_T lMaxBidPrice = 0;
00493
00494         //Browse class path, class-yield maps, class-(bid price vector) maps.
00495         //Each iteration corresponds to one segment.
00496
00497         std::ostringstream oCPStr;
00498         for (stdair::ClassList_StringList_T::const_iterator itCL =
00499              lClassPath.begin();
00500              itCL != lClassPath.end(); ++itCL, ++itCYM, ++itCBPM) {
00501
00502             // Class path determination
00503             if (itCL == lClassPath.begin()) {
00504                 oCPStr << *itCL;
00505
00506             } else {
00507                 oCPStr << "-" << *itCL;
00508             }
00509
00510             const stdair::ClassList_String_T& lCL = *itCL;
00511             stdair::ClassCode_T lCC;
00512             lCC.append (lCL, 0, 1);
00513
00514             const stdair::ClassYieldMap_T& lCYM = *itCYM;
00515             stdair::ClassYieldMap_T::const_iterator itCCCYM = lCYM.find (lCC);
00516             assert (itCCCYM != lCYM.end());
00517
00518             const stdair::YieldValue_T& lYield = itCCCYM->second;
00519             const stdair::ClassBpvMap_T& lCBPM = *itCBPM;
00520             stdair::ClassBpvMap_T::const_iterator itCCCBPM = lCBPM.find (lCC);
00521             assert (itCCCBPM != lCBPM.end());
00522
00523             const stdair::BidPriceVector_T* lBidPriceVector_ptr = itCCCBPM->second;
00524             assert (lBidPriceVector_ptr != NULL);
00525
00526             // Initialization of fare option availability
00527             if (itCL == lClassPath.begin()) {
00528                 lFO.setAvailability (lBidPriceVector_ptr->size());
00529             }
00530
00531             // Availability update

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```

00532         if (lFO.getAvailability() > 0) {
00533
00534             //Segment availability calculation
00535             stdair::BidPriceVector_T lReverseBPV (lBidPriceVector_ptr->size());
00536             std::reverse_copy (lBidPriceVector_ptr->begin(),
00537                             lBidPriceVector_ptr->end(), lReverseBPV.begin());
00538
00539             stdair::BidPriceVector_T::const_iterator lBidPrice =
00540                 std::upper_bound (lReverseBPV.begin(), lReverseBPV.end(), lYield);
00541
00542             const stdair::Availability_T lAvl = lBidPrice - lReverseBPV.begin();
00543
00544             // Availability update
00545             lFO.setAvailability (std::min(lFO.getAvailability(), lAvl));
00546
00547         }
00548
00549         // Total bid price calculation
00550         if (lBidPriceVector_ptr->size() > 0) {
00551             lTotalBidPrice += lBidPriceVector_ptr->back();
00552
00553             if (lMaxBidPrice < lBidPriceVector_ptr->back()) {
00554                 lMaxBidPrice = lBidPriceVector_ptr->back();
00555             }
00556
00557         } else {
00558             lTotalBidPrice = std::numeric_limits<stdair::BidPrice_T>::max();
00559         }
00560
00561         // Total yield calculation (has been replaced by total fare).
00562         //lTotalYield += lYield;
00563     }
00564     // Multi-segment bid price control
00565
00566     // Protective IBP (maximin): guarantees the minimal yield for each airline
00567     // Proration factors are all equal to 1/{number of partners}.
00568
00569     lTotalBidPrice = std::max (lMaxBidPrice * lClassPath.size(),
00570                             lTotalBidPrice);
00571
00572     if (lClassPath.size() > 1) {
00573         if (lFO.getAvailability() > 0) {
00574             const stdair::Availability_T lAvl =
00575                 alpha * lTotalYield >= lTotalBidPrice;
00576             lFO.setAvailability (lAvl * lFO.getAvailability());
00577
00578         } else {
00579             const stdair::Availability_T lAvl =
00580                 alpha * lTotalYield >= lTotalBidPrice;
00581             lFO.setAvailability (lAvl);
00582         }
00583
00584         // DEBUG
00585         STDAIR_LOG_DEBUG ("Class: " << oCPStr.str()
00586                         << ", " << "Yield: " << alpha*lTotalYield << ", "
00587                         << "Bid price: " << lTotalBidPrice << ", "
00588                         << "Remaining capacity: " << "Undefined" << " "
00589                         << "Segment date: " << oStr.str());
00590     }
00591
00592     // DEBUG
00593     STDAIR_LOG_DEBUG ("Fare option " << lFO.describe() << ", "
00594                     << "Availability " << lFO.getAvailability() << ", "
00595                     << "Segment Path " << oStr.str() << ", ");
00596 }
00597 }
00598

```

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00599 //MODIF
00600 // //////////////////////////////////////
00601 void InventoryManager::setDefaultBidPriceVector (stdair::BomRoot& ioBomRoot) {
00602
00603     const stdair::InventoryList_T& lInvList =
00604         stdair::BomManager::getList<stdair::Inventory> (ioBomRoot);
00605     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00606         itInv != lInvList.end(); ++itInv) {
00607         stdair::Inventory* lCurrentInv_ptr = *itInv;
00608         assert (lCurrentInv_ptr != NULL);
00609
00610         // Set the default bid price for own cabins.
00611         setDefaultBidPriceVector (*lCurrentInv_ptr);
00612
00613         // Check if the inventory contains images of partner inventories.
00614         // If so, set the default bid price for their cabins.
00615         if (stdair::BomManager::hasList<stdair::Inventory> (*lCurrentInv_ptr)) {
00616             const stdair::InventoryList_T& lPartnerInvList =
00617                 stdair::BomManager::getList<stdair::Inventory> (*lCurrentInv_ptr);
00618
00619             for (stdair::InventoryList_T::const_iterator itPartnerInv =
00620                 lPartnerInvList.begin();
00621                 itPartnerInv != lPartnerInvList.end(); ++itPartnerInv) {
00622                 stdair::Inventory* lCurrentPartnerInv_ptr = *itPartnerInv;
00623                 assert (lCurrentPartnerInv_ptr != NULL);
00624
00625                 setDefaultBidPriceVector (*lCurrentPartnerInv_ptr);
00626             }
00627         }
00628     }
00629 }
00630
00631 // //////////////////////////////////////
00632 void InventoryManager::
00633 setDefaultBidPriceVector (stdair::Inventory& ioInventory) {
00634
00635     const stdair::FlightDateList_T& lFlightDateList =
00636         stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00637     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00638         lFlightDateList.begin();
00639         itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00640         stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00641         assert (lCurrentFlightDate_ptr != NULL);
00642
00643         // Check if the flight date holds a list of leg dates.
00644         // If so retrieve it and initialise the bid price vectors of their cabins.
00645         if (stdair::BomManager::hasList<stdair::LegDate> (*lCurrentFlightDate_ptr))
00646         {
00647             const stdair::LegDateList_T& lLegDateList =
00648                 stdair::BomManager::getList<stdair::LegDate> (*lCurrentFlightDate_ptr);
00649
00650             for (stdair::LegDateList_T::const_iterator itLegDate =
00651                 lLegDateList.begin();
00652                 itLegDate != lLegDateList.end(); ++itLegDate) {
00653                 stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00654                 assert (lCurrentLegDate_ptr != NULL);
00655
00656                 const stdair::LegCabinList_T& lLegCabinList =
00657                     stdair::BomManager::getList<stdair::LegCabin> (*lCurrentLegDate_ptr);
00658
00659                 for (stdair::LegCabinList_T::const_iterator itLegCabin =
00660                     lLegCabinList.begin();
00661                     itLegCabin != lLegCabinList.end(); ++itLegCabin) {
00662                     stdair::LegCabin* lCurrentLegCabin_ptr = *itLegCabin;
00663                     assert (lCurrentLegCabin_ptr != NULL);
00664
00665                     const stdair::CabinCapacity_T& lCabinCapacity =

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00663         lCurrentLegCabin_ptr->getPhysicalCapacity();
00664         lCurrentLegCabin_ptr->emptyBidPriceVector();
00665
00666         stdair::BidPriceVector_T& lBPV =
00667             lCurrentLegCabin_ptr->getBidPriceVector();
00668
00669         //for (stdair::CabinCapacity_T k = 0;k!=lCabinCapacity;k++) {lBPV.push
h_back(400 + 300/sqrt(k+1));}
00670         for (stdair::CabinCapacity_T k = 0; k != lCabinCapacity; k++) {
00671             lBPV.push_back (400);
00672         }
00673
00674         lCurrentLegCabin_ptr->setPreviousBidPrice (lBPV.back());
00675         lCurrentLegCabin_ptr->setCurrentBidPrice (lBPV.back());
00676     }
00677 }
00678 }
00679 }
00680 }
00681
00682 // //////////////////////////////////////
00683 bool InventoryManager::sell (stdair::Inventory& ioInventory,
00684                             const std::string& iSegmentDateKey,
00685                             const stdair::ClassCode_T& iClassCode,
00686                             const stdair::PartySize_T& iPartySize) {
00687
00688     // Make the sale within the inventory.
00689     return InventoryHelper::sell (ioInventory, iSegmentDateKey,
00690                                   iClassCode, iPartySize);
00691 }
00692
00693 // //////////////////////////////////////
00694 bool InventoryManager::sell (const stdair::BookingClassID_T& iClassID,
00695                             const stdair::PartySize_T& iPartySize) {
00696
00697     // Make the sale within the inventory.
00698     return InventoryHelper::sell (iClassID, iPartySize);
00699 }
00700
00701 // //////////////////////////////////////
00702 bool InventoryManager::cancel (stdair::Inventory& ioInventory,
00703                               const std::string& iSegmentDateKey,
00704                               const stdair::ClassCode_T& iClassCode,
00705                               const stdair::PartySize_T& iPartySize) {
00706
00707     // Make the cancellation within the inventory.
00708     return InventoryHelper::cancel (ioInventory, iSegmentDateKey,
00709                                     iClassCode, iPartySize);
00710 }
00711
00712 // //////////////////////////////////////
00713 bool InventoryManager::cancel (const stdair::BookingClassID_T& iClassID,
00714                               const stdair::PartySize_T& iPartySize) {
00715
00716     // Make the cancellation within the inventory.
00717     return InventoryHelper::cancel (iClassID, iPartySize);
00718 }
00719
00720 // //////////////////////////////////////
00721 void InventoryManager::
00722 updateBookingControls (stdair::FlightDate& ioFlightDate) {
00723
00724     // Forward the call to FlightDateHelper.
00725     FlightDateHelper::updateBookingControls (ioFlightDate);
00726 }
00727
00728 // //////////////////////////////////////

```

```

00729 void InventoryManager::
00730 recalculateAvailability (stdair::FlightDate& ioFlightDate) {
00731
00732     // Forward the call to FlightDateHelper.
00733     FlightDateHelper::recalculateAvailability (ioFlightDate);
00734 }
00735
00736 // //////////////////////////////////////
00737 void InventoryManager::takeSnapshots(const stdair::Inventory& iInventory,
00738                                     const stdair::DateTime_T& iSnapshotTime){
00739
00740     // Make the snapshots within the inventory
00741     InventoryHelper::takeSnapshots (iInventory, iSnapshotTime);
00742 }
00743
00744 // //////////////////////////////////////
00745 void InventoryManager::
00746 createDirectAccesses (const stdair::BomRoot& iBomRoot) {
00747
00748     // Browse the list of inventories and create direct accesses
00749     // within each inventory.
00750     const stdair::InventoryList_T& lInvList =
00751         stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
00752     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00753          itInv != lInvList.end(); ++itInv) {
00754         stdair::Inventory* lCurrentInv_ptr = *itInv;
00755         assert (lCurrentInv_ptr != NULL);
00756
00757         createDirectAccesses (iBomRoot, *lCurrentInv_ptr);
00758     }
00759
00760     // Browse the list of inventories and create partner accesses
00761     // within each inventory.
00762     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00763          itInv != lInvList.end(); ++itInv) {
00764         stdair::Inventory* lCurrentInv_ptr = *itInv;
00765         assert (lCurrentInv_ptr != NULL);
00766
00767         createPartnerAccesses (iBomRoot, *lCurrentInv_ptr);
00768     }
00769
00770     // Fill some attributes of segment-date with the routing legs.
00771     BomRootHelper::fillFromRouting (iBomRoot);
00772 }
00773
00774 // //////////////////////////////////////
00775 void InventoryManager::
00776 createDirectAccesses (const stdair::BomRoot& iBomRoot,
00777                     stdair::Inventory& ioInventory) {
00778
00779     // Browse the list of flight-dates and create direct accesses
00780     // within each flight-date.
00781     const stdair::FlightDateList_T& lFlightDateList =
00782         stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00783     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00784          lFlightDateList.begin();
00785          itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00786         stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00787         assert (lCurrentFlightDate_ptr != NULL);
00788
00789         createDirectAccesses (iBomRoot, ioInventory, *lCurrentFlightDate_ptr);
00790     }
00791
00792     // Browse the list of inventories and create direct accesses
00793     // within each inventory.
00794     const bool hasInventoryList =
00795         stdair::BomManager::hasList<stdair::Inventory> (ioInventory);

```



```

00796     if (hasInventoryList == true) {
00797         const stdair::InventoryList_T& lInvList =
00798             stdair::BomManager::getList<stdair::Inventory> (ioInventory);
00799         for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
00800             itInv != lInvList.end(); ++itInv) {
00801             stdair::Inventory* lCurrentInv_ptr = *itInv;
00802             assert (lCurrentInv_ptr != NULL);
00803
00804             createDirectAccesses (iBomRoot, *lCurrentInv_ptr);
00805         }
00806     }
00807 }
00808
00809 // //////////////////////////////////////
00810 void InventoryManager::
00811 createDirectAccesses (const stdair::BomRoot& ioBomRoot,
00812                     stdair::Inventory& ioInventory,
00813                     stdair::FlightDate& ioFlightDate) {
00814
00815     bool areSegmentAndRoutingLegLinked = false;
00816
00817     // Browse the list of segment-dates and create direct accesses
00818     // within each segment-date.
00819     const stdair::SegmentDateList_T& lSegmentDateList =
00820         stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00821     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00822         lSegmentDateList.begin();
00823         itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00824
00825         stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00826         assert (lCurrentSegmentDate_ptr != NULL);
00827
00828         // Get the routing leg keys list
00829         const stdair::RoutingLegKeyList_T& lRoutingLegKeyList =
00830             lCurrentSegmentDate_ptr->getLegKeyList ();
00831
00832         // Browse the list of routing leg keys and try to create direct accesses
00833         // with each corresponding leg date.
00834         for (stdair::RoutingLegKeyList_T::const_iterator itRoutingLegKey =
00835             lRoutingLegKeyList.begin();
00836             itRoutingLegKey != lRoutingLegKeyList.end(); ++itRoutingLegKey) {
00837
00838             // Try to retrieve the routing LegDate within the flight date
00839             stdair::LegDate* lLegDate_ptr = stdair::BomRetriever::
00840                 retrieveOperatingLegDateFromLongKey (ioFlightDate, *itRoutingLegKey);
00841
00842             if (lLegDate_ptr != NULL) {
00843
00844                 // Link the SegmentDate and LegDate together
00845                 stdair::FacBomManager::addToListAndMap (*lCurrentSegmentDate_ptr,
00846                                                         *lLegDate_ptr);
00847                 stdair::FacBomManager::addToListAndMap (*lLegDate_ptr,
00848                                                         *lCurrentSegmentDate_ptr);
00849                 areSegmentAndRoutingLegLinked = true;
00850             }
00851         }
00852         if (areSegmentAndRoutingLegLinked == true) {
00853             createDirectAccesses (*lCurrentSegmentDate_ptr);
00854         }
00855     }
00856 }
00857
00858 // //////////////////////////////////////
00859 void InventoryManager::
00860 createDirectAccesses (stdair::SegmentDate& ioSegmentDate) {
00861
00862     // Browse the list of segment-cabins and create direct accesses

```

```

00863     // within each segment-cabin.
00864     const stdair::SegmentCabinList_T& lSegmentCabinList =
00865         stdair::BomManager::getList<stdair::SegmentCabin> (ioSegmentDate);
00866     for (stdair::SegmentCabinList_T::const_iterator itSegmentCabin =
00867         lSegmentCabinList.begin();
00868         itSegmentCabin != lSegmentCabinList.end(); ++itSegmentCabin) {
00869
00870         //
00871         stdair::SegmentCabin* lCurrentSegmentCabin_ptr = *itSegmentCabin;
00872         assert (lCurrentSegmentCabin_ptr != NULL);
00873
00874         //
00875         const stdair::CabinCode_T& lCabinCode =
00876             lCurrentSegmentCabin_ptr->getCabinCode();
00877
00878         // Iterate on the routing legs
00879         const stdair::LegDateList_T& lLegDateList =
00880             stdair::BomManager::getList<stdair::LegDate> (ioSegmentDate);
00881         for (stdair::LegDateList_T::const_iterator itLegDate =
00882             lLegDateList.begin();
00883             itLegDate != lLegDateList.end(); ++itLegDate) {
00884
00885             const stdair::LegDate* lCurrentLegDate_ptr = *itLegDate;
00886             assert (lCurrentLegDate_ptr != NULL);
00887
00888             // Retrieve the LegCabin getting the same class of service
00889             // (cabin code) as the SegmentCabin.
00890             stdair::LegCabin& lLegCabin = stdair::BomManager::
00891                 getObject<stdair::LegCabin> (*lCurrentLegDate_ptr, lCabinCode);
00892
00893             stdair::FacBomManager::addToListAndMap (*lCurrentSegmentCabin_ptr,
00894                 lLegCabin,
00895                 lLegCabin.getFullerKey());
00896
00897             stdair::FacBomManager::
00898                 addToListAndMap (lLegCabin, *lCurrentSegmentCabin_ptr,
00899                     lCurrentSegmentCabin_ptr->getFullerKey());
00900         }
00901     }
00902 }
00903
00904 // //////////////////////////////////////
00905 void InventoryManager::
00906 createPartnerAccesses (const stdair::BomRoot& iBomRoot,
00907     stdair::Inventory& ioInventory) {
00908
00909     // Browse the list of flight-dates and create partner accesses
00910     // within each flight-date.
00911     const stdair::FlightDateList_T& lFlightDateList =
00912         stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
00913     for (stdair::FlightDateList_T::const_iterator itFlightDate =
00914         lFlightDateList.begin();
00915         itFlightDate != lFlightDateList.end(); ++itFlightDate) {
00916         stdair::FlightDate* lCurrentFlightDate_ptr = *itFlightDate;
00917         assert (lCurrentFlightDate_ptr != NULL);
00918
00919         createPartnerAccesses (iBomRoot, ioInventory, *lCurrentFlightDate_ptr);
00920     }
00921 }
00922
00923 // //////////////////////////////////////
00924 void InventoryManager::
00925 createPartnerAccesses (const stdair::BomRoot& ioBomRoot,
00926     stdair::Inventory& ioInventory,
00927     stdair::FlightDate& ioFlightDate) {
00928
00929     // Browse the list of segment-dates and create partner accesses

```

```

00950     // within each segment-date.
00951     const stdair::SegmentDateList_T& lSegmentDateList =
00952         stdair::BomManager::getList<stdair::SegmentDate> (ioFlightDate);
00953     for (stdair::SegmentDateList_T::const_iterator itSegmentDate =
00954         lSegmentDateList.begin();
00955         itSegmentDate != lSegmentDateList.end(); ++itSegmentDate) {
00956
00957         stdair::SegmentDate* lCurrentSegmentDate_ptr = *itSegmentDate;
00958         assert (lCurrentSegmentDate_ptr != NULL);
00959
00960         // Get the routing leg keys list
00961         const stdair::RoutingLegKeyList_T& lRoutingLegKeyList =
00962             lCurrentSegmentDate_ptr->getLegKeyList ();
00963
00964         // Browse the list of routing leg keys and try to create partner accesses
00965         // with each corresponding leg date.
00966         for (stdair::RoutingLegKeyList_T::const_iterator itRoutingLegKey =
00967             lRoutingLegKeyList.begin();
00968             itRoutingLegKey != lRoutingLegKeyList.end(); ++itRoutingLegKey) {
00969
00970             // Try to retrieve the LegDate getting that Boarding Point within the
00971             // flight date
00972             stdair::LegDate* lLegDate_ptr = stdair::BomRetriever::
00973                 retrieveOperatingLegDateFromLongKey (ioFlightDate, *itRoutingLegKey);
00974
00975             // If there is no LegDate getting that Boarding Point within the flight
00976             // date, the segment is operating by a partner
00977             if (lLegDate_ptr == NULL) {
00978
00979                 // Retrieve the (unique) operating LegDate getting that Boarding Point
00980                 // within the partner inventory
00981                 std::ostringstream lRoutingSegmentKey;
00982                 lRoutingSegmentKey << *itRoutingLegKey << "; "
00983                     << lCurrentSegmentDate_ptr->getOffPoint ();
00984
00985                 stdair::SegmentDate* lPartnerOperatingSegmentDate_ptr =
00986                     stdair::BomRetriever::
00987                         retrievePartnerSegmentDateFromLongKey (ioInventory,
00988                             lRoutingSegmentKey.str());
00989                 assert (lPartnerOperatingSegmentDate_ptr != NULL);
00990
00991                 // Link the current segment date with its operating one
00992                 stdair::FacBomManager::linkWithOperating (*lCurrentSegmentDate_ptr,
00993                     *lPartnerOperatingSegmentDate
00994                     _ptr);
00995
00996                 stdair::SegmentDate* lOperatingSegmentDate_ptr =
00997                     stdair::BomRetriever::
00998                         retrieveSegmentDateFromLongKey (ioBomRoot,
00999                             lRoutingSegmentKey.str());
01000                 assert (lOperatingSegmentDate_ptr != NULL);
01001
01002                 stdair::Inventory* lInventory_ptr =
01003                     stdair::BomRetriever::
01004                         retrieveInventoryFromLongKey (ioBomRoot, *itRoutingLegKey);
01005                 assert (lInventory_ptr != NULL);
01006
01007                 std::ostringstream lRoutingSegment;
01008                 lRoutingSegment << ioFlightDate.getAirlineCode() << "; "
01009                     << ioFlightDate.describeKey() << "; "
01010                     << lCurrentSegmentDate_ptr->getBoardingPoint() << "; "
01011                     << lCurrentSegmentDate_ptr->getOffPoint ();
01012
01013                 stdair::SegmentDate* lPartnerMarketingSegmentDate_ptr =
01014                     stdair::BomRetriever::
01015                         retrievePartnerSegmentDateFromLongKey (*lInventory_ptr, lRoutingSegme
01016                             nt.str());

```

```

01015         assert(lPartnerMarketingSegmentDate_ptr != NULL);
01016
01017         stdair::FacBomManager::addToList (*lOperatingSegmentDate_ptr, *lPartner
MarketingSegmentDate_ptr);
01018
01019     }
01020 }
01021 }
01022 }
01023
01024
01025 // ////////////////////////////////////////
01026 void InventoryManager::
01027 buildSimilarSegmentCabinSets (const stdair::BomRoot& iBomRoot) {
01028     // Browse the list of inventories and create direct accesses
01029     // within each inventory.
01030     const stdair::InventoryList_T& lInvList =
01031         stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
01032     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
01033          itInv != lInvList.end(); ++itInv) {
01034         stdair::Inventory* lCurrentInv_ptr = *itInv;
01035         assert (lCurrentInv_ptr != NULL);
01036
01037         buildSimilarSegmentCabinSets (*lCurrentInv_ptr);
01038     }
01039 }
01040
01041 // ////////////////////////////////////////
01042 void InventoryManager::
01043 buildSimilarSegmentCabinSets (stdair::Inventory& ioInventory) {
01044     // For instance, we consider two flight-dates are
01045     // similar if they have the same flight number and the same
01046     // day-of-the-week departure.
01047
01048     // Browse the segment-cabin list and build the sets of segment-cabin
01049     // which have the same flight number and origin-destination
01050     SimilarSegmentCabinSetMap_T lSSCSM;
01051
01052     // Browsing the flight-date list
01053     const stdair::FlightDateList_T& lFlightDateList =
01054         stdair::BomManager::getList<stdair::FlightDate> (ioInventory);
01055     for (stdair::FlightDateList_T::const_iterator itFD= lFlightDateList.begin();
01056          itFD != lFlightDateList.end(); ++itFD) {
01057         const stdair::FlightDate* lFD_ptr = *itFD;
01058         assert (lFD_ptr != NULL);
01059         const stdair::FlightNumber_T& lFlightNumber = lFD_ptr->getFlightNumber();
01060
01061         // Browsing the segment-date list and retrieve the departure
01062         // date, the origine and the destination of the segment
01063         const stdair::SegmentDateList_T& lSegmentDateList =
01064             stdair::BomManager::getList<stdair::SegmentDate> (*lFD_ptr);
01065         for (stdair::SegmentDateList_T::const_iterator itSD =
01066              lSegmentDateList.begin(); itSD != lSegmentDateList.end(); ++itSD) {
01067             const stdair::SegmentDate* lSD_ptr = *itSD;
01068             assert (lSD_ptr != NULL);
01069
01070             const stdair::Date_T& lDepartureDate = lSD_ptr->getBoardingDate();
01071             const stdair::AirportCode_T& lOrigin = lSD_ptr->getBoardingPoint();
01072             const stdair::AirportCode_T& lDestination = lSD_ptr->getOffPoint();
01073
01074             // Browsing the segment-cabin list and retrieve the cabin code and
01075             // build the corresponding key map.
01076             const stdair::SegmentCabinList_T& lSegmentCabinList =
01077                 stdair::BomManager::getList<stdair::SegmentCabin> (*lSD_ptr);
01078             for (stdair::SegmentCabinList_T::const_iterator itSC =
01079                  lSegmentCabinList.begin();
01080                  itSC != lSegmentCabinList.end(); ++itSC) {

```

```

01081         stdair::SegmentCabin* lSC_ptr = *itSC;
01082         assert (lSC_ptr != NULL);
01083
01084         std::ostringstream ostr;
01085         ostr << lFlightNumber << lDepartureDate.day_of_week()
01086             << lOrigin << lDestination << lSC_ptr->getCabinCode();
01087         const std::string lMapKey = ostr.str();
01088
01089         // Add the segment cabin to the similar segment cabin set map.
01090         SimilarSegmentCabinSetMap_T::iterator itSSCS = lSSCSM.find (lMapKey);
01091         if (itSSCS == lSSCSM.end()) {
01092             DepartureDateSegmentCabinMap_T lDDSCMap;
01093             lDDSCMap.insert (DepartureDateSegmentCabinMap_T::
01094                 value_type (lDepartureDate, lSC_ptr));
01095             lSSCSM.insert (SimilarSegmentCabinSetMap_T::
01096                 value_type (lMapKey, lDDSCMap));
01097         } else {
01098             DepartureDateSegmentCabinMap_T& lDDSCMap = itSSCS->second;
01099             lDDSCMap.insert (DepartureDateSegmentCabinMap_T::
01100                 value_type (lDepartureDate, lSC_ptr));
01101         }
01102     }
01103 }
01104 }
01105
01106 // Initialise the segment data table.
01107 stdair::TableID_T lTableID = 1;
01108 for (SimilarSegmentCabinSetMap_T::const_iterator itSSCS = lSSCSM.begin();
01109     itSSCS != lSSCSM.end(); ++itSSCS, ++lTableID) {
01110     const DepartureDateSegmentCabinMap_T& lDDSCMap = itSSCS->second;
01111
01112     buildSegmentSnapshotTable (ioInventory, lTableID, lDDSCMap);
01113 }
01114 }
01115
01116 // //////////////////////////////////////
01117 void InventoryManager::
01118 buildSegmentSnapshotTable (stdair::Inventory& ioInventory,
01119                             const stdair::TableID_T& iTableID,
01120                             const DepartureDateSegmentCabinMap_T& iDDSCMap) {
01121     // Build an empty segment data table.
01122     const stdair::SegmentSnapshotTableKey lKey (iTableID);
01123     stdair::SegmentSnapshotTable& lSegmentSnapshotTable =
01124         stdair::FacBom<stdair::SegmentSnapshotTable>::instance().create (lKey);
01125     stdair::FacBomManager::addToListAndMap (ioInventory, lSegmentSnapshotTable);
01126
01127     // Build the value type index map.
01128     DepartureDateSegmentCabinMap_T::const_iterator itDDSC = iDDSCMap.begin();
01129     assert (itDDSC != iDDSCMap.end());
01130     const stdair::SegmentCabin* lSegmentCabin_ptr = itDDSC->second;
01131
01132     // Browse the booking class list and build the value type for the classes
01133     // as well as for the cabin (Q-equivalent).
01134     stdair::ClassIndexMap_T lClassIndexMap;
01135     stdair::ClassIndex_T lClassIndex = 0;
01136     std::ostringstream lSCMapKey;
01137     lSCMapKey << stdair::DEFAULT_SEGMENT_CABIN_VALUE_TYPE
01138         << lSegmentCabin_ptr->describeKey();
01139     lClassIndexMap.insert (stdair::ClassIndexMap_T::
01140         value_type (lSCMapKey.str(), lClassIndex));
01141     ++lClassIndex;
01142
01143     // Browse the booking class list
01144     const stdair::BookingClassList_T& lBCList =
01145         stdair::BomManager::getList<stdair::BookingClass>(*lSegmentCabin_ptr);
01146     for (stdair::BookingClassList_T::const_iterator itBC= lBCList.begin();
01147         itBC != lBCList.end(); ++itBC) {

```

```

01148     const stdair::BookingClass* lBookingClass_ptr = *itBC;
01149     assert (lBookingClass_ptr != NULL);
01150     lClassIndexMap.
01151         insert (stdair::ClassIndexMap_T::
01152             value_type(lBookingClass_ptr->describeKey(), lClassIndex));
01153     ++lClassIndex;
01154 }
01155
01156 // Build the segment-cabin index map
01157 stdair::SegmentCabinIndexMap_T lSegmentCabinIndexMap;
01158 stdair::SegmentDataID_T lSegmentDataID = 0;
01159 for (; itDDSC != iDDSCMap.end(); ++itDDSC, ++lSegmentDataID) {
01160     stdair::SegmentCabin* lCurrentSC_ptr = itDDSC->second;
01161     assert (lCurrentSC_ptr != NULL);
01162     lSegmentCabinIndexMap.
01163         insert (stdair::SegmentCabinIndexMap_T::value_type (lCurrentSC_ptr,
01164             lSegmentDataID));
01165
01166     // Added the data table to the segment-cabin.
01167     lCurrentSC_ptr->setSegmentSnapshotTable (lSegmentSnapshotTable);
01168 }
01169
01170 // Initialise the segment data table.
01171 lSegmentSnapshotTable.initSnapshotBlocks(lSegmentCabinIndexMap,
01172     lClassIndexMap);
01173 }
01174
01175 // //////////////////////////////////////
01176 void InventoryManager::initSnapshotEvents (SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR
01177     _ServicePtr,
01178         const stdair::Date_T& iStartDate,
01179         const stdair::Date_T& iEndDate) {
01180     const stdair::Duration_T lTimeZero (0, 0, 0);
01181     const stdair::Duration_T lOneDayDuration (24, 0, 0);
01182     const stdair::DateTime_T lBeginSnapshotTime (iStartDate, lTimeZero);
01183     const stdair::DateTime_T lEndSnapshotTime (iEndDate, lTimeZero);
01184
01185     // TODO: remove the default airline code.
01186     stdair::NbOfEvents_T lNbOfSnapshots = 0.0;
01187     for (stdair::DateTime_T lSnapshotTime = lBeginSnapshotTime;
01188         lSnapshotTime < lEndSnapshotTime; lSnapshotTime += lOneDayDuration) {
01189         // Create the snapshot event structure
01190         stdair::SnapshotPtr_T lSnapshotStruct =
01191             boost::make_shared<stdair::SnapshotStruct>(stdair::DEFAULT_AIRLINE_CODE,
01192                 lSnapshotTime);
01193         // Create the event structure
01194         stdair::EventStruct lEventStruct (stdair::EventType::SNAPSHOT,
01195             lSnapshotStruct);
01196
01197         ioSEVMGR_ServicePtr->addEvent (lEventStruct);
01198         ++lNbOfSnapshots;
01199     }
01200
01201     // Update the status of snap shots within the event queue.
01202     ioSEVMGR_ServicePtr->addStatus (stdair::EventType::SNAPSHOT, lNbOfSnapshots);
01203 }
01204
01205 // //////////////////////////////////////
01206 void InventoryManager::
01207     initRMEEvents (const stdair::Inventory& iInventory,
01208         stdair::RMEEventList_T& ioRMEEventList,
01209         const stdair::Date_T& iStartDate,
01210         const stdair::Date_T& iEndDate) {
01211     const stdair::Duration_T lTimeZero (0, 0, 0);
01212     const stdair::Duration_T lTime (0, 0, 10);
01213     const stdair::Duration_T lOneDayDuration (24, 0, 0);

```

```

01220     const stdair::DateTime_T lEarliestEventTime (iStartDate, lTimeZero);
01221     const stdair::DateTime_T lLatestEventTime (iEndDate, lTimeZero);
01222
01223     const stdair::AirlineCode_T& lAirlineCode = iInventory.getAirlineCode();
01224
01225     // Browse the list of flight-dates and initialise the RM events for
01226     // each flight-date.
01227     const stdair::FlightDateList_T& lFDList =
01228         stdair::BomManager::getList<stdair::FlightDate> (iInventory);
01229     for (stdair::FlightDateList_T::const_iterator itFD = lFDList.begin();
01230          itFD != lFDList.end(); ++itFD) {
01231         const stdair::FlightDate* lFD_ptr = *itFD;
01232         assert (lFD_ptr != NULL);
01233
01234         // Retrieve the departure date and initialise the RM events with
01235         // the data collection points of the inventory.
01236         const stdair::Date_T& lDepartureDate = lFD_ptr->getDepartureDate();
01237         const stdair::DateTime_T lDepartureDateTime (lDepartureDate, lTime);
01238         for (stdair::DCPLIST_T::const_iterator itDCP =
01239              stdair::DEFAULT_DCP_LIST.begin();
01240              itDCP != stdair::DEFAULT_DCP_LIST.end(); ++itDCP) {
01241             const stdair::DCP_T& lDCP = *itDCP;
01242
01243             // Create the event time and check if it is in the validate interval
01244             const stdair::DateTime_T lEventTime =
01245                 lDepartureDateTime - lOneDayDuration * lDCP;
01246             if (lEventTime >= lEarliestEventTime && lEventTime <= lLatestEventTime){
01247                 const stdair::KeyDescription_T lKeyDes = lFD_ptr->describeKey();
01248                 stdair::RMEventStruct lRMEvent (lAirlineCode, lKeyDes, lEventTime);
01249                 ioRMEventList.push_back (lRMEvent);
01250             }
01251         }
01252     }
01253 }
01254
01255 // //////////////////////////////////////
01256 void InventoryManager::
01257 addRMEventsToEventQueue (SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR_ServicePtr,
01258                          stdair::RMEventList_T& ioRMEventList) {
01259     // Browse the RM event list and add them to the queue.
01260     for (stdair::RMEventList_T::iterator itRMEvent = ioRMEventList.begin();
01261          itRMEvent != ioRMEventList.end(); ++itRMEvent) {
01262         stdair::RMEventStruct& lRMEvent = *itRMEvent;
01263         stdair::RMEventPtr_T lRMEventPtr =
01264             boost::make_shared<stdair::RMEventStruct> (lRMEvent);
01265         stdair::EventStruct lEventStruct (stdair::EventType::RM, lRMEventPtr);
01266         ioSEVMGR_ServicePtr->addEvent (lEventStruct);
01267     }
01268
01269     // Update the status of RM events within the event queue.
01270     const stdair::Count_T lRMEventListSize = ioRMEventList.size();
01271     ioSEVMGR_ServicePtr->addStatus (stdair::EventType::RM, lRMEventListSize);
01272 }
01273
01274 // //////////////////////////////////////
01275 void InventoryManager::
01276 initialiseYieldBasedNestingStructures (const stdair::BomRoot& iBomRoot) {
01277     // DEBUG
01278     STDAIR_LOG_DEBUG ("Initialise the yield-based nesting structure for "
01279                      << "all segment-cabins");
01280
01281     // Browse the list of inventories
01282     const stdair::InventoryList_T& lInvList =
01283         stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
01284
01285     // Browse the inventories

```

```

01287     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
01288          itInv != lInvList.end(); ++itInv) {
01289         stdair::Inventory* lCurrentInv_ptr = *itInv;
01290         assert (lCurrentInv_ptr != NULL);
01291         const stdair::FlightDateList_T& lFlightDateList =
01292             stdair::BomManager::getList<stdair::FlightDate> (*lCurrentInv_ptr);
01293
01294         // Browse the flight dates
01295         for (stdair::FlightDateList_T::const_iterator itFD =
01296              lFlightDateList.begin(); itFD != lFlightDateList.end(); ++itFD) {
01297             const stdair::FlightDate* lFD_ptr = *itFD;
01298             assert (lFD_ptr != NULL);
01299             const stdair::SegmentDateList_T& lSegmentDateList =
01300                 stdair::BomManager::getList<stdair::SegmentDate> (*lFD_ptr);
01301
01302             // Browse the segment dates
01303             for (stdair::SegmentDateList_T::const_iterator itSD =
01304                  lSegmentDateList.begin(); itSD != lSegmentDateList.end(); ++itSD) {
01305                 const stdair::SegmentDate* lSD_ptr = *itSD;
01306                 assert (lSD_ptr != NULL);
01307                 const stdair::SegmentCabinList_T& lSegmentCabinList =
01308                     stdair::BomManager::getList<stdair::SegmentCabin> (*lSD_ptr);
01309
01310                 // Browse the segment cabins
01311                 for (stdair::SegmentCabinList_T::const_iterator itSC =
01312                      lSegmentCabinList.begin(); itSC != lSegmentCabinList.end();
01313                      ++itSC) {
01314                     stdair::SegmentCabin* lSC_ptr = *itSC;
01315                     assert (lSC_ptr != NULL);
01316
01317                     // Initialise the nesting structure of the segment cabin
01318                     SegmentCabinHelper::initYieldBasedNestingStructure (*lSC_ptr);
01319                 }
01320             }
01321         }
01322     }
01323 }
01324
01325 // //////////////////////////////////////
01326 void InventoryManager::
01327 initialiseListsOfUsablePolicies (const stdair::BomRoot& iBomRoot) {
01328     // Browse the list of inventories
01329     const stdair::InventoryList_T& lInvList =
01330         stdair::BomManager::getList<stdair::Inventory> (iBomRoot);
01331
01332     // Browse the inventories
01333     for (stdair::InventoryList_T::const_iterator itInv = lInvList.begin();
01334          itInv != lInvList.end(); ++itInv) {
01335         stdair::Inventory* lCurrentInv_ptr = *itInv;
01336         assert (lCurrentInv_ptr != NULL);
01337
01338         // Create the policies if the optimisation method uses Marginal
01339         // Revenue Transformation
01340         stdair::PreOptimisationMethod::EN_PreOptimisationMethod lPreOptMethod =
01341             lCurrentInv_ptr->getPreOptimisationMethod();
01342
01343         if (lPreOptMethod == stdair::PreOptimisationMethod::MRT) {
01344             const stdair::FlightDateList_T& lFlightDateList =
01345                 stdair::BomManager::getList<stdair::FlightDate> (*lCurrentInv_ptr);
01346
01347             // Browse the flight dates
01348             for (stdair::FlightDateList_T::const_iterator itFD =
01349                  lFlightDateList.begin(); itFD != lFlightDateList.end(); ++itFD) {
01350                 const stdair::FlightDate* lFD_ptr = *itFD;
01351                 assert (lFD_ptr != NULL);
01352                 const stdair::SegmentDateList_T& lSegmentDateList =
01353                     stdair::BomManager::getList<stdair::SegmentDate> (*lFD_ptr);

```



```
01354
01355     // Browse the segment dates
01356     for (stdair::SegmentDateList_T::const_iterator itSD =
01357         lSegmentDateList.begin();
01358         itSD != lSegmentDateList.end(); ++itSD) {
01359         const stdair::SegmentDate* lSD_ptr = *itSD;
01360         assert (lSD_ptr != NULL);
01361         const stdair::SegmentCabinList_T& lSegmentCabinList =
01362             stdair::BomManager::getList<stdair::SegmentCabin> (*lSD_ptr);
01363
01364         // Browse the segment cabins
01365         for (stdair::SegmentCabinList_T::const_iterator itSC =
01366             lSegmentCabinList.begin(); itSC != lSegmentCabinList.end();
01367             ++itSC) {
01368             stdair::SegmentCabin* lSC_ptr = *itSC;
01369             assert (lSC_ptr != NULL);
01370
01371             if (lSC_ptr->getFareFamilyStatus() == true) {
01372                 // Initialise the nesting structure of the segment cabin
01373                 SegmentCabinHelper::initListOfUsablePolicies (*lSC_ptr);
01374             }
01375         }
01376     }
01377 }
01378 }
01379 }
01380 }
01381
01382 }
```

## 25.143 airinv/command/InventoryManager.hpp File Reference

```
#include <string>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/bom/RMEventTypes.hpp>
#include <stdair/bom/BomIDTypes.hpp>
#include <sevmgr/SEVMGR_Types.hpp>
```

### Classes

- class [AIRINV::InventoryManager](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

### Typedefs

- typedef `std::map< const stdair::Date_T, stdair::SegmentCabin * >`  
[AIRINV::DepartureDateSegmentCabinMap\\_T](#)
- typedef `std::map< const std::string, DepartureDateSegmentCabinMap_T >`  
[AIRINV::SimilarSegmentCabinSetMap\\_T](#)

**25.144 InventoryManager.hpp**

```

00001 #ifndef __AIRINV_CMD_INVENTORYMANAGER_HPP
00002 #define __AIRINV_CMD_INVENTORYMANAGER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // STDAIR
00010 #include <stdair/stdair_basic_types.hpp>
00011 #include <stdair/bom/RMEventTypes.hpp>
00012 #include <stdair/bom/BomIDTypes.hpp>
00013 // SEVMgr
00014 #include <sevmgr/SEVMGR_Types.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019     class Inventory;
00020     class FlightDate;
00021     class SegmentDate;
00022     class SegmentCabin;
00023     class EventQueue;
00024     struct TravelSolutionStruct;
00025 }
00026
00027 namespace AIRINV {
00028
00029     // ////////////////////////////////// Type definitions //////////////////////////////////
00030     typedef std::map<const stdair::Date_T,
00031                     stdair::SegmentCabin*> DepartureDateSegmentCabinMap_T;
00032     typedef std::map<const std::string,
00033                     DepartureDateSegmentCabinMap_T> SimilarSegmentCabinSetMap_T;
00034
00035     class InventoryManager {
00036     friend class AIRINV_Master_Service;
00037     friend class AIRINV_Service;
00038
00039     private:
00040         static void initSnapshotEvents (SEVMGR::SEVMGR_ServicePtr_T,
00041                                         const stdair::Date_T&,
00042                                         const stdair::Date_T&);
00043
00044         static void initRMEvents (const stdair::Inventory&, stdair::RMEventList_T&,
00045                                   const stdair::Date_T&, const stdair::Date_T&);
00046
00047         static void addRMEventsToEventQueue (SEVMGR::SEVMGR_ServicePtr_T,
00048                                               stdair::RMEventList_T&);
00049
00050         static void calculateAvailability (const stdair::BomRoot&,
00051                                           stdair::TravelSolutionStruct&);
00052
00053         static void calculateAvailabilityByAU (stdair::TravelSolutionStruct&);
00054
00055         static void calculateAvailabilityByRAE (stdair::TravelSolutionStruct&);
00056
00057         static void calculateAvailabilityByIBP (stdair::TravelSolutionStruct&);
00058
00059         static void calculateAvailabilityByProtectiveIBP (stdair::TravelSolutionStruct&);
00060
00061         static bool sell (stdair::Inventory&, const std::string& iSegmentDateKey,
00062                           const stdair::ClassCode_T&, const stdair::PartySize_T&);
00063
00064         static bool sell (const stdair::BookingClassID_T&,
00065                           const stdair::ClassCode_T&, const stdair::PartySize_T&);
00066
00067     };
00068
00069 }
00070
00071 #endif

```

```

00084         const stdair::PartySize_T&);
00085
00087     static bool cancel (stdair::Inventory&, const std::string& iSegmentDateKey,
00088         const stdair::ClassCode_T&, const stdair::PartySize_T&);
00089
00091     static bool cancel (const stdair::BookingClassID_T&,
00092         const stdair::PartySize_T&);
00093
00095     static void takeSnapshots (const stdair::Inventory&,
00096         const stdair::DateTime_T&);
00097
00099     static void updateBookingControls (stdair::FlightDate&);
00100
00102     static void recalculateAvailability (stdair::FlightDate&);
00103
00104 public:
00107     static void createDirectAccesses (const stdair::BomRoot&);
00108     static void createDirectAccesses (const stdair::BomRoot&,
00109         stdair::Inventory&);
00110     static void createDirectAccesses (const stdair::BomRoot&,
00111         stdair::Inventory&, stdair::FlightDate&);
00112     static void createDirectAccesses (stdair::SegmentDate&);
00113
00116     static void createPartnerAccesses (const stdair::BomRoot&,
00117         stdair::Inventory&);
00118     static void createPartnerAccesses (stdair::FlightDate&);
00119     static void createPartnerAccesses (const stdair::BomRoot&,
00120         stdair::Inventory&, stdair::FlightDate&);
00121
00122
00125     static void buildSimilarSegmentCabinSets (const stdair::BomRoot&);
00126     static void buildSimilarSegmentCabinSets (stdair::Inventory&);
00127     static void buildSegmentSnapshotTable (stdair::Inventory&,
00128         const stdair::TableID_T&,
00129         const DepartureDateSegmentCabinMap_T&)
00130 ;
00131
00133     static void setDefaultBidPriceVector (stdair::BomRoot&);
00134     static void setDefaultBidPriceVector (stdair::Inventory&);
00135
00137     static void initialiseYieldBasedNestingStructures (const stdair::BomRoot&);
00138
00140     static void initialiseListsOfUsablePolicies (const stdair::BomRoot&);
00141
00142 private:
00144     InventoryManager() {}
00145     InventoryManager(const InventoryManager&) {}
00147     ~InventoryManager() {}
00148 };
00149
00150 }
00151 #endif // __AIRINV_CMD_INVENTORYMANAGER_HPP

```

## 25.145 airinv/command/InventoryParser.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/InventoryParserHelper.hpp>
#include <airinv/command/InventoryParser.hpp>
#include <airinv/command/InventoryManager.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.146 InventoryParser.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasFileMgr.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/command/InventoryParserHelper.hpp>
00013 #include <airinv/command/InventoryParser.hpp>
00014 #include <airinv/command/InventoryManager.hpp>
00015
00016 namespace AIRINV {
00017
00018     // //////////////////////////////////////
00019     void InventoryParser::
00020     buildInventory (const InventoryFilePath& iInventoryFilename,
00021                    stdair::BomRoot& ioBomRoot) {
00022
00023         const stdair::Filename_T lFilename = iInventoryFilename.name();
00024
00025         // Check that the file path given as input corresponds to an actual file
00026         const bool doesExistAndIsReadable =
00027             stdair::BasFileMgr::doesExistAndIsReadable (lFilename);
00028         if (doesExistAndIsReadable == false) {
00029             std::ostringstream oMessage;
00030             oMessage << "The inventory input file, '" << lFilename
00031                 << "', can not be retrieved on the file-system";
00032             STDAIR_LOG_ERROR (oMessage.str());
00033             throw InventoryInputFileNotFoundException (oMessage.str());
00034         }
00035
00036         // Initialise the inventory file parser.
00037         InventoryFileParser lInventoryParser (ioBomRoot, lFilename);
00038
00039         // Parse the CSV-formatted inventory input file, and generate the
00040         // corresponding Inventory-related objects.
00041         lInventoryParser.buildInventory();
00042     }
00043
00044 }

```

## 25.147 airinv/command/InventoryParser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- class [AIRINV::InventoryParser](#)  
*Class wrapping the parser entry point.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.148 InventoryParser.hpp

```
00001 #ifndef __AIRINV_CMD_INVENTORYPARSER_HPP
00002 #define __AIRINV_CMD_INVENTORYPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010 // AirInv
00011 #include <airinv/AIRINV_Types.hpp>
00012
00014 namespace stdair {
00015     class BomRoot;
00016 }
00017
00018 namespace AIRINV {
00019
00023     class InventoryParser : public stdair::CmdAbstract {
00024     public:
00034         static void buildInventory (const InventoryFilePath&,
00035                                     stdair::BomRoot&);
00036     };
00037 }
00038 #endif // __AIRINV_CMD_INVENTORYPARSER_HPP
```



## 25.149 airinv/command/InventoryParserHelper.cpp File Reference

```
#include <cassert>
#include <stdair/service/Logger.hpp>
#include <stdair/stdair_exceptions.hpp>
#include <airinv/command/InventoryBuilder.hpp>
#include <airinv/command/InventoryParserHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)
- namespace [AIRINV::InventoryParserHelper](#)

### Functions

- repeat\_p\_t [AIRINV::InventoryParserHelper::airline\\_code\\_p](#) (chset\_t("0-9A-Z").derived(), 2, 3)
- bounded1\_4\_p\_t [AIRINV::InventoryParserHelper::flight\\_number\\_p](#) (uint1\_4\_p.derived(), 0u, 9999u)
- bounded2\_p\_t [AIRINV::InventoryParserHelper::year\\_p](#) (uint2\_p.derived(), 0u, 99u)
- bounded2\_p\_t [AIRINV::InventoryParserHelper::month\\_p](#) (uint2\_p.derived(), 1u, 12u)
- bounded2\_p\_t [AIRINV::InventoryParserHelper::day\\_p](#) (uint2\_p.derived(), 1u, 31u)
- repeat\_p\_t [AIRINV::InventoryParserHelper::dow\\_p](#) (chset\_t("0-1").derived().derived(), 7, 7)
- repeat\_p\_t [AIRINV::InventoryParserHelper::airport\\_p](#) (chset\_t("0-9A-Z").derived(), 3, 3)
- bounded1\_2\_p\_t [AIRINV::InventoryParserHelper::hours\\_p](#) (uint1\_2\_p.derived(), 0u, 24u)
- bounded2\_p\_t [AIRINV::InventoryParserHelper::minutes\\_p](#) (uint2\_p.derived(), 0u, 59u)
- bounded2\_p\_t [AIRINV::InventoryParserHelper::seconds\\_p](#) (uint2\_p.derived(), 0u, 59u)
- chset\_t [AIRINV::InventoryParserHelper::cabin\\_code\\_p](#) ("A-Z")
- chset\_t [AIRINV::InventoryParserHelper::class\\_code\\_p](#) ("A-Z")
- chset\_t [AIRINV::InventoryParserHelper::passenger\\_type\\_p](#) ("A-Z")
- repeat\_p\_t [AIRINV::InventoryParserHelper::class\\_code\\_list\\_p](#) (chset\_t("A-Z").derived(), 1, 26)
- bounded1\_3\_p\_t [AIRINV::InventoryParserHelper::stay\\_duration\\_p](#) (uint1\_3\_p.derived(), 0u, 999u)

### Variables

- int1\_p\_t [AIRINV::InventoryParserHelper::int1\\_p](#)
- uint2\_p\_t [AIRINV::InventoryParserHelper::uint2\\_p](#)
- uint1\_2\_p\_t [AIRINV::InventoryParserHelper::uint1\\_2\\_p](#)
- uint1\_3\_p\_t [AIRINV::InventoryParserHelper::uint1\\_3\\_p](#)
- uint4\_p\_t [AIRINV::InventoryParserHelper::uint4\\_p](#)
- uint1\_4\_p\_t [AIRINV::InventoryParserHelper::uint1\\_4\\_p](#)
- int1\_p\_t [AIRINV::InventoryParserHelper::family\\_code\\_p](#)

**25.150 InventoryParserHelper.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/Logger.hpp>
00008 #include <stdair/stdair_exceptions.hpp>
00009 // Airinv
00010 #include <airinv/command/InventoryBuilder.hpp>
00011 // #define BOOST_SPIRIT_DEBUG
00012 #include <airinv/command/InventoryParserHelper.hpp>
00013
00014 //
00015 namespace bsc = boost::spirit::classic;
00016
00017 namespace AIRINV {
00018
00019     namespace InventoryParserHelper {
00020
00021         // //////////////////////////////////////
00022         // Semantic actions
00023         // //////////////////////////////////////
00024
00025         ParserSemanticAction::
00026         ParserSemanticAction (FlightDateStruct& ioFlightDate)
00027             : _flightDate (ioFlightDate) {
00028         }
00029
00030         // //////////////////////////////////////
00031         storeSnapshotDate::
00032         storeSnapshotDate (FlightDateStruct& ioFlightDate)
00033             : ParserSemanticAction (ioFlightDate) {
00034         }
00035
00036         // //////////////////////////////////////
00037         void storeSnapshotDate::operator() (iterator_t iStr,
00038                                             iterator_t iStrEnd) const {
00039             _flightDate._flightDate = _flightDate.getDate();
00040         }
00041
00042         // //////////////////////////////////////
00043         storeAirlineCode::
00044         storeAirlineCode (FlightDateStruct& ioFlightDate)
00045             : ParserSemanticAction (ioFlightDate) {
00046         }
00047
00048         // //////////////////////////////////////
00049         void storeAirlineCode::operator() (iterator_t iStr,
00050                                             iterator_t iStrEnd) const {
00051             const stdair::AirlineCode_T lAirlineCode (iStr, iStrEnd);
00052             _flightDate._airlineCode = lAirlineCode;
00053
00054             // As that's the beginning of a new flight, all the list must be reset
00055             // 1. Leg branch of the tree
00056             _flightDate._legList.clear();
00057             _flightDate._itLeg._cabinList.clear();
00058             _flightDate._itLegCabin._bucketList.clear();
00059             _flightDate._itBucket._yieldRangeUpperValue = 0.0;
00060
00061             // 2. Segment branch of the tree
00062             _flightDate._segmentList.clear();
00063             _flightDate._itSegment._cabinList.clear();
00064             _flightDate._itSegmentCabin._itFareFamily._classList.clear();
00065             _flightDate._itSegmentCabin._fareFamilies.clear();

```

```

00066     _flightDate._itBookingClass._classCode = "";
00067 }
00068
00069 // //////////////////////////////////////
00070 storeFlightNumber::storeFlightNumber (FlightDateStruct& ioFlightDate)
00071 : ParserSemanticAction (ioFlightDate) {
00072 }
00073
00074 // //////////////////////////////////////
00075 void storeFlightNumber::operator() (unsigned int iNumber) const {
00076     _flightDate._flightNumber = iNumber;
00077 }
00078
00079 // //////////////////////////////////////
00080 storeFlightDate::storeFlightDate (FlightDateStruct& ioFlightDate)
00081 : ParserSemanticAction (ioFlightDate) {
00082 }
00083
00084 // //////////////////////////////////////
00085 void storeFlightDate::operator() (iterator_t iStr,
00086                                 iterator_t iStrEnd) const {
00087     _flightDate._flightDate = _flightDate.getDate();
00088 }
00089
00090 // //////////////////////////////////////
00091 storeFlightTypeCode::storeFlightTypeCode (FlightDateStruct& ioFlightDate)
00092 : ParserSemanticAction (ioFlightDate) {
00093 }
00094
00095 // //////////////////////////////////////
00096 void storeFlightTypeCode::operator() (iterator_t iStr,
00097                                     iterator_t iStrEnd) const {
00098     const std::string lFlightTypeCodeStr (iStr, iStrEnd);
00099     const FlightTypeCode lFlightTypeCode (lFlightTypeCodeStr);
00100     _flightDate._flightTypeCode = lFlightTypeCode.getCode();
00101     //STDAIR_LOG_DEBUG ("FlightType code: " << lFlightTypeCode);
00102 }
00103
00104 // //////////////////////////////////////
00105 storeFlightVisibilityCode::
00106 storeFlightVisibilityCode (FlightDateStruct& ioFlightDate)
00107 : ParserSemanticAction (ioFlightDate) {
00108 }
00109
00110 // //////////////////////////////////////
00111 void storeFlightVisibilityCode::operator() (iterator_t iStr,
00112                                     iterator_t iStrEnd) const {
00113     const std::string lFlightVisibilityCodeStr (iStr, iStrEnd);
00114     const FlightVisibilityCode lFlightVisibilityCode(lFlightVisibilityCodeStr);
00115
00116     _flightDate._flightVisibilityCode = lFlightVisibilityCode.getCode();
00117     //STDAIR_LOG_DEBUG ("FlightVisibility code: " << lFlightVisibilityCode);
00118 }
00119
00120 // //////////////////////////////////////
00121 storeLegBoardingPoint::
00122 storeLegBoardingPoint (FlightDateStruct& ioFlightDate)
00123 : ParserSemanticAction (ioFlightDate) {
00124 }
00125
00126 // //////////////////////////////////////
00127 void storeLegBoardingPoint::operator() (iterator_t iStr,
00128                                     iterator_t iStrEnd) const {
00129     stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00130
00131     // //////////////////////////////////
00132     // If this is not the first leg-date of the flight-date,

```

```

00132     // the already parsed leg-date must be added to the flight-date.
00133     if (_flightDate._itLeg._cabinList.empty() == false) {
00134         _flightDate._itLegCabin._bucketList.push_back (_flightDate._itBucket);
00135         _flightDate._itLeg._cabinList.push_back (_flightDate._itLegCabin);
00136         _flightDate._legList.push_back (_flightDate._itLeg);
00137     }
00138
00139     // As that's the beginning of a new leg-date,
00140     // (re-)initialise the leg-cabin branch of the tree
00141     _flightDate._itLeg._cabinList.clear();
00142     _flightDate._itLegCabin._cabinCode = "";
00143     _flightDate._itLegCabin._bucketList.clear();
00144     _flightDate._itBucket._yieldRangeUpperValue = 0.0;
00145
00146     // ///////////////////////////////////
00147     // Set the (default) operating airline and flight number
00148     _flightDate._itLeg._airlineCode = _flightDate._airlineCode;
00149     _flightDate._itLeg._flightNumber = _flightDate._flightNumber;
00150
00151     // Set the (new) boarding point
00152     _flightDate._itLeg._boardingPoint = lBoardingPoint;
00153
00154     // Add the airport code if it is not already stored in the airport lists
00155     _flightDate.addAirport (lBoardingPoint);
00156 }
00157
00158 // ///////////////////////////////////
00159 storeLegOffPoint::
00160 storeLegOffPoint (FlightDateStruct& ioFlightDate)
00161 : ParserSemanticAction (ioFlightDate) {
00162 }
00163
00164 // ///////////////////////////////////
00165 void storeLegOffPoint::operator() (iterator_t iStr,
00166                                   iterator_t iStrEnd) const {
00167     stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00168     _flightDate._itLeg._offPoint = lOffPoint;
00169
00170     // Add the airport code if it is not already stored in the airport lists
00171     _flightDate.addAirport (lOffPoint);
00172 }
00173
00174 // ///////////////////////////////////
00175 storeOperatingAirlineCode::
00176 storeOperatingAirlineCode (FlightDateStruct& ioFlightDate)
00177 : ParserSemanticAction (ioFlightDate) {
00178 }
00179
00180 // ///////////////////////////////////
00181 void storeOperatingAirlineCode::operator() (iterator_t iStr,
00182                                             iterator_t iStrEnd) const {
00183     const stdair::AirlineCode_T lAirlineCode (iStr, iStrEnd);
00184     if (lAirlineCode.size() == 2) {
00185         _flightDate._itLeg._airlineCode = lAirlineCode;
00186     }
00187     //STDAIR_LOG_DEBUG ("Airline code: " << lAirlineCode);
00188 }
00189
00190 // ///////////////////////////////////
00191 storeOperatingFlightNumber::
00192 storeOperatingFlightNumber (FlightDateStruct& ioFlightDate)
00193 : ParserSemanticAction (ioFlightDate) {
00194 }
00195
00196 // ///////////////////////////////////
00197 void storeOperatingFlightNumber::operator() (unsigned int iNumber) const {
00198     _flightDate._itLeg._flightNumber = iNumber;

```

```

00199         //STDAIR_LOG_DEBUG ("Flight number: " << iNumber);
00200     }
00201
00202
00203     // //////////////////////////////////////
00204     storeBoardingDate::storeBoardingDate (FlightDateStruct& ioFlightDate)
00205         : ParserSemanticAction (ioFlightDate) {
00206     }
00207
00208     // //////////////////////////////////////
00209     void storeBoardingDate::operator() (iterator_t iStr,
00210                                         iterator_t iStrEnd) const {
00211         _flightDate._itLeg._boardingDate = _flightDate.getDate();
00212     }
00213
00214     // //////////////////////////////////////
00215     storeBoardingTime::storeBoardingTime (FlightDateStruct& ioFlightDate)
00216         : ParserSemanticAction (ioFlightDate) {
00217     }
00218
00219     // //////////////////////////////////////
00220     void storeBoardingTime::operator() (iterator_t iStr,
00221                                         iterator_t iStrEnd) const {
00222         _flightDate._itLeg._boardingTime = _flightDate.getTime();
00223
00224         // Reset the number of seconds
00225         _flightDate._itSeconds = 0;
00226
00227         // Reset the date off-set
00228         _flightDate._dateOffSet = 0;
00229     }
00230
00231     // //////////////////////////////////////
00232     storeOffDate::storeOffDate (FlightDateStruct& ioFlightDate)
00233         : ParserSemanticAction (ioFlightDate) {
00234     }
00235
00236     // //////////////////////////////////////
00237     void storeOffDate::operator() (iterator_t iStr, iterator_t iStrEnd) const {
00238         _flightDate._itLeg._offDate = _flightDate.getDate();
00239     }
00240
00241     // //////////////////////////////////////
00242     storeOffTime::storeOffTime (FlightDateStruct& ioFlightDate)
00243         : ParserSemanticAction (ioFlightDate) {
00244     }
00245
00246     // //////////////////////////////////////
00247     void storeOffTime::operator() (iterator_t iStr, iterator_t iStrEnd) const {
00248         _flightDate._itLeg._offTime = _flightDate.getTime();
00249
00250         // Reset the number of seconds
00251         _flightDate._itSeconds = 0;
00252     }
00253
00254     // //////////////////////////////////////
00255     storeLegCabinCode::storeLegCabinCode (FlightDateStruct& ioFlightDate)
00256         : ParserSemanticAction (ioFlightDate) {
00257     }
00258
00259     // //////////////////////////////////////
00260     void storeLegCabinCode::operator() (char iChar) const {
00261
00262         // //////////////////////////////////////
00263         // If this is not the first leg-cabin of the leg-date,
00264         // the already parsed leg-cabin must be added to the leg-date.
00265         if (_flightDate._itLegCabin._cabinCode != "") {

```

```

00266         if (_flightDate._itLegCabin._bucketList.empty() == false) {
00267             _flightDate._itLegCabin._bucketList.push_back (_flightDate._itBucket);
00268         }
00269         _flightDate._itLeg._cabinList.push_back (_flightDate._itLegCabin);
00270     }
00271
00272     // (Re-)initialise the leg-cabin branch of the tree
00273     _flightDate._itLegCabin._bucketList.clear();
00274     _flightDate._itBucket._yieldRangeUpperValue = 0.0;
00275
00276
00277     // ///////////////////////////////////
00278     _flightDate._itLegCabin._cabinCode = iChar;
00279     //std::cout << "Cabin code: " << iChar << std::endl;
00280 }
00281
00282 // ///////////////////////////////////
00283 storeSaleableCapacity::
00284 storeSaleableCapacity (FlightDateStruct& ioFlightDate)
00285 : ParserSemanticAction (ioFlightDate) {
00286 }
00287
00288 // ///////////////////////////////////
00289 void storeSaleableCapacity::operator() (double iReal) const {
00290     _flightDate._itLegCabin._saleableCapacity = iReal;
00291     //std::cout << "Saleable capacity: " << iReal << std::endl;
00292 }
00293
00294 // ///////////////////////////////////
00295 storeAU::storeAU (FlightDateStruct& ioFlightDate)
00296 : ParserSemanticAction (ioFlightDate) {
00297 }
00298
00299 // ///////////////////////////////////
00300 void storeAU::operator() (double iReal) const {
00301     _flightDate._itLegCabin._au = iReal;
00302     //std::cout << "AU: " << iReal << std::endl;
00303 }
00304
00305 // ///////////////////////////////////
00306 storeUPR::storeUPR (FlightDateStruct& ioFlightDate)
00307 : ParserSemanticAction (ioFlightDate) {
00308 }
00309
00310 // ///////////////////////////////////
00311 void storeUPR::operator() (double iReal) const {
00312     _flightDate._itLegCabin._upr = iReal;
00313     //std::cout << "UPR: " << iReal << std::endl;
00314 }
00315
00316 // ///////////////////////////////////
00317 storeBookingCounter::storeBookingCounter (FlightDateStruct& ioFlightDate)
00318 : ParserSemanticAction (ioFlightDate) {
00319 }
00320
00321 // ///////////////////////////////////
00322 void storeBookingCounter::operator() (double iReal) const {
00323     _flightDate._itLegCabin._nbOfBookings = iReal;
00324     //std::cout << "Nb of bookings: " << iReal << std::endl;
00325 }
00326
00327 // ///////////////////////////////////
00328 storeNAV::storeNAV (FlightDateStruct& ioFlightDate)
00329 : ParserSemanticAction (ioFlightDate) {
00330 }
00331
00332 // ///////////////////////////////////

```

```

00333 void storeNAV::operator() (double iReal) const {
00334     _flightDate._itLegCabin._nav = iReal;
00335     //std::cout << "NAV: " << iReal << std::endl;
00336 }
00337
00338 // //////////////////////////////////////
00339 storeGAV::storeGAV (FlightDateStruct& ioFlightDate)
00340     : ParserSemanticAction (ioFlightDate) {
00341 }
00342
00343 // //////////////////////////////////////
00344 void storeGAV::operator() (double iReal) const {
00345     _flightDate._itLegCabin._gav = iReal;
00346     //std::cout << "GAV: " << iReal << std::endl;
00347 }
00348
00349 // //////////////////////////////////////
00350 storeACP::storeACP (FlightDateStruct& ioFlightDate)
00351     : ParserSemanticAction (ioFlightDate) {
00352 }
00353
00354 // //////////////////////////////////////
00355 void storeACP::operator() (double iReal) const {
00356     _flightDate._itLegCabin._acp = iReal;
00357     //std::cout << "ACP: " << iReal << std::endl;
00358 }
00359
00360 // //////////////////////////////////////
00361 storeETB::storeETB (FlightDateStruct& ioFlightDate)
00362     : ParserSemanticAction (ioFlightDate) {
00363 }
00364
00365 // //////////////////////////////////////
00366 void storeETB::operator() (double iReal) const {
00367     _flightDate._itLegCabin._etb = iReal;
00368     //std::cout << "ETB: " << iReal << std::endl;
00369 }
00370
00371 // //////////////////////////////////////
00372 storeYieldUpperRange::storeYieldUpperRange(FlightDateStruct& ioFlightDate)
00373     : ParserSemanticAction (ioFlightDate) {
00374 }
00375
00376 // //////////////////////////////////////
00377 void storeYieldUpperRange::operator() (double iReal) const {
00378     // If this is not the first bucket of the leg-cabin,
00379     // the already parsed bucket must be added to the leg-cabin.
00380     if (_flightDate._itBucket._yieldRangeUpperValue != 0.0) {
00381         _flightDate._itLegCabin._bucketList.push_back (_flightDate._itBucket);
00382     }
00383
00384
00385     // //////////////////////////////////
00386     _flightDate._itBucket._yieldRangeUpperValue = iReal;
00387     //std::cout << "Yield Upper Range Value: " << iReal << std::endl;
00388 }
00389
00390 // //////////////////////////////////////
00391 storeBucketAvaibility::
00392 storeBucketAvaibility (FlightDateStruct& ioFlightDate)
00393     : ParserSemanticAction (ioFlightDate) {
00394 }
00395
00396 // //////////////////////////////////////
00397 void storeBucketAvaibility::operator() (double iReal) const {
00398     _flightDate._itBucket._availability = iReal;
00399     //std::cout << "Availability: " << iReal << std::endl;

```

```

00400     }
00401
00402     // ////////////////////////////////////////
00403     storeSeatIndex::storeSeatIndex (FlightDateStruct& ioFlightDate)
00404         : ParserSemanticAction (ioFlightDate) {
00405     }
00406
00407     // ////////////////////////////////////////
00408     void storeSeatIndex::operator() (double iReal) const {
00409         _flightDate._itBucket._seatIndex = iReal;
00410         //std::cout << "Seat Index: " << iReal << std::endl;
00411     }
00412
00413     // ////////////////////////////////////////
00414     storeSegmentBoardingPoint::
00415     storeSegmentBoardingPoint (FlightDateStruct& ioFlightDate)
00416         : ParserSemanticAction (ioFlightDate) {
00417     }
00418
00419     // ////////////////////////////////////////
00420     void storeSegmentBoardingPoint::operator() (iterator_t iStr,
00421                                                 iterator_t iStrEnd) const {
00422         stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00423
00424         // ////////////////////////////////////////
00425         // When the first segment-date is read, it means that the leg section
00426         // is over. The parsed leg can therefore be added to the list.
00427         if (_flightDate._itLeg._cabinList.empty() == false) {
00428             _flightDate._itLegCabin._bucketList.push_back (_flightDate._itBucket);
00429             _flightDate._itLeg._cabinList.push_back (_flightDate._itLegCabin);
00430             _flightDate._legList.push_back (_flightDate._itLeg);
00431
00432             // (Re-)initialise the leg-date branch of the tree
00433             _flightDate._itLeg._cabinList.clear();
00434             _flightDate._itLegCabin._cabinCode = "";
00435             _flightDate._itLeg._cabinList.clear();
00436             _flightDate._itLegCabin._bucketList.clear();
00437         }
00438
00439         // ////////////////////////////////////////
00440         // If this is not the first segment-date of the flight-date,
00441         // the already parsed segment-date must be added to the flight-date.
00442         if (_flightDate._itSegment._cabinList.empty() == false) {
00443             _flightDate._itSegmentCabin._itFareFamily._classList.push_back (
00444             _flightDate._itBookingClass);
00445             _flightDate._itSegmentCabin._fareFamilies.push_back (_flightDate.
00446             _itSegmentCabin._itFareFamily);
00447             _flightDate._itSegment._cabinList.push_back (_flightDate._itSegmentCabin)
00448         };
00449             _flightDate._segmentList.push_back (_flightDate._itSegment);
00450         }
00451
00452         // As that's the beginning of a new segment-date,
00453         // (re-)initialise the segment-cabin branch of the tree
00454         _flightDate._itSegment._cabinList.clear();
00455         _flightDate._itSegmentCabin._itFareFamily._classList.clear();
00456         _flightDate._itSegmentCabin._fareFamilies.clear();
00457         _flightDate._itBookingClass._classCode = "";
00458
00459         // ////////////////////////////////////////
00460         _flightDate._itSegment._boardingPoint = lBoardingPoint;
00461         //std::cout << "Board point: " << lBoardingPoint << std::endl;
00462     }
00463     // ////////////////////////////////////////

```



```

00464     storeSegmentOffPoint::storeSegmentOffPoint (FlightDateStruct& ioFlightDate)
00465     : ParserSemanticAction (ioFlightDate) {
00466     }
00467
00468     // //////////////////////////////////////
00469     void storeSegmentOffPoint::operator() (iterator_t iStr,
00470                                           iterator_t iStrEnd) const {
00471         stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00472         _flightDate._itSegment._offPoint = lOffPoint;
00473         //std::cout << "Off point: " << lOffPoint << std::endl;
00474     }
00475
00476     // //////////////////////////////////////
00477     storeSegmentCabinCode::
00478     storeSegmentCabinCode (FlightDateStruct& ioFlightDate)
00479     : ParserSemanticAction (ioFlightDate) {
00480     }
00481
00482     // //////////////////////////////////////
00483     void storeSegmentCabinCode::operator() (char iChar) const {
00484
00485         // Reset the list of fare families, as it is a new segment-cabin
00486         _flightDate._itSegmentCabin._fareFamilies.clear();
00487
00488         // //////////////////////////////////
00489         // If this is not the first segment-cabin of the segment-date,
00490         // the already parsed segment-cabin must be added to the segment-date.
00491         if (_flightDate._itSegmentCabin._itFareFamily._classList.empty() == false){
00492
00493             _flightDate._itSegmentCabin._itFareFamily._classList.
00494             push_back (_flightDate._itBookingClass);
00495             _flightDate._itSegmentCabin._fareFamilies.
00496             push_back (_flightDate._itSegmentCabin._itFareFamily);
00497             _flightDate._itSegment._cabinList.
00498             push_back (_flightDate._itSegmentCabin);
00499         }
00500
00501         // (Re-)initialise the booking-class branch of the tree
00502         _flightDate._itSegmentCabin._fareFamilies.clear();
00503         _flightDate._itSegmentCabin._itFareFamily._classList.clear();
00504         _flightDate._itBookingClass._classCode = "";
00505
00506         // //////////////////////////////////
00507         _flightDate._itSegmentCabin._cabinCode = iChar;
00508         //std::cout << "Segment-cabin code: " << iChar << std::endl;
00509     }
00510
00511     // //////////////////////////////////////
00512     storeSegmentCabinBookingCounter::
00513     storeSegmentCabinBookingCounter (FlightDateStruct& ioFlightDate)
00514     : ParserSemanticAction (ioFlightDate) {
00515     }
00516
00517     // //////////////////////////////////////
00518     void storeSegmentCabinBookingCounter::operator() (double iReal) const {
00519         _flightDate._itSegmentCabin._nbOfBookings = iReal;
00520         //std::cout << "Nb of bookings: " << iReal << std::endl;
00521     }
00522
00523     // //////////////////////////////////////
00524     storeClassCode::storeClassCode (FlightDateStruct& ioFlightDate)
00525     : ParserSemanticAction (ioFlightDate) {
00526     }
00527
00528     // //////////////////////////////////////
00529     void storeClassCode::operator() (char iChar) const {

```

```

00530         // If this is not the first booking-class of the segment-cabin,
00531         // the already parsed booking-class must be added to the segment-cabin.
00532         if (_flightDate._itBookingClass._classCode != "") {
00533             _flightDate._itSegmentCabin._itFareFamily._classList.
00534                 push_back (_flightDate._itBookingClass);
00535         }
00536
00537         // //////////////////////////////////
00538         _flightDate._itBookingClass._classCode = iChar;
00539         //std::cout << "Booking class code: " << iChar << std::endl;
00540     }
00541
00542     // //////////////////////////////////
00543     storeSubclassCode::storeSubclassCode (FlightDateStruct& ioFlightDate)
00544         : ParserSemanticAction (ioFlightDate) {
00545     }
00546
00547     // //////////////////////////////////
00548     void storeSubclassCode::operator() (unsigned int iNumber) const {
00549         _flightDate._itBookingClass._subclassCode = iNumber;
00550         //std::cout << "Sub-class code: " << iNumber << std::endl;
00551     }
00552
00553     // //////////////////////////////////
00554     storeParentClassCode::
00555     storeParentClassCode (FlightDateStruct& ioFlightDate)
00556         : ParserSemanticAction (ioFlightDate) {
00557     }
00558
00559     // //////////////////////////////////
00560     void storeParentClassCode::operator() (char iChar) const {
00561         _flightDate._itBookingClass._parentClassCode = iChar;
00562         //std::cout << "Parent booking class code: " << iChar << std::endl;
00563     }
00564
00565     // //////////////////////////////////
00566     storeParentSubclassCode::
00567     storeParentSubclassCode (FlightDateStruct& ioFlightDate)
00568         : ParserSemanticAction (ioFlightDate) {
00569     }
00570
00571     // //////////////////////////////////
00572     void storeParentSubclassCode::operator() (unsigned int iNumber) const {
00573         _flightDate._itBookingClass._parentSubclassCode = iNumber;
00574         //std::cout << "Parent sub-class code: " << iNumber << std::endl;
00575     }
00576
00577     // //////////////////////////////////
00578     storeCumulatedProtection::
00579     storeCumulatedProtection (FlightDateStruct& ioFlightDate)
00580         : ParserSemanticAction (ioFlightDate) {
00581     }
00582
00583     // //////////////////////////////////
00584     void storeCumulatedProtection::operator() (double iReal) const {
00585         _flightDate._itBookingClass._cumulatedProtection = iReal;
00586         //std::cout << "Cumulated protection: " << iReal << std::endl;
00587     }
00588
00589     // //////////////////////////////////
00590     storeProtection::storeProtection (FlightDateStruct& ioFlightDate)
00591         : ParserSemanticAction (ioFlightDate) {
00592     }
00593
00594     // //////////////////////////////////
00595     void storeProtection::operator() (double iReal) const {
00596         _flightDate._itBookingClass._protection = iReal;

```

```

00597         //std::cout << "Protection: " << iReal << std::endl;
00598     }
00599
00600     // //////////////////////////////////////
00601     storeNego::storeNego (FlightDateStruct& ioFlightDate)
00602         : ParserSemanticAction (ioFlightDate) {
00603     }
00604
00605     // //////////////////////////////////////
00606     void storeNego::operator() (double iReal) const {
00607         _flightDate._itBookingClass._nego = iReal;
00608         //std::cout << "Negotiated allotment: " << iReal << std::endl;
00609     }
00610
00611     // //////////////////////////////////////
00612     storeNoShow::storeNoShow (FlightDateStruct& ioFlightDate)
00613         : ParserSemanticAction (ioFlightDate) {
00614     }
00615
00616     // //////////////////////////////////////
00617     void storeNoShow::operator() (double iReal) const {
00618         _flightDate._itBookingClass._noShowPercentage = iReal;
00619         //std::cout << "No-Show percentage: " << iReal << std::endl;
00620     }
00621
00622     // //////////////////////////////////////
00623     storeOverbooking::storeOverbooking (FlightDateStruct& ioFlightDate)
00624         : ParserSemanticAction (ioFlightDate) {
00625     }
00626
00627     // //////////////////////////////////////
00628     void storeOverbooking::operator() (double iReal) const {
00629         _flightDate._itBookingClass._overbookingPercentage = iReal;
00630         //std::cout << "Overbooking percentage: " << iReal << std::endl;
00631     }
00632
00633     // //////////////////////////////////////
00634     storeNbOfBkgs::storeNbOfBkgs (FlightDateStruct& ioFlightDate)
00635         : ParserSemanticAction (ioFlightDate) {
00636     }
00637
00638     // //////////////////////////////////////
00639     void storeNbOfBkgs::operator() (double iReal) const {
00640         _flightDate._itBookingClass._nbOfBookings = iReal;
00641         //std::cout << "Nb of bookings: " << iReal << std::endl;
00642     }
00643
00644     // //////////////////////////////////////
00645     storeNbOfGroupBkgs::storeNbOfGroupBkgs (FlightDateStruct& ioFlightDate)
00646         : ParserSemanticAction (ioFlightDate) {
00647     }
00648
00649     // //////////////////////////////////////
00650     void storeNbOfGroupBkgs::operator() (double iReal) const {
00651         _flightDate._itBookingClass._nbOfGroupBookings = iReal;
00652         //std::cout << "Nb of group bookings: " << iReal << std::endl;
00653     }
00654
00655     // //////////////////////////////////////
00656     storeNbOfPendingGroupBkgs::
00657     storeNbOfPendingGroupBkgs (FlightDateStruct& ioFlightDate)
00658         : ParserSemanticAction (ioFlightDate) {
00659     }
00660
00661     // //////////////////////////////////////
00662     void storeNbOfPendingGroupBkgs::operator() (double iReal) const {
00663         _flightDate._itBookingClass._nbOfPendingGroupBookings = iReal;

```

```

00664         //std::cout << "Nb of pending group bookings: " << iReal << std::endl;
00665     }
00666
00667     // ////////////////////////////////////////
00668     storeNbOfStaffBkgs::storeNbOfStaffBkgs (FlightDateStruct& ioFlightDate)
00669         : ParserSemanticAction (ioFlightDate) {
00670     }
00671
00672     // ////////////////////////////////////////
00673     void storeNbOfStaffBkgs::operator() (double iReal) const {
00674         _flightDate._itBookingClass._nbOfStaffBookings = iReal;
00675         //std::cout << "Nb of staff bookings: " << iReal << std::endl;
00676     }
00677
00678     // ////////////////////////////////////////
00679     storeNbOfWLBkgs::storeNbOfWLBkgs (FlightDateStruct& ioFlightDate)
00680         : ParserSemanticAction (ioFlightDate) {
00681     }
00682
00683     // ////////////////////////////////////////
00684     void storeNbOfWLBkgs::operator() (double iReal) const {
00685         _flightDate._itBookingClass._nbOfWLBookings = iReal;
00686         //std::cout << "Nb of wait-list bookings: " << iReal << std::endl;
00687     }
00688
00689     // ////////////////////////////////////////
00690     storeClassETB::storeClassETB (FlightDateStruct& ioFlightDate)
00691         : ParserSemanticAction (ioFlightDate) {
00692     }
00693
00694     // ////////////////////////////////////////
00695     void storeClassETB::operator() (double iReal) const {
00696         _flightDate._itBookingClass._etb = iReal;
00697         //std::cout << "Class-level ETB: " << iReal << std::endl;
00698     }
00699
00700     // ////////////////////////////////////////
00701     storeClassAvailability::
00702     storeClassAvailability (FlightDateStruct& ioFlightDate)
00703         : ParserSemanticAction (ioFlightDate) {
00704     }
00705
00706     // ////////////////////////////////////////
00707     void storeClassAvailability::operator() (double iReal) const {
00708         _flightDate._itBookingClass._netClassAvailability = iReal;
00709         //std::cout << "Net class availability: " << iReal << std::endl;
00710     }
00711
00712     // ////////////////////////////////////////
00713     storeSegmentAvailability::
00714     storeSegmentAvailability (FlightDateStruct& ioFlightDate)
00715         : ParserSemanticAction (ioFlightDate) {
00716     }
00717
00718     // ////////////////////////////////////////
00719     void storeSegmentAvailability::operator() (double iReal) const {
00720         _flightDate._itBookingClass._segmentAvailability = iReal;
00721         //std::cout << "Segment availability: " << iReal << std::endl;
00722     }
00723
00724     // ////////////////////////////////////////
00725     storeRevenueAvailability::
00726     storeRevenueAvailability (FlightDateStruct& ioFlightDate)
00727         : ParserSemanticAction (ioFlightDate) {
00728     }
00729
00730     // ////////////////////////////////////////

```

```

00731 void storeRevenueAvailability::operator() (double iReal) const {
00732     _flightDate._itBookingClass._netRevenueAvailability = iReal;
00733     //std::cout << "Net revenue availability: " << iReal << std::endl;
00734 }
00735
00736 // //////////////////////////////////////
00737 storeFamilyCode::storeFamilyCode (FlightDateStruct& ioFlightDate)
00738 : ParserSemanticAction (ioFlightDate) {
00739 }
00740
00741 // //////////////////////////////////////
00742 void storeFamilyCode::operator() (int iCode) const {
00743     std::ostringstream ostr;
00744     ostr << iCode;
00745     _flightDate._itSegmentCabin._itFareFamily._familyCode = ostr.str();
00746 }
00747
00748 // //////////////////////////////////////
00749 storeFClasses::storeFClasses (FlightDateStruct& ioFlightDate)
00750 : ParserSemanticAction (ioFlightDate) {
00751 }
00752
00753 // //////////////////////////////////////
00754 void storeFClasses::operator() (iterator_t iStr,
00755     iterator_t iStrEnd) const {
00756     std::string lClasses (iStr, iStrEnd);
00757     _flightDate._itSegmentCabin._itFareFamily._classes = lClasses;
00758
00759     // The list of classes is the last (according to the arrival order
00760     // within the schedule input file) detail of the segment cabin. Hence,
00761     // when a list of classes is parsed, it means that the full segment
00762     // cabin details have already been parsed as well: the segment cabin
00763     // can thus be added to the segment.
00764     _flightDate._itSegmentCabin._itFareFamily._classList.
00765         push_back (_flightDate._itBookingClass);
00766     _flightDate._itSegmentCabin._fareFamilies.
00767         push_back (_flightDate._itSegmentCabin._itFareFamily);
00768     _flightDate._itSegment._cabinList.push_back (_flightDate._itSegmentCabin);
00769
00770     // As that's the beginning of a new segment-cabin,
00771     // (re-)initialise the segment-cabin branch of the tree
00772     _flightDate._itSegmentCabin._itFareFamily._classList.clear();
00773     _flightDate._itSegmentCabin._fareFamilies.clear();
00774     _flightDate._itBookingClass._classCode = "";
00775 }
00776
00777 // //////////////////////////////////////
00778 doEndFlightDate::doEndFlightDate (stdair::BomRoot& ioBomRoot,
00779     FlightDateStruct& ioFlightDate,
00780     unsigned int& ioNbOfFlights)
00781 : ParserSemanticAction (ioFlightDate), _bomRoot (ioBomRoot),
00782     _nbOfFlights (ioNbOfFlights) {
00783 }
00784
00785 // //////////////////////////////////////
00786 // void doEndFlightDate::operator() (char iChar) const {
00787 void doEndFlightDate::operator() (iterator_t iStr,
00788     iterator_t iStrEnd) const {
00789
00790     // //////////////////////////////////
00791     // The segment-date section is now over. It means that the
00792     // already parsed segment-date must be added to the flight-date.
00793     if (_flightDate._itSegment._cabinList.empty() == false) {
00794         _flightDate._segmentList.push_back (_flightDate._itSegment);
00795     }
00796
00797     // As that's the beginning of a new flight-date,

```

```

00798         // (re-)initialise the segment-cabin branch of the tree
00799         _flightDate._itSegment._cabinList.clear();
00800
00801
00802         // ///////////////////////////////////
00803         //if (_nbOfFlights % 1000 == 0) {
00804             // DEBUG: Display the result
00805             //STDAIR_LOG_DEBUG ("FlightDate #" << _nbOfFlights
00806             //                  << ": " << _flightDate.describe());
00807             //}
00808
00809         // Build the FlightDate BOM objects
00810         InventoryBuilder::buildInventory (_bomRoot, _flightDate);
00811
00812         //
00813         ++_nbOfFlights;
00814     }
00815
00816
00817     // ///////////////////////////////////
00818     //
00819     // Utility Parsers
00820     //
00821     // ///////////////////////////////////
00823     int1_p_t int1_p;
00824
00826     uint2_p_t uint2_p;
00827
00829     uint1_2_p_t uint1_2_p;
00830
00832     uint1_3_p_t uint1_3_p;
00833
00835     uint4_p_t uint4_p;
00836
00838     uint1_4_p_t uint1_4_p;
00839
00841     repeat_p_t airline_code_p (chset_t("0-9A-Z").derived(), 2, 3);
00842
00844     bounded1_4_p_t flight_number_p (uint1_4_p.derived(), 0u, 9999u);
00845
00847     bounded2_p_t year_p (uint2_p.derived(), 0u, 99u);
00848
00850     bounded2_p_t month_p (uint2_p.derived(), 1u, 12u);
00851
00853     bounded2_p_t day_p (uint2_p.derived(), 1u, 31u);
00854
00856     repeat_p_t dow_p (chset_t("0-1").derived().derived(), 7, 7);
00857
00859     repeat_p_t airport_p (chset_t("0-9A-Z").derived(), 3, 3);
00860
00862     bounded1_2_p_t hours_p (uint1_2_p.derived(), 0u, 24u);
00863
00865     bounded2_p_t minutes_p (uint2_p.derived(), 0u, 59u);
00866
00868     bounded2_p_t seconds_p (uint2_p.derived(), 0u, 59u);
00869
00871     chset_t cabin_code_p ("A-Z");
00872
00874     chset_t class_code_p ("A-Z");
00875
00877     chset_t passenger_type_p ("A-Z");
00878
00880     int1_p_t family_code_p;
00881
00883     repeat_p_t class_code_list_p (chset_t("A-Z").derived(), 1, 26);
00884
00886     bounded1_3_p_t stay_duration_p (uint1_3_p.derived(), 0u, 999u);

```

```

00887
00888
00889 // ////////////////////////////////////////
00890 // (Boost Spirit) Grammar Definition
00891 // ////////////////////////////////////////
00892
00893 // ////////////////////////////////////////
00894 InventoryParser::InventoryParser (stdair::BomRoot& ioBomRoot,
00895                                   FlightDateStruct& ioFlightDate,
00896                                   unsigned int& ioNbOfFlights)
00897 : _bomRoot (ioBomRoot), _flightDate (ioFlightDate),
00898   _nbOfFlights (ioNbOfFlights) {
00899 }
00900
00901 // ////////////////////////////////////////
00902 template<typename ScannerT>
00903 InventoryParser::definition<ScannerT>::
00904 definition (InventoryParser const& self) {
00905
00906     flight_date_list = *( not_to_be_parsed | flight_date )
00907     ;
00908
00909     not_to_be_parsed =
00910         bsc::lexeme_d[ bsc::comment_p("//") | bsc::comment_p("/*", "*/")
00911                       | bsc::space_p ]
00912     ;
00913
00914     flight_date = flight_key
00915         >> leg_list
00916         >> segment_list
00917         >> flight_date_end[doEndFlightDate (self._bomRoot, self._flightDate,
00918                                             self._nbOfFlights)]
00919     ;
00920
00921     flight_date_end = bsc::ch_p(';')
00922     ;
00923
00924     flight_key = date[storeSnapshotDate(self._flightDate)]
00925         >> '/' >> airline_code
00926         >> '/' >> flight_number
00927         >> '/' >> date[storeFlightDate(self._flightDate)]
00928         >> '/' >> flight_type_code[storeFlightTypeCode(self._flightDate)]
00929         >> !( '/' >> flight_visibility_code[storeFlightVisibilityCode(self.
00930 _flightDate)])
00931     ;
00932
00933     airline_code =
00934         bsc::lexeme_d[ (airline_code_p) [storeAirlineCode(self._flightDate)] ]
00935     ;
00936
00937     flight_number =
00938         bsc::lexeme_d[ (flight_number_p) [storeFlightNumber(self._flightDate)] ]
00939     ;
00940
00941     date =
00942         bsc::lexeme_d[ (day_p) [bsc::assign_a(self._flightDate._itDay)]
00943                       >> (month_p) [bsc::assign_a(self._flightDate._itMonth)]
00944                       >> (year_p) [bsc::assign_a(self._flightDate._itYear)] ]
00945     ;
00946
00947     flight_type_code =
00948         ( bsc::chseq_p("INT") | bsc::chseq_p("DOM") | bsc::chseq_p("GRD") )
00949     ;
00950
00951     flight_visibility_code =
00952         ( bsc::chseq_p("HID") | bsc::chseq_p("PSD") )
00953     ;

```

```

00953
00954     leg_list = +( '/' >> leg )
00955     ;
00956
00957     leg = !( operating_leg_details >> ';' )
00958     >> leg_key >> ';' >> leg_details >> leg_cabin_list
00959     ;
00960
00961     operating_leg_details =
00962     bsc::lexeme_d[ (airline_code_p) [storeOperatingAirlineCode(self.
00963     _flightDate)] ]
00964     >> ";"
00965     >> bsc::lexeme_d[ (flight_number_p) [storeOperatingFlightNumber(self.
00966     _flightDate)] ]
00967     ;
00968     leg_key = (airport_p) [storeLegBoardingPoint(self._flightDate)]
00969     >> ';' >> (airport_p) [storeLegOffPoint(self._flightDate)]
00970     ;
00971     leg_details = date[storeBoardingDate(self._flightDate)]
00972     >> ';' >> time[storeBoardingTime(self._flightDate)]
00973     >> ';' >> date[storeOffDate(self._flightDate)]
00974     >> ';' >> time[storeOffTime(self._flightDate)]
00975     ;
00976
00977     leg_cabin_list = +( ';' >> leg_cabin_details >> !bucket_list )
00978     ;
00979
00980     leg_cabin_details = (cabin_code_p) [storeLegCabinCode(self._flightDate)]
00981     >> ',' >> (bsc::ureal_p) [storeSaleableCapacity(self._flightDate)]
00982     >> ',' >> (bsc::real_p) [storeAU(self._flightDate)]
00983     >> ',' >> (bsc::real_p) [storeUPR(self._flightDate)]
00984     >> ',' >> (bsc::real_p) [storeBookingCounter(self._flightDate)]
00985     >> ',' >> (bsc::real_p) [storeNAV(self._flightDate)]
00986     >> ',' >> (bsc::real_p) [storeGAV(self._flightDate)]
00987     >> ',' >> (bsc::ureal_p) [storeACP(self._flightDate)]
00988     >> ',' >> (bsc::real_p) [storeETB(self._flightDate)]
00989     ;
00990
00991     time =
00992     bsc::lexeme_d[
00993     (hours_p) [bsc::assign_a(self._flightDate._itHours)]
00994     >> (minutes_p) [bsc::assign_a(self._flightDate._itMinutes)]
00995     >> !((seconds_p) [bsc::assign_a(self._flightDate._itSeconds)])
00996     ]
00997     ;
00998
00999     bucket_list = +( ',' >> bucket_details )
01000     ;
01001
01002     bucket_details =
01003     (bsc::ureal_p) [storeYieldUpperRange(self._flightDate)]
01004     >> ':' >> (bsc::real_p) [storeBucketAvaibility(self._flightDate)]
01005     >> ':' >> (uint1_3_p) [storeSeatIndex(self._flightDate)];
01006
01007     segment_list = +( '/' >> segment )
01008     ;
01009
01010     segment = segment_key >> segment_cabin_list
01011     ;
01012
01013     segment_key = (airport_p) [storeSegmentBoardingPoint(self._flightDate)]
01014     >> ';' >> (airport_p) [storeSegmentOffPoint(self._flightDate)]
01015     ;
01016
01017     segment_cabin_list =

```



```

01018         +( ';' >> segment_cabin_key >> ','
01019         >> segment_cabin_details >> class_list >> family_cabin_list )
01020     ;
01021
01022     family_cabin_list =
01023     +( ';' >> family_cabin_details)
01024     ;
01025
01026     segment_cabin_key =
01027     (cabin_code_p) [storeSegmentCabinCode (self._flightDate)]
01028     ;
01029
01030     segment_cabin_details =
01031     (bsc::ureal_p) [storeSegmentCabinBookingCounter (self._flightDate)]
01032     ;
01033
01034     class_list = +( ';' >> class_key >> '|' >> class_details )
01035     ;
01036
01037     class_key = (class_code_p) [storeClassCode (self._flightDate)]
01038     ;
01039
01040     parent_subclass_code =
01041     (class_code_p) [storeParentClassCode (self._flightDate)]
01042     >> (uint1_2_p) [storeParentSubclassCode (self._flightDate)]
01043     ;
01044
01045     class_protection =
01046     (bsc::ureal_p) [storeProtection (self._flightDate)]
01047     ;
01048
01049     class_nego =
01050     (bsc::ureal_p) [storeNego (self._flightDate)]
01051     ;
01052
01053     class_details = (uint1_2_p) [storeSubclassCode (self._flightDate)]
01054     >> ':' >> (bsc::ureal_p) [storeCumulatedProtection (self._flightDate)]
01055     >> ':' >> !( parent_subclass_code )
01056     >> ':' >> !( class_protection )
01057     >> ':' >> (bsc::ureal_p) [storeNoShow (self._flightDate)]
01058     >> ':' >> (bsc::ureal_p) [storeOverbooking (self._flightDate)]
01059     >> ':' >> (bsc::ureal_p) [storeNbOfBkgs (self._flightDate)]
01060     >> ':' >> (bsc::ureal_p) [storeNbOfGroupBkgs (self._flightDate)]
01061     >> ':' >> (bsc::ureal_p) [storeNbOfPendingGroupBkgs (self._flightDate)]
01062     >> ':' >> (bsc::ureal_p) [storeNbOfStaffBkgs (self._flightDate)]
01063     >> ':' >> (bsc::ureal_p) [storeNbOfWLBkgs (self._flightDate)]
01064     >> ':' >> (bsc::ureal_p) [storeClassETB (self._flightDate)]
01065     >> ':' >> !( class_nego )
01066     >> ':' >> (bsc::real_p) [storeClassAvailability (self._flightDate)]
01067     >> ':' >> (bsc::real_p) [storeSegmentAvailability (self._flightDate)]
01068     >> ':' >> (bsc::real_p) [storeRevenueAvailability (self._flightDate)]
01069     ;
01070
01071     family_cabin_details =
01072     (family_code_p) [storeFamilyCode (self._flightDate)]
01073     >> ';'
01074     >> (class_code_list_p) [storeFClasses (self._flightDate)]
01075     ;
01076
01077     // BOOST_SPIRIT_DEBUG_NODE (InventoryParser);
01078     BOOST_SPIRIT_DEBUG_NODE (flight_date_list);
01079     BOOST_SPIRIT_DEBUG_NODE (not_to_be_parsed);
01080     BOOST_SPIRIT_DEBUG_NODE (flight_date);
01081     BOOST_SPIRIT_DEBUG_NODE (flight_date_end);
01082     BOOST_SPIRIT_DEBUG_NODE (flight_key);
01083     BOOST_SPIRIT_DEBUG_NODE (airline_code);
01084     BOOST_SPIRIT_DEBUG_NODE (flight_number);

```

```

01085     BOOST_SPIRIT_DEBUG_NODE (flight_type_code);
01086     BOOST_SPIRIT_DEBUG_NODE (flight_visibility_code);
01087     BOOST_SPIRIT_DEBUG_NODE (date);
01088     BOOST_SPIRIT_DEBUG_NODE (leg_list);
01089     BOOST_SPIRIT_DEBUG_NODE (leg);
01090     BOOST_SPIRIT_DEBUG_NODE (operating_leg_details);
01091     BOOST_SPIRIT_DEBUG_NODE (leg_key);
01092     BOOST_SPIRIT_DEBUG_NODE (leg_details);
01093     BOOST_SPIRIT_DEBUG_NODE (leg_cabin_list);
01094     BOOST_SPIRIT_DEBUG_NODE (leg_cabin_details);
01095     BOOST_SPIRIT_DEBUG_NODE (bucket_list);
01096     BOOST_SPIRIT_DEBUG_NODE (bucket_details);
01097     BOOST_SPIRIT_DEBUG_NODE (time);
01098     BOOST_SPIRIT_DEBUG_NODE (segment_list);
01099     BOOST_SPIRIT_DEBUG_NODE (segment);
01100     BOOST_SPIRIT_DEBUG_NODE (segment_key);
01101     BOOST_SPIRIT_DEBUG_NODE (full_segment_cabin_details);
01102     BOOST_SPIRIT_DEBUG_NODE (segment_cabin_list);
01103     BOOST_SPIRIT_DEBUG_NODE (segment_cabin_key);
01104     BOOST_SPIRIT_DEBUG_NODE (segment_cabin_details);
01105     BOOST_SPIRIT_DEBUG_NODE (class_list);
01106     BOOST_SPIRIT_DEBUG_NODE (class_key);
01107     BOOST_SPIRIT_DEBUG_NODE (parent_subclass_code);
01108     BOOST_SPIRIT_DEBUG_NODE (class_protection);
01109     BOOST_SPIRIT_DEBUG_NODE (class_nego);
01110     BOOST_SPIRIT_DEBUG_NODE (class_details);
01111     BOOST_SPIRIT_DEBUG_NODE (family_cabin_list);
01112     BOOST_SPIRIT_DEBUG_NODE (family_cabin_details);
01113 }
01114
01115 // //////////////////////////////////////
01116 template<typename ScannerT>
01117 bsc::rule<ScannerT> const&
01118 InventoryParser::definition<ScannerT>::start() const {
01119     return flight_date_list;
01120 }
01121 }
01122
01123
01125 //
01126 // Entry class for the file parser
01127 //
01129
01130 // //////////////////////////////////////
01131 InventoryFileParser::
01132 InventoryFileParser (stdair::BomRoot& ioBomRoot, const std::string& iFilename)
01133 : _filename (iFilename), _bomRoot (ioBomRoot),
01134   _nbOfFlights (0) {
01135     init();
01136 }
01137
01138 // //////////////////////////////////////
01139 void InventoryFileParser::init() {
01140     // Open the file
01141     _startIterator = iterator_t (_filename);
01142
01143     // Check the filename exists and can be open
01144     if (!_startIterator) {
01145         std::ostringstream oMessage;
01146         oMessage << "The file " << _filename << " can not be open.";
01147         STDAIR_LOG_ERROR (oMessage.str());
01148         throw InventoryInputFileNotFoundException (oMessage.str());
01149     }
01150
01151     // Create an EOF iterator
01152     _endIterator = _startIterator.make_end();
01153 }

```

```

01154
01155 // //////////////////////////////////////
01156 bool InventoryFileParser::buildInventory () {
01157     bool oResult = false;
01158
01159     STDAIR_LOG_DEBUG ("Parsing inventory input file: " << _filename);
01160
01161     // Initialise the parser (grammar) with the helper/staging structure.
01162     InventoryParserHelper::InventoryParser lInventoryParser (_bomRoot,
01163         _flightDate,
01164         _nbOfFlights);
01165
01166     // Launch the parsing of the file and, thanks to the doEndFlightDate
01167     // call-back structure, the building of the whole Inventory BOM
01168     // (i.e., including Inventory, FlightDate, LegDate, SegmentDate, etc.)
01169     bsc::parse_info<iterator_t> info = bsc::parse (_startIterator, _endIterator,
01170         lInventoryParser,
01171         bsc::space_p - bsc::eol_p);
01172
01173     // Retrieves whether or not the parsing was successful
01174     oResult = info.hit;
01175
01176     const std::string hasBeenFullyReadStr = (info.full == true)?"":"not ";
01177     if (oResult == true) {
01178         STDAIR_LOG_DEBUG ("Parsing of inventory input file: " << _filename
01179             << " succeeded: read " << info.length
01180             << " characters. The input file has "
01181             << hasBeenFullyReadStr
01182             << "been fully read. Stop point: " << info.stop);
01183     } else {
01184         STDAIR_LOG_ERROR ("Parsing of inventory input file: " << _filename
01185             << " failed: read " << info.length
01186             << " characters. The input file has "
01187             << hasBeenFullyReadStr
01188             << "been fully read. Stop point: " << info.stop);
01189         throw InventoryFileParsingFailedException("Parsing of inventory input file"
01190             " : " + _filename + " failed");
01191     }
01192 }
01193
01194 return oResult;
01195 }
01196
01197 }

```

## 25.151 airinv/command/InventoryParserHelper.hpp File Reference

```
#include <string>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/BasParserTypes.hpp>
#include <airinv/bom/FlightDateStruct.hpp>
```

### Classes

- struct [AIRINV::InventoryParserHelper::ParserSemanticAction](#)
- struct [AIRINV::InventoryParserHelper::storeSnapshotDate](#)
- struct [AIRINV::InventoryParserHelper::storeAirlineCode](#)
- struct [AIRINV::InventoryParserHelper::storeFlightNumber](#)
- struct [AIRINV::InventoryParserHelper::storeFlightDate](#)
- struct [AIRINV::InventoryParserHelper::storeFlightTypeCode](#)
- struct [AIRINV::InventoryParserHelper::storeFlightVisibilityCode](#)
- struct [AIRINV::InventoryParserHelper::storeLegBoardingPoint](#)
- struct [AIRINV::InventoryParserHelper::storeLegOffPoint](#)
- struct [AIRINV::InventoryParserHelper::storeOperatingAirlineCode](#)
- struct [AIRINV::InventoryParserHelper::storeOperatingFlightNumber](#)
- struct [AIRINV::InventoryParserHelper::storeBoardingDate](#)
- struct [AIRINV::InventoryParserHelper::storeBoardingTime](#)
- struct [AIRINV::InventoryParserHelper::storeOffDate](#)
- struct [AIRINV::InventoryParserHelper::storeOffTime](#)
- struct [AIRINV::InventoryParserHelper::storeLegCabinCode](#)
- struct [AIRINV::InventoryParserHelper::storeSaleableCapacity](#)
- struct [AIRINV::InventoryParserHelper::storeAU](#)
- struct [AIRINV::InventoryParserHelper::storeUPR](#)
- struct [AIRINV::InventoryParserHelper::storeBookingCounter](#)
- struct [AIRINV::InventoryParserHelper::storeNAV](#)
- struct [AIRINV::InventoryParserHelper::storeGAV](#)
- struct [AIRINV::InventoryParserHelper::storeACP](#)
- struct [AIRINV::InventoryParserHelper::storeETB](#)
- struct [AIRINV::InventoryParserHelper::storeYieldUpperRange](#)
- struct [AIRINV::InventoryParserHelper::storeBucketAvailability](#)
- struct [AIRINV::InventoryParserHelper::storeSeatIndex](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentBoardingPoint](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentOffPoint](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentCabinCode](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentCabinBookingCounter](#)
- struct [AIRINV::InventoryParserHelper::storeClassCode](#)
- struct [AIRINV::InventoryParserHelper::storeSubclassCode](#)
- struct [AIRINV::InventoryParserHelper::storeParentClassCode](#)
- struct [AIRINV::InventoryParserHelper::storeParentSubclassCode](#)
- struct [AIRINV::InventoryParserHelper::storeCumulatedProtection](#)
- struct [AIRINV::InventoryParserHelper::storeProtection](#)
- struct [AIRINV::InventoryParserHelper::storeNego](#)

- struct [AIRINV::InventoryParserHelper::storeNoShow](#)
- struct [AIRINV::InventoryParserHelper::storeOverbooking](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfGroupBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfPendingGroupBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfStaffBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeNbOfWLBkgs](#)
- struct [AIRINV::InventoryParserHelper::storeClassETB](#)
- struct [AIRINV::InventoryParserHelper::storeClassAvailability](#)
- struct [AIRINV::InventoryParserHelper::storeSegmentAvailability](#)
- struct [AIRINV::InventoryParserHelper::storeRevenueAvailability](#)
- struct [AIRINV::InventoryParserHelper::storeFamilyCode](#)
- struct [AIRINV::InventoryParserHelper::storeFClasses](#)
- struct [AIRINV::InventoryParserHelper::doEndFlightDate](#)
- struct [AIRINV::InventoryParserHelper::InventoryParser](#)
- struct [AIRINV::InventoryParserHelper::InventoryParser::definition< ScannerT >](#)
- class [AIRINV::InventoryFileParser](#)

## Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::InventoryParserHelper](#)

**25.152 InventoryParserHelper.hpp**

```

00001 #ifndef __AIRINV_CMD_INVENTORYPARSERHELPER_HPP
00002 #define __AIRINV_CMD_INVENTORYPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/command/CmdAbstract.hpp>
00011 // Airinv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/basic/BasParserTypes.hpp>
00014 #include <airinv/bom/FlightDateStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022
00023     namespace InventoryParserHelper {
00024
00025         // //////////////////////////////////////
00026         // Semantic actions
00027         // //////////////////////////////////////
00029         struct ParserSemanticAction {
00031             ParserSemanticAction (FlightDateStruct&);
00033             FlightDateStruct& _flightDate;
00034         };
00035
00037         struct storeSnapshotDate : public ParserSemanticAction {
00039             storeSnapshotDate (FlightDateStruct&);
00041             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00042         };
00043
00045         struct storeAirlineCode : public ParserSemanticAction {
00047             storeAirlineCode (FlightDateStruct&);
00049             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00050         };
00051
00053         struct storeFlightNumber : public ParserSemanticAction {
00055             storeFlightNumber (FlightDateStruct&);
00057             void operator() (unsigned int iNumber) const;
00058         };
00059
00061         struct storeFlightDate : public ParserSemanticAction {
00063             storeFlightDate (FlightDateStruct&);
00065             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00066         };
00067
00069         struct storeFlightTypeCode : public ParserSemanticAction {
00071             storeFlightTypeCode (FlightDateStruct&);
00073             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00074         };
00075
00077         struct storeFlightVisibilityCode : public ParserSemanticAction {
00079             storeFlightVisibilityCode (FlightDateStruct&);
00081             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00082         };
00083
00085         struct storeLegBoardingPoint : public ParserSemanticAction {
00087             storeLegBoardingPoint (FlightDateStruct&);
00089             void operator() (iterator_t iStr, iterator_t iStrEnd) const;

```

```
00090     };
00091
00093     struct storeLegOffPoint : public ParserSemanticAction {
00095         storeLegOffPoint (FlightDateStruct&);
00097         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00098     };
00099
00101     struct storeOperatingAirlineCode : public ParserSemanticAction {
00103         storeOperatingAirlineCode (FlightDateStruct&);
00105         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00106     };
00107
00109     struct storeOperatingFlightNumber : public ParserSemanticAction {
00111         storeOperatingFlightNumber (FlightDateStruct&);
00113         void operator() (unsigned int iNumber) const;
00114     };
00115
00117     struct storeBoardingDate : public ParserSemanticAction {
00119         storeBoardingDate (FlightDateStruct&);
00121         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00122     };
00123
00125     struct storeBoardingTime : public ParserSemanticAction {
00127         storeBoardingTime (FlightDateStruct&);
00129         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00130     };
00131
00133     struct storeOffDate : public ParserSemanticAction {
00135         storeOffDate (FlightDateStruct&);
00137         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00138     };
00139
00141     struct storeOffTime : public ParserSemanticAction {
00143         storeOffTime (FlightDateStruct&);
00145         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00146     };
00147
00149     struct storeLegCabinCode : public ParserSemanticAction {
00151         storeLegCabinCode (FlightDateStruct&);
00153         void operator() (char iChar) const;
00154     };
00155
00157     struct storeSaleableCapacity : public ParserSemanticAction {
00159         storeSaleableCapacity (FlightDateStruct&);
00161         void operator() (double iReal) const;
00162     };
00163
00165     struct storeAU : public ParserSemanticAction {
00167         storeAU (FlightDateStruct&);
00169         void operator() (double iReal) const;
00170     };
00171
00173     struct storeUPR : public ParserSemanticAction {
00175         storeUPR (FlightDateStruct&);
00177         void operator() (double iReal) const;
00178     };
00179
00181     struct storeBookingCounter : public ParserSemanticAction {
00183         storeBookingCounter (FlightDateStruct&);
00185         void operator() (double iReal) const;
00186     };
00187
00189     struct storeNAV : public ParserSemanticAction {
00191         storeNAV (FlightDateStruct&);
00193         void operator() (double iReal) const;
00194     };
00195
```

```
00197     struct storeGAV : public ParserSemanticAction {
00198         storeGAV (FlightDateStruct&);
00201         void operator() (double iReal) const;
00202     };
00203
00205     struct storeACP : public ParserSemanticAction {
00207         storeACP (FlightDateStruct&);
00209         void operator() (double iReal) const;
00210     };
00211
00213     struct storeETB : public ParserSemanticAction {
00215         storeETB (FlightDateStruct&);
00217         void operator() (double iReal) const;
00218     };
00219
00221     struct storeYieldUpperRange : public ParserSemanticAction {
00223         storeYieldUpperRange (FlightDateStruct&);
00225         void operator() (double iReal) const;
00226     };
00227
00229     struct storeBucketAvaibility : public ParserSemanticAction {
00231         storeBucketAvaibility (FlightDateStruct&);
00233         void operator() (double iReal) const;
00234     };
00235
00237     struct storeSeatIndex : public ParserSemanticAction {
00239         storeSeatIndex (FlightDateStruct&);
00241         void operator() (double iReal) const;
00242     };
00243
00245     struct storeSegmentBoardingPoint : public ParserSemanticAction {
00247         storeSegmentBoardingPoint (FlightDateStruct&);
00249         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00250     };
00251
00253     struct storeSegmentOffPoint : public ParserSemanticAction {
00255         storeSegmentOffPoint (FlightDateStruct&);
00257         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00258     };
00259
00261     struct storeSegmentCabinCode : public ParserSemanticAction {
00263         storeSegmentCabinCode (FlightDateStruct&);
00265         void operator() (char iChar) const;
00266     };
00267
00269     struct storeSegmentCabinBookingCounter : public ParserSemanticAction {
00271         storeSegmentCabinBookingCounter (FlightDateStruct&);
00273         void operator() (double iReal) const;
00274     };
00275
00277     struct storeClassCode : public ParserSemanticAction {
00279         storeClassCode (FlightDateStruct&);
00281         void operator() (char iChar) const;
00282     };
00283
00285     struct storeSubclassCode : public ParserSemanticAction {
00287         storeSubclassCode (FlightDateStruct&);
00289         void operator() (unsigned int iNumber) const;
00290     };
00291
00293     struct storeParentClassCode : public ParserSemanticAction {
00295         storeParentClassCode (FlightDateStruct&);
00297         void operator() (char iChar) const;
00298     };
00299
00301     struct storeParentSubclassCode : public ParserSemanticAction {
00303         storeParentSubclassCode (FlightDateStruct&);
```



```
00305     void operator() (unsigned int iNumber) const;
00306 };
00307
00309 struct storeCumulatedProtection : public ParserSemanticAction {
00311     storeCumulatedProtection (FlightDateStruct&);
00313     void operator() (double iReal) const;
00314 };
00315
00317 struct storeProtection : public ParserSemanticAction {
00319     storeProtection (FlightDateStruct&);
00321     void operator() (double iReal) const;
00322 };
00323
00325 struct storeNego : public ParserSemanticAction {
00327     storeNego (FlightDateStruct&);
00329     void operator() (double iReal) const;
00330 };
00331
00333 struct storeNoShow : public ParserSemanticAction {
00335     storeNoShow (FlightDateStruct&);
00337     void operator() (double iReal) const;
00338 };
00339
00341 struct storeOverbooking : public ParserSemanticAction {
00343     storeOverbooking (FlightDateStruct&);
00345     void operator() (double iReal) const;
00346 };
00347
00349 struct storeNbOfBkgs : public ParserSemanticAction {
00351     storeNbOfBkgs (FlightDateStruct&);
00353     void operator() (double iReal) const;
00354 };
00355
00357 struct storeNbOfGroupBkgs : public ParserSemanticAction {
00359     storeNbOfGroupBkgs (FlightDateStruct&);
00361     void operator() (double iReal) const;
00362 };
00363
00365 struct storeNbOfPendingGroupBkgs : public ParserSemanticAction {
00367     storeNbOfPendingGroupBkgs (FlightDateStruct&);
00369     void operator() (double iReal) const;
00370 };
00371
00373 struct storeNbOfStaffBkgs : public ParserSemanticAction {
00375     storeNbOfStaffBkgs (FlightDateStruct&);
00377     void operator() (double iReal) const;
00378 };
00379
00382 struct storeNbOfWLBkgs : public ParserSemanticAction {
00384     storeNbOfWLBkgs (FlightDateStruct&);
00386     void operator() (double iReal) const;
00387 };
00388
00390 struct storeClassETB : public ParserSemanticAction {
00392     storeClassETB (FlightDateStruct&);
00394     void operator() (double iReal) const;
00395 };
00396
00399 struct storeClassAvailability : public ParserSemanticAction {
04001     storeClassAvailability (FlightDateStruct&);
04003     void operator() (double iReal) const;
04004 };
04005
04008 struct storeSegmentAvailability : public ParserSemanticAction {
04010     storeSegmentAvailability (FlightDateStruct&);
04012     void operator() (double iReal) const;
04013 };
```

```

00414
00417     struct storeRevenueAvailability : public ParserSemanticAction {
00419         storeRevenueAvailability (FlightDateStruct&);
00421         void operator() (double iReal) const;
00422     };
00423
00425     struct storeFamilyCode : public ParserSemanticAction {
00427         storeFamilyCode (FlightDateStruct&);
00429         void operator() (int iCode) const;
00430     };
00431
00433     struct storeFClasses : public ParserSemanticAction {
00435         storeFClasses (FlightDateStruct&);
00437         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00438     };
00439
00441     struct doEndFlightDate : public ParserSemanticAction {
00443         doEndFlightDate (stdair::BomRoot&, FlightDateStruct&,
00444             unsigned int&);
00446         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00448         stdair::BomRoot& _bomRoot;
00449         unsigned int& _nbOfFlights;
00450     };
00451
00452
00454     //
00455     // (Boost Spirit) Grammar Definition
00456     //
00458
00470     struct InventoryParser :
00471         public boost::spirit::classic::grammar<InventoryParser> {
00472
00473         InventoryParser (stdair::BomRoot&, FlightDateStruct&, unsigned int&);
00474
00475         template <typename ScannerT>
00476         struct definition {
00477             definition (InventoryParser const& self);
00478
00479             // Instantiation of rules
00480             boost::spirit::classic::rule<ScannerT> flight_date_list,
00481                 not_to_be_parsed,
00482                 flight_date, flight_date_end, flight_key, airline_code, flight_number,
00483                 flight_type_code, flight_visibility_code,
00484                 date, leg_list, leg, operating_leg_details, leg_key, leg_details,
00485                 leg_cabin_list, leg_cabin_details,
00486                 bucket_list, bucket_details,
00487                 time, segment_list, segment, segment_key, full_segment_cabin_details,
00488                 segment_cabin_list, segment_cabin_key, segment_cabin_details,
00489                 class_list, class_key, parent_subclass_code,
00490                 class_protection, class_nego, class_details,
00491                 family_cabin_list, family_cabin_details;
00492
00494             boost::spirit::classic::rule<ScannerT> const& start() const;
00495         };
00496
00497         // Parser Context
00498         stdair::BomRoot& _bomRoot;
00499         FlightDateStruct& _flightDate;
00500         unsigned int& _nbOfFlights;
00501     };
00502
00503 }
00504
00505
00507 //
00508 // Entry class for the file parser
00509 //

```

```
00511
00516 class InventoryFileParser : public stdair::CmdAbstract {
00517 public:
00519     InventoryFileParser (stdair::BomRoot&,
00520                          const stdair::Filename_T& iInventoryInputFilename);
00521
00523     bool buildInventory ();
00524
00525 private:
00527     void init();
00528
00529 private:
00530     // Attributes
00532     stdair::Filename_T _filename;
00533
00535     iterator_t _startIterator;
00536
00538     iterator_t _endIterator;
00539
00541     stdair::BomRoot& _bomRoot;
00542
00544     FlightDateStruct _flightDate;
00545
00547     unsigned int _nbOfFlights;
00548 };
00549
00550 }
00551 #endif // __AIRINV_CMD_INVENTORYPARSERHELPER_HPP
```

## 25.153 airinv/command/ScheduleParser.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/ScheduleParserHelper.hpp>
#include <airinv/command/ScheduleParser.hpp>
#include <airinv/command/InventoryManager.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.154 ScheduleParser.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // StdAir
00008 #include <stdair/basic/BasFileMgr.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/command/ScheduleParserHelper.hpp>
00013 #include <airinv/command/ScheduleParser.hpp>
00014 #include <airinv/command/InventoryManager.hpp>
00015
00016 namespace AIRINV {
00017
00018 // //////////////////////////////////////
00019 void ScheduleParser::
00020 generateInventories (const stdair::ScheduleFilePath& iScheduleFilename,
00021                    stdair::BomRoot& ioBomRoot) {
00022
00023     const stdair::Filename_T lFilename = iScheduleFilename.name();
00024
00025     // Check that the file path given as input corresponds to an actual file
00026     bool doesExistAndIsReadable =
00027         stdair::BasFileMgr::doesExistAndIsReadable (lFilename);
00028     if (doesExistAndIsReadable == false) {
00029         std::ostringstream oMessage;
00030         oMessage << "The schedule input file, '" << lFilename
00031             << "', can not be retrieved on the file-system";
00032         STDAIR_LOG_ERROR (oMessage.str());
00033         throw ScheduleInputFileNotFoundException (oMessage.str());
00034     }
00035
00036     // Initialise the Flight-Period file parser.
00037     FlightPeriodFileParser lFlightPeriodParser (ioBomRoot, lFilename);
00038
00039     // Parse the CSV-formatted schedule input file, and generate the
00040     // corresponding Inventories for the airlines.
00041     lFlightPeriodParser.generateInventories ();
00042
00043 }
00044
00045 }

```

## 25.155 airinv/command/ScheduleParser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_file.hpp>
#include <stdair/command/CmdAbstract.hpp>
```

### Classes

- class [AIRINV::ScheduleParser](#)  
*Class wrapping the parser entry point.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.156 ScheduleParser.hpp

```
00001 #ifndef __AIRINV_CMD_SCHEDULEPARSER_HPP
00002 #define __AIRINV_CMD_SCHEDULEPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/stdair_file.hpp>
00010 #include <stdair/command/CmdAbstract.hpp>
00011
00012 namespace stdair {
00013     class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00018     class ScheduleParser : public stdair::CmdAbstract {
00019     public:
00020         static void generateInventories (const stdair::ScheduleFilePath& iScheduleFil
00021 ename,
00022                                         stdair::BomRoot&);
00023     };
00024 }
00025
00026 #endif // __AIRINV_CMD_SCHEDULEPARSER_HPP
```

## 25.157 airinv/command/ScheduleParserHelper.cpp File Reference

```
#include <cassert>
#include <stdair/stdair_exceptions.hpp>
#include <stdair/stdair_types.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/InventoryGenerator.hpp>
#include <airinv/command/ScheduleParserHelper.hpp>
```

### Namespaces

- namespace [AIRINV](#)
- namespace [AIRINV::ScheduleParserHelper](#)

### Functions

- repeat\_p\_t [AIRINV::ScheduleParserHelper::airline\\_code\\_p](#) (chset\_t("0-9A-Z").derived(), 2, 3)
- bounded1\_4\_p\_t [AIRINV::ScheduleParserHelper::flight\\_number\\_p](#) (uint1\_4\_p.derived(), 0u, 9999u)
- bounded4\_p\_t [AIRINV::ScheduleParserHelper::year\\_p](#) (uint4\_p.derived(), 2000u, 2099u)
- bounded2\_p\_t [AIRINV::ScheduleParserHelper::month\\_p](#) (uint2\_p.derived(), 1u, 12u)
- bounded2\_p\_t [AIRINV::ScheduleParserHelper::day\\_p](#) (uint2\_p.derived(), 1u, 31u)
- repeat\_p\_t [AIRINV::ScheduleParserHelper::dow\\_p](#) (chset\_t("0-1").derived().derived(), 7, 7)
- repeat\_p\_t [AIRINV::ScheduleParserHelper::airport\\_p](#) (chset\_t("0-9A-Z").derived(), 3, 3)
- bounded2\_p\_t [AIRINV::ScheduleParserHelper::hours\\_p](#) (uint2\_p.derived(), 0u, 23u)
- bounded2\_p\_t [AIRINV::ScheduleParserHelper::minutes\\_p](#) (uint2\_p.derived(), 0u, 59u)
- bounded2\_p\_t [AIRINV::ScheduleParserHelper::seconds\\_p](#) (uint2\_p.derived(), 0u, 59u)
- chset\_t [AIRINV::ScheduleParserHelper::cabin\\_code\\_p](#) ("A-Z")
- repeat\_p\_t [AIRINV::ScheduleParserHelper::key\\_p](#) (chset\_t("0-9A-Z").derived(), 1, 10)
- repeat\_p\_t [AIRINV::ScheduleParserHelper::class\\_code\\_list\\_p](#) (chset\_t("A-Z").derived(), 1, 26)

### Variables

- int1\_p\_t [AIRINV::ScheduleParserHelper::int1\\_p](#)
- uint2\_p\_t [AIRINV::ScheduleParserHelper::uint2\\_p](#)
- uint4\_p\_t [AIRINV::ScheduleParserHelper::uint4\\_p](#)
- uint1\_4\_p\_t [AIRINV::ScheduleParserHelper::uint1\\_4\\_p](#)
- int1\_p\_t [AIRINV::ScheduleParserHelper::family\\_code\\_p](#)



**25.158 ScheduleParserHelper.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/stdair_exceptions.hpp>
00008 #include <stdair/stdair_types.hpp>
00009 #include <stdair/bom/BomRoot.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/command/InventoryGenerator.hpp>
00013 // #define BOOST_SPIRIT_DEBUG
00014 #include <airinv/command/ScheduleParserHelper.hpp>
00015
00016 //
00017 namespace bsc = boost::spirit::classic;
00018
00019 namespace AIRINV {
00020
00021     namespace ScheduleParserHelper {
00022
00023         // //////////////////////////////////////
00024         // Semantic actions
00025         // //////////////////////////////////////
00026
00027         ParserSemanticAction::
00028         ParserSemanticAction (FlightPeriodStruct& ioFlightPeriod)
00029             : _flightPeriod (ioFlightPeriod) {
00030         }
00031
00032         // //////////////////////////////////////
00033         storeAirlineCode::
00034         storeAirlineCode (FlightPeriodStruct& ioFlightPeriod)
00035             : ParserSemanticAction (ioFlightPeriod) {
00036         }
00037
00038         // //////////////////////////////////////
00039         void storeAirlineCode::operator() (iterator_t iStr,
00040             iterator_t iStrEnd) const {
00041             const stdair::AirlineCode_T lAirlineCode (iStr, iStrEnd);
00042             _flightPeriod._airlineCode = lAirlineCode;
00043
00044             // As that's the beginning of a new flight, the list of legs
00045             // must be reset
00046             _flightPeriod._legList.clear();
00047         }
00048
00049         // //////////////////////////////////////
00050         storeFlightNumber::
00051         storeFlightNumber (FlightPeriodStruct& ioFlightPeriod)
00052             : ParserSemanticAction (ioFlightPeriod) {
00053         }
00054
00055         // //////////////////////////////////////
00056         void storeFlightNumber::operator() (unsigned int iNumber) const {
00057             _flightPeriod._flightNumber = iNumber;
00058         }
00059
00060         // //////////////////////////////////////
00061         storeDateRangeStart::
00062         storeDateRangeStart (FlightPeriodStruct& ioFlightPeriod)
00063             : ParserSemanticAction (ioFlightPeriod) {
00064         }
00065

```

```

00066 ///////////////////////////////////////////////////////////////////
00067 void storeDateRangeStart::operator() (iterator_t iStr,
00068                                     iterator_t iStrEnd) const {
00069     _flightPeriod._dateRangeStart = _flightPeriod.getDate();
00070
00071     // Reset the number of seconds
00072     _flightPeriod._itSeconds = 0;
00073 }
00074
00075 ///////////////////////////////////////////////////////////////////
00076 storeDateRangeEnd::
00077 storeDateRangeEnd (FlightPeriodStruct& ioFlightPeriod)
00078     : ParserSemanticAction (ioFlightPeriod) {
00079 }
00080
00081 ///////////////////////////////////////////////////////////////////
00082 void storeDateRangeEnd::operator() (iterator_t iStr,
00083                                     iterator_t iStrEnd) const {
00084     // As a Boost date period (DatePeriod_T) defines the last day of
00085     // the period to be end-date - one day, we have to add one day to that
00086     // end date before.
00087     const stdair::DateOffset_T oneDay (1);
00088     _flightPeriod._dateRangeEnd = _flightPeriod.getDate() + oneDay;
00089
00090     // Transform the date pair (i.e., the date range) into a date period
00091     _flightPeriod._dateRange =
00092         stdair::DatePeriod_T (_flightPeriod._dateRangeStart,
00093                               _flightPeriod._dateRangeEnd);
00094
00095     // Reset the number of seconds
00096     _flightPeriod._itSeconds = 0;
00097
00098     // Set the (default) operating airline and flight number
00099     _flightPeriod._itLeg._airlineCode = _flightPeriod._airlineCode;
00100     _flightPeriod._itLeg._flightNumber = _flightPeriod._flightNumber;
00101 }
00102
00103 ///////////////////////////////////////////////////////////////////
00104 storeDow::storeDow (FlightPeriodStruct& ioFlightPeriod)
00105     : ParserSemanticAction (ioFlightPeriod) {
00106 }
00107
00108 ///////////////////////////////////////////////////////////////////
00109 void storeDow::operator() (iterator_t iStr, iterator_t iStrEnd) const {
00110     stdair::DOW_String_T lDow (iStr, iStrEnd);
00111     _flightPeriod._dow = lDow;
00112 }
00113
00114 ///////////////////////////////////////////////////////////////////
00115 storeLegBoardingPoint::
00116 storeLegBoardingPoint (FlightPeriodStruct& ioFlightPeriod)
00117     : ParserSemanticAction (ioFlightPeriod) {
00118 }
00119
00120 ///////////////////////////////////////////////////////////////////
00121 void storeLegBoardingPoint::operator() (iterator_t iStr,
00122                                         iterator_t iStrEnd) const {
00123     stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00124
00125     // If a leg has already been parsed, add it to the FlightPeriod
00126     if (_flightPeriod._legAlreadyDefined == true) {
00127         _flightPeriod._legList.push_back (_flightPeriod._itLeg);
00128     } else {
00129         _flightPeriod._legAlreadyDefined = true;
00130     }
00131 }
00132

```

```

00133         // Set the (new) boarding point
00134         _flightPeriod._itLeg._boardingPoint = lBoardingPoint;
00135
00136         // As that's the beginning of a new leg, the list of cabins
00137         // must be reset
00138         _flightPeriod._itLeg._cabinList.clear();
00139
00140         // Add the airport code if it is not already stored in the airport lists
00141         _flightPeriod.addAirport (lBoardingPoint);
00142     }
00143
00144     // //////////////////////////////////////
00145     storeLegOffPoint::
00146     storeLegOffPoint (FlightPeriodStruct& ioFlightPeriod)
00147         : ParserSemanticAction (ioFlightPeriod) {
00148     }
00149
00150     // //////////////////////////////////////
00151     void storeLegOffPoint::operator() (iterator_t iStr,
00152                                       iterator_t iStrEnd) const {
00153         stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00154         _flightPeriod._itLeg._offPoint = lOffPoint;
00155
00156         // Add the airport code if it is not already stored in the airport lists
00157         _flightPeriod.addAirport (lOffPoint);
00158     }
00159
00160     // //////////////////////////////////////
00161     storeOperatingAirlineCode::
00162     storeOperatingAirlineCode (FlightPeriodStruct& ioFlightPeriod)
00163         : ParserSemanticAction (ioFlightPeriod) {
00164     }
00165
00166     // //////////////////////////////////////
00167     void storeOperatingAirlineCode::operator() (iterator_t iStr,
00168                                                iterator_t iStrEnd) const {
00169         const stdair::AirlineCode_T lAirlineCode (iStr, iStrEnd);
00170         if (lAirlineCode.size() == 2) {
00171             _flightPeriod._itLeg._airlineCode = lAirlineCode;
00172         }
00173         //STDAIR_LOG_DEBUG ("Airline code: " << lAirlineCode);
00174     }
00175
00176     // //////////////////////////////////////
00177     storeOperatingFlightNumber::
00178     storeOperatingFlightNumber (FlightPeriodStruct& ioFlightPeriod)
00179         : ParserSemanticAction (ioFlightPeriod) {
00180     }
00181
00182     // //////////////////////////////////////
00183     void storeOperatingFlightNumber::operator() (unsigned int iNumber) const {
00184         _flightPeriod._itLeg._flightNumber = iNumber;
00185         //STDAIR_LOG_DEBUG ("Flight number: " << iNumber);
00186     }
00187
00188     // //////////////////////////////////////
00189     storeBoardingTime::
00190     storeBoardingTime (FlightPeriodStruct& ioFlightPeriod)
00191         : ParserSemanticAction (ioFlightPeriod) {
00192     }
00193
00194     // //////////////////////////////////////
00195     void storeBoardingTime::operator() (iterator_t iStr,
00196                                       iterator_t iStrEnd) const {
00197         _flightPeriod._itLeg._boardingTime = _flightPeriod.getTime();
00198
00199         // Reset the number of seconds

```

```

00200     _flightPeriod._itSeconds = 0;
00201
00202     // Reset the date off-set
00203     _flightPeriod._dateOffset = 0;
00204 }
00205
00206 // //////////////////////////////////////
00207 storeOffTime::
00208 storeOffTime (FlightPeriodStruct& ioFlightPeriod)
00209     : ParserSemanticAction (ioFlightPeriod) {
00210 }
00211
00212 // //////////////////////////////////////
00213 void storeOffTime::operator() (iterator_t iStr,
00214                               iterator_t iStrEnd) const {
00215     _flightPeriod._itLeg._offTime = _flightPeriod.getTime();
00216
00217     // Reset the number of seconds
00218     _flightPeriod._itSeconds = 0;
00219
00220     // As the boarding date off set is optional, it can be set only
00221     // afterwards, based on the staging date off-set value
00222     // (_flightPeriod._dateOffset).
00223     const stdair::DateOffset_T lDateOffset (_flightPeriod._dateOffset);
00224     _flightPeriod._itLeg._boardingDateOffset = lDateOffset;
00225 }
00226
00227 // //////////////////////////////////////
00228 storeElapsedTime::
00229 storeElapsedTime (FlightPeriodStruct& ioFlightPeriod)
00230     : ParserSemanticAction (ioFlightPeriod) {
00231 }
00232
00233 // //////////////////////////////////////
00234 void storeElapsedTime::operator() (iterator_t iStr,
00235                                   iterator_t iStrEnd) const {
00236     _flightPeriod._itLeg._elapsed = _flightPeriod.getTime();
00237
00238     // Reset the number of seconds
00239     _flightPeriod._itSeconds = 0;
00240
00241     // As the boarding date off set is optional, it can be set only
00242     // afterwards, based on the staging date off-set value
00243     // (_flightPeriod._dateOffset).
00244     const stdair::DateOffset_T lDateOffset (_flightPeriod._dateOffset);
00245     _flightPeriod._itLeg._offDateOffset = lDateOffset;
00246 }
00247
00248 // //////////////////////////////////////
00249 storeLegCabinCode::
00250 storeLegCabinCode (FlightPeriodStruct& ioFlightPeriod)
00251     : ParserSemanticAction (ioFlightPeriod) {
00252 }
00253
00254 // //////////////////////////////////////
00255 void storeLegCabinCode::operator() (char iChar) const {
00256     _flightPeriod._itLegCabin._cabinCode = iChar;
00257     //std::cout << "Cabin code: " << iChar << std::endl;
00258 }
00259
00260 // //////////////////////////////////////
00261 storeCapacity::
00262 storeCapacity (FlightPeriodStruct& ioFlightPeriod)
00263     : ParserSemanticAction (ioFlightPeriod) {
00264 }
00265
00266 // //////////////////////////////////////

```

```

00267 void storeCapacity::operator() (double iReal) const {
00268     _flightPeriod._itLegCabin._saleableCapacity = iReal;
00269     //std::cout << "Capacity: " << iReal << std::endl;
00270
00271     // The capacity is the last (according to the arrival order
00272     // within the schedule input file) detail of the leg cabin. Hence,
00273     // when a capacity is parsed, it means that the full cabin
00274     // details have already been parsed as well: the cabin can
00275     // thus be added to the leg.
00276     _flightPeriod._itLeg._cabinList.push_back (_flightPeriod._itLegCabin);
00277 }
00278
00279 // //////////////////////////////////////
00280 storeSegmentSpecificity::
00281 storeSegmentSpecificity (FlightPeriodStruct& ioFlightPeriod)
00282     : ParserSemanticAction (ioFlightPeriod) {
00283 }
00284
00285 // //////////////////////////////////////
00286 void storeSegmentSpecificity::operator() (char iChar) const {
00287     if (iChar == '0') {
00288         _flightPeriod._areSegmentDefinitionsSpecific = false;
00289     } else {
00290         _flightPeriod._areSegmentDefinitionsSpecific = true;
00291     }
00292
00293     // Do a few sanity checks: the two lists should get exactly the same
00294     // content (in terms of airport codes). The only difference is that one
00295     // is a STL set, and the other a STL vector.
00296     assert (_flightPeriod._airportList.size()
00297         == _flightPeriod._airportOrderedList.size());
00298     assert (_flightPeriod._airportList.size() >= 2);
00299
00300     // Since all the legs have now been parsed, we get all the airports
00301     // and the segments may be built.
00302     _flightPeriod.buildSegments();
00303 }
00304
00305 // //////////////////////////////////////
00306 storeSegmentBoardingPoint::
00307 storeSegmentBoardingPoint (FlightPeriodStruct& ioFlightPeriod)
00308     : ParserSemanticAction (ioFlightPeriod) {
00309 }
00310
00311 // //////////////////////////////////////
00312 void storeSegmentBoardingPoint::operator() (iterator_t iStr,
00313     iterator_t iStrEnd) const {
00314     stdair::AirportCode_T lBoardingPoint (iStr, iStrEnd);
00315     _flightPeriod._itSegment._boardingPoint = lBoardingPoint;
00316 }
00317
00318 // //////////////////////////////////////
00319 storeSegmentOffPoint::
00320 storeSegmentOffPoint (FlightPeriodStruct& ioFlightPeriod)
00321     : ParserSemanticAction (ioFlightPeriod) {
00322 }
00323
00324 // //////////////////////////////////////
00325 void storeSegmentOffPoint::operator() (iterator_t iStr,
00326     iterator_t iStrEnd) const {
00327     stdair::AirportCode_T lOffPoint (iStr, iStrEnd);
00328     _flightPeriod._itSegment._offPoint = lOffPoint;
00329 }
00330
00331 // //////////////////////////////////////
00332 storeSegmentCabinCode::
00333 storeSegmentCabinCode (FlightPeriodStruct& ioFlightPeriod)

```

```

00334         : ParserSemanticAction (ioFlightPeriod) {
00335     }
00336
00337     // //////////////////////////////////////
00338 void storeSegmentCabinCode::operator() (char iChar) const {
00339     _flightPeriod._itSegmentCabin._cabinCode = iChar;
00340 }
00341
00342     // //////////////////////////////////////
00343 storeClasses::
00344 storeClasses (FlightPeriodStruct& ioFlightPeriod)
00345     : ParserSemanticAction (ioFlightPeriod) {
00346 }
00347
00348     // //////////////////////////////////////
00349 void storeClasses::operator() (iterator_t iStr,
00350                               iterator_t iStrEnd) const {
00351     std::string lClasses (iStr, iStrEnd);
00352     _flightPeriod._itSegmentCabin._itFareFamily._classes = lClasses;
00353
00354     // The list of classes is the last (according to the arrival order
00355     // within the schedule input file) detail of the segment cabin. Hence,
00356     // when a list of classes is parsed, it means that the full segment
00357     // cabin details have already been parsed as well: the segment cabin
00358     // can thus be added to the segment.
00359     if (_flightPeriod._areSegmentDefinitionsSpecific == true) {
00360         _flightPeriod.addSegmentCabin (_flightPeriod._itSegment,
00361                                       _flightPeriod._itSegmentCabin);
00362     } else {
00363         _flightPeriod.addSegmentCabin (_flightPeriod._itSegmentCabin);
00364     }
00365 }
00366
00367     // //////////////////////////////////////
00368 storeFamilyCode::
00369 storeFamilyCode (FlightPeriodStruct& ioFlightPeriod)
00370     : ParserSemanticAction (ioFlightPeriod) {
00371 }
00372
00373     // //////////////////////////////////////
00374 void storeFamilyCode::operator() (int iCode) const {
00375     std::ostream ostr;
00376     ostr << iCode;
00377     _flightPeriod._itSegmentCabin._itFareFamily._familyCode = ostr.str();
00378 }
00379
00380     // //////////////////////////////////////
00381 storeFRAT5CurveKey::
00382 storeFRAT5CurveKey (FlightPeriodStruct& ioFlightPeriod)
00383     : ParserSemanticAction (ioFlightPeriod) {
00384 }
00385
00386     // //////////////////////////////////////
00387 void storeFRAT5CurveKey::operator() (iterator_t iStr,
00388                                     iterator_t iStrEnd) const {
00389     const std::string lKey (iStr, iStrEnd);
00390     _flightPeriod._itSegmentCabin._itFareFamily._frat5CurveKey = lKey;
00391     //STDAIR_LOG_DEBUG ("FRAT5 key: " << lKey);
00392 }
00393
00394     // //////////////////////////////////////
00395 storeFFDisutilityCurveKey::
00396 storeFFDisutilityCurveKey (FlightPeriodStruct& ioFlightPeriod)
00397     : ParserSemanticAction (ioFlightPeriod) {
00398 }
00399
00400     // //////////////////////////////////////

```

```

00401     void storeFFDisutilityCurveKey::operator() (iterator_t iStr,
00402                                                iterator_t iStrEnd) const {
00403         const std::string lKey (iStr, iStrEnd);
00404         _flightPeriod._itSegmentCabin._itFareFamily._ffDisutilityCurveKey = lKey;
00405     }
00406
00407     // //////////////////////////////////////
00408     storeFClasses::
00409     storeFClasses (FlightPeriodStruct& ioFlightPeriod)
00410         : ParserSemanticAction (ioFlightPeriod) {
00411     }
00412
00413     // //////////////////////////////////////
00414     void storeFClasses::operator() (iterator_t iStr,
00415                                    iterator_t iStrEnd) const {
00416         std::string lClasses (iStr, iStrEnd);
00417         FareFamilyStruct lFareFamily (_flightPeriod._itSegmentCabin._itFareFamily.
00418                                     _familyCode, _flightPeriod._itSegmentCabin._itFareFamily._frat5CurveKey,
00419                                     _flightPeriod._itSegmentCabin._itFareFamily._ffDisutilityCurveKey, lClasses);
00418
00419         // The list of classes is the last (according to the arrival order
00420         // within the schedule input file) detail of the segment cabin. Hence,
00421         // when a list of classes is parsed, it means that the full segment
00422         // cabin details have already been parsed as well: the segment cabin
00423         // can thus be added to the segment.
00424         if (_flightPeriod._areSegmentDefinitionsSpecific == true) {
00425             _flightPeriod.addFareFamily (_flightPeriod._itSegment,
00426                                         _flightPeriod._itSegmentCabin,
00427                                         lFareFamily);
00428         } else {
00429             _flightPeriod.addFareFamily (_flightPeriod._itSegmentCabin,
00430                                         lFareFamily);
00431         }
00432     }
00433
00434     // //////////////////////////////////////
00435     doEndFlight::
00436     doEndFlight (stdair::BomRoot& ioBomRoot,
00437                 FlightPeriodStruct& ioFlightPeriod)
00438         : ParserSemanticAction (ioFlightPeriod),
00439           _bomRoot (ioBomRoot) {
00440     }
00441
00442     // //////////////////////////////////////
00443     // void doEndFlight::operator() (char iChar) const {
00444     void doEndFlight::operator() (iterator_t iStr,
00445                                  iterator_t iStrEnd) const {
00446
00447         assert (_flightPeriod._legAlreadyDefined == true);
00448         _flightPeriod._legList.push_back (_flightPeriod._itLeg);
00449
00450         // The lists of legs and cabins must be reset
00451         _flightPeriod._legAlreadyDefined = false;
00452         _flightPeriod._itLeg._cabinList.clear();
00453
00454         // DEBUG: Display the result
00455         STDAIR_LOG_DEBUG ("FlightPeriod: " << _flightPeriod.describe());
00456
00457         // Create the FlightDate BOM objects, and potentially the intermediary
00458         // objects (e.g., Inventory).
00459         InventoryGenerator::createFlightDate (_bomRoot, _flightPeriod);
00460     }
00461
00462     // //////////////////////////////////////
00463     //
00464     //
00465     // Utility Parsers

```

```

00466 //
00467 // ///////////////////////////////////////////////////////////////////
00469 int1_p_t int1_p;
00470
00472 uint2_p_t uint2_p;
00473
00475 uint4_p_t uint4_p;
00476
00478 uint1_4_p_t uint1_4_p;
00479
00481 repeat_p_t airline_code_p (chset_t("0-9A-Z").derived(), 2, 3);
00482
00484 bounded1_4_p_t flight_number_p (uint1_4_p.derived(), 0u, 9999u);
00485
00487 bounded4_p_t year_p (uint4_p.derived(), 2000u, 2099u);
00488
00490 bounded2_p_t month_p (uint2_p.derived(), 1u, 12u);
00491
00493 bounded2_p_t day_p (uint2_p.derived(), 1u, 31u);
00494
00496 repeat_p_t dow_p (chset_t("0-1").derived().derived(), 7, 7);
00497
00499 repeat_p_t airport_p (chset_t("0-9A-Z").derived(), 3, 3);
00500
00502 bounded2_p_t hours_p (uint2_p.derived(), 0u, 23u);
00503
00505 bounded2_p_t minutes_p (uint2_p.derived(), 0u, 59u);
00506
00508 bounded2_p_t seconds_p (uint2_p.derived(), 0u, 59u);
00509
00511 chset_t cabin_code_p ("A-Z");
00512
00514 int1_p_t family_code_p;
00515
00517 repeat_p_t key_p (chset_t("0-9A-Z").derived(), 1, 10);
00518
00520 repeat_p_t class_code_list_p (chset_t("A-Z").derived(), 1, 26);
00521
00522
00523 // ///////////////////////////////////////////////////////////////////
00524 // (Boost Spirit) Grammar Definition
00525 // ///////////////////////////////////////////////////////////////////
00526
00527 // ///////////////////////////////////////////////////////////////////
00528 FlightPeriodParser::
00529 FlightPeriodParser (stdair::BomRoot& ioBomRoot,
00530                    FlightPeriodStruct& ioFlightPeriod)
00531 : _bomRoot (ioBomRoot),
00532   _flightPeriod (ioFlightPeriod) {
00533 }
00534
00535 // ///////////////////////////////////////////////////////////////////
00536 template<typename ScannerT>
00537 FlightPeriodParser::definition<ScannerT>::
00538 definition (FlightPeriodParser const& self) {
00539
00540     flight_period_list = *( not_to_be_parsed | flight_period )
00541     ;
00542
00543     not_to_be_parsed =
00544         bsc::lexeme_d[ bsc::comment_p("//") | bsc::comment_p("/*", "*/")
00545                       | bsc::space_p ]
00546     ;
00547
00548     flight_period = flight_key
00549         >> + ( ';' >> leg )
00550         >> ';' >> segment_section

```



```

00551         >> flight_period_end[doEndFlight (self._bomRoot, self._flightPeriod)]
00552     ;
00553
00554     flight_period_end = bsc::ch_p(';')
00555     ;
00556
00557     flight_key = airline_code
00558     >> ';' >> flight_number
00559     >> ';' >> date[storeDateRangeStart(self._flightPeriod)]
00560     >> ';' >> date[storeDateRangeEnd(self._flightPeriod)]
00561     >> ';' >> dow[storeDow(self._flightPeriod)]
00562     ;
00563
00564     airline_code =
00565         bsc::lexeme_d[ (airline_code_p) [storeAirlineCode(self._flightPeriod)] ]
00566     ;
00567
00568     flight_number =
00569         bsc::lexeme_d[ (flight_number_p) [storeFlightNumber(self._flightPeriod)] ]
00570     ;
00571
00572     date =
00573         bsc::lexeme_d[ (year_p) [bsc::assign_a(self._flightPeriod._itYear)]
00574             >> '-' >> (month_p) [bsc::assign_a(self._flightPeriod._itMonth)]
00575             >> '-' >> (day_p) [bsc::assign_a(self._flightPeriod._itDay)] ]
00576     ;
00577
00578     dow = bsc::lexeme_d[ dow_p ]
00579     ;
00580
00581     leg = !( operating_leg_details >> ';' )
00582     >> leg_key
00583     >> ';' >> leg_details
00584     >> + ( ';' >> leg_cabin_details )
00585     ;
00586
00587     leg_key = (airport_p) [storeLegBoardingPoint(self._flightPeriod)]
00588     >> ';'
00589     >> (airport_p) [storeLegOffPoint(self._flightPeriod)]
00590     ;
00591
00592     operating_leg_details =
00593         bsc::lexeme_d[ (airline_code_p) [storeOperatingAirlineCode(self.
00594             _flightPeriod)] ]
00594     >> ";"
00595     >> bsc::lexeme_d[ (flight_number_p) [storeOperatingFlightNumber(self.
00596             _flightPeriod)] ]
00596     ;
00597
00598     leg_details =
00599         time[storeBoardingTime(self._flightPeriod)]
00600     >> !(date_offset)
00601     >> ';'
00602     >> time[storeOffTime(self._flightPeriod)]
00603     >> !(date_offset)
00604     >> ';'
00605     >> time[storeElapsedTime(self._flightPeriod)]
00606     ;
00607
00608     time =
00609         bsc::lexeme_d[ (hours_p) [bsc::assign_a(self._flightPeriod._itHours)]
00610             >> ':' >> (minutes_p) [bsc::assign_a(self._flightPeriod._itMinutes)]
00611             >> !(':' >> (seconds_p) [bsc::assign_a(self._flightPeriod._itSeconds)]) ]
00612     ;
00613
00614     date_offset =

```

```

00615         bsc::ch_p('/')
00616         >> (int1_p) [bsc::assign_a(self._flightPeriod._dateOffset)]
00617         ;
00618
00619     leg_cabin_details =
00620         (cabin_code_p) [storeLegCabinCode(self._flightPeriod)]
00621         >> ';' >> (bsc::ureal_p) [storeCapacity(self._flightPeriod)]
00622         ;
00623
00624     segment_key =
00625         (airport_p) [storeSegmentBoardingPoint(self._flightPeriod)]
00626         >> ';'
00627         >> (airport_p) [storeSegmentOffPoint(self._flightPeriod)]
00628         ;
00629
00630     segment_section =
00631         generic_segment | specific_segment_list
00632         ;
00633
00634     generic_segment =
00635         bsc::ch_p('0') [storeSegmentSpecificity(self._flightPeriod)]
00636         >> +(';') >> segment_cabin_details)
00637         ;
00638
00639     specific_segment_list =
00640         bsc::ch_p('1') [storeSegmentSpecificity(self._flightPeriod)]
00641         >> +(';') >> segment_key >> full_segment_cabin_details)
00642         ;
00643
00644     full_segment_cabin_details =
00645         +(';') >> segment_cabin_details)
00646         ;
00647
00648     segment_cabin_details =
00649         (cabin_code_p) [storeSegmentCabinCode(self._flightPeriod)]
00650         >> ';' >> (class_code_list_p) [storeClasses(self._flightPeriod)]
00651         >> +(';') >> family_cabin_details)
00652         ;
00653
00654     family_cabin_details =
00655         (family_code_p) [storeFamilyCode(self._flightPeriod)]
00656         >> ';'
00657         >> (key_p) [storeFRAT5CurveKey(self._flightPeriod)]
00658         >> ';'
00659         >> (key_p) [storeFFDisutilityCurveKey(self._flightPeriod)]
00660         >> ';'
00661         >> (class_code_list_p) [storeFCClasses(self._flightPeriod)]
00662         ;
00663
00664     // BOOST_SPIRIT_DEBUG_NODE (FlightPeriodParser);
00665     BOOST_SPIRIT_DEBUG_NODE (flight_period_list);
00666     BOOST_SPIRIT_DEBUG_NODE (not_to_be_parsed);
00667     BOOST_SPIRIT_DEBUG_NODE (flight_period);
00668     BOOST_SPIRIT_DEBUG_NODE (flight_period_end);
00669     BOOST_SPIRIT_DEBUG_NODE (flight_key);
00670     BOOST_SPIRIT_DEBUG_NODE (airline_code);
00671     BOOST_SPIRIT_DEBUG_NODE (flight_number);
00672     BOOST_SPIRIT_DEBUG_NODE (date);
00673     BOOST_SPIRIT_DEBUG_NODE (dow);
00674     BOOST_SPIRIT_DEBUG_NODE (leg);
00675     BOOST_SPIRIT_DEBUG_NODE (leg_key);
00676     BOOST_SPIRIT_DEBUG_NODE (leg_details);
00677     BOOST_SPIRIT_DEBUG_NODE (time);
00678     BOOST_SPIRIT_DEBUG_NODE (date_offset);
00679     BOOST_SPIRIT_DEBUG_NODE (leg_cabin_details);
00680     BOOST_SPIRIT_DEBUG_NODE (segment_section);
00681     BOOST_SPIRIT_DEBUG_NODE (segment_key);

```

```

00682     BOOST_SPIRIT_DEBUG_NODE (generic_segment);
00683     BOOST_SPIRIT_DEBUG_NODE (specific_segment_list);
00684     BOOST_SPIRIT_DEBUG_NODE (full_segment_cabin_details);
00685     BOOST_SPIRIT_DEBUG_NODE (segment_cabin_details);
00686     BOOST_SPIRIT_DEBUG_NODE (family_cabin_details);
00687 }
00688
00689 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00690 template<typename ScannerT>
00691 bsc::rule<ScannerT> const&
00692 FlightPeriodParser::definition<ScannerT>::start() const {
00693     return flight_period_list;
00694 }
00695 }
00696
00697 //
00700 // Entry class for the file parser
00701 //
00702
00703 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00704 FlightPeriodFileParser::
00705 FlightPeriodFileParser (stdair::BomRoot& ioBomRoot,
00706                         const stdair::Filename_T& iFilename)
00707     : _filename (iFilename), _bomRoot (ioBomRoot) {
00708     init();
00709 }
00710
00711 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00712 void FlightPeriodFileParser::init() {
00713     // Open the file
00714     _startIterator = iterator_t (_filename);
00715
00716     // Check the filename exists and can be open
00717     if (!_startIterator) {
00718         std::ostringstream oMessage;
00719         oMessage << "The file " << _filename << " can not be open." << std::endl;
00720         STDAIR_LOG_ERROR (oMessage.str());
00721         throw ScheduleInputFileNotFoundException (oMessage.str());
00722     }
00723
00724     // Create an EOF iterator
00725     _endIterator = _startIterator.make_end();
00726 }
00727
00728 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
00729 bool FlightPeriodFileParser::generateInventories () {
00730     bool oResult = false;
00731
00732     STDAIR_LOG_DEBUG ("Parsing schedule input file: " << _filename);
00733
00734     // Initialise the parser (grammar) with the helper/staging structure.
00735     ScheduleParserHelper::FlightPeriodParser lFPParser (_bomRoot, _flightPeriod);
00736
00737     // Launch the parsing of the file and, thanks to the doEndFlight
00738     // call-back structure, the building of the whole BomRoot BOM
00739     // (i.e., including Inventory, FlightDate, LegDate, SegmentDate, etc.)
00740     bsc::parse_info<iterator_t> info = bsc::parse (_startIterator, _endIterator,
00741                                                  lFPParser,
00742                                                  bsc::space_p - bsc::eol_p);
00743
00744     // Retrieves whether or not the parsing was successful
00745     oResult = info.hit;
00746
00747     const bool isFull = info.full;
00748
00749

```

```
00750     const std::string hasBeenFullyReadStr = (isFull == true)?"":"not ";
00751     if (oResult == true && isFull == true) {
00752         STDAIR_LOG_DEBUG ("Parsing of schedule input file: " << _filename
00753             << " succeeded: read " << info.length
00754             << " characters. The input file has "
00755             << hasBeenFullyReadStr
00756             << "been fully read. Stop point: " << info.stop);
00757     } else {
00758         STDAIR_LOG_ERROR ("Parsing of schedule input file: " << _filename
00759             << " failed: read " << info.length
00760             << " characters. The input file has "
00761             << hasBeenFullyReadStr
00762             << "been fully read. Stop point: " << info.stop);
00763         throw ScheduleFileParsingFailedException ("Parsing of schedule input file:
00764     "
00765                                     + _filename + " failed.");
00766     }
00767     return oResult;
00768 }
00770
00771 }
```

## 25.159 airinv/command/ScheduleParserHelper.hpp File Reference

```
#include <string>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/basic/BasParserTypes.hpp>
#include <airinv/bom/FlightPeriodStruct.hpp>
```

### Classes

- struct [AIRINV::ScheduleParserHelper::ParserSemanticAction](#)
- struct [AIRINV::ScheduleParserHelper::storeAirlineCode](#)
- struct [AIRINV::ScheduleParserHelper::storeFlightNumber](#)
- struct [AIRINV::ScheduleParserHelper::storeDateRangeStart](#)
- struct [AIRINV::ScheduleParserHelper::storeDateRangeEnd](#)
- struct [AIRINV::ScheduleParserHelper::storeDow](#)
- struct [AIRINV::ScheduleParserHelper::storeLegBoardingPoint](#)
- struct [AIRINV::ScheduleParserHelper::storeLegOffPoint](#)
- struct [AIRINV::ScheduleParserHelper::storeOperatingAirlineCode](#)
- struct [AIRINV::ScheduleParserHelper::storeOperatingFlightNumber](#)
- struct [AIRINV::ScheduleParserHelper::storeBoardingTime](#)
- struct [AIRINV::ScheduleParserHelper::storeOffTime](#)
- struct [AIRINV::ScheduleParserHelper::storeElapsedTime](#)
- struct [AIRINV::ScheduleParserHelper::storeLegCabinCode](#)
- struct [AIRINV::ScheduleParserHelper::storeCapacity](#)
- struct [AIRINV::ScheduleParserHelper::storeSegmentSpecificity](#)
- struct [AIRINV::ScheduleParserHelper::storeSegmentBoardingPoint](#)
- struct [AIRINV::ScheduleParserHelper::storeSegmentOffPoint](#)
- struct [AIRINV::ScheduleParserHelper::storeSegmentCabinCode](#)
- struct [AIRINV::ScheduleParserHelper::storeClasses](#)
- struct [AIRINV::ScheduleParserHelper::storeFamilyCode](#)
- struct [AIRINV::ScheduleParserHelper::storeFRAT5CurveKey](#)
- struct [AIRINV::ScheduleParserHelper::storeFFDisutilityCurveKey](#)
- struct [AIRINV::ScheduleParserHelper::storeFCClasses](#)
- struct [AIRINV::ScheduleParserHelper::doEndFlight](#)
- struct [AIRINV::ScheduleParserHelper::FlightPeriodParser](#)
- struct [AIRINV::ScheduleParserHelper::FlightPeriodParser::definition< ScannerT >](#)
- class [AIRINV::FlightPeriodFileParser](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::ScheduleParserHelper](#)

**25.160 ScheduleParserHelper.hpp**

```

00001 #ifndef __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP
00002 #define __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/command/CmdAbstract.hpp>
00011 // Airinv
00012 #include <airinv/AIRINV_Types.hpp>
00013 #include <airinv/basic/BasParserTypes.hpp>
00014 #include <airinv/bom/FlightPeriodStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022
00023     namespace ScheduleParserHelper {
00024
00025         // //////////////////////////////////////
00026         // Semantic actions
00027         // //////////////////////////////////////
00029         struct ParserSemanticAction {
00031             ParserSemanticAction (FlightPeriodStruct&);
00033             FlightPeriodStruct& _flightPeriod;
00034         };
00035
00037         struct storeAirlineCode : public ParserSemanticAction {
00039             storeAirlineCode (FlightPeriodStruct&);
00041             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00042         };
00043
00045         struct storeFlightNumber : public ParserSemanticAction {
00047             storeFlightNumber (FlightPeriodStruct&);
00049             void operator() (unsigned int iNumber) const;
00050         };
00051
00053         struct storeDateRangeStart : public ParserSemanticAction {
00055             storeDateRangeStart (FlightPeriodStruct&);
00057             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00058         };
00059
00061         struct storeDateRangeEnd : public ParserSemanticAction {
00063             storeDateRangeEnd (FlightPeriodStruct&);
00065             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00066         };
00067
00069         struct storeDow : public ParserSemanticAction {
00071             storeDow (FlightPeriodStruct&);
00073             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00074         };
00075
00077         struct storeLegBoardingPoint : public ParserSemanticAction {
00079             storeLegBoardingPoint (FlightPeriodStruct&);
00081             void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00082         };
00083
00085         struct storeLegOffPoint : public ParserSemanticAction {
00087             storeLegOffPoint (FlightPeriodStruct&);
00089             void operator() (iterator_t iStr, iterator_t iStrEnd) const;

```

```
00090     };
00091
00093     struct storeOperatingAirlineCode : public ParserSemanticAction {
00095         storeOperatingAirlineCode (FlightPeriodStruct&);
00097         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00098     };
00099
00101     struct storeOperatingFlightNumber : public ParserSemanticAction {
00103         storeOperatingFlightNumber (FlightPeriodStruct&);
00105         void operator() (unsigned int iNumber) const;
00106     };
00107
00109     struct storeBoardingTime : public ParserSemanticAction {
00111         storeBoardingTime (FlightPeriodStruct&);
00113         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00114     };
00115
00117     struct storeOffTime : public ParserSemanticAction {
00119         storeOffTime (FlightPeriodStruct&);
00121         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00122     };
00123
00125     struct storeElapsedTime : public ParserSemanticAction {
00127         storeElapsedTime (FlightPeriodStruct&);
00129         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00130     };
00131
00133     struct storeLegCabinCode : public ParserSemanticAction {
00135         storeLegCabinCode (FlightPeriodStruct&);
00137         void operator() (char iChar) const;
00138     };
00139
00141     struct storeCapacity : public ParserSemanticAction {
00143         storeCapacity (FlightPeriodStruct&);
00145         void operator() (double iReal) const;
00146     };
00147
00152     struct storeSegmentSpecificity : public ParserSemanticAction {
00154         storeSegmentSpecificity (FlightPeriodStruct&);
00156         void operator() (char iChar) const;
00157     };
00158
00160     struct storeSegmentBoardingPoint : public ParserSemanticAction {
00162         storeSegmentBoardingPoint (FlightPeriodStruct&);
00164         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00165     };
00166
00168     struct storeSegmentOffPoint : public ParserSemanticAction {
00170         storeSegmentOffPoint (FlightPeriodStruct&);
00172         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00173     };
00174
00176     struct storeSegmentCabinCode : public ParserSemanticAction {
00178         storeSegmentCabinCode (FlightPeriodStruct&);
00180         void operator() (char iChar) const;
00181     };
00182
00184     struct storeClasses : public ParserSemanticAction {
00186         storeClasses (FlightPeriodStruct&);
00188         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00189     };
00190
00192     struct storeFamilyCode : public ParserSemanticAction {
00194         storeFamilyCode (FlightPeriodStruct&);
00196         void operator() (int iCode) const;
00197     };
00198
```

```

00200     struct storeFRAT5CurveKey : public ParserSemanticAction {
00202         storeFRAT5CurveKey (FlightPeriodStruct&);
00204         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00205     };
00206
00208     struct storeFFDisutilityCurveKey : public ParserSemanticAction {
00210         storeFFDisutilityCurveKey (FlightPeriodStruct&);
00212         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00213     };
00214
00216     struct storeFClasses : public ParserSemanticAction {
00218         storeFClasses (FlightPeriodStruct&);
00220         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00221     };
00222
00224     struct doEndFlight : public ParserSemanticAction {
00226         doEndFlight (stdair::BomRoot&, FlightPeriodStruct&);
00228         void operator() (iterator_t iStr, iterator_t iStrEnd) const;
00230         stdair::BomRoot& _bomRoot;
00231     };
00232
00233
00235     //
00236     // (Boost Spirit) Grammar Definition
00237     //
00239
00282     struct FlightPeriodParser :
00283         public boost::spirit::classic::grammar<FlightPeriodParser> {
00284
00285         FlightPeriodParser (stdair::BomRoot&, FlightPeriodStruct&);
00286
00287         template <typename ScannerT>
00288         struct definition {
00289             definition (FlightPeriodParser const& self);
00290
00291             // Instantiation of rules
00292             boost::spirit::classic::rule<ScannerT> flight_period_list,
00293                 not_to_be_parsed, flight_period, flight_period_end,
00294                 flight_key, airline_code, flight_number,
00295                 date, dow, time, date_offset,
00296                 leg, leg_key, operating_leg_details, leg_details, leg_cabin_details,
00297                 segment_section, segment_key, full_segment_cabin_details,
00298                 segment_cabin_details, full_family_cabin_details,
00299                 family_cabin_details, generic_segment, specific_segment_list;
00300
00302             boost::spirit::classic::rule<ScannerT> const& start() const;
00303         };
00304
00305         // Parser Context
00306         stdair::BomRoot& _bomRoot;
00307         FlightPeriodStruct& _flightPeriod;
00308     };
00309
00310 }
00315
00316 //
00317 // Entry class for the file parser
00318 //
00320
00325     class FlightPeriodFileParser : public stdair::CmdAbstract {
00326     public:
00328         FlightPeriodFileParser (stdair::BomRoot& ioBomRoot,
00329                                 const stdair::Filename_T& iFilename);
00330
00332         bool generateInventories ();
00333
00334     private:

```



```
00336     void init();
00337
00338 private:
00339     // Attributes
00341     stdair::Filename_T _filename;
00342
00344     iterator_t _startIterator;
00345
00347     iterator_t _endIterator;
00348
00350     stdair::BomRoot& _bomRoot;
00351
00353     FlightPeriodStruct _flightPeriod;
00354 };
00355
00356 }
00357 #endif // __AIRINV_CMD_SCHEDULEPARSERHELPER_HPP
```

## 25.161 airinv/command/vault/DCPEventGenerator.cpp File Reference

```
#include <cassert>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/bom/DCPEventStruct.hpp>
#include <airinv/command/DCPEventGenerator.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.162 DCPEventGenerator.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/bom/BomManager.hpp>
00008 #include <stdair/bom/BomRoot.hpp>
00009 #include <stdair/factory/FacBomManager.hpp>
00010 #include <stdair/service/Logger.hpp>
00011 // AirInv
00012 #include <airinv/bom/DCPEventStruct.hpp>
00013 #include <airinv/command/DCPEventGenerator.hpp>
00014
00015 namespace AIRINV {
00016
00017     // //////////////////////////////////////
00018     void DCPEventGenerator::
00019     createDCPEvent (stdair::BomRoot& ioBomRoot,
00020                    DCPEventStruct& iDCPEventStruct) {
00021
00022         // Set the airport-pair primary key.
00023         /*
00024         const stdair::AirportCode_T& lBoardPoint = iDCPEventStruct._origin;
00025         const stdair::AirportCode_T& lOffPoint = iDCPEventStruct._destination;
00026         */
00027
00028         // Set the DCP date-period primary key.
00029         const stdair::Date_T& lDateRangeStart = iDCPEventStruct._dateRangeStart;
00030         const stdair::Date_T& lDateRangeEnd = iDCPEventStruct._dateRangeEnd;
00031         const stdair::DatePeriod_T lDatePeriod (lDateRangeStart, lDateRangeEnd);
00032
00033         // Set the DCP time-period primary key.
00034         /*
00035         const stdair::Time_T& lTimeRangeStart = iDCPEventStruct._timeRangeStart;
00036         const stdair::Time_T& lTimeRangeEnd = iDCPEventStruct._timeRangeEnd;
00037         */
00038
00039         // Generate the DCPEvent
00040         const stdair::DayDuration_T& lAdvancePurchase =
00041             iDCPEventStruct._advancePurchase;
00042         const stdair::SaturdayStay_T& lSaturdayStay = iDCPEventStruct._saturdayStay;
00043         const stdair::ChangeFees_T& lChangeFees = iDCPEventStruct._changeFees;
00044         const stdair::NonRefundable_T& lNonRefundable =
00045             iDCPEventStruct._nonRefundable;
00046         const stdair::DayDuration_T& lMinimumStay = iDCPEventStruct._minimumStay;
00047         const stdair::Fare_T& lDCP = iDCPEventStruct._DCP;
00048
00049         // Generate Segment Features and link them to their DCPEvent
00050         stdair::ClassList_StringList_T::const_iterator lItCurrentClassCodeList =
00051             iDCPEventStruct._classCodeList.begin();
00052
00053         const unsigned int lAirlineListSize = iDCPEventStruct.getAirlineListSize();
00054         const unsigned int lClassCodeListSize =
00055             iDCPEventStruct.getClassCodeListSize();
00056         assert (lAirlineListSize == lClassCodeListSize);
00057
00058         iDCPEventStruct.beginClassCode();
00059         for (iDCPEventStruct.beginAirline();
00060              iDCPEventStruct.hasNotReachedEndAirline();
00061              iDCPEventStruct.iterateAirline()) {
00062             /*
00063             const stdair::AirlineCode_T& lAirlineCode =
00064                 iDCPEventStruct.getCurrentAirlineCode();
00065             const std::string& lClassCodeList = iDCPEventStruct.getCurrentClassCode();

```

---

```
00066         iDCPEventStruct.iterateClassCode();
00067     */
00068 }
00069 }
00070
00071 }
00072
```

## 25.163 airinv/command/vault/DCPEventGenerator.hpp File Reference

```
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- class [AIRINV::DCPEventGenerator](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::DCPParserHelper](#)

**25.164 DCPEventGenerator.hpp**

```

00001 #ifndef __AIRINV_CMD_DCPEVENTGENERATOR_HPP
00002 #define __AIRINV_CMD_DCPEVENTGENERATOR_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/command/CmdAbstract.hpp>
00009 // AirInv
00010 #include <airinv/AIRINV_Types.hpp>
00011
00012 // Forward declarations
00013 namespace stdair {
00014     class BomRoot;
00015     class DCPEvent;
00016 }
00017
00018 namespace AIRINV {
00019
00020     // Forward declarations
00021     struct DCPEventStruct;
00022     namespace DCPParserHelper {
00023         struct doEndDCP;
00024     }
00025
00027     class DCPEventGenerator : public stdair::CmdAbstract {
00028         // Only the following class may use methods of DCPGenerator.
00029         // Indeed, as those methods build the BOM, it is not good to expose
00030         // them public.
00031         friend class DCPFileParser;
00032         friend struct DCPParserHelper::doEndDCP;
00033         friend class DCPParser;
00034     private:
00037         static void createDCPEvent (stdair::BomRoot&, DCPEventStruct&);
00038     };
00039
00040 }
00041 #endif // __AIRINV_CMD_DCPEVENTGENERATOR_HPP

```

## 25.165 airinv/command/vault/DCPParser.cpp File Reference

```
#include <cassert>
#include <string>
#include <stdair/service/Logger.hpp>
#include <airinv/command/DCPParserHelper.hpp>
#include <airinv/command/DCPParser.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.166 DCPParser.cpp**

```
00001 // ////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 // StdAir
00008 #include <stdair/service/Logger.hpp>
00009 // AirSched
00010 #include <airinv/command/DCPParserHelper.hpp>
00011 #include <airinv/command/DCPParser.hpp>
00012
00013 namespace AIRINV {
00014
00015 // ////////////////////////////////////////
00016 void DCPParser::DCPRuleGeneration (const stdair::Filename_T& iFilename,
00017                                     stdair::BomRoot& ioBomRoot) {
00018
00019     // Initialise the DCP file parser
00020     DCPRuleFileParser lDCPRuleFileParser (ioBomRoot, iFilename);
00021
00022     // Parse the CSV-formatted DCP input file and generate the
00023     // corresponding DCP events
00024     lDCPRuleFileParser.generateDCPRules();
00025 }
00026
00027 }
```



## 25.167 airinv/command/vault/DCPParser.hpp File Reference

```
#include <stdair/stdair_basic_types.hpp>
#include <stdair/command/CmdAbstract.hpp>
```

### Classes

- class [AIRINV::DCPParser](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

**25.168 DCPParser.hpp**

```
00001 #ifndef __AIRINV_CMD_DCPPARSER_HPP
00002 #define __AIRINV_CMD_DCPPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 #include <stdair/stdair_basic_types.hpp>
00009 #include <stdair/command/CmdAbstract.hpp>
00010
00011 // Forward declarations.
00012 namespace stdair {
00013     class BomRoot;
00014 }
00015
00016 namespace AIRINV {
00017
00019     class DCPParser : public stdair::CmdAbstract {
00020     public:
00028         static void DCPRuleGeneration (const stdair::Filename_T&,
00029                                         stdair::BomRoot&);
00030     };
00031 }
00032 #endif // __AIRINV_CMD_DCPPARSER_HPP
```

## 25.169 airinv/command/vault/DCPParserHelper.cpp File Reference

```
#include <cassert>
#include <string>
#include <vector>
#include <fstream>
#include <stdair/basic/BasFileMgr.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/service/Logger.hpp>
#include <airinv/command/DCPParserHelper.hpp>
#include <airinv/command/DCPRuleGenerator.hpp>
```

### Namespaces

- namespace [AIRINV](#)
- namespace [AIRINV::DCPParserHelper](#)

### Variables

- stdair::int1\_p\_t [AIRINV::DCPParserHelper::int1\\_p](#)
- stdair::uint2\_p\_t [AIRINV::DCPParserHelper::uint2\\_p](#)
- stdair::uint4\_p\_t [AIRINV::DCPParserHelper::uint4\\_p](#)
- stdair::uint1\_4\_p\_t [AIRINV::DCPParserHelper::uint1\\_4\\_p](#)
- stdair::hour\_p\_t [AIRINV::DCPParserHelper::hour\\_p](#)
- stdair::minute\_p\_t [AIRINV::DCPParserHelper::minute\\_p](#)
- stdair::second\_p\_t [AIRINV::DCPParserHelper::second\\_p](#)
- stdair::year\_p\_t [AIRINV::DCPParserHelper::year\\_p](#)
- stdair::month\_p\_t [AIRINV::DCPParserHelper::month\\_p](#)
- stdair::day\_p\_t [AIRINV::DCPParserHelper::day\\_p](#)

## 25.170 DCPParserHelper.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 #include <vector>
00008 #include <fstream>
00009 // StdAir
00010 #include <stdair/basic/BasFileMgr.hpp>
00011 #include <stdair/bom/BomRoot.hpp>
00012 #include <stdair/service/Logger.hpp>
00013 // AirInv
00014 #include <airinv/command/DCPParserHelper.hpp>
00015 #include <airinv/command/DCPRuleGenerator.hpp>
00016
00017 namespace AIRINV {
00018
00019     namespace DCPParserHelper {
00020
00021         // //////////////////////////////////////
00022         // Semantic actions
00023         // //////////////////////////////////////
00024
00025         ParserSemanticAction::ParserSemanticAction (DCPRuleStruct& ioDCPRule)
00026             : _DCPRule (ioDCPRule) {
00027         }
00028
00029         // //////////////////////////////////////
00030         storeDCPId::storeDCPId (DCPRuleStruct& ioDCPRule)
00031             : ParserSemanticAction (ioDCPRule) {
00032         }
00033
00034         // //////////////////////////////////////
00035         void storeDCPId::operator() (unsigned int iDCPId,
00036                                     boost::spirit::qi::unused_type,
00037                                     boost::spirit::qi::unused_type) const {
00038             _DCPRule._DCPId = iDCPId;
00039
00040             // DEBUG
00041             //STDAIR_LOG_DEBUG ( "DCP Id: " << _DCPRule._DCPId);
00042
00043             _DCPRule._nbOfAirlines = 0;
00044             _DCPRule._airlineCode = "";
00045             _DCPRule._classCode = "";
00046             _DCPRule._airlineCodeList.clear();
00047             _DCPRule._classCodeList.clear();
00048             _DCPRule._classCodeListOfList.clear();
00049             _DCPRule._itSeconds = 0;
00050         }
00051
00052         // //////////////////////////////////////
00053         storeOrigin ::
00054         storeOrigin (DCPRuleStruct& ioDCPRule)
00055             : ParserSemanticAction (ioDCPRule) {
00056         }
00057
00058         // //////////////////////////////////////
00059         void storeOrigin::operator() (std::vector<char> iChar,
00060                                     boost::spirit::qi::unused_type,
00061                                     boost::spirit::qi::unused_type) const {
00062             stdair::AirportCode_T lOrigin (iChar.begin(), iChar.end());
00063             // DEBUG
00064             //STDAIR_LOG_DEBUG ( "Origin: " << lOrigin);
00065             _DCPRule._origin = lOrigin;

```

```

00066     }
00067
00068     // //////////////////////////////////////
00069     storeDestination ::
00070     storeDestination (DCPRuleStruct& ioDCPRule)
00071         : ParserSemanticAction (ioDCPRule) {
00072     }
00073
00074     // //////////////////////////////////////
00075     void storeDestination::operator() (std::vector<char> iChar,
00076                                         boost::spirit::qi::unused_type,
00077                                         boost::spirit::qi::unused_type) const {
00078         stdair::AirportCode_T lDestination (iChar.begin(), iChar.end());
00079         // DEBUG
00080         //STDAIR_LOG_DEBUG ( "Destination: " << lDestination);
00081         _DCPRule._destination = lDestination;
00082     }
00083
00084     // //////////////////////////////////////
00085     storeDateRangeStart::
00086     storeDateRangeStart (DCPRuleStruct& ioDCPRule)
00087         : ParserSemanticAction (ioDCPRule) {
00088     }
00089
00090     // //////////////////////////////////////
00091     void storeDateRangeStart::operator() (boost::spirit::qi::unused_type,
00092                                         boost::spirit::qi::unused_type,
00093                                         boost::spirit::qi::unused_type) const {
00094
00095         _DCPRule._dateRangeStart = _DCPRule.getDate();
00096         // DEBUG
00097         //STDAIR_LOG_DEBUG ("Date Range Start: "<< _DCPRule._dateRangeStart);
00098     }
00099
00100     // //////////////////////////////////////
00101     storeDateRangeEnd::
00102     storeDateRangeEnd(DCPRuleStruct& ioDCPRule)
00103         : ParserSemanticAction (ioDCPRule) {
00104     }
00105
00106     // //////////////////////////////////////
00107     void storeDateRangeEnd::operator() (boost::spirit::qi::unused_type,
00108                                         boost::spirit::qi::unused_type,
00109                                         boost::spirit::qi::unused_type) const {
00110         _DCPRule._dateRangeEnd = _DCPRule.getDate();
00111         // DEBUG
00112         //STDAIR_LOG_DEBUG ("Date Range End: " << _DCPRule._dateRangeEnd);
00113     }
00114
00115     // //////////////////////////////////////
00116     storeStartRangeTime::
00117     storeStartRangeTime (DCPRuleStruct& ioDCPRule)
00118         : ParserSemanticAction (ioDCPRule) {
00119     }
00120
00121     // //////////////////////////////////////
00122     void storeStartRangeTime::operator() (boost::spirit::qi::unused_type,
00123                                         boost::spirit::qi::unused_type,
00124                                         boost::spirit::qi::unused_type) const {
00125
00126         _DCPRule._timeRangeStart = _DCPRule.getTime();
00127         // DEBUG
00128         //STDAIR_LOG_DEBUG ("Time Range Start: " << _DCPRule._timeRangeStart);
00129         // Reset the number of seconds
00130         _DCPRule._itSeconds = 0;
00131     }
00132
00133

```

```

00131 // //////////////////////////////////////
00132 storeEndRangeTime::
00133 storeEndRangeTime (DCPRuleStruct& ioDCPRule)
00134 : ParserSemanticAction (ioDCPRule) {
00135 }
00136
00137 // //////////////////////////////////////
00138 void storeEndRangeTime::operator() (boost::spirit::qi::unused_type,
00139                                     boost::spirit::qi::unused_type,
00140                                     boost::spirit::qi::unused_type) const {
00141     _DCPRule._timeRangeEnd = _DCPRule.getTime();
00142     // DEBUG
00143     //STDAIR_LOG_DEBUG ("Time Range End: " << _DCPRule._timeRangeEnd);
00144     // Reset the number of seconds
00145     _DCPRule._itSeconds = 0;
00146 }
00147
00148 // //////////////////////////////////////
00149 storePOS ::
00150 storePOS (DCPRuleStruct& ioDCPRule)
00151 : ParserSemanticAction (ioDCPRule) {
00152 }
00153
00154 // //////////////////////////////////////
00155 void storePOS::operator() (std::vector<char> iChar,
00156                             boost::spirit::qi::unused_type,
00157                             boost::spirit::qi::unused_type) const {
00158     stdair::AirlineCode_T lPOS (iChar.begin(), iChar.end());
00159     _DCPRule._pos = lPOS;
00160     // DEBUG
00161     //STDAIR_LOG_DEBUG ("POS: " << _DCPRule._pos);
00162 }
00163
00164 // //////////////////////////////////////
00165 storeCabinCode ::
00166 storeCabinCode (DCPRuleStruct& ioDCPRule)
00167 : ParserSemanticAction (ioDCPRule) {
00168 }
00169
00170 // //////////////////////////////////////
00171 void storeCabinCode::operator() (char iChar,
00172                                 boost::spirit::qi::unused_type,
00173                                 boost::spirit::qi::unused_type) const {
00174     std::ostringstream ostr;
00175     ostr << iChar;
00176     std::string cabinCodeStr = ostr.str();
00177     const stdair::CabinCode_T lCabinCode (cabinCodeStr);
00178     _DCPRule._cabinCode = lCabinCode;
00179     // DEBUG
00180     //STDAIR_LOG_DEBUG ("Cabin Code: " << lCabinCode);
00181 }
00182
00183 // //////////////////////////////////////
00184 storeChannel ::
00185 storeChannel (DCPRuleStruct& ioDCPRule)
00186 : ParserSemanticAction (ioDCPRule) {
00187 }
00188
00189 // //////////////////////////////////////
00190 void storeChannel::operator() (std::vector<char> iChar,
00191                                 boost::spirit::qi::unused_type,
00192                                 boost::spirit::qi::unused_type) const {
00193     stdair::ChannelLabel_T lChannel (iChar.begin(), iChar.end());
00194     if (lChannel != "IN" && lChannel != "IF"
00195         && lChannel != "DN" && lChannel != "DF") {

```

```

00198         // DEBUG
00199         STDAIR_LOG_DEBUG ("Invalid channel " << lChannel);
00200     }
00201     _DCPRule._channel = lChannel;
00202     // DEBUG
00203     //STDAIR_LOG_DEBUG ("Channel: " << _DCPRule._channel);
00204 }
00205
00206 // //////////////////////////////////////
00207 storeAdvancePurchase ::
00208 storeAdvancePurchase (DCPRuleStruct& ioDCPRule)
00209     : ParserSemanticAction (ioDCPRule) {
00210 }
00211
00212 // //////////////////////////////////////
00213 void storeAdvancePurchase::operator() (unsigned int iAdvancePurchase,
00214                                         boost::spirit::qi::unused_type,
00215                                         boost::spirit::qi::unused_type) const
00216 {
00217     _DCPRule._advancePurchase = iAdvancePurchase;
00218     // DEBUG
00219     //STDAIR_LOG_DEBUG ( "Advance Purchase: " << _DCPRule._advancePurchase);
00220 }
00221
00222 // //////////////////////////////////////
00223 storeSaturdayStay ::
00224 storeSaturdayStay (DCPRuleStruct& ioDCPRule)
00225     : ParserSemanticAction (ioDCPRule) {
00226 }
00227
00228 // //////////////////////////////////////
00229 void storeSaturdayStay::operator() (char iSaturdayStay,
00230                                     boost::spirit::qi::unused_type,
00231                                     boost::spirit::qi::unused_type) const {
00232     bool lBool = false;
00233     if (iSaturdayStay == 'T') {
00234         lBool = true;
00235     } else {
00236         if (iSaturdayStay != 'F') {
00237             // DEBUG
00238             STDAIR_LOG_DEBUG ("Invalid saturdayStay char " << iSaturdayStay);
00239         }
00240     }
00241     stdair::SaturdayStay_T lSaturdayStay (lBool);
00242     _DCPRule._saturdayStay = lSaturdayStay;
00243     // DEBUG
00244     //STDAIR_LOG_DEBUG ("Saturday Stay: " << _DCPRule._saturdayStay);
00245 }
00246
00247 // //////////////////////////////////////
00248 storeChangeFees ::
00249 storeChangeFees (DCPRuleStruct& ioDCPRule)
00250     : ParserSemanticAction (ioDCPRule) {
00251 }
00252
00253 // //////////////////////////////////////
00254 void storeChangeFees::operator() (char iChangefees,
00255                                     boost::spirit::qi::unused_type,
00256                                     boost::spirit::qi::unused_type) const {
00257     bool lBool = false;
00258     if (iChangefees == 'T') {
00259         lBool = true;
00260     } else {
00261         if (iChangefees != 'F') {
00262             // DEBUG
00263             STDAIR_LOG_DEBUG ("Invalid change fees char " << iChangefees);

```

```

00264     }
00265     }
00266     stdair::ChangeFees_T lChangefees (lBool);
00267     _DCPRule._changeFees = lChangefees;
00268     // DEBUG
00269     //STDAIR_LOG_DEBUG ("Change fees: " << _DCPRule._changeFees);
00270 }
00271
00272 // //////////////////////////////////////
00273 storeNonRefundable ::
00274 storeNonRefundable (DCPRuleStruct& ioDCPRule)
00275 : ParserSemanticAction (ioDCPRule) {
00276 }
00277
00278 // //////////////////////////////////////
00279 void storeNonRefundable::operator() (char iNonRefundable,
00280                                     boost::spirit::qi::unused_type,
00281                                     boost::spirit::qi::unused_type) const {
00282     bool lBool = false;
00283     if (iNonRefundable == 'T') {
00284         lBool = true;
00285     } else {
00286         if (iNonRefundable != 'F') {
00287             // DEBUG
00288             STDAIR_LOG_DEBUG ("Invalid non refundable char " << iNonRefundable);
00289         }
00290     }
00291     stdair::NonRefundable_T lNonRefundable (lBool);
00292     _DCPRule._nonRefundable = lNonRefundable;
00293     // DEBUG
00294     //STDAIR_LOG_DEBUG ("Non refundable: " << _DCPRule._nonRefundable);
00295 }
00296
00297 // //////////////////////////////////////
00298 storeMinimumStay ::
00299 storeMinimumStay (DCPRuleStruct& ioDCPRule)
00300 : ParserSemanticAction (ioDCPRule) {
00301 }
00302
00303 // //////////////////////////////////////
00304 void storeMinimumStay::operator() (unsigned int iMinStay,
00305                                   boost::spirit::qi::unused_type,
00306                                   boost::spirit::qi::unused_type) const {
00307     _DCPRule._minimumStay = iMinStay;
00308     // DEBUG
00309     //STDAIR_LOG_DEBUG ("Minimum Stay: " << _DCPRule._minimumStay );
00310 }
00311
00312 // //////////////////////////////////////
00313 storeDCP ::
00314 storeDCP (DCPRuleStruct& ioDCPRule)
00315 : ParserSemanticAction (ioDCPRule) {
00316 }
00317
00318 // //////////////////////////////////////
00319 void storeDCP::operator() (double iDCP,
00320                           boost::spirit::qi::unused_type,
00321                           boost::spirit::qi::unused_type) const {
00322     _DCPRule._DCP = iDCP;
00323     // DEBUG
00324     //STDAIR_LOG_DEBUG ("DCP: " << _DCPRule._DCP);
00325 }
00326
00327 // //////////////////////////////////////
00328 storeAirlineCode ::
00329 storeAirlineCode (DCPRuleStruct& ioDCPRule)
00330 : ParserSemanticAction (ioDCPRule) {

```



```

00331     }
00332
00333     ///////////////////////////////////////////////////////////////////
00334 void storeAirlineCode::operator() (std::vector<char> iChar,
00335                                   boost::spirit::qi::unused_type,
00336                                   boost::spirit::qi::unused_type) const {
00337
00338     bool lAlreadyInTheList = false;
00339     stdair::AirlineCode_T lAirlineCode (iChar.begin(), iChar.end());
00340     // Update the airline code
00341     _DCPRule._airlineCode = lAirlineCode;
00342     // Test if the DCPRule Struct stands for interline products
00343     if (_DCPRule._airlineCodeList.size() > 0) {
00344         _DCPRule._classCodeListOfList.push_back(_DCPRule._classCodeList);
00345         _DCPRule._classCodeList.clear();
00346         // Update the number of airlines if necessary
00347         std::vector<stdair::AirlineCode_T>::iterator Airline_iterator;
00348         for (Airline_iterator = _DCPRule._airlineCodeList.begin();
00349              Airline_iterator != _DCPRule._airlineCodeList.end();
00350              ++Airline_iterator) {
00351             stdair::AirlineCode_T lPreviousAirlineCode =
00352                 *Airline_iterator;
00353             if (lPreviousAirlineCode == lAirlineCode) {
00354                 lAlreadyInTheList = true;
00355                 /*STDAIR_LOG_DEBUG ("Airline Code Already Existing: "
00356                                     << lAirlineCode);*/
00357             }
00358         }
00359         if (lAlreadyInTheList == false) {
00360             /*STDAIR_LOG_DEBUG ("New Airline Code: "
00361                                 << lAirlineCode);*/
00362             _DCPRule._airlineCodeList.push_back(lAirlineCode);
00363             _DCPRule._classCodeList.clear();
00364         }
00365     } else {
00366         /*STDAIR_LOG_DEBUG ("First Airline Code: "
00367                             << lAirlineCode);*/
00368         _DCPRule._airlineCodeList.push_back (lAirlineCode);
00369     }
00370     // DEBUG
00371     //STDAIR_LOG_DEBUG ( "Airline code: " << lAirlineCode);
00372 }
00373
00374 ///////////////////////////////////////////////////////////////////
00375 storeClass ::
00376 storeClass (DCPRuleStruct& ioDCPRule)
00377 : ParserSemanticAction (ioDCPRule) {
00378 }
00379
00380 ///////////////////////////////////////////////////////////////////
00381 void storeClass::operator() (std::vector<char> iChar,
00382                              boost::spirit::qi::unused_type,
00383                              boost::spirit::qi::unused_type) const {
00384     std::ostringstream ostr;
00385     for (std::vector<char>::const_iterator lItVector = iChar.begin();
00386          lItVector != iChar.end();
00387          lItVector++) {
00388         ostr << *lItVector;
00389     }
00390     std::string classCodeStr = ostr.str();
00391     // Insertion of this class Code list in the whole classCode name
00392     _DCPRule._classCodeList.push_back(classCodeStr);
00393     // DEBUG
00394     // STDAIR_LOG_DEBUG ("Class Code: " << classCodeStr);
00395 }
00396
00397 ///////////////////////////////////////////////////////////////////

```

```

00398     doEndDCP::
00399     doEndDCP (stdair::BomRoot& ioBomRoot,
00400               DCPRuleStruct& ioDCPRule)
00401     : ParserSemanticAction (ioDCPRule),
00402       _bomRoot (ioBomRoot) {
00403     }
00404
00405     // //////////////////////////////////////
00406     void doEndDCP::operator() (boost::spirit::qi::unused_type,
00407                               boost::spirit::qi::unused_type,
00408                               boost::spirit::qi::unused_type) const {
00409         // DEBUG
00410         // STDAIR_LOG_DEBUG ("Do End");
00411         // Generation of the DCP rule object.
00412         _DCPRule._classCodeListOfList.push_back(_DCPRule._classCodeList);
00413         DCPRuleGenerator::createDCPRule (_bomRoot, _DCPRule);
00414         STDAIR_LOG_DEBUG(_DCPRule.describe());
00415     }
00416
00417     // //////////////////////////////////////
00418     //
00419     // Utility Parsers
00420     //
00421     // //////////////////////////////////////
00422     namespace bsq = boost::spirit::qi;
00423     namespace bsa = boost::spirit::ascii;
00424
00425     stdair::int1_p_t int1_p;
00426
00427     stdair::uint2_p_t uint2_p;
00428
00429     stdair::uint4_p_t uint4_p;
00430
00431     stdair::uint1_4_p_t uint1_4_p;
00432
00433     stdair::hour_p_t hour_p;
00434     stdair::minute_p_t minute_p;
00435     stdair::second_p_t second_p;
00436
00437     stdair::year_p_t year_p;
00438     stdair::month_p_t month_p;
00439     stdair::day_p_t day_p;
00440
00441     // //////////////////////////////////////
00442     // (Boost Spirit) Grammar Definition
00443     // //////////////////////////////////////
00444
00445     // //////////////////////////////////////
00446     DCPRuleParser::DCPRuleParser (stdair::BomRoot& ioBomRoot,
00447                                   DCPRuleStruct& ioDCPRule) :
00448         DCPRuleParser::base_type(start),
00449         _bomRoot(ioBomRoot), _DCPRule(ioDCPRule) {
00450
00451         start = *(comments | DCP_rule);
00452
00453         comments = (bsq::lexeme[bsq::repeat(2)[bsa::char_('/')]
00454                               >> +(bsa::char_ - bsq::eol)
00455                               >> bsq::eol]
00456                   | bsq::lexeme[bsa::char_('/') >> bsa::char_('*')
00457                               >> +(bsa::char_ - bsa::char_('*'))
00458                               >> bsa::char_('*') >> bsa::char_('/')]);
00459
00460         DCP_rule = DCP_key
00461                   >> +( ' ; ' >> segment )
00462                   >> DCP_rule_end[doEndDCP(_bomRoot, _DCPRule)];
00463
00464         DCP_rule_end = bsa::char_(';');

```

```

00472
00473     DCP_key = DCP_id
00474     >> ';' >> origin >> ';' >> destination
00475     >> ';' >> dateRangeStart >> ';' >> dateRangeEnd
00476     >> ';' >> timeRangeStart >> ';' >> timeRangeEnd
00477     >> ';' >> position >> ';' >> cabinCode >> ';' >> channel
00478     >> ';' >> advancePurchase >> ';' >> saturdayStay
00479     >> ';' >> changeFees >> ';' >> nonRefundable
00480     >> ';' >> minimumStay >> ';' >> DCP;
00481
00482     DCP_id = uint1_4_p[storeDCPId(_DCPRule)];
00483
00484     origin = bsq::repeat(3)[bsa::char_("A-Z")][storeOrigin(_DCPRule)];
00485
00486     destination =
00487         bsq::repeat(3)[bsa::char_("A-Z")][storeDestination(_DCPRule)];
00488
00489     dateRangeStart = date[storeDateRangeStart(_DCPRule)];
00490
00491     dateRangeEnd = date[storeDateRangeEnd(_DCPRule)];
00492
00493     date = bsq::lexeme
00494         [year_p[boost::phoenix::ref(_DCPRule._itYear) = bsq::labels::_1]
00495         >> '-'
00496         >> month_p[boost::phoenix::ref(_DCPRule._itMonth) = bsq::labels::_1]
00497         >> '-'
00498         >> day_p[boost::phoenix::ref(_DCPRule._itDay) = bsq::labels::_1] ];
00499
00500     timeRangeStart = time[storeStartRangeTime(_DCPRule)];
00501
00502     timeRangeEnd = time[storeEndRangeTime(_DCPRule)];
00503
00504     time = bsq::lexeme
00505         [hour_p[boost::phoenix::ref(_DCPRule._itHours) = bsq::labels::_1]
00506         >> ':'
00507         >> minute_p[boost::phoenix::ref(_DCPRule._itMinutes) = bsq::labels::_1]
00508         >> - (':' >> second_p[boost::phoenix::ref(_DCPRule._itSeconds) = bsq::lab
00509         els::_1]) ];
00510
00510     position = bsq::repeat(3)[bsa::char_("A-Z")][storePOS(_DCPRule)];
00511
00512     cabinCode = bsa::char_("A-Z")[storeCabinCode(_DCPRule)];
00513
00514     channel = bsq::repeat(2)[bsa::char_("A-Z")][storeChannel(_DCPRule)];
00515
00516     advancePurchase = uint1_4_p[storeAdvancePurchase(_DCPRule)];
00517
00518     saturdayStay = bsa::char_("A-Z")[storeSaturdayStay(_DCPRule)];
00519
00520     changeFees = bsa::char_("A-Z")[storeChangeFees(_DCPRule)];
00521
00522     nonRefundable = bsa::char_("A-Z")[storeNonRefundable(_DCPRule)];
00523
00524     minimumStay = uint1_4_p[storeMinimumStay(_DCPRule)];
00525
00526     DCP = bsq::double_[storeDCP(_DCPRule)];
00527
00528     segment = bsq::repeat(2)[bsa::char_("A-Z")][storeAirlineCode(_DCPRule)]
00529         //>> ';'
00530         //>> bsa::char_("A-Z")[storeClass(_DCPRule)]
00531         >> +(';' >> list_class);
00532
00533     list_class = bsq::repeat(1,bsq::inf)[bsa::char_("A-Z")][storeClass(
00534         _DCPRule)];
00535
00535     //BOOST_SPIRIT_DEBUG_NODE (DCPRuleParser);

```

```

00536     BOOST_SPIRIT_DEBUG_NODE (start);
00537     BOOST_SPIRIT_DEBUG_NODE (comments);
00538     BOOST_SPIRIT_DEBUG_NODE (DCP_rule);
00539     BOOST_SPIRIT_DEBUG_NODE (DCP_rule_end);
00540     BOOST_SPIRIT_DEBUG_NODE (DCP_key);
00541     BOOST_SPIRIT_DEBUG_NODE (DCP_id);
00542     BOOST_SPIRIT_DEBUG_NODE (origin);
00543     BOOST_SPIRIT_DEBUG_NODE (destination);
00544     BOOST_SPIRIT_DEBUG_NODE (dateRangeStart);
00545     BOOST_SPIRIT_DEBUG_NODE (dateRangeEnd);
00546     BOOST_SPIRIT_DEBUG_NODE (date);
00547     BOOST_SPIRIT_DEBUG_NODE (timeRangeStart);
00548     BOOST_SPIRIT_DEBUG_NODE (timeRangeEnd);
00549     BOOST_SPIRIT_DEBUG_NODE (time);
00550     BOOST_SPIRIT_DEBUG_NODE (position);
00551     BOOST_SPIRIT_DEBUG_NODE (cabinCode);
00552     BOOST_SPIRIT_DEBUG_NODE (channel);
00553     BOOST_SPIRIT_DEBUG_NODE (advancePurchase);
00554     BOOST_SPIRIT_DEBUG_NODE (saturdayStay);
00555     BOOST_SPIRIT_DEBUG_NODE (changeFees);
00556     BOOST_SPIRIT_DEBUG_NODE (nonRefundable);
00557     BOOST_SPIRIT_DEBUG_NODE (minimumStay);
00558     BOOST_SPIRIT_DEBUG_NODE (DCP);
00559     BOOST_SPIRIT_DEBUG_NODE (segment);
00560     BOOST_SPIRIT_DEBUG_NODE (list_class);
00561 }
00562 }
00563
00564 //
00565 // Entry class for the file parser
00566 //
00567 //
00568 // //////////////////////////////////////
00569 DCPRuleFileParser::
00570 DCPRuleFileParser (stdair::BomRoot& ioBomRoot,
00571                    const stdair::Filename_T& iFilename)
00572 : _filename (iFilename), _bomRoot (ioBomRoot) {
00573     init();
00574 }
00575
00576 // //////////////////////////////////////
00577 void DCPRuleFileParser::init() {
00578     // Check that the file exists and is readable
00579     const bool doesExistAndIsReadable =
00580         stdair::BasFileMgr::doesExistAndIsReadable (_filename);
00581     if (doesExistAndIsReadable == false) {
00582         STDAIR_LOG_ERROR ("The DCP schedule file " << _filename
00583             << " does not exist or can not be read.");
00584         throw DCPInputFileNotFoundException ("The DCP file " + _filename + " does n
00585             ot exist or can not be read");
00586     }
00587 }
00588
00589 // //////////////////////////////////////
00590 bool DCPRuleFileParser::generateDCPRules () {
00591     STDAIR_LOG_DEBUG ("Parsing DCP input file: " << _filename);
00592
00593     // File to be parsed
00594     const std::string* lFileName = &_filename;
00595     const char *lChar = (*lFileName).c_str();
00596     std::ifstream fileToBeParsed(lChar, std::ios_base::in);
00597
00598     // Check the filename exists and can be open
00599     if (fileToBeParsed == false) {

```

```
00604         STDAIR_LOG_ERROR ("The DCP file " << _filename << " can not be open."
00605                             << std::endl);
00606
00607         throw DCPInputFileNotFoundException ("The file " + _filename + " does not e
xist or can not be read");
00608     }
00609
00610     // Create an input iterator
00611     stdair::base_iterator_t inputBegin (fileToBeParsed);
00612
00613     // Convert input iterator to an iterator usable by spirit parser
00614     stdair::iterator_t
00615         start (boost::spirit::make_default_multi_pass (inputBegin));
00616     stdair::iterator_t end;
00617
00618     // Initialise the parser (grammar) with the helper/staging structure.
00619     DCPParserHelper::DCPRuleParser lFPParser(_bomRoot, _DCPRule);
00620
00621     // Launch the parsing of the file and, thanks to the doEndDCP
00622     // call-back structure, the building of the whole BomRoot BOM
00623
00624     const bool hasParsingBeenSuccesful =
00625         boost::spirit::qi::phrase_parse (start, end, lFPParser,
00626                                           boost::spirit::ascii::space);
00627
00628     if (hasParsingBeenSuccesful == false) {
00629         // TODO: decide whether to throw an excegption
00630         STDAIR_LOG_ERROR ("Parsing of DCP input file: " << _filename
00631                             << " failed");
00632     }
00633     if (start != end) {
00634         // TODO: decide whether to throw an exception
00635         STDAIR_LOG_ERROR ("Parsing of DCP input file: " << _filename
00636                             << " failed");
00637     }
00638     if (hasParsingBeenSuccesful == true && start == end) {
00639         STDAIR_LOG_DEBUG ("Parsing of DCP input file: " << _filename
00640                             << " succeeded");
00641     }
00642     return hasParsingBeenSuccesful;
00643 }
00644
00645 }
```

## 25.171 airinv/command/vault/DCPParserHelper.hpp File Reference

```
#include <stdair/basic/BasParserTypes.hpp>
#include <stdair/command/CmdAbstract.hpp>
#include <airinv/AIRINV_Types.hpp>
#include <airinv/bom/DCPRuleStruct.hpp>
```

### Classes

- struct [AIRINV::DCPParserHelper::ParserSemanticAction](#)
- struct [AIRINV::DCPParserHelper::storeDCPIId](#)
- struct [AIRINV::DCPParserHelper::storeOrigin](#)
- struct [AIRINV::DCPParserHelper::storeDestination](#)
- struct [AIRINV::DCPParserHelper::storeDateRangeStart](#)
- struct [AIRINV::DCPParserHelper::storeDateRangeEnd](#)
- struct [AIRINV::DCPParserHelper::storeStartRangeTime](#)
- struct [AIRINV::DCPParserHelper::storeEndRangeTime](#)
- struct [AIRINV::DCPParserHelper::storePOS](#)
- struct [AIRINV::DCPParserHelper::storeCabinCode](#)
- struct [AIRINV::DCPParserHelper::storeChannel](#)
- struct [AIRINV::DCPParserHelper::storeAdvancePurchase](#)
- struct [AIRINV::DCPParserHelper::storeSaturdayStay](#)
- struct [AIRINV::DCPParserHelper::storeChangeFees](#)
- struct [AIRINV::DCPParserHelper::storeNonRefundable](#)
- struct [AIRINV::DCPParserHelper::storeMinimumStay](#)
- struct [AIRINV::DCPParserHelper::storeDCP](#)
- struct [AIRINV::DCPParserHelper::storeAirlineCode](#)
- struct [AIRINV::DCPParserHelper::storeClass](#)
- struct [AIRINV::DCPParserHelper::doEndDCP](#)
- struct [AIRINV::DCPParserHelper::DCPRuleParser](#)
- class [AIRINV::DCPRuleFileParser](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)
- namespace [AIRINV::DCPParserHelper](#)

**25.172 DCPParserHelper.hpp**

```

00001 #ifndef __AIRINV_CMD_DCPPARSERHELPER_HPP
00002 #define __AIRINV_CMD_DCPPARSERHELPER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // StdAir
00008 // The stdair/basic/BasParserTypes.hpp header includes Boost.Spirit headers
00009 // #define BOOST_SPIRIT_DEBUG
00010 #include <stdair/basic/BasParserTypes.hpp>
00011 #include <stdair/command/CmdAbstract.hpp>
00012 // AirInv
00013 #include <airinv/AIRINV_Types.hpp>
00014 #include <airinv/bom/DCPRuleStruct.hpp>
00015
00016 // Forward declarations
00017 namespace stdair {
00018     class BomRoot;
00019 }
00020
00021 namespace AIRINV {
00022     namespace DCPParserHelper {
00023
00024         // //////////////////////////////////////
00025         // Semantic actions
00026         // //////////////////////////////////////
00029
00030         struct ParserSemanticAction {
00032             ParserSemanticAction (DCPRuleStruct&);
00034             DCPRuleStruct& _DCPRule;
00035         };
00036
00038         struct storeDCPId : public ParserSemanticAction {
00040             storeDCPId (DCPRuleStruct&);
00042             void operator() (unsigned int,
00043                             boost::spirit::qi::unused_type,
00044                             boost::spirit::qi::unused_type) const;
00045         };
00046
00048         struct storeOrigin : public ParserSemanticAction {
00050             storeOrigin (DCPRuleStruct&);
00052             void operator() (std::vector<char>,
00053                             boost::spirit::qi::unused_type,
00054                             boost::spirit::qi::unused_type) const;
00055         };
00056
00058         struct storeDestination : public ParserSemanticAction {
00060             storeDestination (DCPRuleStruct&);
00062             void operator() (std::vector<char>,
00063                             boost::spirit::qi::unused_type,
00064                             boost::spirit::qi::unused_type) const;
00065         };
00066
00068         struct storeDateRangeStart : public ParserSemanticAction {
00070             storeDateRangeStart (DCPRuleStruct&);
00072             void operator() (boost::spirit::qi::unused_type,
00073                             boost::spirit::qi::unused_type,
00074                             boost::spirit::qi::unused_type) const;
00075         };
00076
00078         struct storeDateRangeEnd : public ParserSemanticAction {
00080             storeDateRangeEnd (DCPRuleStruct&);
00082             void operator() (boost::spirit::qi::unused_type,
00083                             boost::spirit::qi::unused_type,

```

```
00084             boost::spirit::qi::unused_type) const;
00085     };
00086
00087     struct storeStartRangeTime : public ParserSemanticAction {
00088         storeStartRangeTime (DCPRuleStruct&);
00089         void operator() (boost::spirit::qi::unused_type,
00090             boost::spirit::qi::unused_type,
00091             boost::spirit::qi::unused_type) const;
00092     };
00093
00094     struct storeEndRangeTime : public ParserSemanticAction {
00095         storeEndRangeTime (DCPRuleStruct&);
00096         void operator() (boost::spirit::qi::unused_type,
00097             boost::spirit::qi::unused_type,
00098             boost::spirit::qi::unused_type) const;
00099     };
00100
00101     struct storePOS : public ParserSemanticAction {
00102         storePOS (DCPRuleStruct&);
00103         void operator() (std::vector<char>,
00104             boost::spirit::qi::unused_type,
00105             boost::spirit::qi::unused_type) const;
00106     };
00107
00108     struct storeCabinCode : public ParserSemanticAction {
00109         storeCabinCode (DCPRuleStruct&);
00110         void operator() (char,
00111             boost::spirit::qi::unused_type,
00112             boost::spirit::qi::unused_type) const;
00113     };
00114
00115     struct storeChannel : public ParserSemanticAction {
00116         storeChannel (DCPRuleStruct&);
00117         void operator() (std::vector<char>,
00118             boost::spirit::qi::unused_type,
00119             boost::spirit::qi::unused_type) const;
00120     };
00121
00122     struct storeAdvancePurchase : public ParserSemanticAction {
00123         storeAdvancePurchase (DCPRuleStruct&);
00124         void operator() (unsigned int,
00125             boost::spirit::qi::unused_type,
00126             boost::spirit::qi::unused_type) const;
00127     };
00128
00129     struct storeSaturdayStay : public ParserSemanticAction {
00130         storeSaturdayStay (DCPRuleStruct&);
00131         void operator() (char,
00132             boost::spirit::qi::unused_type,
00133             boost::spirit::qi::unused_type) const;
00134     };
00135
00136     struct storeChangeFees : public ParserSemanticAction {
00137         storeChangeFees (DCPRuleStruct&);
00138         void operator() (char,
00139             boost::spirit::qi::unused_type,
00140             boost::spirit::qi::unused_type) const;
00141     };
00142
00143     struct storeNonRefundable : public ParserSemanticAction {
00144         storeNonRefundable (DCPRuleStruct&);
00145         void operator() (char,
00146             boost::spirit::qi::unused_type,
00147             boost::spirit::qi::unused_type) const;
00148     };
00149
00150     struct storeMinimumStay : public ParserSemanticAction {
```



```

00180     storeMinimumStay (DCPRuleStruct&);
00182     void operator() (unsigned int,
00183                     boost::spirit::qi::unused_type,
00184                     boost::spirit::qi::unused_type) const;
00185 };
00186
00188 struct storeDCP : public ParserSemanticAction {
00190     storeDCP (DCPRuleStruct&);
00192     void operator() (double,
00193                     boost::spirit::qi::unused_type,
00194                     boost::spirit::qi::unused_type) const;
00195 };
00196
00198 struct storeAirlineCode : public ParserSemanticAction {
00200     storeAirlineCode (DCPRuleStruct&);
00202     void operator() (std::vector<char>,
00203                     boost::spirit::qi::unused_type,
00204                     boost::spirit::qi::unused_type) const;
00205 };
00206
00208 struct storeClass : public ParserSemanticAction {
00210     storeClass (DCPRuleStruct&);
00212     void operator() (std::vector<char>,
00213                     boost::spirit::qi::unused_type,
00214                     boost::spirit::qi::unused_type) const;
00215 };
00216
00218 struct doEndDCP : public ParserSemanticAction {
00220     doEndDCP (stdair::BomRoot&, DCPRuleStruct&);
00222     void operator() (boost::spirit::qi::unused_type,
00223                     boost::spirit::qi::unused_type,
00224                     boost::spirit::qi::unused_type) const;
00226     stdair::BomRoot& _bomRoot;
00227 };
00228
00229
00231 //
00232 // (Boost Spirit) Grammar Definition
00233 //
00235
00304 struct DCPRuleParser :
00305     public boost::spirit::qi::grammar<stdair::iterator_t,
00306                                     boost::spirit::ascii::space_type> {
00307
00308     DCPRuleParser (stdair::BomRoot&, DCPRuleStruct&);
00309
00310     // Instantiation of rules
00311     boost::spirit::qi::rule<stdair::iterator_t,
00312                             boost::spirit::ascii::space_type>
00313     start, comments, DCP_rule, DCP_rule_end, DCP_key, DCP_id, origin,
00314     destination, dateRangeStart, dateRangeEnd, date, timeRangeStart,
00315     timeRangeEnd, time, position, cabinCode, channel, advancePurchase,
00316     saturdayStay, changeFees, nonRefundable, minimumStay, DCP,
00317     segment, list_class;
00318
00319     // Parser Context
00320     stdair::BomRoot& _bomRoot;
00321     DCPRuleStruct& _DCPRule;
00322 };
00323
00324 }
00325
00327 //
00328 // Entry class for the file parser
00329 //
00331
00337 class DCPRuleFileParser : public stdair::CmdAbstract {

```

```
00338 public:
00340     DCPRuleFileParser (stdair::BomRoot& ioBomRoot,
00341                         const stdair::Filename_T& iFilename);
00342
00344     bool generateDCPRules ();
00345
00346 private:
00348     void init();
00349
00350 private:
00351     // Attributes
00353     stdair::Filename_T _filename;
00354
00356     stdair::BomRoot& _bomRoot;
00357
00359     DCPRuleStruct _DCPRule;
00360 };
00361
00362 }
00363 #endif // __AIRINV_CMD_DCPPARSERHELPER_HPP
```

## 25.173 airinv/config/airinv-paths.hpp.in File Reference

### Defines

- `#define PACKAGE "@PACKAGE@"`
- `#define PACKAGE_NAME "@PACKAGE_NAME@"`
- `#define PACKAGE_VERSION "@PACKAGE_VERSION@"`
- `#define PREFIXDIR "@prefix@"`
- `#define EXEC_PREFIX "@exec_prefix@"`
- `#define BINDIR "@bindir@"`
- `#define LIBDIR "@libdir@"`
- `#define LIBEXECDIR "@libexecdir@"`
- `#define SBINDIR "@sbindir@"`
- `#define SYSCONFDIR "@sysconfdir@"`
- `#define INCLUDEDIR "@includedir@"`
- `#define DATAROOTDIR "@datarootdir@"`
- `#define DATADIR "@datadir@"`
- `#define DOCDIR "@docdir@"`
- `#define MANDIR "@mandir@"`
- `#define INFODIR "@infodir@"`
- `#define HTMLDIR "@htmldir@"`
- `#define PDFDIR "@pdfdir@"`
- `#define STDAIR_SAMPLE_DIR "@sampledir@"`

### 25.173.1 Define Documentation

#### 25.173.1.1 `#define PACKAGE "@PACKAGE@"`

Definition at line 4 of file [airinv-paths.hpp.in](#).

#### 25.173.1.2 `#define PACKAGE_NAME "@PACKAGE_NAME@"`

Definition at line 5 of file [airinv-paths.hpp.in](#).

#### 25.173.1.3 `#define PACKAGE_VERSION "@PACKAGE_VERSION@"`

Definition at line 6 of file [airinv-paths.hpp.in](#).

#### 25.173.1.4 `#define PREFIXDIR "@prefix@"`

Definition at line 7 of file [airinv-paths.hpp.in](#).

**25.173.1.5 #define EXEC\_PREFIX "@exec\_prefix@"**

Definition at line 8 of file [airinv-paths.hpp.in](#).

**25.173.1.6 #define BINDIR "@bindir@"**

Definition at line 9 of file [airinv-paths.hpp.in](#).

**25.173.1.7 #define LIBDIR "@libdir@"**

Definition at line 10 of file [airinv-paths.hpp.in](#).

**25.173.1.8 #define LIBEXECDIR "@libexecdir@"**

Definition at line 11 of file [airinv-paths.hpp.in](#).

**25.173.1.9 #define SBINDIR "@sbindir@"**

Definition at line 12 of file [airinv-paths.hpp.in](#).

**25.173.1.10 #define SYSCONFDIR "@sysconfdir@"**

Definition at line 13 of file [airinv-paths.hpp.in](#).

**25.173.1.11 #define INCLUDEDIR "@includedir@"**

Definition at line 14 of file [airinv-paths.hpp.in](#).

**25.173.1.12 #define DATAROOTDIR "@datarootdir@"**

Definition at line 15 of file [airinv-paths.hpp.in](#).

**25.173.1.13 #define DATADIR "@datadir@"**

Definition at line 16 of file [airinv-paths.hpp.in](#).

**25.173.1.14 #define DOCDIR "@docdir@"**

Definition at line 17 of file [airinv-paths.hpp.in](#).

**25.173.1.15 #define MANDIR "@mandir@"**

Definition at line 18 of file [airinv-paths.hpp.in](#).

**25.173.1.16 #define INFODIR "@infodir@"**

Definition at line 19 of file [airinv-paths.hpp.in](#).

**25.173.1.17 #define HTMLDIR "@htmldir@"**

Definition at line 20 of file [airinv-paths.hpp.in](#).

**25.173.1.18 #define PDFDIR "@pdfdir@"**

Definition at line 21 of file [airinv-paths.hpp.in](#).

**25.173.1.19 #define STDAIR\_SAMPLE\_DIR "@sampledir@"**

Definition at line 22 of file [airinv-paths.hpp.in](#).

## 25.174 airinv-paths.hpp.in

```
00001 #ifndef __AIRINV_PATHS_HPP__
00002 #define __AIRINV_PATHS_HPP__
00003
00004 #define PACKAGE "@PACKAGE@"
00005 #define PACKAGE_NAME "@PACKAGE_NAME@"
00006 #define PACKAGE_VERSION "@PACKAGE_VERSION@"
00007 #define PREFIXDIR "@prefix@"
00008 #define EXEC_PREFIX "@exec_prefix@"
00009 #define BINDIR "@bindir@"
00010 #define LIBDIR "@libdir@"
00011 #define LIBEXECDIR "@libexecdir@"
00012 #define SBINDIR "@sbindir@"
00013 #define SYSCONFDIR "@sysconfdir@"
00014 #define INCLUDEDIR "@includedir@"
00015 #define DATAROOTDIR "@datarootdir@"
00016 #define DATADIR "@datadir@"
00017 #define DOCDIR "@docdir@"
00018 #define MANDIR "@mandir@"
00019 #define INFODIR "@infodir@"
00020 #define HTMLDIR "@htmldir@"
00021 #define PDFDIR "@pdfdir@"
00022 #define STDAIR_SAMPLE_DIR "@sampledir@"
00023
00024 #endif // __AIRINV_PATHS_HPP__
```

## 25.175 airinv/factory/FacAirinvMasterServiceContext.cpp File Reference

```
#include <cassert>
#include <stdair/service/FacSupervisor.hpp>
#include <airinv/factory/FacAirinvMasterServiceContext.hpp>
#include <airinv/service/AIRINV_Master_ServiceContext.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.176 FacAirinvMasterServiceContext.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/FacSupervisor.hpp>
00008 // AirInv
00009 #include <airinv/factory/FacAirinvMasterServiceContext.hpp>
00010 #include <airinv/service/AIRINV_Master_ServiceContext.hpp>
00011
00012 namespace AIRINV {
00013
00014     FacAirinvMasterServiceContext* FacAirinvMasterServiceContext::_instance = NULL;
00015
00016     // //////////////////////////////////////
00017     FacAirinvMasterServiceContext::~FacAirinvMasterServiceContext() {
00018         _instance = NULL;
00019     }
00020
00021     // //////////////////////////////////////
00022     FacAirinvMasterServiceContext& FacAirinvMasterServiceContext::instance() {
00023
00024         if (_instance == NULL) {
00025             _instance = new FacAirinvMasterServiceContext();
00026             assert (_instance != NULL);
00027
00028             stdair::FacSupervisor::instance().registerServiceFactory (_instance);
00029         }
00030         return *_instance;
00031     }
00032
00033     // //////////////////////////////////////
00034     AIRINV_Master_ServiceContext& FacAirinvMasterServiceContext::create() {
00035         AIRINV_Master_ServiceContext* aAIRINV_Master_ServiceContext_ptr = NULL;
00036
00037         aAIRINV_Master_ServiceContext_ptr = new AIRINV_Master_ServiceContext();
00038         assert (aAIRINV_Master_ServiceContext_ptr != NULL);
00039
00040         // The new object is added to the Bom pool
00041         _pool.push_back (aAIRINV_Master_ServiceContext_ptr);
00042
00043         return *aAIRINV_Master_ServiceContext_ptr;
00044     }
00045
00046 }

```



## 25.177 airinv/factory/FacAirinvMasterServiceContext.hpp File Reference

```
#include <string>
#include <stdair/service/FacServiceAbstract.hpp>
```

### Classes

- class [AIRINV::FacAirinvMasterServiceContext](#)  
*Factory for Bucket.*

### Namespaces

- namespace [AIRINV](#)

**25.178 FacAirinvMasterServiceContext.hpp**

```
00001 #ifndef __AIRINV_FAC_FACAIRINVMASTERSERVICECONTEXT_HPP
00002 #define __AIRINV_FAC_FACAIRINVMASTERSERVICECONTEXT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/service/FacServiceAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00014     class AIRINV_Master_ServiceContext;
00015
00016     class FacAirinvMasterServiceContext : public stdair::FacServiceAbstract {
00020     public:
00021
00022         static FacAirinvMasterServiceContext& instance();
00026
00027         ~FacAirinvMasterServiceContext();
00032
00033         AIRINV_Master_ServiceContext& create();
00037
00038     protected:
00039         FacAirinvMasterServiceContext() {}
00044
00045     private:
00046         static FacAirinvMasterServiceContext* _instance;
00048     };
00049
00050 }
00051
00052 #endif // __AIRINV_FAC_FACAIRINVMASTERSERVICECONTEXT_HPP
```

## 25.179 airinv/factory/FacAirinvServiceContext.cpp File Reference

```
#include <cassert>
#include <stdair/service/FacSupervisor.hpp>
#include <airinv/factory/FacAirinvServiceContext.hpp>
#include <airinv/service/AIRINV_ServiceContext.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.180 FacAirinvServiceContext.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // StdAir
00007 #include <stdair/service/FacSupervisor.hpp>
00008 // AirInv
00009 #include <airinv/factory/FacAirinvServiceContext.hpp>
00010 #include <airinv/service/AIRINV_ServiceContext.hpp>
00011
00012 namespace AIRINV {
00013
00014     FacAirinvServiceContext* FacAirinvServiceContext::_instance = NULL;
00015
00016     // //////////////////////////////////////
00017     FacAirinvServiceContext::~FacAirinvServiceContext() {
00018         _instance = NULL;
00019     }
00020
00021     // //////////////////////////////////////
00022     FacAirinvServiceContext& FacAirinvServiceContext::instance() {
00023
00024         if (_instance == NULL) {
00025             _instance = new FacAirinvServiceContext();
00026             assert (_instance != NULL);
00027
00028             stdair::FacSupervisor::instance().registerServiceFactory (_instance);
00029         }
00030         return *_instance;
00031     }
00032
00033     // //////////////////////////////////////
00034     AIRINV_ServiceContext& FacAirinvServiceContext::create() {
00035         AIRINV_ServiceContext* aAIRINV_ServiceContext_ptr = NULL;
00036
00037         aAIRINV_ServiceContext_ptr = new AIRINV_ServiceContext();
00038         assert (aAIRINV_ServiceContext_ptr != NULL);
00039
00040         // The new object is added to the Bom pool
00041         _pool.push_back (aAIRINV_ServiceContext_ptr);
00042
00043         return *aAIRINV_ServiceContext_ptr;
00044     }
00045
00046 }

```

## 25.181 airinv/factory/FacAirinvServiceContext.hpp File Reference

```
#include <string>
#include <stdair/service/FacServiceAbstract.hpp>
```

### Classes

- class [AIRINV::FacAirinvServiceContext](#)

### Namespaces

- namespace [AIRINV](#)

## 25.182 FacAirinvServiceContext.hpp

```
00001 #ifndef __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP
00002 #define __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/service/FacServiceAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00014     class AIRINV_ServiceContext;
00015
00016     class FacAirinvServiceContext : public stdair::FacServiceAbstract {
00017     public:
00018
00019         static FacAirinvServiceContext& instance();
00020
00021         ~FacAirinvServiceContext();
00022
00023         AIRINV_ServiceContext& create();
00024
00025     protected:
00026         FacAirinvServiceContext() {}
00027
00028     private:
00029         static FacAirinvServiceContext* _instance;
00030     };
00031 }
00032 #endif // __AIRINV_FAC_FACAIRINVSERVICECONTEXT_HPP
```

## 25.183 airinv/factory/FacBomAbstract.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <boost/functional/hash/hash.hpp>
#include <airinv/bom/BomAbstract.hpp>
#include <airinv/factory/FacBomAbstract.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.184 FacBomAbstract.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // Boost (STL Extension)
00008 #include <boost/functional/hash/hash.hpp>
00009 // Airinv
00010 #include <airinv/bom/BomAbstract.hpp>
00011 #include <airinv/factory/FacBomAbstract.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 FacBomAbstract::~FacBomAbstract() {
00017     clean ();
00018 }
00019
00020 // //////////////////////////////////////
00021 void FacBomAbstract::clean() {
00022     for (BomPool_T::iterator itBom = _pool.begin();
00023          itBom != _pool.end(); itBom++) {
00024         BomAbstract* currentBom_ptr = *itBom;
00025         assert (currentBom_ptr != NULL);
00026
00027         delete (currentBom_ptr); currentBom_ptr = NULL;
00028     }
00029
00030     // Empty the pool of Factories
00031     _pool.clear();
00032 }
00033
00034 // //////////////////////////////////////
00035 std::size_t FacBomAbstract::getID (const BomAbstract* iBomAbstract_ptr) {
00036     const void* lPtr = iBomAbstract_ptr;
00037     boost::hash<const void*> ptr_hash;
00038     const std::size_t lID = ptr_hash (lPtr);
00039     return lID;
00040 }
00041
00042 // //////////////////////////////////////
00043 std::size_t FacBomAbstract::getID (const BomAbstract& iBomAbstract) {
00044     return getID (&iBomAbstract);
00045 }
00046
00047 // //////////////////////////////////////
00048 std::string FacBomAbstract::getIDString(const BomAbstract* iBomAbstract_ptr) {
00049     const std::size_t lID = getID (iBomAbstract_ptr);
00050     std::ostringstream oStr;
00051     oStr << lID;
00052     return oStr.str();
00053 }
00054
00055 // //////////////////////////////////////
00056 std::string FacBomAbstract::getIDString (const BomAbstract& iBomAbstract) {
00057     return getIDString (&iBomAbstract);
00058 }
00059
00060 }

```



## 25.185 airinv/factory/FacBomAbstract.hpp File Reference

```
#include <string>
#include <vector>
```

### Classes

- class [AIRINV::FacBomAbstract](#)

### Namespaces

- namespace [AIRINV](#)

**25.186 FacBomAbstract.hpp**

```

00001 #ifndef __AIRINV_FAC_FACBOMABSTRACT_HPP
00002 #define __AIRINV_FAC_FACBOMABSTRACT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010
00011 namespace AIRINV {
00012
00013     // Forward declarations
00014     class BomAbstract;
00015
00016     class FacBomAbstract {
00017     friend class FacSupervisor;
00018     public:
00019
00020
00022         typedef std::vector<BomAbstract*> BomPool_T;
00023
00025         static std::size_t getID (const BomAbstract*);
00026
00028         static std::size_t getID (const BomAbstract&);
00029
00032         static std::string getIDString (const BomAbstract*);
00033
00036         static std::string getIDString (const BomAbstract&);
00037
00038     protected:
00041         FacBomAbstract() {}
00042         FacBomAbstract(const FacBomAbstract&) {}
00043
00045         virtual ~FacBomAbstract();
00046
00047     private:
00049         void clean();
00050
00051     protected:
00053         BomPool_T _pool;
00054     };
00055 }
00056 #endif // __AIRINV_FAC_FACBOMABSTRACT_HPP

```

## 25.187 airinv/factory/FacServiceAbstract.cpp File Reference

```
#include <cassert>
#include <airinv/service/ServiceAbstract.hpp>
#include <airinv/factory/FacServiceAbstract.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.188 FacServiceAbstract.cpp**

```
00001 // ////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AIRINV
00007 #include <airinv/service/ServiceAbstract.hpp>
00008 #include <airinv/factory/FacServiceAbstract.hpp>
00009
00010 namespace AIRINV {
00011
00012 // ////////////////////////////////////////
00013 FacServiceAbstract::~FacServiceAbstract () {
00014     clean ();
00015 }
00016
00017 // ////////////////////////////////////////
00018 void FacServiceAbstract::clean() {
00019     for (ServicePool_T::iterator itService = _pool.begin();
00020          itService != _pool.end(); itService++) {
00021         ServiceAbstract* currentService_ptr = *itService;
00022         assert (currentService_ptr != NULL);
00023
00024         delete (currentService_ptr); currentService_ptr = NULL;
00025     }
00026
00027     // Empty the pool of Service Factories
00028     _pool.clear();
00029 }
00030
00031 }
```

## 25.189 airinv/factory/FacServiceAbstract.hpp File Reference

```
#include <vector>
```

### Classes

- class [AIRINV::FacServiceAbstract](#)

### Namespaces

- namespace [AIRINV](#)

## 25.190 FacServiceAbstract.hpp

```
00001 #ifndef __AIRINV_FAC_FACSERVICEABSTRACT_HPP
00002 #define __AIRINV_FAC_FACSERVICEABSTRACT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <vector>
00009
00010 namespace AIRINV {
00011
00012     // Forward declarations
00013     class ServiceAbstract;
00014
00016     class FacServiceAbstract {
00017     public:
00018
00020         typedef std::vector<ServiceAbstract*> ServicePool_T;
00021
00023         virtual ~FacServiceAbstract();
00024
00026         void clean();
00027
00028     protected:
00031         FacServiceAbstract() {}
00032
00034         ServicePool_T _pool;
00035     };
00036
00037 }
00038 #endif // __AIRINV_FAC_FACSERVICEABSTRACT_HPP
```

## 25.191 airinv/factory/FacSupervisor.cpp File Reference

```
#include <cassert>
#include <airinv/factory/FacBomAbstract.hpp>
#include <airinv/factory/FacServiceAbstract.hpp>
#include <airinv/factory/FacSupervisor.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.192 FacSupervisor.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AIRINV
00007 #include <airinv/factory/FacBomAbstract.hpp>
00008 #include <airinv/factory/FacServiceAbstract.hpp>
00009 #include <airinv/factory/FacSupervisor.hpp>
00010
00011 namespace AIRINV {
00012
00013     FacSupervisor* FacSupervisor::_instance = NULL;
00014
00015     // //////////////////////////////////////
00016     FacSupervisor::FacSupervisor () {
00017     }
00018
00019     // //////////////////////////////////////
00020     FacSupervisor& FacSupervisor::instance () {
00021         if (_instance == NULL) {
00022             _instance = new FacSupervisor();
00023         }
00024
00025         return *_instance;
00026     }
00027
00028     // //////////////////////////////////////
00029     void FacSupervisor::
00030     registerBomFactory (FacBomAbstract* ioFacBomAbstract_ptr) {
00031         _bomPool.push_back (ioFacBomAbstract_ptr);
00032     }
00033
00034     // //////////////////////////////////////
00035     void FacSupervisor::
00036     registerServiceFactory (FacServiceAbstract* ioFacServiceAbstract_ptr) {
00037         _svcPool.push_back (ioFacServiceAbstract_ptr);
00038     }
00039
00040     // //////////////////////////////////////
00041     FacSupervisor::~FacSupervisor () {
00042         cleanBomLayer();
00043         cleanServiceLayer();
00044     }
00045
00046     // //////////////////////////////////////
00047     void FacSupervisor::cleanBomLayer () {
00048         for (BomFactoryPool_T::const_iterator itFactory = _bomPool.begin();
00049             itFactory != _bomPool.end(); itFactory++) {
00050             const FacBomAbstract* currentFactory_ptr = *itFactory;
00051             assert (currentFactory_ptr != NULL);
00052
00053             delete (currentFactory_ptr); currentFactory_ptr = NULL;
00054         }
00055
00056         // Empty the pool of Bom Factories
00057         _bomPool.clear();
00058     }
00059
00060     // //////////////////////////////////////
00061     void FacSupervisor::cleanServiceLayer () {
00062         for (ServiceFactoryPool_T::const_iterator itFactory = _svcPool.begin();
00063             itFactory != _svcPool.end(); itFactory++) {
00064             const FacServiceAbstract* currentFactory_ptr = *itFactory;
00065             assert (currentFactory_ptr != NULL);

```



```
00066
00067     delete (currentFactory_ptr); currentFactory_ptr = NULL;
00068 }
00069
00070 // Empty the pool of Service Factories
00071 _svcPool.clear();
00072 }
00073
00074 // //////////////////////////////////////
00075 void FacSupervisor::cleanFactory () {
00076     if (_instance != NULL) {
00077         _instance->cleanBomLayer();
00078         _instance->cleanServiceLayer();
00079     }
00080     delete (_instance); _instance = NULL;
00081 }
00082
00083 }
```

## 25.193 airinv/factory/FacSupervisor.hpp File Reference

```
#include <vector>
```

### Classes

- class [AIRINV::FacSupervisor](#)

### Namespaces

- namespace [AIRINV](#)

**25.194 FacSupervisor.hpp**

```

00001 #ifndef __AIRINV_FAC_FACSUPERVISOR_HPP
00002 #define __AIRINV_FAC_FACSUPERVISOR_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <vector>
00009
00010 namespace AIRINV {
00011
00012     // Forward declarations
00013     class FacBomAbstract;
00014     class FacServiceAbstract;
00015
00017     class FacSupervisor {
00018     public:
00019
00021         typedef std::vector<FacBomAbstract*> BomFactoryPool_T;
00022         typedef std::vector<FacServiceAbstract*> ServiceFactoryPool_T;
00023
00027         static FacSupervisor& instance();
00028
00033         void registerBomFactory (FacBomAbstract*);
00034
00039         void registerServiceFactory (FacServiceAbstract*);
00040
00044         void cleanBomLayer();
00045
00049         void cleanServiceLayer();
00050
00053         static void cleanFactory ();
00054
00058         ~FacSupervisor();
00059
00060     protected:
00065         FacSupervisor ();
00066         FacSupervisor (const FacSupervisor&) {}
00067
00068     private:
00069         static FacSupervisor* _instance;
00072
00074         BomFactoryPool_T _bomPool;
00075
00077         ServiceFactoryPool_T _svcPool;
00078     };
00079 }
00080 #endif // __AIRINV_FAC_FACSUPERVISOR_HPP

```

## 25.195 airinv/FlightRequestStatus.hpp File Reference

```
#include <string>
#include <stdair/basic/StructAbstract.hpp>
```

### Classes

- struct [AIRINV::FlightRequestStatus](#)

### Namespaces

- namespace [AIRINV](#)

**25.196 FlightRequestStatus.hpp**

```

00001 #ifndef __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP
00002 #define __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // StdAir
00010 #include <stdair/basic/StructAbstract.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct FlightRequestStatus : public stdair::StructAbstract {
00015     public:
00016         typedef enum {
00017             OK = 0,
00018             NOT_FOUND,
00019             INTERNAL_ERROR,
00020             LAST_VALUE
00021         } EN_FlightRequestStatus;
00022
00023         static const std::string& getLabel (const EN_FlightRequestStatus&);
00024
00025         static const std::string& getCodeLabel (const EN_FlightRequestStatus&);
00026
00027         static std::string describeLabels();
00028
00029         EN_FlightRequestStatus getCode() const;
00030
00031         const std::string describe() const;
00032
00033     public:
00034         FlightRequestStatus (const EN_FlightRequestStatus&);
00035         FlightRequestStatus (const std::string& iCode);
00036
00037     private:
00038         static const std::string _labels[LAST_VALUE];
00039         static const std::string _codeLabels[LAST_VALUE];
00040
00041     private:
00042         // ////////// Attributes //////////
00043         EN_FlightRequestStatus _code;
00044     };
00045
00046 }
00047
00048 #endif // __AIRINV_BAS_FLIGHTREQUESTSTATUS_HPP

```

## 25.197 airinv/server/AirInvClient.cpp File Reference

```
#include <string>
#include <iostream>
#include <zmq.hpp>
```

### Functions

- int [main](#) (int argc, char \*argv[])

#### 25.197.1 Function Documentation

##### 25.197.1.1 int main (int *argc*, char \* *argv*[])

Definition at line 11 of file [AirInvClient.cpp](#).

**25.198 AirInvClient.cpp**

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <string>
00006 #include <iostream>
00007 // ZeroMQ
00008 #include <zmq.hpp>
00009
00010 // ////////////////////////////////// M A I N //////////////////////////////////
00011 int main (int argc, char* argv[]) {
00012     // Prepare our context and socket
00013     zmq::context_t context (1);
00014     zmq::socket_t socket (context, ZMQ_REQ);
00015
00016     std::cout << "Connecting to hello world server..." << std::endl;
00017     socket.connect ("tcp://localhost:5555");
00018
00019     // Do 10 requests, waiting each time for a response
00020     for (int request_nbr = 0; request_nbr != 10; request_nbr++) {
00021         zmq::message_t request (6);
00022         memcpy ((void *) request.data (), "Hello", 5);
00023         std::cout << "Sending Hello " << request_nbr << "..." << std::endl;
00024         socket.send (request);
00025
00026         // Get the reply.
00027         zmq::message_t reply;
00028         socket.recv (&reply);
00029         std::cout << "Received World " << request_nbr << std::endl;
00030     }
00031     return 0;
00032 }
```

## 25.199 airinv/server/AirInvClient\_ASIO.cpp File Reference

```
#include <cassert>
#include <iostream>
#include <string>
#include <boost/asio.hpp>
#include <boost/array.hpp>
```

### Functions

- int [main](#) (int argc, char \*argv[ ])

#### 25.199.1 Function Documentation

##### 25.199.1.1 int main (int *argc*, char \* *argv*[ ])

Definition at line 14 of file [AirInvClient\\_ASIO.cpp](#).



**25.200 AirInvClient\_ASIO.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <iostream>
00007 #include <string>
00008 // Boost.ASIO
00009 #include <boost/asio.hpp>
00010 // Boost.Array
00011 #include <boost/array.hpp>
00012
00013 // ////////////////////////////////// M A I N //////////////////////////////////
00014 int main (int argc, char* argv[]) {
00015
00016     // Host name
00017     std::string lHostname = "localhost";
00018
00019     // Service name (as specified within /etc/services)
00020     // The "aria" service corresponds to the port 2624
00021     const std::string lServiceName = "aria";
00022
00023     try {
00024
00025         if (argc >= 2) {
00026             lHostname = argv[1];
00027         }
00028
00029         boost::asio::io_service lIOService;
00030
00031         boost::asio::ip::tcp::resolver lResolver (lIOService);
00032
00033         boost::asio::ip::tcp::resolver::query lQuery (lHostname, lServiceName);
00034
00035         boost::asio::ip::tcp::resolver::iterator itEndPoint =
00036             lResolver.resolve (lQuery);
00037         boost::asio::ip::tcp::resolver::iterator lEnd;
00038
00039         boost::asio::ip::tcp::socket lSocket (lIOService);
00040         boost::system::error_code lError = boost::asio::error::host_not_found;
00041
00042         //
00043         while (lError && itEndPoint != lEnd) {
00044             const boost::asio::ip::tcp::endpoint lEndPoint = *itEndPoint;
00045
00046             // DEBUG
00047             std::cout << "Testing end point: " << std::endl;
00048
00049             lSocket.close();
00050             lSocket.connect (lEndPoint, lError);
00051             ++itEndPoint;
00052         }
00053
00054         //
00055         if (lError) {
00056             throw boost::system::system_error (lError);
00057         }
00058         assert (!lError);
00059
00060         // DEBUG
00061         const boost::asio::ip::tcp::endpoint lValidEndPoint;
00062         std::cout << "Valid end point: " << lValidEndPoint << std::endl;
00063
00064         // Send a message to the server
00065         const std::string lMessage ("Hello AirInv Server!");

```

```
00066     boost::asio::write (lSocket, boost::asio::buffer (lMessage),
00067                         boost::asio::transfer_all(), lError);
00068
00069     // Read the reply from the server
00070     boost::array<char, 256> lBuffer;
00071
00072     size_t lLength = lSocket.read_some (boost::asio::buffer(lBuffer), lError);
00073
00074     // Some other error than connection closed cleanly by peer
00075     if (lError && lError != boost::asio::error::eof) {
00076         throw boost::system::system_error (lError);
00077     }
00078
00079     // DEBUG
00080     std::cout << "Reply from the server: ";
00081     std::cout.write (lBuffer.data(), lLength);
00082     std::cout << std::endl;
00083
00084 } catch (std::exception& lException) {
00085     std::cerr << lException.what() << std::endl;
00086 }
00087
00088 return 0;
00089 }
```

**25.201   airinv/server/AirInvServer.cpp File Reference**

**25.202 AirInvServer.cpp**

```

00001
00005 // //////////////////////////////////////
00006 // Import section
00007 // //////////////////////////////////////
00008 // STL
00009 #include <cassert>
00010 #include <sstream>
00011 #include <fstream>
00012 #include <string>
00013 #include <unistd.h>
00014 // Boost (Extended STL)
00015 #include <boost/program_options.hpp>
00016 #include <boost/tokenizer.hpp>
00017 // ZeroMQ
00018 #include <zmq.hpp>
00019 // StdAir
00020 #include <stdair/basic/BasLogParams.hpp>
00021 #include <stdair/basic/BasDBParams.hpp>
00022 #include <stdair/service/Logger.hpp>
00023 #include <stdair/stdair_json.hpp>
00024 // AirInvServer
00025 #include <airinv/config/airinv-paths.hpp>
00026 #include <airinv/AIRINV_Master_Service.hpp>
00027
00028 // ////////// Type definitions //////////
00029 typedef unsigned int ServerPort_T;
00030
00031 // ////////// Constants //////////
00032
00033 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinvServer.log");
00034
00035 const std::string K_AIRINV_DEFAULT_SERVER_PROTOCOL ("tcp://");
00036
00037
00038 const std::string K_AIRINV_DEFAULT_SERVER_ADDRESS ("*");
00039
00040
00041 const ServerPort_T K_AIRINV_DEFAULT_SERVER_PORT (5555);
00042
00043
00044 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00045                                                         "/invdump01.csv");
00046
00047 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00048                                                         "/schedule01.csv");
00049
00050 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00051                                                    "/ond01.csv");
00052
00053 const std::string K_AIRINV_DEFAULT_FRAT5_INPUT_FILENAME (STDAIR_SAMPLE_DIR
00054                                                           "/frat5.csv");
00055
00056 const std::string K_AIRINV_DEFAULT_FF_DISUTILITY_INPUT_FILENAME (
00057     STDAIR_SAMPLE_DIR
00058
00059     "/ffDisutility.csv
00060 ");
00061
00062 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00063                                                     "/yield01.csv");
00064
00065 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00066
00067 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00068
00069 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00070
00071 struct Command_T {
00072     typedef enum {
00073         NOP = 0,
00074         QUIT,
00075         DISPLAY,
00076         SELL,
00077         LAST_VALUE
00078     };

```

```

00091     } Type_T;
00092 };
00093
00094 // ////////// Parsing of Options & Configuration //////////
00095 // A helper function to simplify the main part.
00096 template<class T> std::ostream& operator<< (std::ostream& os,
00097                                           const std::vector<T>& v) {
00098     std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00099     return os;
00100 }
00101
00102 int readConfiguration (int argc, char* argv[], std::string& ioServerProtocol,
00103                       std::string& ioServerAddress, ServerPort_T& ioServerPort,
00104                       bool& ioIsBuiltin, bool& ioIsForSchedule,
00105                       stdair::Filename_T& ioInventoryFilename,
00106                       stdair::Filename_T& ioScheduleInputFilename,
00107                       stdair::Filename_T& ioODInputFilename,
00108                       stdair::Filename_T& ioFRAT5Filename,
00109                       stdair::Filename_T& ioFFDisutilityFilename,
00110                       stdair::Filename_T& ioYieldInputFilename,
00111                       std::string& ioLogFilename) {
00112     // Default for the built-in input
00113     ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00114
00115     // Default for the inventory or schedule option
00116     ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00117
00118     // Declare a group of options that will be allowed only on command line
00119     boost::program_options::options_description generic ("Generic options");
00120     generic.add_options()
00121         ("prefix", "print installation prefix")
00122         ("version,v", "print version string")
00123         ("help,h", "produce help message");
00124
00125     // Declare a group of options that will be allowed both on command
00126     // line and in config file
00127
00128     boost::program_options::options_description config ("Configuration");
00129     config.add_options()
00130         ("builtin,b",
00131          "The sample BOM tree can be either built-in or parsed from an input file. Th
00132          at latter must then be given with the -i/--inventory or -s/--schedule option")
00133         ("for_schedule,f",
00134          "The BOM tree should be built from a schedule file (instead of from an inven
00135          tory dump)")
00136         ("inventory,i",
00137          boost::program_options::value< std::string >(&ioInventoryFilename)->default_
00138          value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00139          "(CVS) input file for the inventory")
00140         ("schedule,s",
00141          boost::program_options::value< std::string >(&ioScheduleInputFilename)->defa
00142          ult_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00143          "(CVS) input file for the schedule")
00144         ("ond,o",
00145          boost::program_options::value< std::string >(&ioODInputFilename)->default_va
00146          lue(K_AIRINV_DEFAULT_OND_FILENAME),
00147          "(CVS) input file for the O&D")
00148         ("frat5,r",
00149          boost::program_options::value< std::string >(&ioFRAT5Filename)->default_valu
00150          e(K_AIRINV_DEFAULT_FRAT5_INPUT_FILENAME),
00151          "(CSV) input file for the FRAT5 Curve")
00152         ("ff_disutility,d",
00153          boost::program_options::value< std::string >(&ioFFDisutilityFilename)->defau
00154          lt_value(K_AIRINV_DEFAULT_FF_DISUTILITY_INPUT_FILENAME),
00155          "(CSV) input file for the FF disutility Curve")
00156         ("yield,y",
00157          boost::program_options::value< std::string >(&ioYieldInputFilename)->default

```

```

    _value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00152     "(CVS) input file for the yield")
00153     ("protocol,t",
00154      boost::program_options::value< std::string >(&ioServerProtocol)->default_val
ue(K_AIRINV_DEFAULT_SERVER_PROTOCOL),
00155      "Server protocol")
00156     ("address,a",
00157      boost::program_options::value< std::string >(&ioServerAddress)->default_valu
e(K_AIRINV_DEFAULT_SERVER_ADDRESS),
00158      "Server address")
00159     ("port,p",
00160      boost::program_options::value< ServerPort_T >(&ioServerPort)->default_value(
K_AIRINV_DEFAULT_SERVER_PORT),
00161      "Server port")
00162     ("log,l",
00163      boost::program_options::value< std::string >(&ioLogFilename)->default_value(
K_AIRINV_DEFAULT_LOG_FILENAME),
00164      "Filename for the output logs")
00165     ;
00166
00167     // Hidden options, will be allowed both on command line and
00168     // in config file, but will not be shown to the user.
00169     boost::program_options::options_description hidden ("Hidden options");
00170     hidden.add_options()
00171         ("copyright",
00172          boost::program_options::value< std::vector<std::string> >(),
00173          "Show the copyright (license)");
00174
00175     boost::program_options::options_description cmdline_options;
00176     cmdline_options.add(generic).add(config).add(hidden);
00177
00178     boost::program_options::options_description config_file_options;
00179     config_file_options.add(config).add(hidden);
00180     boost::program_options::options_description visible ("Allowed options");
00181     visible.add(generic).add(config);
00182
00183     boost::program_options::positional_options_description p;
00184     p.add ("copyright", -1);
00185
00186     boost::program_options::variables_map vm;
00187     boost::program_options::
00188         store (boost::program_options::command_line_parser (argc, argv).
00189             options (cmdline_options).positional(p).run(), vm);
00190
00191     std::ifstream ifs ("airinvServer.cfg");
00192     boost::program_options::store (parse_config_file (ifs, config_file_options),
00193         vm);
00194     boost::program_options::notify (vm);
00195
00196     if (vm.count ("help")) {
00197         std::cout << visible << std::endl;
00198         return K_AIRINV_EARLY_RETURN_STATUS;
00199     }
00200
00201     if (vm.count ("version")) {
00202         std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00203         return K_AIRINV_EARLY_RETURN_STATUS;
00204     }
00205
00206     if (vm.count ("prefix")) {
00207         std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00208         return K_AIRINV_EARLY_RETURN_STATUS;
00209     }
00210
00211     if (vm.count ("protocol")) {
00212         ioServerProtocol = vm["protocol"].as< std::string >();
00213         std::cout << "Server protocol is: " << ioServerProtocol << std::endl;

```

```

00214     }
00215
00216     if (vm.count ("address")) {
00217         ioServerAddress = vm["address"].as< std::string >();
00218         std::cout << "Server address is: " << ioServerAddress << std::endl;
00219     }
00220
00221     if (vm.count ("port")) {
00222         ioServerPort = vm["port"].as< ServerPort_T >();
00223         std::cout << "Server port is: " << ioServerPort << std::endl;
00224     }
00225
00226     if (vm.count ("builtin")) {
00227         ioIsBuiltin = true;
00228     }
00229     const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00230     std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00231
00232     if (vm.count ("for_schedule")) {
00233         ioIsForSchedule = true;
00234     }
00235     const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00236     std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00237         << std::endl;
00238
00239     if (ioIsBuiltin == false) {
00240
00241         if (ioIsForSchedule == false) {
00242             // The BOM tree should be built from parsing an inventory dump
00243             if (vm.count ("inventory")) {
00244                 ioInventoryFilename = vm["inventory"].as< std::string >();
00245                 std::cout << "Input inventory filename is: " << ioInventoryFilename
00246                     << std::endl;
00247             } else {
00248                 // The built-in option is not selected. However, no inventory dump
00249                 // file is specified
00250                 std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00251                     << " -f/--for_schedule and -s/--schedule options "
00252                     << "must be specified" << std::endl;
00253             }
00254         } else {
00255             // The BOM tree should be built from parsing a schedule (and O&D) file
00256             if (vm.count ("schedule")) {
00257                 ioScheduleInputFilename = vm["schedule"].as< std::string >();
00258                 std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00259                     << std::endl;
00260             } else {
00261                 // The built-in option is not selected. However, no schedule file
00262                 // is specified
00263                 std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00264                     << " -f/--for_schedule and -s/--schedule options "
00265                     << "must be specified" << std::endl;
00266             }
00267         }
00268     }
00269
00270     if (vm.count ("ond")) {
00271         ioODInputFilename = vm["ond"].as< std::string >();
00272         std::cout << "Input O&D filename is: " << ioODInputFilename << std::endl;
00273     }
00274
00275     if (vm.count ("frat5")) {
00276         ioFRAT5Filename = vm["frat5"].as< std::string >();
00277         std::cout << "FRAT5 input filename is: " << ioFRAT5Filename << std::endl;
00278     }

```

```

00279
00280     }
00281
00282     if (vm.count ("ff_disutility")) {
00283         ioFFDisutilityFilename = vm["ff_disutility"].as< std::string >();
00284         std::cout << "FF disutility input filename is: "
00285             << ioFFDisutilityFilename << std::endl;
00286
00287     }
00288
00289     if (vm.count ("yield")) {
00290         ioYieldInputFilename = vm["yield"].as< std::string >();
00291         std::cout << "Input yield filename is: " << ioYieldInputFilename << std::
endl;
00292     }
00293 }
00294 }
00295
00296 if (vm.count ("log")) {
00297     ioLogFilename = vm["log"].as< std::string >();
00298     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00299 }
00300
00301 return 0;
00302 }
00303
00304
00305 // //////////// Utility functions on top of the ZeroMQ library ////////////
00309 static std::string s_rcv (zmq::socket_t& socket) {
00310     zmq::message_t message;
00311     socket.recv (&message);
00312
00313     return std::string (static_cast<char*> (message.data()), message.size());
00314 }
00315
00319 static bool s_snd (zmq::socket_t& socket, const std::string& string) {
00320     zmq::message_t message (string.size());
00321     memcpy (message.data(), string.data(), string.size());
00322
00323     bool rc = socket.send (message);
00324     return rc;
00325 }
00326
00327
00328 // ////////////////////////////////// M A I N //////////////////////////////////
00329 int main (int argc, char* argv[]) {
00330
00331     // Server parameters (for ZeroMQ)
00332     std::string ioServerProtocol;
00333     std::string ioServerAddress;
00334     ServerPort_T ioServerPort;
00335
00336     // State whether the BOM tree should be built-in or parsed from an
00337     // input file
00338     bool isBuiltin;
00339     bool isForSchedule;
00340
00341     // Input file names
00342     stdair::Filename_T lInventoryFilename;
00343     stdair::Filename_T lScheduleInputFilename;
00344     stdair::Filename_T lODInputFilename;
00345     stdair::Filename_T lFRAT5InputFilename;
00346     stdair::Filename_T lFFDisutilityInputFilename;
00347     stdair::Filename_T lYieldInputFilename;
00348
00349     // Output log File
00350     stdair::Filename_T lLogFilename;

```



```

00351
00352 // Call the command-line option parser
00353 const int lOptionParserStatus =
00354     readConfiguration (argc, argv, ioServerProtocol, ioServerAddress,
00355         ioServerPort, isBuiltin, isForSchedule,
00356         lInventoryFilename, lScheduleInputFilename,
00357         lODInputFilename, lFRAT5InputFilename,
00358         lFFDisutilityInputFilename, lYieldInputFilename,
00359         lLogFilename);
00360
00361 if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00362     return 0;
00363 }
00364
00365 // Set the log parameters
00366 std::ofstream logOutputFile;
00367 // Open and clean the log outputfile
00368 logOutputFile.open (lLogFilename.c_str());
00369 logOutputFile.clear();
00370
00371 // Initialise the inventory service
00372 const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);
00373 AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00374
00375 // DEBUG
00376 STDAIR_LOG_DEBUG ("Initialisation of the AirInv server");
00377
00378 // Check wether or not a (CSV) input file should be read
00379 if (isBuiltin == true) {
00380
00381     // Build the sample BOM tree for RMOL
00382     airinvService.buildSampleBom();
00383
00384 } else {
00385     if (isForSchedule == true) {
00386         // Build the BOM tree from parsing a schedule file (and O&D list)
00387         stdair::ScheduleFilePath lScheduleFilePath (lScheduleInputFilename);
00388         stdair::ODFilePath lODFilePath (lODInputFilename);
00389         stdair::FRAT5FilePath lFRAT5FilePath (lFRAT5InputFilename);
00390         stdair::FFDisutilityFilePath lFFDisutilityFilePath (lFFDisutilityInputFilen
00391 ame);
00392         AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00393         airinvService.parseAndLoad (lScheduleFilePath, lODFilePath,
00394             lFRAT5FilePath, lFFDisutilityFilePath,
00395             lYieldFilePath);
00396     } else {
00397         // Build the BOM tree from parsing an inventory dump file
00398         AIRINV::InventoryFilePath lInventoryFilePath (lInventoryFilename);
00399         airinvService.parseAndLoad (lInventoryFilePath);
00400     }
00401 }
00402
00403 // Build the connection string (e.g., "tcp://*:5555", which is the default)
00404 std::ostringstream oZeroMQBindStream;
00405 oZeroMQBindStream << ioServerProtocol << ioServerAddress
00406     << ":" << ioServerPort;
00407 const std::string lZeroMQBindString (oZeroMQBindStream.str());
00408
00409 // Prepare the context and socket of the server
00410 zmq::context_t context (1);
00411 zmq::socket_t socket (context, ZMQ_REP);
00412 socket.bind (lZeroMQBindString.c_str());
00413
00414 // DEBUG
00415 STDAIR_LOG_DEBUG ("The AirInv server is ready to receive requests...");
00416

```

```
00417 while (true) {
00418
00419     // Wait for next request from client, which is expected to give
00420     // a JSON-ified command.
00421     const std::string& lReceivedString = s_recv (socket);
00422
00423     // DEBUG
00424     STDAIR_LOG_DEBUG ("Received: '" << lReceivedString << "'");
00425
00426     const stdair::JSONString lJSONCommandString (lReceivedString);
00427     const std::string& lJSONDump =
00428         airinvService.jsonHandler (lJSONCommandString);
00429
00430     // DEBUG
00431     STDAIR_LOG_DEBUG ("Send: '" << lJSONDump << "'");
00432
00433     // Send back the answer details to the client
00434     s_send (socket, lJSONDump);
00435 }
00436
00437 return 0;
00438 }
00439
```

## 25.203 airinv/server/AirInvServer.hpp File Reference

```
#include <string>
#include <vector>
#include <boost/asio.hpp>
#include <boost/noncopyable.hpp>
#include <boost/shared_ptr.hpp>
#include <stdair/stdair_basic_types.hpp>
#include <airinv/server/Connection.hpp>
#include <airinv/server/RequestHandler.hpp>
```

### Classes

- class [AIRINV::AirInvServer](#)

### Namespaces

- namespace [AIRINV](#)

**25.204 AirInvServer.hpp**

```

00001 #ifndef __AIRINV_SVR_AIRINVSERVER_HPP
00002 #define __AIRINV_SVR_AIRINVSERVER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // Boost
00011 #include <boost/asio.hpp>
00012 #include <boost/noncopyable.hpp>
00013 #include <boost/shared_ptr.hpp>
00014 // StdAir
00015 #include <stdair/stdair_basic_types.hpp>
00016 // AirInv
00017 #include <airinv/server/Connection.hpp>
00018 #include <airinv/server/RequestHandler.hpp>
00019
00020 namespace AIRINV {
00021
00022     class AirInvServer : private boost::noncopyable {
00023     public:
00024         // ////////////////////////////////// Constructors and Destructors //////////////////////////////////
00025         AirInvServer (const std::string& address, const std::string& port,
00026                     const stdair::AirlineCode_T& iAirlineCode,
00027                     std::size_t thread_pool_size);
00028         ~AirInvServer();
00029
00030     public:
00031         // ////////////////////////////////// Business Methods //////////////////////////////////
00032         void run();
00033
00034         void stop();
00035
00036     private:
00037         // ////////////////////////////////// Constructors and Destructors //////////////////////////////////
00038         AirInvServer();
00039         AirInvServer(const AirInvServer&);
00040
00041     private:
00042         // ////////////////////////////////// Attributes //////////////////////////////////
00043         void handleAccept (const boost::system::error_code& e);
00044
00045         std::size_t _threadPoolSize;
00046
00047         boost::asio::io_service _ioService;
00048
00049         boost::asio::ip::tcp::acceptor _acceptor;
00050
00051         ConnectionShrPtr_T _newConnection;
00052
00053         RequestHandler _requestHandler;
00054     };
00055 }
00056 #endif // __AIRINV_SVR_AIRINVSERVER_HPP

```

## 25.205 airinv/server/AirInvServer\_ASIO.cpp File Reference

```
#include <cassert>
#include <boost/thread.hpp>
#include <boost/bind.hpp>
#include <airinv/server/AirInvServer.hpp>
```

### Namespaces

- namespace [AIRINV](#)

### Typedefs

- typedef boost::shared\_ptr< boost::thread > [AIRINV::ThreadShrPtr\\_T](#)
- typedef std::vector< ThreadShrPtr\_T > [AIRINV::ThreadShrPtrList\\_T](#)

**25.206 AirInvServer\_ASIO.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/thread.hpp>
00008 #include <boost/bind.hpp>
00009 // AirInv
00010 #include <airinv/server/AirInvServer.hpp>
00011
00012 namespace AIRINV {
00013
00014     // Type definitions
00015     typedef boost::shared_ptr<boost::thread> ThreadShrPtr_T;
00016     typedef std::vector<ThreadShrPtr_T> ThreadShrPtrList_T;
00017
00018
00019     // //////////////////////////////////////
00020     AirInvServer::AirInvServer (const std::string& address,
00021                               const std::string& port,
00022                               const stdair::AirlineCode_T& iAirlineCode,
00023                               std::size_t iThreadPoolSize)
00024     : _threadPoolSize (iThreadPoolSize), _acceptor (_ioService),
00025       _newConnection (new Connection (_ioService, _requestHandler)),
00026       _requestHandler (iAirlineCode) {
00027
00028         // Open the acceptor with the option to reuse the address
00029         // (i.e. SO_REUSEADDR).
00030         boost::asio::ip::tcp::resolver resolver (_ioService);
00031         boost::asio::ip::tcp::resolver::query query (address, port);
00032         boost::asio::ip::tcp::endpoint endpoint = *resolver.resolve(query);
00033
00034         _acceptor.open (endpoint.protocol());
00035         _acceptor.set_option (boost::asio::ip::tcp::acceptor::reuse_address(true));
00036         _acceptor.bind (endpoint);
00037         _acceptor.listen();
00038
00039         assert (_newConnection != NULL);
00040         _acceptor.async_accept (_newConnection->socket(),
00041                               boost::bind (&AirInvServer::handleAccept, this,
00042                                             boost::asio::placeholders::error));
00043     }
00044
00045     // //////////////////////////////////////
00046     AirInvServer::~AirInvServer () {
00047     }
00048
00049     // //////////////////////////////////////
00050     void AirInvServer::run() {
00051         // Create a pool of threads to run all of the io_services.
00052         ThreadShrPtrList_T lThreadList;
00053
00054         for (std::size_t itThread = 0; itThread != _threadPoolSize; ++itThread) {
00055             ThreadShrPtr_T lThread (new boost::thread (boost::bind (&boost::asio::io_service::run,
00056                                                                     &_ioService)));
00057             lThreadList.push_back (lThread);
00058         }
00059
00060         // Wait for all threads in the pool to exit.
00061         for (std::size_t itThread = 0; itThread != lThreadList.size(); ++itThread) {
00062             boost::shared_ptr<boost::thread> lThread_ptr = lThreadList.at (itThread);
00063             assert (lThread_ptr != NULL);
00064             lThread_ptr->join();

```

```
00065     }
00066 }
00067
00068 // //////////////////////////////////////
00069 void AirInvServer::stop() {
00070     _ioService.stop();
00071 }
00072
00073 // //////////////////////////////////////
00074 void AirInvServer::handleAccept (const boost::system::error_code& iError) {
00075     if (!iError) {
00076         assert (_newConnection != NULL);
00077
00078         // The Connection object now takes in charge reading an incoming
00081         // message from the socket, and writing back a message.
00082         _newConnection->start();
00083
00084         // The (Boost) shared pointer is resetted to a newly allocated Connection
00085         // object. As the older Connection object is no longer pointed to, it is
00086         // deleted by the shared pointer mechanism.
00087         _newConnection.reset (new Connection (_ioService, _requestHandler));
00088
00089         _acceptor.async_accept (_newConnection->socket(),
00090                                 boost::bind (&AirInvServer::handleAccept, this,
00091                                               boost::asio::placeholders::error));
00092     }
00093 }
00094
00095 }
```

## 25.207 airinv/server/BomPropertyTree.cpp File Reference

```
#include <boost/property_tree/ptree.hpp>
#include <boost/property_tree/json_parser.hpp>
#include <boost/foreach.hpp>
#include <airinv/server/BomPropertyTree.hpp>
```

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*



**25.208 BomPropertyTree.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // Boost Property Tree
00005 #include <boost/property_tree/ptree.hpp>
00006 #include <boost/property_tree/json_parser.hpp>
00007 // Boost ForEach
00008 #include <boost/foreach.hpp>
00009 // AirInvServer
00010 #include <airinv/server/BomPropertyTree.hpp>
00011
00012 namespace bpt = boost::property_tree;
00013
00014 namespace stdair {
00015
00016     // Loads BomPropertyTree structure from the specified JSON file
00017     void BomPropertyTree::load (const std::string& iBomTree) {
00018         // Create an empty property tree object
00019         bpt::ptree pt;
00020
00021         // Load the JSON formatted string into the property tree. If reading fails
00022         // (cannot open stream, parse error), an exception is thrown.
00023         std::istream iStr (iBomTree);
00024         read_json (iStr, pt);
00025
00026         // Get the airline_code and store it in the _airlineCode variable.
00027         // Note that we construct the path to the value by separating
00028         // the individual keys with dots. If dots appear in the keys,
00029         // a path type with a different separator can be used.
00030         // If the flight_date.airline_code key is not found, an exception is thrown.
00031         _airlineCode = pt.get<stdair::AirlineCode_T> ("flight_date.airline_code");
00032
00033         // Get the departure_date and store it in the _departureDate variable.
00034         // This is another version of the get method: if the value is
00035         // not found, the default value (specified by the second
00036         // parameter) is returned instead. The type of the value
00037         // extracted is determined by the type of the second parameter,
00038         // so we can simply write get(...) instead of get<int>(...).
00039         _flightNumber =
00040             pt.get<stdair::FlightNumber_T> ("flight_date.flight_number", 100);
00041
00042         const std::string& lDepartureDateStr =
00043             pt.get<std::string> ("flight_date.departure_date");
00044         _departureDate = boost::gregorian::from_simple_string (lDepartureDateStr);
00045
00046         // Iterate over the flight_date.airport_codes section and store all found
00047         // codes in the _airportCodeList set. The get_child() function
00048         // returns a reference to the child at the specified path; if
00049         // there is no such child, it throws. Property tree iterators
00050         // are models of BidirectionalIterator.
00051         /*
00052         BOOST_FOREACH (bpt::ptree::value_type &v,
00053             pt.get_child ("flight_date.airport_codes")) {
00054             _airportCodeList.insert (v.second.data());
00055         }
00056         */
00057     }
00058
00059     // Saves the BomPropertyTree structure to the specified JSON file
00060     std::string BomPropertyTree::save() const {
00061         std::ostringstream oStr;
00062
00063         // Create an empty property tree object
00064         bpt::ptree pt;
00065

```

```
00066 // Put airline code in property tree
00067 pt.put ("flight_date.airline_code", _airlineCode);
00068
00069 // Put flight number level in property tree
00070 pt.put ("flight_date.flight_number", _flightNumber);
00071
00072 // Put the flight departure date in property tree
00073 const std::string& lDepartureDateStr =
00074     boost::gregorian::to_simple_string (_departureDate);
00075 pt.put ("flight_date.departure_date", lDepartureDateStr);
00076
00077 // Iterate over the airport codes in the set and put them in the
00078 // property tree. Note that the put function places the new
00079 // key at the end of the list of keys. This is fine most of
00080 // the time. If you want to place an item at some other place
00081 // (i.e. at the front or somewhere in the middle), this can
00082 // be achieved using a combination of the insert and put_own
00083 // functions.
00084 bpt::ptree lAirportCodeArray;
00085 BOOST_FOREACH (const std::string& name, _airportCodeList) {
00086     lAirportCodeArray.push_back (std::pair<bpt::ptree::key_type,
00087                                     bpt::ptree::data_type> ("", name));
00088 }
00089 pt.put_child ("flight_date.airport_codes", lAirportCodeArray);
00090 //pt.push_back (std::make_pair ("flight_date.airport_codes", lAirportCodeArra
00091 y));
00092
00092 // Write the property tree to the JSON stream.
00093 write_json (oStr, pt);
00094
00095 return oStr.str();
00096 }
00097
00098 }
```

## 25.209 airinv/server/BomPropertyTree.hpp File Reference

```
#include <string>
#include <set>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_date_time_types.hpp>
```

### Classes

- struct [stdair::BomPropertyTree](#)

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*

## 25.210 BomPropertyTree.hpp

```
00001 #ifndef __AIRINV_SVR_BOMPROPERTYTREE_HPP
00002 #define __AIRINV_SVR_BOMPROPERTYTREE_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <set>
00010 // StdAir
00011 #include <stdair/stdair_basic_types.hpp>
00012 #include <stdair/stdair_date_time_types.hpp>
00013
00014 namespace stdair {
00015
00019     struct BomPropertyTree {
00024         void load (const std::string& iBomTree);
00025
00029         std::string save() const;
00030
00031         // ////////////////////////////////// Attributes //////////////////////////////////
00033         stdair::AirlineCode_T _airlineCode;
00034
00036         stdair::FlightNumber_T _flightNumber;
00037
00039         stdair::Date_T _departureDate;
00040
00042         std::set<stdair::AirportCode_T> _airportCodeList;
00043     };
00044
00045 }
00046 #endif // __AIRINV_SVR_BOMPROPERTYTREE_HPP
```

## 25.211 airinv/server/Connection.cpp File Reference

```
#include <cassert>
#include <vector>
#include <boost/bind.hpp>
#include <airinv/server/RequestHandler.hpp>
#include <airinv/server/Connection.hpp>
```

### Namespaces

- namespace [AIRINV](#)

## 25.212 Connection.cpp

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <vector>
00007 // Boost
00008 #include <boost/bind.hpp>
00009 // AirInv
00010 #include <airinv/server/RequestHandler.hpp>
00011 #include <airinv/server/Connection.hpp>
00012
00013 namespace AIRINV {
00014
00015 // //////////////////////////////////////
00016 Connection::Connection (boost::asio::io_service& ioService,
00017                         RequestHandler& ioHandler)
00018 : _strand (ioService), _socket (ioService), _requestHandler (ioHandler) {
00019 }
00020
00021 // //////////////////////////////////////
00022 boost::asio::ip::tcp::socket& Connection::socket() {
00023     return _socket;
00024 }
00025
00026 // //////////////////////////////////////
00027 void Connection::start() {
00028
00029     _socket.async_read_some (boost::asio::buffer (_buffer),
00030                             _strand.wrap (boost::bind (&Connection::handleRead,
00031                                                         shared_from_this(),
00032                                                         boost::asio::placeholders
00033 ::error,
00034                                                         boost::asio::placeholders
00035 ::bytes_transferred))));
00036 }
00037
00038 // //////////////////////////////////////
00039 void Connection::handleRead (const boost::system::error_code& iErrorCode,
00040                             std::size_t bytes_transferred) {
00041     if (!iErrorCode) {
00042         _request._flightDetails = _buffer.data();
00043         const bool hasBeenSuccessfull = _requestHandler.handleRequest (_request,
00044                                                                           _reply);
00045
00046         if (hasBeenSuccessfull == true) {
00047             boost::asio::async_write (_socket, _reply.to_buffers(),
00048                                     _strand.wrap (boost::bind (&Connection::handleW
00049 rite,
00050
00051                                                         shared_from_this(),
00052                                                         boost::asio::placeho
00053 lders::error)));
00054         } else {
00055             boost::asio::async_write (_socket, _reply.to_buffers(),
00056                                     _strand.wrap (boost::bind (&Connection::handleW
00057 rite,
00058
00059                                                         shared_from_this(),
00060                                                         boost::asio::placeho
00061 lders::error)));
00062         }
00063     }
00064 }

```

```
00060
00061     // If an error occurs then no new asynchronous operations are
00062     // started. This means that all shared_ptr references to the
00063     // connection object will disappear and the object will be
00064     // destroyed automatically after this handler returns. The
00065     // connection class's destructor closes the socket.
00066 }
00067
00068 // //////////////////////////////////////
00069 void Connection::handleWrite (const boost::system::error_code& iErrorCode) {
00070
00071     if (!iErrorCode) {
00072         // Initiate graceful connection closure.
00073         boost::system::error_code ignored_ec;
00074         _socket.shutdown (boost::asio::ip::tcp::socket::shutdown_both,
00075                           ignored_ec);
00076     }
00077
00078     // No new asynchronous operations are started. This means that all
00079     // shared_ptr references to the connection object will disappear
00080     // and the object will be destroyed automatically after this
00081     // handler returns. The connection class's destructor closes the
00082     // socket.
00083 }
00084
00085 }
```

## 25.213 airinv/server/Connection.hpp File Reference

```
#include <boost/asio.hpp>
#include <boost/array.hpp>
#include <boost/noncopyable.hpp>
#include <boost/shared_ptr.hpp>
#include <boost/enable_shared_from_this.hpp>
#include <airinv/server/Reply.hpp>
#include <airinv/server/Request.hpp>
```

### Classes

- class [AIRINV::Connection](#)

### Namespaces

- namespace [AIRINV](#)

### Typedefs

- typedef boost::shared\_ptr< Connection > [AIRINV::ConnectionShrPtr\\_T](#)



## 25.214 Connection.hpp

```

00001 #ifndef __AIRINV_SVR_CONNECTION_HPP
00002 #define __AIRINV_SVR_CONNECTION_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 // Boost
00009 #include <boost/asio.hpp>
00010 #include <boost/array.hpp>
00011 #include <boost/noncopyable.hpp>
00012 #include <boost/shared_ptr.hpp>
00013 #include <boost/enable_shared_from_this.hpp>
00014 // AirInv
00015 #include <airinv/server/Reply.hpp>
00016 #include <airinv/server/Request.hpp>
00017
00018 namespace AIRINV {
00019
00020     // Forward declarations.
00021     class RequestHandler;
00022
00023
00024
00025     class Connection : public boost::enable_shared_from_this<Connection>,
00026                       private boost::noncopyable {
00027     public:
00028         // ////////////////////////////////// Constructors and Destructors //////////////////////////////////
00031         Connection (boost::asio::io_service&, RequestHandler&);
00032
00033
00034         // ////////////////////////////////// Business Support Methods //////////////////////////////////
00036         boost::asio::ip::tcp::socket& socket();
00037
00039         void start();
00040
00041
00042     private:
00044         void handleRead (const boost::system::error_code& e,
00045                         std::size_t bytes_transferred);
00046
00048         void handleWrite (const boost::system::error_code& e);
00049
00052         boost::asio::io_service::strand _strand;
00053
00055         boost::asio::ip::tcp::socket _socket;
00056
00058         RequestHandler& _requestHandler;
00059
00061         boost::array<char, 8192> _buffer;
00062
00064         Request _request;
00065
00067         Reply _reply;
00068     };
00069
00071     typedef boost::shared_ptr<Connection> ConnectionShrPtr_T;
00072
00073 }
00074 #endif // __AIRINV_SVR_CONNECTION_HPP

```

## 25.215 airinv/server/header.hpp File Reference

```
#include <string>
```

### Classes

- struct [AIRINV::header](#)

### Namespaces

- namespace [AIRINV](#)

## 25.216 header.hpp

```
00001 #ifndef __AIRINV_SVR_HEADER_HPP
00002 #define __AIRINV_SVR_HEADER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009
00010 namespace AIRINV {
00011
00012     struct header {
00013         std::string name;
00014         std::string value;
00015     };
00016
00017 }
00018
00019 #endif // __AIRINV_SVR_HEADER_HPP
```

## 25.217 airinv/server/posix\_main.cpp File Reference

```
#include <iostream>
#include <string>
#include <boost/asio.hpp>
#include <boost/thread.hpp>
#include <boost/bind.hpp>
#include <boost/lexical_cast.hpp>
#include <airinv/server/AirInvServer.hpp>
#include <pthread.h>
#include <signal.h>
```

### Functions

- int [main](#) (int argc, char \*argv[])

#### 25.217.1 Function Documentation

##### 25.217.1.1 int main (int *argc*, char \* *argv*[])

Definition at line 25 of file [posix\\_main.cpp](#).

References [AIRINV::AirInvServer::run\(\)](#).

**25.218 posix\_main.cpp**

```

00001 //
00002 // posix_main.cpp
00003 // ~~~~~
00004 //
00005 // Copyright (c) 2003-2008 Christopher M. Kohlhoff (chris at kohlhoff dot com)
00006 //
00007 // Distributed under the Boost Software License, Version 1.0. (See accompanying
00008 // file LICENSE_1_0.txt or copy at http://www.boost.org/LICENSE_1_0.txt)
00009 //
00010
00011 #include <iostream>
00012 #include <string>
00013 #include <boost/asio.hpp>
00014 #include <boost/thread.hpp>
00015 #include <boost/bind.hpp>
00016 #include <boost/lexical_cast.hpp>
00017 #include <airinv/server/AirInvServer.hpp>
00018
00019 #if !defined(_WIN32)
00020
00021 #include <pthread.h>
00022 #include <signal.h>
00023
00024 // //////////// M A I N ////////////
00025 int main(int argc, char* argv[]) {
00026
00027     try {
00028
00029         // Check command line arguments.
00030         if (argc != 5) {
00031             std::cerr << "Usage: airinvServer <address> <port> <threads> <doc_root>"
00032                       << std::endl;
00033             std::cerr << "  For IPv4, try:" << std::endl;
00034             std::cerr << "    receiver 0.0.0.0 80 1 ." << std::endl;
00035             std::cerr << "  For IPv6, try:" << std::endl;
00036             std::cerr << "    receiver 0::0 80 1 ." << std::endl;
00037             return 1;
00038         }
00039
00040         // Block all signals for background thread.
00041         sigset_t new_mask;
00042         sigfillset (&new_mask);
00043         sigset_t old_mask;
00044         pthread_sigmask (SIG_BLOCK, &new_mask, &old_mask);
00045
00046         // Run server in background thread.
00047         std::size_t num_threads = boost::lexical_cast<std::size_t>(argv[3]);
00048         AIRINV::AirInvServer s (argv[1], argv[2], argv[4], num_threads);
00049         boost::thread t (boost::bind (&AIRINV::AirInvServer::run, &s));
00050
00051         // Restore previous signals.
00052         pthread_sigmask (SIG_SETMASK, &old_mask, 0);
00053
00054         // Wait for signal indicating time to shut down.
00055         sigset_t wait_mask;
00056         sigemptyset (&wait_mask);
00057         sigaddset (&wait_mask, SIGINT);
00058         sigaddset (&wait_mask, SIGQUIT);
00059         sigaddset (&wait_mask, SIGTERM);
00060         pthread_sigmask (SIG_BLOCK, &wait_mask, 0);
00061         int sig = 0;
00062         sigwait (&wait_mask, &sig);
00063
00064         // Stop the server.
00065         s.stop();

```

```
00066     t.join();
00067
00068 } catch (std::exception& e) {
00069     std::cerr << "exception: " << e.what() << "\n";
00070 }
00071
00072 return 0;
00073 }
00074
00075 #endif // !defined(_WIN32)
```

## 25.219 airinv/server/Reply.cpp File Reference

```
#include <cassert>
#include <string>
#include <boost/lexical_cast.hpp>
#include <airinv/server/Reply.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.220 Reply.cpp**

```
00001 // ////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 // Boost
00008 #include <boost/lexical_cast.hpp>
00009 // AirInv
00010 #include <airinv/server/Reply.hpp>
00011
00012 namespace AIRINV {
00013
00014 // ////////////////////////////////////////
00015 std::vector<boost::asio::const_buffer> Reply::to_buffers() {
00016     std::vector<boost::asio::const_buffer> lBuffers;
00017     lBuffers.push_back (boost::asio::buffer(content));
00018     return lBuffers;
00019 }
00020
00021 }
```



## 25.221 airinv/server/Reply.hpp File Reference

```
#include <string>
#include <vector>
#include <boost/asio.hpp>
#include <airinv/FlightRequestStatus.hpp>
```

### Classes

- struct [AIRINV::Reply](#)

### Namespaces

- namespace [AIRINV](#)

## 25.222 Reply.hpp

```
00001 #ifndef __AIRINV_SVR_REPLY_HPP
00002 #define __AIRINV_SVR_REPLY_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // Boost
00011 #include <boost/asio.hpp>
00012 // AirInv
00013 #include <airinv/FlightRequestStatus.hpp>
00014
00015 namespace AIRINV {
00016
00017     struct Reply {
00020         FlightRequestStatus::EN_FlightRequestStatus _status;
00021
00023         std::string content;
00024
00029         std::vector<boost::asio::const_buffer> to_buffers();
00030     };
00031
00032 }
00033 #endif // __AIRINV_SVR_REPLY_HPP
```

## 25.223 airinv/server/Request.cpp File Reference

```
#include <cassert>
#include <airinv/server/Request.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.224 Request.cpp**

```
00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AirInv
00007 #include <airinv/server/Request.hpp>
00008
00009 namespace AIRINV {
00010
00011 // //////////////////////////////////////
00012 bool Request::parseFlightDate () {
00013     bool hasBeenSuccessfull = false;
00014
00015     //
00016     _airlineCode = "BA";
00017     _flightNumber = 341;
00018     _departureDate = stdair::Date_T (2010, 04, 20);
00019
00020     //
00021     hasBeenSuccessfull = true;
00022
00023     return hasBeenSuccessfull;
00024 }
00025
00026 }
```

## 25.225 airinv/server/Request.hpp File Reference

```
#include <string>
#include <vector>
#include <stdair/stdair_basic_types.hpp>
#include <stdair/stdair_date_time_types.hpp>
```

### Classes

- struct [AIRINV::Request](#)

### Namespaces

- namespace [AIRINV](#)

## 25.226 Request.hpp

```
00001 #ifndef __AIRINV_SVR_REQUEST_HPP
00002 #define __AIRINV_SVR_REQUEST_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 #include <vector>
00010 // StdAir
00011 #include <stdair/stdair_basic_types.hpp>
00012 #include <stdair/stdair_date_time_types.hpp>
00013 // AirInv
00014
00015 namespace AIRINV {
00016
00017     struct Request {
00018     public:
00019         bool parseFlightDate();
00020
00021     public:
00022         // ////////////////////////////////// Attributes //////////////////////////////////
00023         std::string _flightDetails;
00024         stdair::AirlineCode_T _airlineCode;
00025         stdair::FlightNumber_T _flightNumber;
00026         stdair::Date_T _departureDate;
00027     };
00028 }
00029
00030 #endif // __AIRINV_SVR_REQUEST_HPP
```

## 25.227 airinv/server/RequestHandler.cpp File Reference

```
#include <cassert>
#include <string>
#include <fstream>
#include <sstream>
#include <boost/lexical_cast.hpp>
#include <airinv/server/Reply.hpp>
#include <airinv/server/Request.hpp>
#include <airinv/server/RequestHandler.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.228 RequestHandler.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <string>
00007 #include <fstream>
00008 #include <sstream>
00009 // Boost
00010 #include <boost/lexical_cast.hpp>
00011 // StdAir
00012 // AirInv
00013 #include <airinv/server/Reply.hpp>
00014 #include <airinv/server/Request.hpp>
00015 #include <airinv/server/RequestHandler.hpp>
00016
00017 namespace AIRINV {
00018
00019     // //////////////////////////////////////
00020     RequestHandler::RequestHandler (const stdair::AirlineCode_T& iAirlineCode)
00021         : _airlineCode (iAirlineCode) {
00022     }
00023
00024     // //////////////////////////////////////
00025     bool RequestHandler::
00026     handleRequest (Request& ioRequest, Reply& ioReply) const {
00027         bool hasBeenSuccessfull = false;
00028
00029         // Decode request string to a flight-date details (airline code,
00030         // flight number and departure date)
00031         hasBeenSuccessfull = ioRequest.parseFlightDate();
00032
00033         if (hasBeenSuccessfull == false) {
00034             ioReply._status = FlightRequestStatus::INTERNAL_ERROR;
00035             return hasBeenSuccessfull;
00036         }
00037
00045         // Fill out the reply to be sent to the client.
00046         ioReply._status = FlightRequestStatus::OK;
00047         ioReply.content = "Your are looking for: '" + ioRequest._flightDetails + "'.
Ok, I have found your flight-date. Be patient until I give you more information a
bout it";
00048
00049         return hasBeenSuccessfull;
00050     }
00051
00052 }

```



## 25.229 airinv/server/RequestHandler.hpp File Reference

```
#include <string>
#include <boost/noncopyable.hpp>
#include <stdair/stdair_basic_types.hpp>
```

### Classes

- class [AIRINV::RequestHandler](#)  
*The common handler for all incoming requests.*

### Namespaces

- namespace [stdair](#)  
*Forward declarations.*
- namespace [AIRINV](#)

## 25.230 RequestHandler.hpp

```
00001 #ifndef __AIRINV_SVR_REQUESTHANDLER_HPP
00002 #define __AIRINV_SVR_REQUESTHANDLER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/noncopyable.hpp>
00011 // StdAir
00012 #include <stdair/stdair_basic_types.hpp>
00013 // AirInv
00014
00015 // Forward declarations
00016 namespace stdair {
00017     struct InventoryKey_T;
00018     struct FlightDateKey_T;
00019 }
00020
00021 namespace AIRINV {
00022
00023     // Forward declarations.
00024     struct Reply;
00025     struct Request;
00026
00027     class RequestHandler : private boost::noncopyable {
00028     public:
00029         // ////////////////////////////////// Constructors and Destructors //////////////////////////////////
00030         RequestHandler (const stdair::AirlineCode_T&);
00031
00032     public:
00033         // ////////////////////////////////// Business Support Methods //////////////////////////////////
00034         bool handleRequest (Request&, Reply&) const;
00035
00036     private:
00037         // ////////////////////////////////// Attributes //////////////////////////////////
00038         stdair::AirlineCode_T _airlineCode;
00039     };
00040
00041 }
00042
00043 #endif // __AIRINV_SVR_REQUESTHANDLER_HPP
```

## 25.231 airinv/server/RequestParser.cpp File Reference

```
#include <cassert>
#include <airinv/server/RequestParser.hpp>
#include <airinv/server/Request.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.232 RequestParser.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // AirInv
00007 #include <airinv/server/RequestParser.hpp>
00008 #include <airinv/server/Request.hpp>
00009
00010 namespace AIRINV {
00011
00012 // //////////////////////////////////////
00013 RequestParser::RequestParser()
00014     : state_(method_start) {
00015 }
00016
00017 // //////////////////////////////////////
00018 void RequestParser::reset() {
00019     state_ = method_start;
00020 }
00021
00022 // //////////////////////////////////////
00023 boost::tribool RequestParser::consume (Request& req, char input) {
00024
00025     switch (state_) {
00026
00027     case method_start:
00028         if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00029             return false;
00030
00031         } else {
00032             state_ = method;
00033             req.method.push_back(input);
00034             return boost::indeterminate;
00035         }
00036
00037     case method:
00038         if (input == ' ') {
00039             state_ = uri;
00040             return boost::indeterminate;
00041
00042         } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00043             return false;
00044
00045         } else {
00046             req.method.push_back(input);
00047             return boost::indeterminate;
00048         }
00049
00050     case uri_start:
00051         if (is_ctl(input)) {
00052             return false;
00053
00054         } else {
00055             state_ = uri;
00056             req.uri.push_back(input);
00057             return boost::indeterminate;
00058         }
00059
00060     case uri:
00061         if (input == ' ') {
00062             state_ = http_version_h;
00063             return boost::indeterminate;
00064
00065         } else if (is_ctl(input)) {

```

```
00066         return false;
00067
00068     } else {
00069         req.uri.push_back(input);
00070         return boost::indeterminate;
00071     }
00072
00073     case http_version_h:
00074         if (input == 'H') {
00075             state_ = http_version_t_1;
00076             return boost::indeterminate;
00077         } else {
00078             return false;
00079         }
00080     }
00081
00082     case http_version_t_1:
00083         if (input == 'T') {
00084             state_ = http_version_t_2;
00085             return boost::indeterminate;
00086         } else {
00087             return false;
00088         }
00089     }
00090
00091     case http_version_t_2:
00092         if (input == 'T') {
00093             state_ = http_version_p;
00094             return boost::indeterminate;
00095         } else {
00096             return false;
00097         }
00098     }
00099
00100     case http_version_p:
00101         if (input == 'P') {
00102             state_ = http_version_slash;
00103             return boost::indeterminate;
00104         } else {
00105             return false;
00106         }
00107     }
00108
00109     case http_version_slash:
00110         if (input == '/') {
00111             req.http_version_major = 0;
00112             req.http_version_minor = 0;
00113             state_ = http_version_major_start;
00114             return boost::indeterminate;
00115         } else {
00116             return false;
00117         }
00118     }
00119
00120     case http_version_major_start:
00121         if (is_digit(input)) {
00122             req.http_version_major = req.http_version_major * 10 + input - '0';
00123             state_ = http_version_major;
00124             return boost::indeterminate;
00125         } else {
00126             return false;
00127         }
00128     }
00129
00130     case http_version_major:
00131         if (input == '.') {
00132             state_ = http_version_minor_start;
```

```
00133         return boost::indeterminate;
00134
00135     } else if (is_digit(input)) {
00136         req.http_version_major = req.http_version_major * 10 + input - '0';
00137         return boost::indeterminate;
00138
00139     } else {
00140         return false;
00141     }
00142
00143     case http_version_minor_start:
00144         if (is_digit(input)) {
00145             req.http_version_minor = req.http_version_minor * 10 + input - '0';
00146             state_ = http_version_minor;
00147             return boost::indeterminate;
00148
00149         } else {
00150             return false;
00151         }
00152
00153     case http_version_minor:
00154         if (input == '\r') {
00155             state_ = expecting_newline_1;
00156             return boost::indeterminate;
00157
00158         } else if (is_digit(input)) {
00159             req.http_version_minor = req.http_version_minor * 10 + input - '0';
00160             return boost::indeterminate;
00161
00162         } else {
00163             return false;
00164         }
00165
00166     case expecting_newline_1:
00167         if (input == '\n') {
00168             state_ = header_line_start;
00169             return boost::indeterminate;
00170
00171         } else {
00172             return false;
00173         }
00174
00175     case header_line_start:
00176         if (input == '\r') {
00177             state_ = expecting_newline_3;
00178             return boost::indeterminate;
00179
00180         } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00181             return false;
00182
00183         } else {
00184             state_ = header_name;
00185             return boost::indeterminate;
00186         }
00187
00188     case header_lws:
00189         if (input == '\r') {
00190             state_ = expecting_newline_2;
00191             return boost::indeterminate;
00192
00193         } else if (input == ' ' || input == '\t') {
00194             return boost::indeterminate;
00195
00196         } else if (is_ctl(input)) {
00197             return false;
00198
00199         } else {
```

```
00200         state_ = header_value;
00201         return boost::indeterminate;
00202     }
00203
00204     case header_name:
00205         if (input == ':') {
00206             state_ = space_before_header_value;
00207             return boost::indeterminate;
00208         } else if (!is_char(input) || is_ctl(input) || is_tspecial(input)) {
00209             return false;
00210         } else {
00211             return boost::indeterminate;
00212         }
00213     }
00214
00215     case space_before_header_value:
00216         if (input == ' ') {
00217             state_ = header_value;
00218             return boost::indeterminate;
00219         } else {
00220             return false;
00221         }
00222     }
00223
00224     case header_value:
00225         if (input == '\r') {
00226             state_ = expecting_newline_2;
00227             return boost::indeterminate;
00228         } else if (is_ctl(input)) {
00229             return false;
00230         } else {
00231             return boost::indeterminate;
00232         }
00233     }
00234
00235     case expecting_newline_2:
00236         if (input == '\n') {
00237             state_ = header_line_start;
00238             return boost::indeterminate;
00239         } else {
00240             return false;
00241         }
00242     }
00243
00244     case expecting_newline_3:
00245         return (input == '\n');
00246     }
00247
00248     default:
00249         return false;
00250     }
00251 }
00252
00253 // //////////////////////////////////////
00254 bool RequestParser::is_char(int c) {
00255     return c >= 0 && c <= 127;
00256 }
00257
00258 // //////////////////////////////////////
00259 bool RequestParser::is_ctl(int c) {
00260     return (c >= 0 && c <= 31) || (c == 127);
00261 }
00262
00263 // //////////////////////////////////////
00264 bool RequestParser::is_tspecial(int c) {
00265     switch (c) {
```

```
00267     case '(': case ')': case '<': case '>': case '@':
00268     case ',': case ';': case ':': case '\\': case '"':
00269     case '/': case '[': case ']': case '?': case '=':
00270     case '{': case '}': case ' ': case '\t':
00271         return true;
00272     default:
00273         return false;
00274 }
00275 }
00276
00277 // //////////////////////////////////////
00278 bool RequestParser::is_digit(int c) {
00279     return c >= '0' && c <= '9';
00280 }
00281
00282 }
```



## 25.233 airinv/server/RequestParser.hpp File Reference

```
#include <boost/logic/tribool.hpp>
#include <boost/tuple/tuple.hpp>
```

### Classes

- class [AIRINV::RequestParser](#)  
*Parser for incoming requests.*

### Namespaces

- namespace [AIRINV](#)

**25.234 RequestParser.hpp**

```

00001 #ifndef __AIRINV_SVR_REQUESTPARSER_HPP
00002 #define __AIRINV_SVR_REQUESTPARSER_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 // Boost
00009 #include <boost/logic/tribool.hpp>
00010 #include <boost/tuple/tuple.hpp>
00011
00012 namespace AIRINV {
00013
00014     struct Request;
00015
00016     class RequestParser {
00017     public:
00018         RequestParser();
00019
00020         void reset();
00021
00022         template <typename InputIterator>
00023         boost::tuple<boost::tribool, InputIterator> parse (Request& req,
00024                                                         InputIterator begin,
00025                                                         InputIterator end) {
00026
00027             while (begin != end) {
00028                 boost::tribool result = consume(req, *begin++);
00029                 if (result || !result)
00030                     return boost::make_tuple(result, begin);
00031             }
00032
00033             boost::tribool result = boost::indeterminate;
00034             return boost::make_tuple(result, begin);
00035         }
00036
00037     private:
00038         boost::tribool consume (Request& req, char input);
00039
00040         static bool is_char(int c);
00041
00042         static bool is_ctl(int c);
00043
00044         static bool is_tspecial(int c);
00045
00046         static bool is_digit(int c);
00047
00048         enum state {
00049             method_start,
00050             method,
00051             uri_start,
00052             uri,
00053             http_version_h,
00054             http_version_t_1,
00055             http_version_t_2,
00056             http_version_p,
00057             http_version_slash,
00058             http_version_major_start,
00059             http_version_major,
00060             http_version_minor_start,
00061             http_version_minor,
00062             expecting_newline_1,
00063             header_line_start,
00064             header_lws,
00065             header_name,

```

```
00079         space_before_header_value,  
00080         header_value,  
00081         expecting_newline_2,  
00082         expecting_newline_3  
00083     } state_;  
00084 };  
00085  
00086 }  
00087 #endif // __AIRINV_SVR_REQUESTPARSER_HPP
```

### 25.235 airinv/server/win\_main.cpp File Reference

```
#include <iostream>
#include <string>
#include <boost/asio.hpp>
#include <boost/bind.hpp>
#include <boost/function.hpp>
#include <boost/lexical_cast.hpp>
#include <airinv/server/AirInvServer.hpp>
```

**25.236 win\_main.cpp**

```

00001 //
00002 // win_main.cpp
00003 // ~~~~~
00004 //
00005 // Copyright (c) 2003-2008 Christopher M. Kohlhoff (chris at kohlhoff dot com)
00006 //
00007 // Distributed under the Boost Software License, Version 1.0. (See accompanying
00008 // file LICENSE_1_0.txt or copy at http://www.boost.org/LICENSE_1_0.txt)
00009 //
00010
00011 #include <iostream>
00012 #include <string>
00013 #include <boost/asio.hpp>
00014 #include <boost/bind.hpp>
00015 #include <boost/function.hpp>
00016 #include <boost/lexical_cast.hpp>
00017 #include <airinv/server/AirInvServer.hpp>
00018
00019 #if defined(_WIN32)
00020
00021 boost::function0<void> console_ctrl_function;
00022
00023 BOOL WINAPI console_ctrl_handler(DWORD ctrl_type) {
00024     switch (ctrl_type) {
00025     case CTRL_C_EVENT:
00026     case CTRL_BREAK_EVENT:
00027     case CTRL_CLOSE_EVENT:
00028     case CTRL_SHUTDOWN_EVENT:
00029         console_ctrl_function();
00030         return TRUE;
00031     default:
00032         return FALSE;
00033     }
00034 }
00035
00036 int main(int argc, char* argv[]) {
00037
00038     try {
00039
00040         // Check command line arguments.
00041         if (argc != 5) {
00042             std::cerr << "Usage: http_server <address> <port> <threads> <doc_root>\n";
00043             std::cerr << "  For IPv4, try:\n";
00044             std::cerr << "    http_server 0.0.0.0 80 1 .\n";
00045             std::cerr << "  For IPv6, try:\n";
00046             std::cerr << "    http_server 0::0 80 1 .\n";
00047             return 1;
00048         }
00049
00050         // Initialise server.
00051         std::size_t num_threads = boost::lexical_cast<std::size_t>(argv[3]);
00052         AIRINV::AirInvServer s(argv[1], argv[2], argv[4], num_threads);
00053
00054         // Set console control handler to allow server to be stopped.
00055         console_ctrl_function = boost::bind(&AIRINV::AirInvServer::stop, &s);
00056         SetConsoleCtrlHandler(console_ctrl_handler, TRUE);
00057
00058         // Run the server until stopped.
00059         s.run();
00060
00061     } catch (std::exception& e) {
00062         std::cerr << "exception: " << e.what() << "\n";
00063     }
00064
00065     return 0;

```

---

```
00066 }  
00067 #endif // defined(_WIN32)
```

## 25.237 airinv/service/AIRINV\_Master\_Service.cpp File Reference

```
#include <cassert>
#include <cmath>
#include <boost/make_shared.hpp>
#include <stdair/stdair_json.hpp>
#include <stdair/basic/BasChronometer.hpp>
#include <stdair/basic/EventType.hpp>
#include <stdair/bom/BomKeyManager.hpp>
#include <stdair/bom/SnapshotStruct.hpp>
#include <stdair/bom/RMEventStruct.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/STDAIR_Service.hpp>
#include <sevmgr/SEVMGR_Service.hpp>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
#include <airinv/factory/FacAirinvMasterServiceContext.hpp>
#include <airinv/command/InventoryParser.hpp>
#include <airinv/command/InventoryManager.hpp>
#include <airinv/service/AIRINV_Master_ServiceContext.hpp>
#include <airinv/AIRINV_Service.hpp>
#include <airinv/AIRINV_Master_Service.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.238 AIRINV\_Master\_Service.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <cmath>
00007 // Boost
00008 #include <boost/make_shared.hpp>
00009 // StdAir
00010 #include <stdair/stdair_json.hpp>
00011 #include <stdair/basic/BasChronometer.hpp>
00012 #include <stdair/basic/EventType.hpp>
00013 #include <stdair/bom/BomKeyManager.hpp>
00014 #include <stdair/bom/SnapshotStruct.hpp>
00015 #include <stdair/bom/RMEventStruct.hpp>
00016 #include <stdair/service/Logger.hpp>
00017 #include <stdair/STDAIR_Service.hpp>
00018 // SEvMgr
00019 #include <sevmgr/SEVMGR_Service.hpp>
00020 // AirInv
00021 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00022 #include <airinv/factory/FacAirinvMasterServiceContext.hpp>
00023 #include <airinv/command/InventoryParser.hpp>
00024 #include <airinv/command/InventoryManager.hpp>
00025 #include <airinv/service/AIRINV_Master_ServiceContext.hpp>
00026 #include <airinv/AIRINV_Service.hpp>
00027 #include <airinv/AIRINV_Master_Service.hpp>
00028
00029 namespace AIRINV {
00030
00031 // //////////////////////////////////////
00032 AIRINV_Master_Service::AIRINV_Master_Service()
00033 : _airinvMasterServiceContext (NULL) {
00034     assert (false);
00035 }
00036
00037 // //////////////////////////////////////
00038 AIRINV_Master_Service::
00039 AIRINV_Master_Service (const AIRINV_Master_Service& iService)
00040 : _airinvMasterServiceContext (NULL) {
00041     assert (false);
00042 }
00043
00044 // //////////////////////////////////////
00045 AIRINV_Master_Service::
00046 AIRINV_Master_Service (const stdair::BasLogParams& iLogParams,
00047                       const stdair::BasDBParams& iDBParams)
00048 : _airinvMasterServiceContext (NULL) {
00049
00050     // Initialise the STDAIR service handler
00051     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00052         initStdAirService (iLogParams, iDBParams);
00053
00054     // Initialise the service context
00055     initServiceContext ();
00056
00057     // Add the StdAir service context to the AIRINV service context
00058     // \note RMOL owns the STDAIR service resources here.
00059     const bool ownStdairService = true;
00060     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00061
00062     // Initialise the (remaining of the) context
00063     initSlaveAirinvService ();
00064 }
00065

```



```

00066 // //////////////////////////////////////
00067 AIRINV_Master_Service::
00068 AIRINV_Master_Service (const stdair::BasLogParams& iLogParams)
00069 : _airinvMasterServiceContext (NULL) {
00070
00071     // Initialise the STDAIR service handler
00072     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00073         initStdAirService (iLogParams);
00074
00075     // Initialise the service context
00076     initServiceContext();
00077
00078     // Add the StdAir service context to the AIRINV service context
00079     // \note RMOL owns the STDAIR service resources here.
00080     const bool ownStdairService = true;
00081     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00082
00083     // Initialise the (remaining of the) context
00084     initSlaveAirinvService();
00085 }
00086
00087 // //////////////////////////////////////
00088 AIRINV_Master_Service::
00089 AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr)
00090 : _airinvMasterServiceContext (NULL) {
00091
00092     // Initialise the service context
00093     initServiceContext();
00094
00095     // Store the STDAIR service object within the (AIRINV) service context
00096     // \note AirInv does not own the STDAIR service resources here.
00097     const bool doesNotOwnStdairService = false;
00098     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00099
00100     // Initialise the (remaining of the) context
00101     initSlaveAirinvService();
00102 }
00103
00104 // //////////////////////////////////////
00105 AIRINV_Master_Service::
00106 AIRINV_Master_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,
00107                       SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR_Service_ptr)
00108 : _airinvMasterServiceContext (NULL) {
00109
00110     // Initialise the service context
00111     initServiceContext();
00112
00113     // Store the STDAIR service object within the (AIRINV) service context
00114     // \note AirInv does not own the STDAIR service resources here.
00115     const bool doesNotOwnStdairService = false;
00116     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00117
00118     //Add the SEvMgr service to the TRADEMGEN service context.
00119     const bool doesNotOwnSEVMGRService = false;
00120     addSEVMGRService (ioSEVMGR_Service_ptr, doesNotOwnSEVMGRService);
00121
00122     // Initialise the (remaining of the) context
00123     initSlaveAirinvService();
00124 }
00125
00126 // //////////////////////////////////////
00127 AIRINV_Master_Service::~AIRINV_Master_Service() {
00128     // Delete/Clean all the objects from memory
00129     finalise();
00130 }
00131
00132 // //////////////////////////////////////

```

```

00133 void AIRINV_Master_Service::finalise() {
00134     assert (_airinvMasterServiceContext != NULL);
00135     // Reset the (Boost.)Smart pointer pointing on the STDAIR_Service object.
00136     _airinvMasterServiceContext->reset();
00137 }
00138
00139 // //////////////////////////////////////
00140 void AIRINV_Master_Service::initServiceContext() {
00141     // Initialise the context
00142     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00143         FacAirinvMasterServiceContext::instance().create();
00144     _airinvMasterServiceContext = &lAIRINV_Master_ServiceContext;
00145 }
00146
00147 // //////////////////////////////////////
00148 void AIRINV_Master_Service::
00149 addStdAirService (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,
00150                  const bool iOwnStdairService) {
00151
00152     // Retrieve the AirInv Master service context
00153     assert (_airinvMasterServiceContext != NULL);
00154     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00155         *_airinvMasterServiceContext;
00156
00157     // Store the STDAIR service object within the (AIRINV) service context
00158     lAIRINV_Master_ServiceContext.setSTDAIR_Service (ioSTDAIR_Service_ptr,
00159                                                       iOwnStdairService);
00160 }
00161
00162 // //////////////////////////////////////
00163 void AIRINV_Master_Service::
00164 addSEVMGRService (SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR_Service_ptr,
00165                  const bool iOwnSEVMGRService) {
00166
00167     // Retrieve the AirInv Master service context
00168     assert (_airinvMasterServiceContext != NULL);
00169     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00170         *_airinvMasterServiceContext;
00171
00172     // Store the STDAIR service object within the (TRADEMGEN) service context
00173     lAIRINV_Master_ServiceContext.setSEVMGR_Service (ioSEVMGR_Service_ptr,
00174                                                       iOwnSEVMGRService);
00175 }
00176
00177 // //////////////////////////////////////
00178 stdair::STDAIR_ServicePtr_T AIRINV_Master_Service::
00179 initStdAirService (const stdair::BasLogParams& iLogParams,
00180                   const stdair::BasDBParams& iDBParams) {
00181
00182     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00183         boost::make_shared<stdair::STDAIR_Service> (iLogParams, iDBParams);
00184
00185     return lSTDAIR_Service_ptr;
00186 }
00187
00188 // //////////////////////////////////////
00189 stdair::STDAIR_ServicePtr_T AIRINV_Master_Service::
00190 initStdAirService (const stdair::BasLogParams& iLogParams) {
00191
00192     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00193         boost::make_shared<stdair::STDAIR_Service> (iLogParams);
00194
00195     return lSTDAIR_Service_ptr;
00196 }
00197
00198 // //////////////////////////////////////
00199 void AIRINV_Master_Service::initSlaveAirinvService() {

```

```

00214
00215     // Retrieve the AirInv Master service context
00216     assert (_airinvMasterServiceContext != NULL);
00217     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00218         *_airinvMasterServiceContext;
00219
00220     // Retrieve the StdAir service
00221     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00222         lAIRINV_Master_ServiceContext.getSTDAIR_ServicePtr();
00223     assert (lSTDAIR_Service_ptr != NULL);
00224
00225     AIRINV_ServicePtr_T lAIRINV_Service_ptr;
00226     const bool ownSEVMGRService =
00227         lAIRINV_Master_ServiceContext.getOwnSEVMGRServiceFlag();
00228     if (ownSEVMGRService == false) {
00229         // Retrieve the SEVMGR service
00230         SEVMGR::SEVMGR_ServicePtr_T lSEVMGR_Service_ptr =
00231             lAIRINV_Master_ServiceContext.getSEVMGR_ServicePtr();
00232         assert (lSEVMGR_Service_ptr != NULL);
00233         lAIRINV_Service_ptr = boost::make_shared<AIRINV_Service> (lSTDAIR_Service_ptr,
00234             lSEVMGR_Service_ptr);
00235     } else {
00236         lAIRINV_Service_ptr = boost::make_shared<AIRINV_Service> (lSTDAIR_Service_ptr);
00237     }
00238     assert (lAIRINV_Service_ptr != NULL);
00239
00240     // Store the AIRINV service object within the AIRINV Master service context.
00241     lAIRINV_Master_ServiceContext.setAIRINV_Service (lAIRINV_Service_ptr);
00242 }
00243
00244 // //////////////////////////////////////
00245 void AIRINV_Master_Service::
00246 parseAndLoad (const InventoryFilePath& iInventoryInputFilename) {
00247
00248     // Retrieve the AirInv Master service context
00249     if (_airinvMasterServiceContext == NULL) {
00250         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00251             "has not been initialised");
00252     }
00253     assert (_airinvMasterServiceContext != NULL);
00254
00255     // Retrieve the AirInv service context and whether it owns the Stdair
00256     // service
00257     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00258         *_airinvMasterServiceContext;
00259     const bool doesOwnStdairService =
00260         lAIRINV_Master_ServiceContext.getOwnStdairServiceFlag();
00261
00262     // Retrieve the slave AIRINV service object from the (AIRINV)
00263     // service context
00264     AIRINV_Service& lAIRINV_Service =
00265         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00266
00267     // Delegate the file parsing and BOM building to the dedicated service
00268     lAIRINV_Service.parseAndLoad (iInventoryInputFilename);
00269
00270     if (doesOwnStdairService == true) {
00271         //
00272         clonePersistentBom ();
00273     }
00274 }
00275
00276 // //////////////////////////////////////

```

```

00291 void AIRINV_Master_Service::buildSampleBom() {
00292
00293     // Retrieve the AirInv Master service context
00294     if (_airinvMasterServiceContext == NULL) {
00295         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00296                                                     "has not been initialised");
00297     }
00298     assert (_airinvMasterServiceContext != NULL);
00299
00300     // Retrieve the AirInv service context and whether it owns the Stdair
00301     // service
00302     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00303         *_airinvMasterServiceContext;
00304     const bool doesOwnStdairService =
00305         lAIRINV_Master_ServiceContext.getOwnStdairServiceFlag();
00306
00307     // Retrieve the StdAir service object from the (AirInv) service context
00308     stdair::STDAIR_Service& lSTDAIR_Service =
00309         lAIRINV_Master_ServiceContext.getSTDAIR_Service();
00310     stdair::BomRoot& lPersistentBomRoot =
00311         lSTDAIR_Service.getPersistentBomRoot();
00312
00313     if (doesOwnStdairService == true) {
00314         //
00315         lSTDAIR_Service.buildSampleBom();
00316     }
00317
00318     AIRINV_Service& lAIRINV_Service =
00319         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00320     lAIRINV_Service.buildSampleBom();
00321
00322     buildComplementaryLinks (lPersistentBomRoot);
00323
00324     if (doesOwnStdairService == true) {
00325         //
00326         clonePersistentBom ();
00327     }
00328 }
00329
00330 // //////////////////////////////////////
00331 void AIRINV_Master_Service::
00332 parseAndLoad (const stdair::ScheduleFilePath& iScheduleInputFilename,
00333               const stdair::ODFilePath& iODInputFilename,
00334               const stdair::FRAT5FilePath& iFRAT5InputFilename,
00335               const stdair::FFDisutilityFilePath& iFFDisutilityInputFilename,
00336               const AIRRAC::YieldFilePath& iYieldFilename) {
00337
00338     // Retrieve the AirInv Master service context
00339     if (_airinvMasterServiceContext == NULL) {
00340         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00341                                                     "has not been initialised");
00342     }
00343     assert (_airinvMasterServiceContext != NULL);
00344
00345     // Retrieve the AirInv service context and whether it owns the Stdair
00346     // service
00347     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00348         *_airinvMasterServiceContext;
00349     const bool doesOwnStdairService =
00350         lAIRINV_Master_ServiceContext.getOwnStdairServiceFlag();
00351
00352     // Retrieve the slave AirInv service object from the (AirInv)
00353     // service context
00354     AIRINV_Service& lAIRINV_Service =
00355         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00356 }

```

```

00378 // Retrieve the StdAir service object from the (AirInv) service context
00379 stdair::STDAIR_Service& lSTDAIR_Service =
00380     lAIRINV_Master_ServiceContext.getSTDAIR_Service();
00381 stdair::BomRoot& lPersistentBomRoot =
00382     lSTDAIR_Service.getPersistentBomRoot();
00383
00387 lAIRINV_Service.parseAndLoad (iScheduleInputFilename, iODInputFilename,
00388                               iFRAT5InputFilename,
00389                               iFFDisutilityInputFilename, iYieldFilename);
00390
00401 buildComplementaryLinks (lPersistentBomRoot);
00402
00407 if (doesOwnStdairService == true) {
00408
00409     //
00410     clonePersistentBom ();
00411 }
00412 }
00413
00414 // //////////////////////////////////////
00415 void AIRINV_Master_Service::clonePersistentBom () {
00416
00417     // Retrieve the AirInv Master service context
00418     if (_airinvMasterServiceContext == NULL) {
00419         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00420                                                         "has not been initialised");
00421     }
00422     assert (_airinvMasterServiceContext != NULL);
00423
00424     // Retrieve the AirInv service context and whether it owns the Stdair
00425     // service
00426     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00427         *_airinvMasterServiceContext;
00428     const bool doesOwnStdairService =
00429         lAIRINV_Master_ServiceContext.getOwnStdairServiceFlag();
00430
00431     // Retrieve the slave AIRINV service object from the (AIRINV)
00432     // service context
00433     AIRINV_Service& lAIRINV_Service =
00434         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00435
00436     // Retrieve the StdAir service object from the (AIRINV) service context
00437     stdair::STDAIR_Service& lSTDAIR_Service =
00438         lAIRINV_Master_ServiceContext.getSTDAIR_Service();
00439
00444 if (doesOwnStdairService == true) {
00445
00446     //
00447     lSTDAIR_Service.clonePersistentBom ();
00448 }
00449
00454 lAIRINV_Service.clonePersistentBom ();
00455
00460 stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00461 buildComplementaryLinks (lBomRoot);
00462 }
00463
00464 // //////////////////////////////////////
00465 void AIRINV_Master_Service::
00466 buildComplementaryLinks (stdair::BomRoot& ioBomRoot) {
00467     // Currently, no more things to do by AIRINV_Master at that stage.
00468 }
00469
00470 // //////////////////////////////////////
00471 std::string AIRINV_Master_Service::
00472 jsonHandler (const stdair::JSONString& lJSONString) const {
00473

```

```

00474 // Retrieve the AirInv Master service context
00475 if (_airinvMasterServiceContext == NULL) {
00476     throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00477                                                     "has not been initialised");
00478 }
00479 assert (_airinvMasterServiceContext != NULL);
00480
00481 AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00482     *_airinvMasterServiceContext;
00483
00484 // Retrieve the slave AirInv (slave) service object from
00485 // the (AirInv master) service context
00486 AIRINV_Service& lAIRINV_Service =
00487     lAIRINV_Master_ServiceContext.getAIRINV_Service();
00488
00489 // Delegate the BOM dump to the dedicated service
00490 return lAIRINV_Service.jsonHandler (lJSONString);
00491 }
00492
00493 // //////////////////////////////////////
00494 std::string AIRINV_Master_Service::
00495 jsonExportFlightDateList (const stdair::AirlineCode_T& iAirlineCode,
00496                           const stdair::FlightNumber_T& iFlightNumber) const {
00497
00498     // Retrieve the AirInv Master service context
00499     if (_airinvMasterServiceContext == NULL) {
00500         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00501                                                         "has not been initialised");
00502     }
00503     assert (_airinvMasterServiceContext != NULL);
00504
00505     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00506         *_airinvMasterServiceContext;
00507
00508     // Retrieve the slave AirInv (slave) service object from
00509     // the (AirInv master) service context
00510     AIRINV_Service& lAIRINV_Service =
00511         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00512
00513     // Delegate the JSON export to the dedicated service
00514     return lAIRINV_Service.jsonExportFlightDateList (iAirlineCode,
00515                                                       iFlightNumber);
00516 }
00517
00518 // //////////////////////////////////////
00519 std::string AIRINV_Master_Service::
00520 jsonExportFlightDateObjects (const stdair::AirlineCode_T& iAirlineCode,
00521                              const stdair::FlightNumber_T& iFlightNumber,
00522                              const stdair::Date_T& iDepartureDate) const {
00523
00524     // Retrieve the AirInv Master service context
00525     if (_airinvMasterServiceContext == NULL) {
00526         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00527                                                         "has not been initialised");
00528     }
00529     assert (_airinvMasterServiceContext != NULL);
00530
00531     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00532         *_airinvMasterServiceContext;
00533
00534     // Retrieve the slave AirInv (slave) service object from
00535     // the (AirInv master) service context
00536     AIRINV_Service& lAIRINV_Service =
00537         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00538
00539     // Delegate the BOM dump to the dedicated service
00540

```

```

00541     return lAIRINV_Service.jsonExportFlightDateObjects (iAirlineCode,
00542                                                         iFlightNumber,
00543                                                         iDepartureDate);
00544 }
00545
00546 // //////////////////////////////////////
00547 std::string AIRINV_Master_Service::
00548 list (const stdair::AirlineCode_T& iAirlineCode,
00549       const stdair::FlightNumber_T& iFlightNumber) const {
00550     std::ostream oFlightListStr;
00551
00552     // Retrieve the AirInv Master service context
00553     if (_airinvMasterServiceContext == NULL) {
00554         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00555                                                         "has not been initialised");
00556     }
00557     assert (_airinvMasterServiceContext != NULL);
00558
00559     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00560         *_airinvMasterServiceContext;
00561
00562     // Retrieve the slave AirInv (slave) service object from
00563     // the (AirInv master) service context
00564     AIRINV_Service& lAIRINV_Service =
00565         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00566
00567     // Delegate the BOM display to the dedicated service
00568     return lAIRINV_Service.list (iAirlineCode, iFlightNumber);
00569 }
00570
00571 // //////////////////////////////////////
00572 bool AIRINV_Master_Service::
00573 check (const stdair::AirlineCode_T& iAirlineCode,
00574        const stdair::FlightNumber_T& iFlightNumber,
00575        const stdair::Date_T& iDepartureDate) const {
00576     std::ostream oFlightListStr;
00577
00578     // Retrieve the AirInv Master service context
00579     if (_airinvMasterServiceContext == NULL) {
00580         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00581                                                         "has not been initialised");
00582     }
00583     assert (_airinvMasterServiceContext != NULL);
00584
00585     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00586         *_airinvMasterServiceContext;
00587
00588     // Retrieve the slave AirInv (slave) service object from
00589     // the (AirInv master) service context
00590     AIRINV_Service& lAIRINV_Service =
00591         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00592
00593     // Delegate the BOM display to the dedicated service
00594     return lAIRINV_Service.check (iAirlineCode, iFlightNumber, iDepartureDate);
00595 }
00596
00597 // //////////////////////////////////////
00598 std::string AIRINV_Master_Service::csvDisplay() const {
00599
00600     // Retrieve the AirInv Master service context
00601     if (_airinvMasterServiceContext == NULL) {
00602         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00603                                                         "has not been initialised");
00604     }
00605     assert (_airinvMasterServiceContext != NULL);
00606
00607     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =

```

```

00608     *_airinvMasterServiceContext;
00609
00610     // Retrieve the slave AIRINV service object from
00611     // the (AIRINV) service context
00612     AIRINV_Service& lAIRINV_Service =
00613         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00614
00615     // Delegate the BOM display to the dedicated service
00616     return lAIRINV_Service.csvDisplay();
00617 }
00618
00619 // //////////////////////////////////////
00620 std::string AIRINV_Master_Service::
00621 csvDisplay (const stdair::AirlineCode_T& iAirlineCode,
00622             const stdair::FlightNumber_T& iFlightNumber,
00623             const stdair::Date_T& iDepartureDate) const {
00624
00625     // Retrieve the AirInv Master service context
00626     if (_airinvMasterServiceContext == NULL) {
00627         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00628                                                         "has not been initialised");
00629     }
00630     assert (_airinvMasterServiceContext != NULL);
00631
00632     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00633         *_airinvMasterServiceContext;
00634
00635     // Retrieve the slave AIRINV service object from
00636     // the (AIRINV) service context
00637     AIRINV_Service& lAIRINV_Service =
00638         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00639
00640     // Delegate the BOM display to the dedicated service
00641     return lAIRINV_Service.csvDisplay (iAirlineCode, iFlightNumber,
00642                                         iDepartureDate);
00643 }
00644
00645 // //////////////////////////////////////
00646 void AIRINV_Master_Service::
00647 initSnapshotAndRMEvents (const stdair::Date_T& iStartDate,
00648                          const stdair::Date_T& iEndDate) {
00649
00650     // Retrieve the AirInv Master service context
00651     if (_airinvMasterServiceContext == NULL) {
00652         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00653                                                         "has not been initialised");
00654     }
00655     assert (_airinvMasterServiceContext != NULL);
00656
00657     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00658         *_airinvMasterServiceContext;
00659
00660     // Retrieve the pointer on the SEVMGR service context
00661     SEVMGR::SEVMGR_ServicePtr_T lSEVMGR_Service_ptr =
00662         lAIRINV_Master_ServiceContext.getSEVMGR_ServicePtr();
00663     assert (lSEVMGR_Service_ptr != NULL);
00664
00665     // Initialise the snapshot events
00666     InventoryManager::initSnapshotEvents (lSEVMGR_Service_ptr, iStartDate, iEndDa
00667 te);
00668
00669     // \todo Browse the list of inventories and itinialise the RM events of
00670     //         each inventory.
00671
00672     // Retrieve the slave AIRINV service object from the (AIRINV)
00673     // service context
00674     AIRINV_Service& lAIRINV_Service =

```



```

00674     lAIRINV_Master_ServiceContext.getAIRINV_Service();
00675     lSEVMGR_Service_ptr->addStatus (stdair::EventType::RM, 0);
00676     stdair::RMEventList_T lRMEventList =
00677         lAIRINV_Service.initRMEvents (iStartDate, iEndDate);
00678     assert (lRMEventList.empty() == false);
00679     InventoryManager::addRMEventsToEventQueue (lSEVMGR_Service_ptr, lRMEventList)
00680 ;
00681 }
00682 // //////////////////////////////////////
00683 void AIRINV_Master_Service::
00684 calculateAvailability (stdair::TravelSolutionStruct& ioTravelSolution) {
00685     // Retrieve the AirInv Master service context
00686     if (_airinvMasterServiceContext == NULL) {
00687         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00688             "has not been initialised");
00689     }
00690     assert (_airinvMasterServiceContext != NULL);
00691     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00692         *_airinvMasterServiceContext;
00693     // Retrieve the slave AIRINV service object from the (AIRINV)
00694     // service context
00695     AIRINV_Service& lAIRINV_Service =
00696         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00697     // Delegate the availability retrieval to the dedicated service
00698     stdair::BasChronometer lAvlChronometer;
00699     lAvlChronometer.start();
00700     lAIRINV_Service.calculateAvailability (ioTravelSolution);
00701     // DEBUG
00702     // const double lAvlMeasure = lAvlChronometer.elapsed();
00703     // STDAIR_LOG_DEBUG ("Availability retrieval: " << lAvlMeasure << " - "
00704     // << lAIRINV_Master_ServiceContext.display());
00705 }
00706 // //////////////////////////////////////
00707 bool AIRINV_Master_Service::sell (const std::string& iSegmentDateKey,
00708     const stdair::ClassCode_T& iClassCode,
00709     const stdair::PartySize_T& iPartySize) {
00710     // Retrieve the AirInv Master service context
00711     if (_airinvMasterServiceContext == NULL) {
00712         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00713             "has not been initialised");
00714     }
00715     assert (_airinvMasterServiceContext != NULL);
00716     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00717         *_airinvMasterServiceContext;
00718     // Retrieve the corresponding inventory key
00719     // const stdair::InventoryKey& lInventoryKey =
00720     // stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00721     // Retrieve the slave AirInv service object from the (AirInv Master)
00722     // service context
00723     AIRINV_Service& lAIRINV_Service =
00724         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00725     // Delegate the booking to the dedicated command
00726     stdair::BasChronometer lSellChronometer;
00727     lSellChronometer.start();

```

```

00740
00741     // Delegate the BOM building to the dedicated service
00742     const bool hasBeenSaleSuccessful =
00743         lAIRINV_Service.sell (iSegmentDateKey, iClassCode, iPartySize);
00744
00745     // const double lSellMeasure = lSellChronometer.elapsed();
00746
00747     // DEBUG
00748     // STDAIR_LOG_DEBUG ("Booking sell: " << lSellMeasure << " - "
00749     //                   << lAIRINV_Master_ServiceContext.display());
00750
00751     //
00752     return hasBeenSaleSuccessful;
00753 }
00754
00755 // //////////////////////////////////////
00756 bool AIRINV_Master_Service::sell (const stdair::BookingClassID_T& iClassID,
00757                                   const stdair::PartySize_T& iPartySize) {
00758
00759     // Retrieve the AirInv Master service context
00760     if (_airinvMasterServiceContext == NULL) {
00761         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00762                                                         "has not been initialised");
00763     }
00764     assert (_airinvMasterServiceContext != NULL);
00765
00766     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00767         *_airinvMasterServiceContext;
00768
00769     // Retrieve the corresponding inventory key
00770     // const stdair::InventoryKey& lInventoryKey =
00771     // stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00772
00773     // Retrieve the slave AirInv service object from the (AirInv Master)
00774     // service context
00775     AIRINV_Service& lAIRINV_Service =
00776         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00777
00778     // Delegate the booking to the dedicated command
00779     stdair::BasChronometer lSellChronometer;
00780     lSellChronometer.start();
00781
00782     // Delegate the BOM building to the dedicated service
00783     const bool hasBeenSaleSuccessful =
00784         lAIRINV_Service.sell (iClassID, iPartySize);
00785
00786     // const double lSellMeasure = lSellChronometer.elapsed();
00787
00788     // DEBUG
00789     // STDAIR_LOG_DEBUG ("Booking sell: " << lSellMeasure << " - "
00790     //                   << lAIRINV_Master_ServiceContext.display());
00791
00792     //
00793     return hasBeenSaleSuccessful;
00794 }
00795
00796 // //////////////////////////////////////
00797 bool AIRINV_Master_Service::cancel (const std::string& iSegmentDateKey,
00798                                     const stdair::ClassCode_T& iClassCode,
00799                                     const stdair::PartySize_T& iPartySize) {
00800
00801     // Retrieve the AirInv Master service context
00802     if (_airinvMasterServiceContext == NULL) {
00803         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00804                                                         "has not been initialised");
00805     }
00806     assert (_airinvMasterServiceContext != NULL);

```

```

00807
00808     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00809         *_airinvMasterServiceContext;
00810
00811     // Retrieve the corresponding inventory key
00812     // const stdair::InventoryKey& lInventoryKey =
00813     // stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00814
00815     // Retrieve the slave AirInv service object from the (AirInv Master)
00816     // service context
00817     AIRINV_Service& lAIRINV_Service =
00818         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00819
00820     // Delegate the booking to the dedicated command
00821     stdair::BasChronometer lCancelChronometer;
00822     lCancelChronometer.start();
00823
00824     // Delegate the BOM building to the dedicated service
00825     const bool hasBeenSaleSuccessful =
00826         lAIRINV_Service.cancel (iSegmentDateKey, iClassCode, iPartySize);
00827
00828     // const double lCancelMeasure = lCancelChronometer.elapsed();
00829
00830     // DEBUG
00831     // STDAIR_LOG_DEBUG ("Booking cancel: " << lCancelMeasure << " - "
00832     //                   << lAIRINV_Master_ServiceContext.display());
00833
00834     //
00835     return hasBeenSaleSuccessful;
00836 }
00837
00838 // //////////////////////////////////////
00839 bool AIRINV_Master_Service::cancel (const stdair::BookingClassID_T& iClassID,
00840                                     const stdair::PartySize_T& iPartySize) {
00841
00842     // Retrieve the AirInv Master service context
00843     if (_airinvMasterServiceContext == NULL) {
00844         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00845                                                         "has not been initialised");
00846     }
00847     assert (_airinvMasterServiceContext != NULL);
00848
00849     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00850         *_airinvMasterServiceContext;
00851
00852     // Retrieve the corresponding inventory key
00853     // const stdair::InventoryKey& lInventoryKey =
00854     // stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00855
00856     // Retrieve the slave AirInv service object from the (AirInv Master)
00857     // service context
00858     AIRINV_Service& lAIRINV_Service =
00859         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00860
00861     // Delegate the booking to the dedicated command
00862     stdair::BasChronometer lCancelChronometer;
00863     lCancelChronometer.start();
00864
00865     // Delegate the BOM building to the dedicated service
00866     const bool hasBeenSaleSuccessful =
00867         lAIRINV_Service.cancel (iClassID, iPartySize);
00868
00869     // const double lCancelMeasure = lCancelChronometer.elapsed();
00870
00871     // DEBUG
00872     // STDAIR_LOG_DEBUG ("Booking cancel: " << lCancelMeasure << " - "
00873     //                   << lAIRINV_Master_ServiceContext.display());

```

```

00874
00875     //
00876     return hasBeenSaleSuccessful;
00877 }
00878
00879 // //////////////////////////////////////
00880 void AIRINV_Master_Service::
00881 takeSnapshots (const stdair::SnapshotStruct& iSnapshot) {
00882
00883     // Retrieve the AirInv Master service context
00884     if (_airinvMasterServiceContext == NULL) {
00885         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00886                                                         "has not been initialised");
00887     }
00888     assert (_airinvMasterServiceContext != NULL);
00889
00890     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00891         *_airinvMasterServiceContext;
00892
00893     // Retrieve the slave AIRINV service object from the (AIRINV)
00894     // service context
00895     AIRINV_Service& lAIRINV_Service =
00896         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00897
00898     // Retrieve the snapshot time and the airline code.
00899     const stdair::DateTime_T& lSnapshotTime = iSnapshot.getSnapshotTime();
00900     const stdair::AirlineCode_T& lAirlineCode = iSnapshot.getAirlineCode();
00901
00902     lAIRINV_Service.takeSnapshots (lAirlineCode, lSnapshotTime);
00903 }
00904
00905 // //////////////////////////////////////
00906 void AIRINV_Master_Service::
00907 optimise (const stdair::RMEventStruct& iRMEvent) {
00908
00909     // Retrieve the AirInv Master service context
00910     if (_airinvMasterServiceContext == NULL) {
00911         throw stdair::NonInitialisedServiceException ("The AirInvMaster service "
00912                                                         "has not been initialised");
00913     }
00914     assert (_airinvMasterServiceContext != NULL);
00915
00916     AIRINV_Master_ServiceContext& lAIRINV_Master_ServiceContext =
00917         *_airinvMasterServiceContext;
00918
00919     // Retrieve the slave AIRINV service object from the (AIRINV)
00920     // service context
00921     AIRINV_Service& lAIRINV_Service =
00922         lAIRINV_Master_ServiceContext.getAIRINV_Service();
00923
00924     // Retrieve the snapshot time and the airline code.
00925     const stdair::DateTime_T& lRMEventTime = iRMEvent.getRMEventTime();
00926     const stdair::AirlineCode_T& lAirlineCode = iRMEvent.getAirlineCode();
00927     const stdair::KeyDescription_T& lFDDescription =
00928         iRMEvent.getFlightDateDescription();
00929
00930     lAIRINV_Service.optimise (lAirlineCode, lFDDescription, lRMEventTime);
00931 }
00932 }

```

## 25.239 airinv/service/AIRINV\_Master\_ServiceContext.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
#include <airinv/service/AIRINV_Master_ServiceContext.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.240 AIRINV\_Master\_ServiceContext.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // Airinv
00008 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00009 #include <airinv/service/AIRINV_Master_ServiceContext.hpp>
00010
00011 namespace AIRINV {
00012
00013     // //////////////////////////////////////
00014     AIRINV_Master_ServiceContext::AIRINV_Master_ServiceContext()
00015         : _ownStdairService (false),
00016           _ownSEVMGRService (true) {
00017     }
00018
00019     // //////////////////////////////////////
00020     AIRINV_Master_ServiceContext::~AIRINV_Master_ServiceContext() {
00021     }
00022
00023     // //////////////////////////////////////
00024     const std::string AIRINV_Master_ServiceContext::shortDisplay() const {
00025         std::ostringstream ostr;
00026         ostr << "AIRINV_Master_ServiceContext -- Owns StdAir service: "
00027             << _ownStdairService;
00028         return ostr.str();
00029     }
00030
00031     // //////////////////////////////////////
00032     const std::string AIRINV_Master_ServiceContext::display() const {
00033         std::ostringstream ostr;
00034         ostr << shortDisplay();
00035         return ostr.str();
00036     }
00037
00038     // //////////////////////////////////////
00039     const std::string AIRINV_Master_ServiceContext::describe() const {
00040         return shortDisplay();
00041     }
00042
00043     // //////////////////////////////////////
00044     void AIRINV_Master_ServiceContext::reset() {
00045
00046         // The shared_ptr<>::reset() method drops the refcount by one.
00047         // If the count result is dropping to zero, the resource pointed to
00048         // by the shared_ptr<> will be freed.
00049
00050         // Reset the stdair shared pointer
00051         _stdairService.reset();
00052
00053         // Reset the sevmgr shared pointer
00054         _sevmgrService.reset();
00055
00056         // Reset the airinv shared pointer
00057         _airinvService.reset();
00058     }
00059 }
00060 }

```

## 25.241 airinv/service/AIRINV\_Master\_ServiceContext.hpp File Reference

```
#include <string>
#include <boost/shared_ptr.hpp>
#include <stdair/stdair_service_types.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/service/ServiceAbstract.hpp>
#include <sevmgr/SEVMGR_Types.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- class [AIRINV::AIRINV\\_Master\\_ServiceContext](#)

### Namespaces

- namespace [AIRINV](#)

**25.242 AIRINV\_Master\_ServiceContext.hpp**

```

00001 #ifndef __AIRINV_SVC_AIRINVMASTERSERVICECONTEXT_HPP
00002 #define __AIRINV_SVC_AIRINVMASTERSERVICECONTEXT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_service_types.hpp>
00013 #include <stdair/bom/Inventory.hpp>
00014 #include <stdair/service/ServiceAbstract.hpp>
00015 // SEvMgr
00016 #include <sevmgr/SEVMGR_Types.hpp>
00017 // AirInv
00018 #include <airinv/AIRINV_Types.hpp>
00019
00020 namespace AIRINV {
00021
00022     class AIRINV_Service;
00023
00024
00028     class AIRINV_Master_ServiceContext : public stdair::ServiceAbstract {
00034         friend class AIRINV_Master_Service;
00035         friend class FacAirinvMasterServiceContext;
00036
00037     private:
00038         // ////////////////////////////////// Getters //////////////////////////////////
00042         stdair::STDAIR_ServicePtr_T getSTDAIR_ServicePtr() const {
00043             return _stdairService;
00044         }
00045
00049         SEVMGR::SEVMGR_ServicePtr_T getSEVMGR_ServicePtr() const {
00050             return _sevmgrService;
00051         }
00052
00056         stdair::STDAIR_Service& getSTDAIR_Service() const {
00057             assert (_stdairService != NULL);
00058             return *_stdairService;
00059         }
00060
00064         const bool getOwnStdairServiceFlag() const {
00065             return _ownStdairService;
00066         }
00067
00071         const bool getOwnSEVMGRServiceFlag() const {
00072             return _ownSEVMGRService;
00073         }
00074
00079         AIRINV_Service& getAIRINV_Service() const {
00080             assert (_airinvService != NULL);
00081             return *_airinvService;
00082         }
00083
00084         // ////////////////////////////////// Setters //////////////////////////////////
00088         void setSTDAIR_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_ServicePtr,
00089                                 const bool iOwnStdairService) {
00090             _stdairService = ioSTDAIR_ServicePtr;
00091             _ownStdairService = iOwnStdairService;
00092         }
00093
00097         void setSEVMGR_Service (SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR_ServicePtr,
00098                                 const bool iOwnSEVMGRService) {
00099             _sevmgrService = ioSEVMGR_ServicePtr;

```



```

00100     _ownSEVMGRService = iOwnSEVMGRService;
00101 }
00102
00106 void setAIRINV_Service (AIRINV_ServicePtr_T ioAIRINV_ServicePtr) {
00107     _airinvService = ioAIRINV_ServicePtr;
00108 }
00109
00110
00111 private:
00112     // ////////////////////////////////// Display Methods //////////////////////////////////
00116     const std::string shortDisplay() const;
00117
00121     const std::string display() const;
00122
00126     const std::string describe() const;
00127
00128
00129 private:
00131
00134     AIRINV_Master_ServiceContext ();
00138     AIRINV_Master_ServiceContext (const AIRINV_Master_ServiceContext&);
00139
00143     ~AIRINV_Master_ServiceContext ();
00144
00148     void reset ();
00149
00150
00151 private:
00152     // ////////////////////////////////// Children //////////////////////////////////
00156     stdair::STDAIR_ServicePtr_T _stdairService;
00157
00161     bool _ownStdairService;
00162
00166     SEVMGR::SEVMGR_ServicePtr_T _sevmgrService;
00167
00171     bool _ownSEVMGRService;
00172
00173
00174 private:
00175     // ////////////////////////////////// Attributes //////////////////////////////////
00179     AIRINV_ServicePtr_T _airinvService;
00180 };
00181
00182 }
00183 #endif // __AIRINV_SVC_AIRINVMASERSERVICECONTEXT_HPP

```

## 25.243 airinv/service/AIRINV\_Service.cpp File Reference

```
#include <cassert>
#include <boost/make_shared.hpp>
#include <stdair/stdair_json.hpp>
#include <stdair/basic/BasChronometer.hpp>
#include <stdair/basic/JSonCommand.hpp>
#include <stdair/basic/PartnershipTechnique.hpp>
#include <stdair/basic/UnconstrainingMethod.hpp>
#include <stdair/basic/OptimisationMethod.hpp>
#include <stdair/bom/BomKeyManager.hpp>
#include <stdair/bom/BomManager.hpp>
#include <stdair/bom/BomRoot.hpp>
#include <stdair/bom/Inventory.hpp>
#include <stdair/bom/FlightDate.hpp>
#include <stdair/bom/SegmentCabin.hpp>
#include <stdair/bom/AirlineFeature.hpp>
#include <stdair/bom/RMEventStruct.hpp>
#include <stdair/bom/BomJSONImport.hpp>
#include <stdair/bom/BomJSONExport.hpp>
#include <stdair/factory/FacBomManager.hpp>
#include <stdair/service/Logger.hpp>
#include <stdair/STDAIR_Service.hpp>
#include <rmol/RMOL_Service.hpp>
#include <airrac/AIRRAC_Service.hpp>
#include <sevmgr/SEVMGR_Service.hpp>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
#include <airinv/factory/FacAirinvServiceContext.hpp>
#include <airinv/command/ScheduleParser.hpp>
#include <airinv/command/FRAT5Parser.hpp>
#include <airinv/command/FFDisutilityParser.hpp>
#include <airinv/command/InventoryParser.hpp>
#include <airinv/command/InventoryManager.hpp>
#include <airinv/command/InventoryBuilder.hpp>
#include <airinv/service/AIRINV_ServiceContext.hpp>
#include <airinv/AIRINV_Service.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.244 AIRINV\_Service.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 // Boost
00007 #include <boost/make_shared.hpp>
00008 // StdAir
00009 #include <stdair/stdair_json.hpp>
00010 #include <stdair/basic/BasChronometer.hpp>
00011 #include <stdair/basic/JJsonCommand.hpp>
00012 #include <stdair/basic/PartnershipTechnique.hpp>
00013 #include <stdair/basic/UnconstrainingMethod.hpp>
00014 #include <stdair/basic/OptimisationMethod.hpp>
00015 #include <stdair/bom/BomKeyManager.hpp>
00016 #include <stdair/bom/BomManager.hpp>
00017 #include <stdair/bom/BomRoot.hpp>
00018 #include <stdair/bom/Inventory.hpp>
00019 #include <stdair/bom/FlightDate.hpp>
00020 #include <stdair/bom/SegmentCabin.hpp>
00021 #include <stdair/bom/AirlineFeature.hpp>
00022 #include <stdair/bom/RMEventStruct.hpp>
00023 #include <stdair/bom/BomJSONImport.hpp>
00024 #include <stdair/bom/BomJSONExport.hpp>
00025 #include <stdair/factory/FacBomManager.hpp>
00026 #include <stdair/service/Logger.hpp>
00027 #include <stdair/STDAIR_Service.hpp>
00028 // RMOL
00029 #include <rmol/RMOL_Service.hpp>
00030 // AirRAC
00031 #include <airrac/AIRRAC_Service.hpp>
00032 // SEvMgr
00033 #include <sevmgr/SEVMGR_Service.hpp>
00034 // AirInv
00035 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00036 #include <airinv/factory/FacAirinvServiceContext.hpp>
00037 #include <airinv/command/ScheduleParser.hpp>
00038 #include <airinv/command/FRAT5Parser.hpp>
00039 #include <airinv/command/FFDisutilityParser.hpp>
00040 #include <airinv/command/InventoryParser.hpp>
00041 #include <airinv/command/InventoryManager.hpp>
00042 #include <airinv/command/InventoryBuilder.hpp>
00043 #include <airinv/service/AIRINV_ServiceContext.hpp>
00044 #include <airinv/AIRINV_Service.hpp>
00045
00046 namespace AIRINV {
00047
00048 // //////////////////////////////////////
00049 AIRINV_Service::AIRINV_Service () : _airinvServiceContext (NULL) {
00050     assert (false);
00051 }
00052
00053 // //////////////////////////////////////
00054 AIRINV_Service::AIRINV_Service (const AIRINV_Service& iService)
00055 : _airinvServiceContext (NULL) {
00056     assert (false);
00057 }
00058
00059 // //////////////////////////////////////
00060 AIRINV_Service::AIRINV_Service (const stdair::BasLogParams& iLogParams)
00061 : _airinvServiceContext (NULL) {
00062
00063     // Initialise the STDAIR service handler
00064     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00065         initStdAirService (iLogParams);

```

```

00066
00067     // Initialise the service context
00068     initServiceContext();
00069
00070     // Add the StdAir service context to the AIRINV service context
00071     // \note AIRINV owns the STDAIR service resources here.
00072     const bool ownStdairService = true;
00073     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00074
00075     // Initialise the RMOL service.
00076     initRMOLService();
00077
00078     // Initialise the AIRRAC service.
00079     initAIRRACService();
00080
00081     // Initialise the SEVMgr service.
00082     initSEVMGRService();
00083
00084     // Initialise the (remaining of the) context
00085     initAirinvService();
00086 }
00087
00088 // //////////////////////////////////////
00089 AIRINV_Service::AIRINV_Service (const stdair::BasLogParams& iLogParams,
00090                                const stdair::BasDBParams& iDBParams)
00091 : _airinvServiceContext (NULL) {
00092
00093     // Initialise the STDAIR service handler
00094     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00095         initStdAirService (iLogParams, iDBParams);
00096
00097     // Initialise the service context
00098     initServiceContext();
00099
00100     // Add the StdAir service context to the AIRINV service context
00101     // \note AIRINV owns the STDAIR service resources here.
00102     const bool ownStdairService = true;
00103     addStdAirService (lSTDAIR_Service_ptr, ownStdairService);
00104
00105     // Initialise the RMOL service.
00106     initRMOLService();
00107
00108     // Initialise the AIRRAC service.
00109     initAIRRACService();
00110
00111     // Initialise the SEVMGR service.
00112     initSEVMGRService();
00113
00114     // Initialise the (remaining of the) context
00115     initAirinvService();
00116 }
00117
00118 // //////////////////////////////////////
00119 AIRINV_Service::
00120 AIRINV_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr)
00121 : _airinvServiceContext (NULL) {
00122
00123     // Initialise the service context
00124     initServiceContext();
00125
00126     // Store the STDAIR service object within the (AIRINV) service context
00127     // \note AirInv does not own the STDAIR service resources here.
00128     const bool doesNotOwnStdairService = false;
00129     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00130
00131     // Initialise the RMOL service.
00132

```

```

00133     initRMOLService();
00134
00135     // Initialise the AIRRAC service.
00136     initAIRRACService();
00137
00138     // Initialise the SEVMGR service.
00139     initSEVMGRService();
00140
00141     // Initialise the (remaining of the) context
00142     initAirinvService();
00143
00144 }
00145
00146 // //////////////////////////////////////
00147 AIRINV_Service::
00148 AIRINV_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,
00149                 SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR_Service_ptr)
00150
00151 : _airinvServiceContext (NULL) {
00152
00153     // Initialise the service context
00154     initServiceContext();
00155
00156     // Store the STDAIR service object within the (AIRINV) service context
00157     // \note AirInv does not own the STDAIR service resources here.
00158     const bool doesNotOwnStdairService = false;
00159     addStdAirService (ioSTDAIR_Service_ptr, doesNotOwnStdairService);
00160
00161     //Add the SEvMgr service to the TRADEMGEN service context.
00162     const bool doesNotOwnSEVMGRService = false;
00163     addSEVMGRService (ioSEVMGR_Service_ptr, doesNotOwnSEVMGRService);
00164
00165     // Initialise the RMOL service.
00166     initRMOLService();
00167
00168     // Initialise the AIRRAC service.
00169     initAIRRACService();
00170
00171     // Initialise the (remaining of the) context
00172     initAirinvService();
00173
00174 }
00175
00176 // //////////////////////////////////////
00177 AIRINV_Service::~AIRINV_Service() {
00178     // Delete/Clean all the objects from memory
00179     finalise();
00180 }
00181
00182 // //////////////////////////////////////
00183 void AIRINV_Service::finalise() {
00184     assert (_airinvServiceContext != NULL);
00185     // Reset the (Boost.)Smart pointer pointing on the STDAIR_Service object.
00186     _airinvServiceContext->reset();
00187 }
00188
00189 // //////////////////////////////////////
00190 void AIRINV_Service::initServiceContext() {
00191     // Initialise the context
00192     AIRINV_ServiceContext& lAIRINV_ServiceContext =
00193         FacAirinvServiceContext::instance().create();
00194     _airinvServiceContext = &lAIRINV_ServiceContext;
00195 }
00196
00197 // //////////////////////////////////////
00198 void AIRINV_Service::
00199 addStdAirService (stdair::STDAIR_ServicePtr_T ioSTDAIR_Service_ptr,

```

```

00200         const bool iOwnStdairService) {
00201
00202     // Retrieve the Airinv service context
00203     assert (_airinvServiceContext != NULL);
00204     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00205
00206     // Store the STDAIR service object within the (AIRINV) service context
00207     lAIRINV_ServiceContext.setSTDAIR_Service (ioSTDAIR_Service_ptr,
00208                                             iOwnStdairService);
00209 }
00210
00211 // //////////////////////////////////////
00212 void AIRINV_Service::
00213 addSEVMGRService (SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR_Service_ptr,
00214                 const bool iOwnSEVMGRService) {
00215
00216     // Retrieve the Airinv service context
00217     assert (_airinvServiceContext != NULL);
00218     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00219
00220     // Store the STDAIR service object within the (TRADEMGEN) service context
00221     lAIRINV_ServiceContext.setSEVMGR_Service (ioSEVMGR_Service_ptr,
00222                                             iOwnSEVMGRService);
00223 }
00224
00225 // //////////////////////////////////////
00226 stdair::STDAIR_ServicePtr_T AIRINV_Service::
00227 initStdAirService (const stdair::BasLogParams& iLogParams,
00228                  const stdair::BasDBParams& iDBParams) {
00229
00230     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00231         boost::make_shared<stdair::STDAIR_Service> (iLogParams, iDBParams);
00232
00233     return lSTDAIR_Service_ptr;
00234 }
00235
00236 // //////////////////////////////////////
00237 stdair::STDAIR_ServicePtr_T AIRINV_Service::
00238 initStdAirService (const stdair::BasLogParams& iLogParams) {
00239
00240     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00241         boost::make_shared<stdair::STDAIR_Service> (iLogParams);
00242
00243     return lSTDAIR_Service_ptr;
00244 }
00245
00246 // //////////////////////////////////////
00247 void AIRINV_Service::initRMOLService() {
00248
00249     // Retrieve the AirInv service context
00250     assert (_airinvServiceContext != NULL);
00251     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00252
00253     // Retrieve the StdAir service context
00254     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00255         lAIRINV_ServiceContext.getSTDAIR_Service_ptr();
00256
00257     RMOL::RMOL_ServicePtr_T lRMOL_Service_ptr =
00258         boost::make_shared<RMOL::RMOL_Service> (lSTDAIR_Service_ptr);
00259
00260     // Store the RMOL service object within the (AIRINV) service context
00261     lAIRINV_ServiceContext.setRMOL_Service (lRMOL_Service_ptr);
00262 }
00263
00264 // //////////////////////////////////////
00265 void AIRINV_Service::initAIRRACService() {
00266

```

```

00288     // Retrieve the AirInv service context
00289     assert (_airinvServiceContext != NULL);
00290     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00291
00292     // Retrieve the StdAir service context
00293     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00294         lAIRINV_ServiceContext.getSTDAIR_ServicePtr();
00295
00303     AIRRAC::AIRRAC_ServicePtr_T lAIRRAC_Service_ptr =
00304         boost::make_shared<AIRRAC::AIRRAC_Service> (lSTDAIR_Service_ptr);
00305
00306     // Store the AIRRAC service object within the (AIRINV) service context
00307     lAIRINV_ServiceContext.setAIRRAC_Service (lAIRRAC_Service_ptr);
00308 }
00309
00310 // //////////////////////////////////////
00311 void AIRINV_Service::initSEVMGRService() {
00312
00313     // Retrieve the AIRINV service context
00314     assert (_airinvServiceContext != NULL);
00315     AIRINV_ServiceContext& lAIRINV_ServiceContext =
00316         *_airinvServiceContext;
00317
00318     // Retrieve the StdAir service context
00319     stdair::STDAIR_ServicePtr_T lSTDAIR_Service_ptr =
00320         lAIRINV_ServiceContext.getSTDAIR_ServicePtr();
00321
00329     SEVMGR::SEVMGR_ServicePtr_T lSEVMGR_Service_ptr =
00330         boost::make_shared<SEVMGR::SEVMGR_Service> (lSTDAIR_Service_ptr);
00331
00332     // Store the SEvMgr service object within the (TraDemGen) service context
00333     const bool doesOwnSEVMGRService = true;
00334     lAIRINV_ServiceContext.setSEVMGR_Service (lSEVMGR_Service_ptr,
00335         doesOwnSEVMGRService);
00336 }
00337
00338 // //////////////////////////////////////
00339 void AIRINV_Service::initAirinvService() {
00340     // Do nothing at this stage. A sample BOM tree may be built by
00341     // calling the buildSampleBom() method
00342 }
00343
00344 // //////////////////////////////////////
00345 void AIRINV_Service::
00346 parseAndLoad (const AIRINV::InventoryFilePath& iInventoryInputFilename) {
00347
00348     // Retrieve the AirInv service context
00349     if (_airinvServiceContext == NULL) {
00350         throw stdair::NonInitialisedServiceException("The AirInv service has not "
00351             "been initialised");
00352     }
00353     assert (_airinvServiceContext != NULL);
00354
00355     // Retrieve the AirInv service context and whether it owns the Stdair
00356     // service
00357     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00358     const bool doesOwnStdairService =
00359         lAIRINV_ServiceContext.getOwnStdairServiceFlag();
00360
00361     // Retrieve the StdAir service object from the (AirInv) service context
00362     stdair::STDAIR_Service& lSTDAIR_Service =
00363         lAIRINV_ServiceContext.getSTDAIR_Service();
00364
00365     // Retrieve the persistent BOM root object.
00366     stdair::BomRoot& lPersistentBomRoot =
00367         lSTDAIR_Service.getPersistentBomRoot();
00368

```



```

00372     InventoryParser::buildInventory (iInventoryInputFilename,
00373                                     lPersistentBomRoot);
00374
00378     InventoryBuilder::buildPartnerInventories (lPersistentBomRoot);
00379
00383     lSTDAIR_Service.updateAirlineFeatures();
00384
00389     buildComplementaryLinks (lPersistentBomRoot);
00390
00395     if (doesOwnStdairService == true) {
00396         //
00398         clonePersistentBom ();
00399     }
00400 }
00401
00402 // //////////////////////////////////////
00403 void AIRINV_Service::
00404 parseAndLoad (const stdair::ScheduleFilePath& iScheduleInputFilename,
00405               const stdair::ODFilePath& iODInputFilename,
00406               const stdair::FRAT5FilePath& iFRAT5InputFilename,
00407               const stdair::FFDisutilityFilePath& iFFDisutilityInputFilename,
00408               const AIRRAC::YieldFilePath& iYieldFilename) {
00409
00410     // Retrieve the AirInv service context
00411     if (_airinvServiceContext == NULL) {
00412         throw stdair::NonInitialisedServiceException("The AirInv service has not "
00413                                                       "been initialised");
00414     }
00415     assert (_airinvServiceContext != NULL);
00416
00417     // Retrieve the AirInv service context and whether it owns the Stdair
00418     // service
00419     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00420     const bool doesOwnStdairService =
00421         lAIRINV_ServiceContext.getOwnStdairServiceFlag();
00422
00423     // Retrieve the StdAir service object from the (AirInv) service context
00424     stdair::STDAIR_Service& lSTDAIR_Service =
00425         lAIRINV_ServiceContext.getSTDAIR_Service();
00426
00427     // Retrieve the perssitent BOM root object.
00428     stdair::BomRoot& lPersistentBomRoot =
00429         lSTDAIR_Service.getPersistentBomRoot();
00430
00434     FRAT5Parser::parse (iFRAT5InputFilename, lPersistentBomRoot);
00435     FFDIsutilityParser::parse (iFFDisutilityInputFilename, lPersistentBomRoot);
00436     ScheduleParser::generateInventories (iScheduleInputFilename,
00437                                         lPersistentBomRoot);
00438
00442     InventoryBuilder::buildPartnerInventories (lPersistentBomRoot);
00443
00447     lSTDAIR_Service.updateAirlineFeatures();
00448
00453     buildComplementaryLinks (lPersistentBomRoot);
00454
00463     AIRRAC::AIRRAC_Service& lAIRRAC_Service =
00464         lAIRINV_ServiceContext.getAIRRAC_Service();
00465     lAIRRAC_Service.parseAndLoad (iYieldFilename);
00473     lAIRRAC_Service.updateYields(lPersistentBomRoot);
00474
00479     if (doesOwnStdairService == true) {
00480         //
00482         clonePersistentBom ();
00483     }
00484 }

```

```

00485
00486 // //////////////////////////////////////
00487 void AIRINV_Service::buildSampleBom() {
00488
00489     // Retrieve the AirInv service context
00490     if (_airinvServiceContext == NULL) {
00491         throw stdair::NonInitialisedServiceException("The AirInv service has not "
00492                                                     "been initialised");
00493     }
00494     assert (_airinvServiceContext != NULL);
00495
00496     // Retrieve the AirInv service context and whether it owns the Stdair
00497     // service
00498     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00499     const bool doesOwnStdairService =
00500         lAIRINV_ServiceContext.getOwnStdairServiceFlag();
00501
00502     // Retrieve the StdAir service object from the (AirInv) service context
00503     stdair::STDAIR_Service& lSTDAIR_Service =
00504         lAIRINV_ServiceContext.getSTDAIR_Service();
00505
00506     // Retrieve the perssitent BOM root object.
00507     stdair::BomRoot& lPersistentBomRoot =
00508         lSTDAIR_Service.getPersistentBomRoot();
00509
00510     if (doesOwnStdairService == true) {
00511         //
00512         lSTDAIR_Service.buildSampleBom();
00513     }
00514
00515     AIRRAC::AIRRAC_Service& lAIRRAC_Service =
00516         lAIRINV_ServiceContext.getAIRRAC_Service();
00517     lAIRRAC_Service.buildSampleBom();
00518
00519     RMOL::RMOL_Service& lRMOL_Service =
00520         lAIRINV_ServiceContext.getRMOL_Service();
00521     lRMOL_Service.buildSampleBom();
00522
00523     InventoryBuilder::buildPartnerInventories (lPersistentBomRoot);
00524
00525     buildComplementaryLinks (lPersistentBomRoot);
00526
00527     lSTDAIR_Service.updateAirlineFeatures();
00528
00529     if (doesOwnStdairService == true) {
00530         //
00531         clonePersistentBom ();
00532     }
00533 }
00534
00535 // //////////////////////////////////////
00536 void AIRINV_Service::clonePersistentBom () {
00537
00538     // Retrieve the AirInv service context
00539     if (_airinvServiceContext == NULL) {
00540         throw stdair::NonInitialisedServiceException("The AirInv service has not "
00541                                                     "been initialised");
00542     }
00543     assert (_airinvServiceContext != NULL);
00544
00545     // Retrieve the AirInv service context and whether it owns the Stdair
00546     // service
00547     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00548     const bool doesOwnStdairService =
00549         lAIRINV_ServiceContext.getOwnStdairServiceFlag();
00550

```

```

00585 // Retrieve the StdAir service object from the (AirInv) service context
00586 stdair::STDAIR_Service& lSTDAIR_Service =
00587     lAIRINV_ServiceContext.getSTDAIR_Service();
00588
00593 if (doesOwnStdairService == true) {
00594     //
00595     lSTDAIR_Service.clonePersistentBom ();
00596 }
00597
00598
00602 stdair::BomRoot& lBomRoot =
00603     lSTDAIR_Service.getBomRoot();
00604 buildComplementaryLinks (lBomRoot);
00605 }
00606
00607 // //////////////////////////////////////
00608 void AIRINV_Service::buildComplementaryLinks (stdair::BomRoot& ioBomRoot) {
00609
00620     InventoryManager::createDirectAccesses (ioBomRoot);
00621
00626     InventoryManager::buildSimilarSegmentCabinSets (ioBomRoot);
00627
00631     InventoryManager::setDefaultBidPriceVector (ioBomRoot);
00632
00636     InventoryManager::initialiseYieldBasedNestingStructures (ioBomRoot);
00637
00641     InventoryManager::initialiseListsOfUsablePolicies (ioBomRoot);
00642 }
00643
00644 // //////////////////////////////////////
00645 std::string AIRINV_Service::
00646 jsonHandler (const stdair::JSONString& iJSONString) const {
00647
00648     //
00649     // Extract from the JSON-ified string the command
00650     //
00651     stdair::JJsonCommand::EN_JJsonCommand lEN_JJsonCommand;
00652     const bool hasCommandBeenRetrieved =
00653         stdair::BomJSONImport::jsonImportCommand (iJSONString,
00654             lEN_JJsonCommand);
00655
00656     if (hasCommandBeenRetrieved == false) {
00657         // Return an error JSON-ified string
00658         std::ostringstream oErrorStream;
00659         oErrorStream << "{\"error\": \"Wrong JSON-ified string: \"
00660             << \"the command is not understood.\"}";
00661         return oErrorStream.str();
00662     }
00663     assert (hasCommandBeenRetrieved == true);
00664
00665     //
00666     // Extract from the JSON-ified string an airline code
00667     //
00668     stdair::AirlineCode_T lAirlineCode;
00669     const bool hasKeyBeenRetrieved =
00670         stdair::BomJSONImport::jsonImportInventoryKey (iJSONString,
00671             lAirlineCode);
00672
00673     if (hasKeyBeenRetrieved == false) {
00674         // Return an error JSON-ified string
00675         std::ostringstream oErrorStream;
00676         oErrorStream << "{\"error\": \"Wrong JSON-ified string: \"
00677             << \"the inventory key is not understood.\"}";
00678         return oErrorStream.str();
00679     }
00680     assert (hasKeyBeenRetrieved == true);
00681

```

```

00682 //
00683 // Extract from the JSON-ified string a flight number
00684 //
00685 stdair::FlightNumber_T lFlightNumber;
00686 const bool hasFlightNumBeenRetrieved =
00687     stdair::BomJSONImport::jsonImportFlightNumber (iJSONString,
00688                                                     lFlightNumber);
00689
00690 if (hasFlightNumBeenRetrieved == false) {
00691     // Return an error JSON-ified string
00692     std::ostringstream oErrorStream;
00693     oErrorStream << "{\"error\": \"Wrong JSON-ified string: \"
00694                   << \"the flight number is not understood.\"}";
00695     return oErrorStream.str();
00696 }
00697 assert (hasFlightNumBeenRetrieved == true);
00698
00699 switch (LEN_JSonCommand) {
00700 case stdair::JSoCommand::FLIGHT_DATE:{
00701
00702     // Extract from the JSON-ified string a flight date
00703     stdair::Date_T lDate;
00704     const bool hasDateBeenRetrieved =
00705         stdair::BomJSONImport::jsonImportFlightDate (iJSONString,
00706                                                       lDate);
00707
00708     if (hasDateBeenRetrieved == false) {
00709         // Return an error JSON-ified string
00710         std::ostringstream oErrorStream;
00711         oErrorStream << "{\"error\": \"Wrong JSON-ified string: \"
00712                       << \"the flight date is not understood.\"}";
00713         return oErrorStream.str();
00714     }
00715
00716     // DEBUG
00717     STDAIR_LOG_DEBUG ("=> airline code = '" << lAirlineCode
00718                     << "', flight number = " << lFlightNumber
00719                     << "', departure date = '" << lDate << "'");
00720
00721     // DEBUG: Display the flight-date details dump
00722     const std::string& lFlightDateDetailsCSVDump =
00723         csvDisplay (lAirlineCode, lFlightNumber, lDate);
00724     STDAIR_LOG_DEBUG (std::endl << lFlightDateDetailsCSVDump);
00725
00726     // Dump the full details of the flight-date into the JSON-ified flight-date
00727
00728     const std::string& lFlightDateDetailsJSONDump =
00729         jsonExportFlightDateObjects (lAirlineCode,
00730                                     lFlightNumber,
00731                                     lDate);
00732
00733     // DEBUG
00734     STDAIR_LOG_DEBUG ("Send: '" << lFlightDateDetailsJSONDump << "'");
00735
00736     return lFlightDateDetailsJSONDump;
00737     break;
00738 }
00739 case stdair::JSoCommand::LIST:{
00740
00741     // DEBUG
00742     STDAIR_LOG_DEBUG ("=> airline code = '" << lAirlineCode
00743                     << "', flight number = " << lFlightNumber << "'");
00744
00745     // DEBUG: Display the flight-date list dump
00746     const std::string& lFlightDateListCSVDump =
00747         list (lAirlineCode, lFlightNumber);
00748     STDAIR_LOG_DEBUG (std::endl << lFlightDateListCSVDump);

```

```

00748
00749     // Dump the full list of the flight-date into the JSON-ified flight-date
00750     const std::string& lFlightDateListJSONDump =
00751         jsonExportFlightDateList (lAirlineCode, lFlightNumber);
00752
00753     // DEBUG
00754     STDAIR_LOG_DEBUG ("Send: '" << lFlightDateListCSVDump << "'");
00755
00756     return lFlightDateListJSONDump;
00757     break;
00758 }
00759 default: {
00760     // Return an Error string
00761     std::ostream lErrorCmdMessage;
00762     const std::string& lCommandStr =
00763         stdair::JSoCommand::getLabel(lEN_JSoCommand);
00764     lErrorCmdMessage << "{\\"error\\": \\"The command '" << lCommandStr
00765         << "' is not handled by the AirInv service.\\"}";
00766     return lErrorCmdMessage.str();
00767     break;
00768 }
00769 }
00770 // Return an error JSON-ified string
00771 assert (false);
00772 std::string lJSONDump ("{\\"error\\": \\"Wrong JSON-ified string\\"}");
00773 return lJSONDump;
00774 }
00775
00776 // //////////////////////////////////////
00777 std::string AIRINV_Service::
00778 jsonExportFlightDateList (const stdair::AirlineCode_T& iAirlineCode,
00779     const stdair::FlightNumber_T& iFlightNumber) const {
00780
00781     // Retrieve the AIRINV service context
00782     if (_airinvServiceContext == NULL) {
00783         throw stdair::NonInitialisedServiceException ("The AirInv service "
00784             "has not been initialised");
00785     }
00786     assert (_airinvServiceContext != NULL);
00787
00788     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00789
00790     // Retrieve the STDAIR service object from the (AIRINV) service context
00791     stdair::STDAIR_Service& lSTDAIR_Service =
00792         lAIRINV_ServiceContext.getSTDAIR_Service();
00793
00794     // Delegate the JSON export to the dedicated service
00795     return lSTDAIR_Service.jsonExportFlightDateList (iAirlineCode,
00796         iFlightNumber);
00797 }
00798
00799 // //////////////////////////////////////
00800 std::string AIRINV_Service::
00801 jsonExportFlightDateObjects (const stdair::AirlineCode_T& iAirlineCode,
00802     const stdair::FlightNumber_T& iFlightNumber,
00803     const stdair::Date_T& iDepartureDate) const {
00804
00805     // Retrieve the AIRINV service context
00806     if (_airinvServiceContext == NULL) {
00807         throw stdair::NonInitialisedServiceException ("The AirInv service "
00808             "has not been initialised");
00809     }
00810     assert (_airinvServiceContext != NULL);
00811
00812     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00813
00814     // Retrieve the STDAIR service object from the (AIRINV) service context

```

```

00815     stdair::STDAIR_Service& lSTDAIR_Service =
00816         lAIRINV_ServiceContext.getSTDAIR_Service();
00817
00818     // Delegate the JSON export to the dedicated service
00819     return lSTDAIR_Service.jsonExportFlightDateObjects (iAirlineCode,
00820                                                         iFlightNumber,
00821                                                         iDepartureDate);
00822 }
00823
00824 // //////////////////////////////////////
00825 std::string AIRINV_Service::
00826 list (const stdair::AirlineCode_T& iAirlineCode,
00827       const stdair::FlightNumber_T& iFlightNumber) const {
00828     std::ostringstream oFlightListStr;
00829
00830     if (_airinvServiceContext == NULL) {
00831         throw stdair::NonInitialisedServiceException ("The AirInv service "
00832                                                         "has not been initialised");
00833     }
00834     assert (_airinvServiceContext != NULL);
00835     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00836
00837     // \todo Check that the current AIRINV_Service is actually operating for
00838     //         the given airline
00839
00840     // Retrieve the STDAIR service object from the (AirInv) service context
00841     stdair::STDAIR_Service& lSTDAIR_Service =
00842         lAIRINV_ServiceContext.getSTDAIR_Service();
00843
00844     // Delegate the BOM display to the dedicated service
00845     return lSTDAIR_Service.list (iAirlineCode, iFlightNumber);
00846 }
00847
00848 // //////////////////////////////////////
00849 bool AIRINV_Service::
00850 check (const stdair::AirlineCode_T& iAirlineCode,
00851        const stdair::FlightNumber_T& iFlightNumber,
00852        const stdair::Date_T& iDepartureDate) const {
00853     std::ostringstream oFlightListStr;
00854
00855     if (_airinvServiceContext == NULL) {
00856         throw stdair::NonInitialisedServiceException ("The AirInv service "
00857                                                         "has not been initialised");
00858     }
00859     assert (_airinvServiceContext != NULL);
00860     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00861
00862     // \todo Check that the current AIRINV_Service is actually operating for
00863     //         the given airline
00864
00865     // Retrieve the STDAIR service object from the (AirInv) service context
00866     stdair::STDAIR_Service& lSTDAIR_Service =
00867         lAIRINV_ServiceContext.getSTDAIR_Service();
00868
00869     // Delegate the BOM display to the dedicated service
00870     return lSTDAIR_Service.check (iAirlineCode, iFlightNumber, iDepartureDate);
00871 }
00872
00873 // //////////////////////////////////////
00874 std::string AIRINV_Service::csvDisplay() const {
00875
00876     // Retrieve the AIRINV service context
00877     if (_airinvServiceContext == NULL) {
00878         throw stdair::NonInitialisedServiceException ("The AirInv service "
00879                                                         "has not been initialised");
00880     }
00881     assert (_airinvServiceContext != NULL);

```

```

00882
00883     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00884
00885     // Retrieve the STDAIR service object from the (AirInv) service context
00886     stdair::STDAIR_Service& lSTDAIR_Service =
00887         lAIRINV_ServiceContext.getSTDAIR_Service();
00888     const stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00889
00890     // Delegate the BOM display to the dedicated service
00891     return lSTDAIR_Service.csvDisplay(lBomRoot);
00892 }
00893
00894 // //////////////////////////////////////
00895 std::string AIRINV_Service::
00896 csvDisplay (const stdair::AirlineCode_T& iAirlineCode,
00897             const stdair::FlightNumber_T& iFlightNumber,
00898             const stdair::Date_T& iDepartureDate) const {
00899
00900     // Retrieve the AIRINV service context
00901     if (_airinvServiceContext == NULL) {
00902         throw stdair::NonInitialisedServiceException ("The AirInv service "
00903                                                         "has not been initialised");
00904     }
00905     assert (_airinvServiceContext != NULL);
00906
00907     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00908
00909     // Retrieve the STDAIR service object from the (AirInv) service context
00910     stdair::STDAIR_Service& lSTDAIR_Service =
00911         lAIRINV_ServiceContext.getSTDAIR_Service();
00912
00913     // Delegate the BOM display to the dedicated service
00914     return lSTDAIR_Service.csvDisplay (iAirlineCode, iFlightNumber,
00915                                         iDepartureDate);
00916 }
00917
00918 // //////////////////////////////////////
00919 stdair::RMEventList_T AIRINV_Service::
00920 initRMEvents (const stdair::Date_T& iStartDate,
00921              const stdair::Date_T& iEndDate) {
00922
00923     if (_airinvServiceContext == NULL) {
00924         throw stdair::NonInitialisedServiceException ("The AirInv service "
00925                                                         "has not been initialised");
00926     }
00927     assert (_airinvServiceContext != NULL);
00928     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00929
00930     // \todo Retrieve the corresponding inventory
00931     stdair::STDAIR_Service& lSTDAIR_Service =
00932         lAIRINV_ServiceContext.getSTDAIR_Service();
00933     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00934
00935     stdair::RMEventList_T oRMEventList;
00936     const stdair::InventoryList_T& lInventoryList =
00937         stdair::BomManager::getList<stdair::Inventory> (lBomRoot);
00938     for (stdair::InventoryList_T::const_iterator itInv = lInventoryList.begin();
00939          itInv != lInventoryList.end(); ++itInv) {
00940         const stdair::Inventory* lInv_ptr = *itInv;
00941         assert (lInv_ptr != NULL);
00942
00943         InventoryManager::initRMEvents (*lInv_ptr, oRMEventList,
00944                                         iStartDate, iEndDate);
00945     }
00946
00947     return oRMEventList;
00948 }

```

```

00949
00950 // //////////////////////////////////////
00951 void AIRINV_Service::
00952 calculateAvailability (stdair::TravelSolutionStruct& ioTravelSolution) {
00953
00954     if (_airinvServiceContext == NULL) {
00955         throw stdair::NonInitialisedServiceException ("The AirInv service "
00956                                                         "has not been initialised");
00957     }
00958     assert (_airinvServiceContext != NULL);
00959     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00960
00961     // Retrieve the corresponding inventory.
00962     stdair::STDAIR_Service& lSTDAIR_Service =
00963         lAIRINV_ServiceContext.getSTDAIR_Service();
00964     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
00965
00966     // Delegate the booking to the dedicated command
00967     stdair::BasChronometer lAvlChronometer;
00968     lAvlChronometer.start();
00969     InventoryManager::calculateAvailability (lBomRoot, ioTravelSolution);
00970     // const double lAvlMeasure = lAvlChronometer.elapsed();
00971
00972     // DEBUG
00973     // STDAIR_LOG_DEBUG ("Availability retrieval: " << lAvlMeasure << " - "
00974                         << lAIRINV_ServiceContext.display());
00975 }
00976
00977 // //////////////////////////////////////
00978 bool AIRINV_Service::sell (const std::string& iSegmentDateKey,
00979                           const stdair::ClassCode_T& iClassCode,
00980                           const stdair::PartySize_T& iPartySize) {
00981     bool isSellSuccessful = false;
00982
00983     if (_airinvServiceContext == NULL) {
00984         throw stdair::NonInitialisedServiceException ("The AirInv service "
00985                                                         "has not been initialised");
00986     }
00987     assert (_airinvServiceContext != NULL);
00988     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
00989
00990     // \todo Check that the current AIRINV_Service is actually operating for
00991     //         the given airline (inventory key)
00992     // Retrieve the corresponding inventory key
00993     const stdair::InventoryKey& lInventoryKey =
00994         stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
00995
00996     // Retrieve the root of the BOM tree
00997     stdair::STDAIR_Service& lSTDAIR_Service =
00998         lAIRINV_ServiceContext.getSTDAIR_Service();
00999     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
01000
01001     // Retrieve the corresponding inventory
01002     stdair::Inventory& lInventory = stdair::BomManager::
01003         getObject<stdair::Inventory> (lBomRoot, lInventoryKey.toString());
01004
01005     // Delegate the booking to the dedicated command
01006     stdair::BasChronometer lSellChronometer; lSellChronometer.start();
01007     isSellSuccessful = InventoryManager::sell (lInventory, iSegmentDateKey,
01008                                               iClassCode, iPartySize);
01009     // const double lSellMeasure = lSellChronometer.elapsed();
01010
01011     // DEBUG
01012     // STDAIR_LOG_DEBUG ("Booking sell: " << lSellMeasure << " - "
01013                         << lAIRINV_ServiceContext.display());
01014
01015     return isSellSuccessful;

```



```

01016 }
01017
01018 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
01019 bool AIRINV_Service::sell (const stdair::BookingClassID_T& iClassID,
01020                          const stdair::PartySize_T& iPartySize) {
01021     bool isSellSuccessful = false;
01022
01023     // Delegate the booking to the dedicated command
01024     stdair::BasChronometer lSellChronometer; lSellChronometer.start();
01025     isSellSuccessful = InventoryManager::sell (iClassID, iPartySize);
01026     // const double lSellMeasure = lSellChronometer.elapsed();
01027
01028     // DEBUG
01029     // STDAIR_LOG_DEBUG ("Booking sell: " << lSellMeasure << " - "
01030     //                  << lAIRINV_ServiceContext.display());
01031
01032     return isSellSuccessful;
01033 }
01034
01035 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
01036 bool AIRINV_Service::cancel (const std::string& iSegmentDateKey,
01037                             const stdair::ClassCode_T& iClassCode,
01038                             const stdair::PartySize_T& iPartySize) {
01039     bool isCancellationSuccessful = false;
01040
01041     if (_airinvServiceContext == NULL) {
01042         throw stdair::NonInitialisedServiceException ("The AirInv service "
01043                                                     "has not been initialised");
01044     }
01045     assert (_airinvServiceContext != NULL);
01046     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
01047
01048     // \todo Check that the current AIRINV_Service is actually operating for
01049     //         the given airline (inventory key)
01050     // Retrieve the corresponding inventory key
01051     const stdair::InventoryKey& lInventoryKey =
01052         stdair::BomKeyManager::extractInventoryKey (iSegmentDateKey);
01053
01054     // Retrieve the root of the BOM tree
01055     stdair::STDAIR_Service& lSTDAIR_Service =
01056         lAIRINV_ServiceContext.getSTDAIR_Service();
01057     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
01058
01059     // Retrieve the corresponding inventory
01060     stdair::Inventory& lInventory = stdair::BomManager::
01061         getObject<stdair::Inventory> (lBomRoot, lInventoryKey.toString());
01062
01063     // Delegate the booking to the dedicated command
01064     stdair::BasChronometer lCancellationChronometer;
01065     lCancellationChronometer.start();
01066     isCancellationSuccessful = InventoryManager::cancel (lInventory,
01067                                                         iSegmentDateKey,
01068                                                         iClassCode, iPartySize);
01069     // const double lCancellationMeasure = lCancellationChronometer.elapsed();
01070
01071     // DEBUG
01072     // STDAIR_LOG_DEBUG ("Booking cancellation: "
01073     //                  << lCancellationMeasure << " - "
01074     //                  << lAIRINV_ServiceContext.display());
01075
01076     return isCancellationSuccessful;
01077 }
01078
01079 //////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////////
01080 bool AIRINV_Service::cancel (const stdair::BookingClassID_T& iClassID,
01081                             const stdair::PartySize_T& iPartySize) {
01082     bool isCancelSuccessful = false;

```

```

01083
01084     // Delegate the booking to the dedicated command
01085     stdair::BasChronometer lCancelChronometer; lCancelChronometer.start();
01086     isCancelSuccessful = InventoryManager::cancel (iClassID, iPartySize);
01087     // const double lCancelMeasure = lCancelChronometer.elapsed();
01088
01089     // DEBUG
01090     // STDAIR_LOG_DEBUG ("Booking cancel: " << lCancelMeasure << " - "
01091     //                  << lAIRINV_ServiceContext.display());
01092
01093     return isCancelSuccessful;
01094 }
01095
01096 // //////////////////////////////////////
01097 void AIRINV_Service::takeSnapshots (const stdair::AirlineCode_T& iAirlineCode,
01098                                     const stdair::DateTime_T& iSnapshotTime) {
01099
01100     if (_airinvServiceContext == NULL) {
01101         throw stdair::NonInitialisedServiceException ("The AirInv service "
01102                                                         "has not been initialised");
01103     }
01104     assert (_airinvServiceContext != NULL);
01105     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
01106
01107     // TODO: Retrieve the corresponding inventory.
01108     stdair::STDAIR_Service& lSTDAIR_Service =
01109         lAIRINV_ServiceContext.getSTDAIR_Service();
01110     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
01111
01112     const stdair::InventoryList_T lInventoryList =
01113         stdair::BomManager::getList<stdair::Inventory> (lBomRoot);
01114     for (stdair::InventoryList_T::const_iterator itInv = lInventoryList.begin();
01115          itInv != lInventoryList.end(); ++itInv) {
01116         const stdair::Inventory* lInv_ptr = *itInv;
01117         assert (lInv_ptr != NULL);
01118
01119         InventoryManager::takeSnapshots (*lInv_ptr, iSnapshotTime);
01120     }
01121 }
01122
01123 // //////////////////////////////////////
01124 void AIRINV_Service::optimise (const stdair::AirlineCode_T& iAirlineCode,
01125                               const stdair::KeyDescription_T& iFDDescription,
01126                               const stdair::DateTime_T& iRMEventTime) {
01127
01128     if (_airinvServiceContext == NULL) {
01129         throw stdair::NonInitialisedServiceException ("The AirInv service "
01130                                                         "has not been initialised");
01131     }
01132     assert (_airinvServiceContext != NULL);
01133     AIRINV_ServiceContext& lAIRINV_ServiceContext = *_airinvServiceContext;
01134
01135     // Retrieve the corresponding inventory & flight-date
01136     stdair::STDAIR_Service& lSTDAIR_Service =
01137         lAIRINV_ServiceContext.getSTDAIR_Service();
01138     stdair::BomRoot& lBomRoot = lSTDAIR_Service.getBomRoot();
01139     stdair::Inventory* lInventory_ptr =
01140         stdair::BomManager::getObjectPtr<stdair::Inventory> (lBomRoot, iAirlineCode
01141 );
01142     if (lInventory_ptr == NULL) {
01143         std::ostringstream oErrorMessage;
01144         oErrorMessage << "The Inventory '" << iAirlineCode
01145             << "', can not be retrieved.";
01146         STDAIR_LOG_ERROR (oErrorMessage.str());
01147         throw InventoryNotFoundException (oErrorMessage.str());
01148     }
01149     assert (lInventory_ptr != NULL);

```

```

01149     stdair::FlightDate* lFlightDate_ptr =
01150         stdair::BomManager::getObjectPtr<stdair::FlightDate> (*lInventory_ptr,
01151             iFDDescription);
01152     if (lFlightDate_ptr == NULL) {
01153         std::ostringstream oErrorMessage;
01154         oErrorMessage << "The flight date '" << iFDDescription
01155             << "', can not be retrieved in the '"
01156             << iAirlineCode << "' inventory.";
01157         STDAIR_LOG_ERROR (oErrorMessage.str());
01158         throw FlightDateNotFoundException (oErrorMessage.str());
01159     }
01160     assert (lFlightDate_ptr != NULL);
01161
01162     const stdair::UnconstrainingMethod& lUnconstrainingMethod =
01163         lInventory_ptr->getUnconstrainingMethod();
01164     const stdair::ForecastingMethod& lForecastingMethod =
01165         lInventory_ptr->getForecastingMethod();
01166     const stdair::PreOptimisationMethod& lPreOptimisationMethod =
01167         lInventory_ptr->getPreOptimisationMethod();
01168     const stdair::OptimisationMethod& lOptimisationMethod =
01169         lInventory_ptr->getOptimisationMethod();
01170     const stdair::PartnershipTechnique& lPartnershipTechnique =
01171         lInventory_ptr->getPartnershipTechnique();
01172
01173     // Retrieve the RMOL service.
01174     RMOL::RMOL_Service& lRMOL_Service = lAIRINV_ServiceContext.getRMOL_Service();
01175
01176     // Optimise the flight-date.
01177     bool isOptimised = lRMOL_Service.optimise (*lFlightDate_ptr, iRMEEventTime,
01178         lUnconstrainingMethod,
01179         lForecastingMethod,
01180         lPreOptimisationMethod,
01181         lOptimisationMethod,
01182         lPartnershipTechnique);
01183
01184     const stdair::OptimisationMethod::EN_OptimisationMethod& lENOptimisationMetho
01185     d = lOptimisationMethod.getMethod();
01186     const bool isEMSRb =
01187         (lENOptimisationMethod == stdair::OptimisationMethod::LEG_BASED_EMSR_B);
01187     // Update the inventory with the new controls.
01188     // updateBookingControls uses bid price vector to set
01189     // the authorization level. But EMSRb sets directly the
01190     // authorization level and does not compute the bid price vector.
01191     // So if EMSRb is used, do not call updateBookingControls.
01192     if (isOptimised == true && isEMSRb == false) {
01193         InventoryManager::updateBookingControls (*lFlightDate_ptr);
01194         InventoryManager::recalculateAvailability (*lFlightDate_ptr);
01195     }
01196 }
01197 }

```

## 25.245 airinv/service/AIRINV\_ServiceContext.cpp File Reference

```
#include <cassert>
#include <sstream>
#include <airinv/basic/BasConst_AIRINV_Service.hpp>
#include <airinv/service/AIRINV_ServiceContext.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.246 AIRINV\_ServiceContext.cpp**

```

00001 // //////////////////////////////////////
00002 // Import section
00003 // //////////////////////////////////////
00004 // STL
00005 #include <cassert>
00006 #include <sstream>
00007 // AirInv
00008 #include <airinv/basic/BasConst_AIRINV_Service.hpp>
00009 #include <airinv/service/AIRINV_ServiceContext.hpp>
00010
00011 namespace AIRINV {
00012
00013     // //////////////////////////////////////
00014     AIRINV_ServiceContext::AIRINV_ServiceContext()
00015         : _ownStdairService (false), _ownSEVMGRService (true),
00016         _airlineCode (DEFAULT_AIRLINE_CODE) {
00017     }
00018
00019     // //////////////////////////////////////
00020     AIRINV_ServiceContext::
00021     AIRINV_ServiceContext (const stdair::AirlineCode_T& iAirlineCode)
00022         : _ownStdairService (false), _ownSEVMGRService (true),
00023         _airlineCode (iAirlineCode) {
00024     }
00025
00026     // //////////////////////////////////////
00027     AIRINV_ServiceContext::AIRINV_ServiceContext (const AIRINV_ServiceContext&)
00028         : _ownStdairService (false), _ownSEVMGRService (true),
00029         _airlineCode (DEFAULT_AIRLINE_CODE) {
00030     }
00031
00032     // //////////////////////////////////////
00033     AIRINV_ServiceContext::~AIRINV_ServiceContext() {
00034     }
00035
00036     // //////////////////////////////////////
00037     const std::string AIRINV_ServiceContext::shortDisplay() const {
00038         std::ostringstream ostr;
00039         ostr << "AIRINV_ServiceContext[" << _airlineCode
00040             << "]" -- Owns StdAir service: " << _ownStdairService;
00041         return ostr.str();
00042     }
00043
00044     // //////////////////////////////////////
00045     const std::string AIRINV_ServiceContext::display() const {
00046         std::ostringstream ostr;
00047         ostr << shortDisplay();
00048         return ostr.str();
00049     }
00050
00051     // //////////////////////////////////////
00052     const std::string AIRINV_ServiceContext::describe() const {
00053         return shortDisplay();
00054     }
00055
00056     // //////////////////////////////////////
00057     void AIRINV_ServiceContext::reset() {
00058
00059         // The shared_ptr<>::reset() method drops the refcount by one.
00060         // If the count result is dropping to zero, the resource pointed to
00061         // by the shared_ptr<> will be freed.
00062
00063         // Reset the stdair shared pointer
00064         _stdairService.reset();
00065

```

```
00066     // Reset the rmol shared pointer
00067     _rmolService.reset();
00068
00069     // Reset the airrac shared pointer
00070     _airracService.reset();
00071
00072     // Reset the sevmgr shared pointer
00073     _sevmgrService.reset();
00074 }
00075
00076 }
```

## 25.247 airinv/service/AIRINV\_ServiceContext.hpp File Reference

```
#include <string>
#include <boost/shared_ptr.hpp>
#include <stdair/stdair_service_types.hpp>
#include <stdair/service/ServiceAbstract.hpp>
#include <rmol/RMOL_Types.hpp>
#include <airrac/AIRRAC_Types.hpp>
#include <sevmgr/SEVMGR_Types.hpp>
#include <airinv/AIRINV_Types.hpp>
```

### Classes

- class [AIRINV::AIRINV\\_ServiceContext](#)  
*Class holding the context of the AirInv services.*

### Namespaces

- namespace [AIRINV](#)

**25.248 AIRINV\_ServiceContext.hpp**

```

00001 #ifndef __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP
00002 #define __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <string>
00009 // Boost
00010 #include <boost/shared_ptr.hpp>
00011 // StdAir
00012 #include <stdair/stdair_service_types.hpp>
00013 #include <stdair/service/ServiceAbstract.hpp>
00014 // RMOL
00015 #include <rmol/RMOL_Types.hpp>
00016 // AIRRAC
00017 #include <airrac/AIRRAC_Types.hpp>
00018 // SEvMgr
00019 #include <sevmgr/SEVMGR_Types.hpp>
00020 // AirInv
00021 #include <airinv/AIRINV_Types.hpp>
00022
00023 namespace AIRINV {
00024
00028     class AIRINV_ServiceContext : public stdair::ServiceAbstract {
00034     friend class AIRINV_Service;
00035     friend class FacAirinvServiceContext;
00036
00037     private:
00038         // ////////////////////////////////////// Getters //////////////////////////////////////
00042         stdair::AirlineCode_T getAirlineCode() const {
00043             return _airlineCode;
00044         }
00045
00049         stdair::STDAIR_ServicePtr_T getSTDAIR_ServicePtr() const {
00050             return _stdairService;
00051         }
00052
00056         stdair::STDAIR_Service& getSTDAIR_Service() const {
00057             assert (_stdairService != NULL);
00058             return *_stdairService;
00059         }
00060
00064         const bool getOwnStdairServiceFlag() const {
00065             return _ownStdairService;
00066         }
00067
00071         RMOL::RMOL_Service& getRMOL_Service() const {
00072             assert (_rmolService != NULL);
00073             return *_rmolService;
00074         }
00075
00079         AIRRAC::AIRRAC_Service& getAIRRAC_Service() const {
00080             assert (_airracService != NULL);
00081             return *_airracService;
00082         }
00083
00087         SEVMGR::SEVMGR_ServicePtr_T getSEVMGR_ServicePtr() const {
00088             return _sevmgrService;
00089         }
00090
00094         SEVMGR::SEVMGR_Service& getSEVMGR_Service() const {
00095             assert (_sevmgrService != NULL);
00096             return *_sevmgrService;
00097         }

```



```

00098
00102     const bool getOwnSEVMGRServiceFlag() const {
00103         return _ownSEVMGRService;
00104     }
00105
00106
00107 private:
00108     // ////////////////////////////////// Setters //////////////////////////////////
00112     void setAirlineCode (const stdair::AirlineCode_T& iAirlineCode) {
00113         _airlineCode = iAirlineCode;
00114     }
00115
00119     void setSTDAIR_Service (stdair::STDAIR_ServicePtr_T ioSTDAIR_ServicePtr,
00120                             const bool iOwnStdairService) {
00121         _stdairService = ioSTDAIR_ServicePtr;
00122         _ownStdairService = iOwnStdairService;
00123     }
00124
00128     void setRMOL_Service (RMOL::RMOL_ServicePtr_T ioRMOL_ServicePtr) {
00129         _rmolService = ioRMOL_ServicePtr;
00130     }
00131
00135     void setAIRRAC_Service (AIRRAC::AIRRAC_ServicePtr_T ioAIRRAC_ServicePtr) {
00136         _airracService = ioAIRRAC_ServicePtr;
00137     }
00138
00142     void setSEVMGR_Service (SEVMGR::SEVMGR_ServicePtr_T ioSEVMGR_ServicePtr,
00143                             const bool iOwnSEVMGRService) {
00144         _sevmgrService = ioSEVMGR_ServicePtr;
00145         _ownSEVMGRService = iOwnSEVMGRService;
00146     }
00147
00148 private:
00149     // ////////////////////////////////// Display Methods //////////////////////////////////
00153     const std::string shortDisplay() const;
00154
00158     const std::string display() const;
00159
00163     const std::string describe() const;
00164
00165
00166 private:
00168
00171     AIRINV_ServiceContext (const stdair::AirlineCode_T&);
00175     AIRINV_ServiceContext ();
00179     AIRINV_ServiceContext (const AIRINV_ServiceContext&);
00180
00184     ~AIRINV_ServiceContext ();
00185
00189     void reset();
00190
00191
00192 private:
00193     // ////////////////////////////////// Children //////////////////////////////////
00197     stdair::STDAIR_ServicePtr_T _stdairService;
00198
00202     bool _ownStdairService;
00203
00207     RMOL::RMOL_ServicePtr_T _rmolService;
00208
00212     SEVMGR::SEVMGR_ServicePtr_T _sevmgrService;
00213
00217     bool _ownSEVMGRService;
00218
00222     AIRRAC::AIRRAC_ServicePtr_T _airracService;
00223
00224 private:

```

---

```
00225     // ////////// Attributes //////////
00230     stdair::AirlineCode_T _airlineCode;
00231 };
00232
00233 }
00234 #endif // __AIRINV_SVC_AIRINVSERVICECONTEXT_HPP
```

## 25.249 airinv/service/ServiceAbstract.cpp File Reference

```
#include <airinv/service/ServiceAbstract.hpp>
```

### Namespaces

- namespace [AIRINV](#)

**25.250 ServiceAbstract.cpp**

```
00001 // ////////////////////////////////////////
00002 // Import section
00003 // ////////////////////////////////////////
00004 // AIRINV
00005 #include <airinv/service/ServiceAbstract.hpp>
00006
00007 namespace AIRINV {
00008
00009 }
```

## 25.251 airinv/service/ServiceAbstract.hpp File Reference

```
#include <iosfwd>
```

### Classes

- class [AIRINV::ServiceAbstract](#)

### Namespaces

- namespace [AIRINV](#)

### Functions

- template<class charT , class traits >  
std::basic\_ostream< charT, traits > & [operator<<](#) (std::basic\_ostream< charT, traits > &ioOut, const [AIRINV::ServiceAbstract](#) &iService)
- template<class charT , class traits >  
std::basic\_istream< charT, traits > & [operator>>](#) (std::basic\_istream< charT, traits > &ioIn, [AIRINV::ServiceAbstract](#) &ioService)

#### 25.251.1 Function Documentation

**25.251.1.1** `template<class charT , class traits > std::basic_ostream<charT, traits>& operator<< (std::basic_ostream< charT, traits > & ioOut, const AIRINV::ServiceAbstract & iService) [inline]`

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (p653) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line 42 of file [ServiceAbstract.hpp](#).

**25.251.1.2** `template<class charT , class traits > std::basic_istream<charT, traits>& operator>> (std::basic_istream< charT, traits > & ioIn, AIRINV::ServiceAbstract & ioService) [inline]`

Piece of code given by Nicolai M. Josuttis, Section 13.12.1 "Implementing Output Operators" (pp655-657) of his book "The C++ Standard Library: A Tutorial and Reference", published by Addison-Wesley.

Definition at line 70 of file [ServiceAbstract.hpp](#).

References [AIRINV::ServiceAbstract::fromStream\(\)](#).

**25.252 ServiceAbstract.hpp**

```

00001 #ifndef __AIRINV_SVC_SERVICEABSTRACT_HPP
00002 #define __AIRINV_SVC_SERVICEABSTRACT_HPP
00003
00004 // //////////////////////////////////////
00005 // Import section
00006 // //////////////////////////////////////
00007 // STL
00008 #include <iosfwd>
00009 // #include <sstream>
00010
00011 namespace AIRINV {
00012
00013     class ServiceAbstract {
00014     public:
00015
00016         virtual ~ServiceAbstract() {}
00017
00018         virtual void toStream (std::ostream& ioOut) const {}
00019
00020         virtual void fromStream (std::istream& ioIn) {}
00021
00022     protected:
00023         ServiceAbstract() {}
00024     };
00025 }
00026
00027 template <class charT, class traits>
00028 inline
00029 std::basic_ostream<charT, traits>&
00030 operator<< (std::basic_ostream<charT, traits>& ioOut,
00031           const AIRINV::ServiceAbstract& iService) {
00032     std::basic_ostringstream<charT, traits> ostr;
00033     ostr.copyfmt (ioOut);
00034     ostr.width (0);
00035
00036     // Fill string stream
00037     iService.toStream (ostr);
00038
00039     // Print string stream
00040     ioOut << ostr.str();
00041
00042     return ioOut;
00043 }
00044
00045 template <class charT, class traits>
00046 inline
00047 std::basic_istream<charT, traits>&
00048 operator>> (std::basic_istream<charT, traits>& ioIn,
00049            AIRINV::ServiceAbstract& ioService) {
00050     // Fill Service object with input stream
00051     ioService.fromStream (ioIn);
00052     return ioIn;
00053 }
00054
00055 #endif // __AIRINV_SVC_SERVICEABSTRACT_HPP

```

## **25.253    airinv/ui/cmdline/airinv.cpp File Reference**

**25.254 airinv.cpp**

```

00001
00005 // STL
00006 #include <cassert>
00007 #include <iostream>
00008 #include <sstream>
00009 #include <fstream>
00010 #include <string>
00011 // Boost (Extended STL)
00012 #include <boost/program_options.hpp>
00013 #include <boost/tokenizer.hpp>
00014 #include <boost/regex.hpp>
00015 #include <boost/swap.hpp>
00016 #include <boost/algorithm/string/case_conv.hpp>
00017 // StdAir
00018 #include <stdair/basic/BasLogParams.hpp>
00019 #include <stdair/basic/BasDBParams.hpp>
00020 #include <stdair/service/Logger.hpp>
00021 #include <stdair/stdair_json.hpp>
00022 // GNU Readline Wrapper
00023 #include <stdair/ui/cmdline/SReadline.hpp>
00024 // AirInv
00025 #include <airinv/AIRINV_Master_Service.hpp>
00026 #include <airinv/config/airinv-paths.hpp>
00027
00028 // ////////// Constants //////////
00032 const std::string K_AIRINV_DEFAULT_LOG_FILENAME ("airinv.log");
00033
00037 const std::string K_AIRINV_DEFAULT_INVENTORY_FILENAME (STDAIR_SAMPLE_DIR
00038                                                         "/invdump01.csv");
00042 const std::string K_AIRINV_DEFAULT_SCHEDULE_FILENAME (STDAIR_SAMPLE_DIR
00043                                                         "/schedule01.csv");
00047 const std::string K_AIRINV_DEFAULT_OND_FILENAME (STDAIR_SAMPLE_DIR
00048                                                    "/ond01.csv");
00052 const std::string K_AIRINV_DEFAULT_FRAT5_INPUT_FILENAME (STDAIR_SAMPLE_DIR
00053                                                         "/frat5.csv");
00057 const std::string K_AIRINV_DEFAULT_FF_DISUTILITY_INPUT_FILENAME (
STDAIR_SAMPLE_DIR
00058                                                         "/ffDisutility.csv
");
00062 const std::string K_AIRINV_DEFAULT_YIELD_FILENAME (STDAIR_SAMPLE_DIR
00063                                                         "/yieldstore01.csv");
00064
00069 const bool K_AIRINV_DEFAULT_BUILT_IN_INPUT = false;
00070
00075 const bool K_AIRINV_DEFAULT_FOR_SCHEDULE = false;
00076
00080 const int K_AIRINV_EARLY_RETURN_STATUS = 99;
00081
00086 typedef std::vector<std::string> TokenList_T;
00087
00091 struct Command_T {
00092     typedef enum {
00093         NOP = 0,
00094         QUIT,
00095         HELP,
00096         LIST,
00097         DISPLAY,
00098         SELECT,
00099         SELL,
00100         JSON_LIST,
00101         JSON_DISPLAY,
00102         LAST_VALUE
00103     } Type_T;
00104 };
00105

```



```

00106 // ////////// Parsing of Options & Configuration //////////
00107 // A helper function to simplify the main part.
00108 template<class T> std::ostream& operator<< (std::ostream& os,
00109                                           const std::vector<T>& v) {
00110     std::copy (v.begin(), v.end(), std::ostream_iterator<T> (std::cout, " "));
00111     return os;
00112 }
00113
00117 int readConfiguration (int argc, char* argv[],
00118                        bool& ioIsBuiltin, bool& ioIsForSchedule,
00119                        stdair::Filename_T& ioInventoryFilename,
00120                        stdair::Filename_T& ioScheduleInputFilename,
00121                        stdair::Filename_T& ioODInputFilename,
00122                        stdair::Filename_T& ioFRAT5Filename,
00123                        stdair::Filename_T& ioFFDisutilityFilename,
00124                        stdair::Filename_T& ioYieldInputFilename,
00125                        std::string& ioLogFilename) {
00126     // Default for the built-in input
00127     ioIsBuiltin = K_AIRINV_DEFAULT_BUILT_IN_INPUT;
00128
00129     // Default for the inventory or schedule option
00130     ioIsForSchedule = K_AIRINV_DEFAULT_FOR_SCHEDULE;
00131
00132     // Declare a group of options that will be allowed only on command line
00133     boost::program_options::options_description generic ("Generic options");
00134     generic.add_options()
00135         ("prefix", "print installation prefix")
00136         ("version,v", "print version string")
00137         ("help,h", "produce help message");
00138
00139     // Declare a group of options that will be allowed both on command
00140     // line and in config file
00141
00142     boost::program_options::options_description config ("Configuration");
00143     config.add_options()
00144         ("builtin,b",
00145          "The sample BOM tree can be either built-in or parsed from an input file. Th
00146          at latter must then be given with the -i/--inventory or -s/--schedule option")
00147         ("for_schedule,f",
00148          "The BOM tree should be built from a schedule file (instead of from an inven
00149          tory dump)")
00150         ("inventory,i",
00151          boost::program_options::value< std::string >(&ioInventoryFilename)->default_
00152          value(K_AIRINV_DEFAULT_INVENTORY_FILENAME),
00153          "(CSV) input file for the inventory")
00154         ("schedule,s",
00155          boost::program_options::value< std::string >(&ioScheduleInputFilename)->defa
00156          ult_value(K_AIRINV_DEFAULT_SCHEDULE_FILENAME),
00157          "(CSV) input file for the schedule")
00158         ("ond,o",
00159          boost::program_options::value< std::string >(&ioODInputFilename)->default_va
00160          lue(K_AIRINV_DEFAULT_OND_FILENAME),
00161          "(CSV) input file for the O&D")
00162         ("frat5,F",
00163          boost::program_options::value< std::string >(&ioFRAT5Filename)->default_valu
00164          e(K_AIRINV_DEFAULT_FRAT5_INPUT_FILENAME),
00165          "(CSV) input file for the FRAT5 Curve")
00166         ("ff_disutility,D",
00167          boost::program_options::value< std::string >(&ioFFDisutilityFilename)->defau
00168          lt_value(K_AIRINV_DEFAULT_FF_DISUTILITY_INPUT_FILENAME),
00169          "(CSV) input file for the FF disutility Curve")
00170         ("yield,y",
00171          boost::program_options::value< std::string >(&ioYieldInputFilename)->default
00172          _value(K_AIRINV_DEFAULT_YIELD_FILENAME),
00173          "(CSV) input file for the yield")
00174         ("log,l",
00175          boost::program_options::value< std::string >(&ioLogFilename)->default_value(

```

```

K_AIRINV_DEFAULT_LOG_FILENAME),
00168     "Filename for the logs")
00169     ;
00170
00171     // Hidden options, will be allowed both on command line and
00172     // in config file, but will not be shown to the user.
00173     boost::program_options::options_description hidden ("Hidden options");
00174     hidden.add_options()
00175         ("copyright",
00176          boost::program_options::value< std::vector<std::string> >(),
00177          "Show the copyright (license)");
00178
00179     boost::program_options::options_description cmdline_options;
00180     cmdline_options.add(generic).add(config).add(hidden);
00181
00182     boost::program_options::options_description config_file_options;
00183     config_file_options.add(config).add(hidden);
00184     boost::program_options::options_description visible ("Allowed options");
00185     visible.add(generic).add(config);
00186
00187     boost::program_options::positional_options_description p;
00188     p.add ("copyright", -1);
00189
00190     boost::program_options::variables_map vm;
00191     boost::program_options::
00192         store (boost::program_options::command_line_parser (argc, argv).
00193               options (cmdline_options).positional(p).run(), vm);
00194
00195     std::ifstream ifs ("airinv.cfg");
00196     boost::program_options::store (parse_config_file (ifs, config_file_options),
00197                                   vm);
00198     boost::program_options::notify (vm);
00199
00200     if (vm.count ("help")) {
00201         std::cout << visible << std::endl;
00202         return K_AIRINV_EARLY_RETURN_STATUS;
00203     }
00204
00205     if (vm.count ("version")) {
00206         std::cout << PACKAGE_NAME << ", version " << PACKAGE_VERSION << std::endl;
00207         return K_AIRINV_EARLY_RETURN_STATUS;
00208     }
00209
00210     if (vm.count ("prefix")) {
00211         std::cout << "Installation prefix: " << PREFIXDIR << std::endl;
00212         return K_AIRINV_EARLY_RETURN_STATUS;
00213     }
00214
00215     if (vm.count ("builtin")) {
00216         ioIsBuiltin = true;
00217     }
00218     const std::string isBuiltinStr = (ioIsBuiltin == true)?"yes":"no";
00219     std::cout << "The BOM should be built-in? " << isBuiltinStr << std::endl;
00220
00221     if (vm.count ("for_schedule")) {
00222         ioIsForSchedule = true;
00223     }
00224     const std::string isForScheduleStr = (ioIsForSchedule == true)?"yes":"no";
00225     std::cout << "The BOM should be built from schedule? " << isForScheduleStr
00226               << std::endl;
00227
00228     if (ioIsBuiltin == false) {
00229
00230         if (ioIsForSchedule == false) {
00231             // The BOM tree should be built from parsing an inventory dump
00232             if (vm.count ("inventory")) {
00233                 ioInventoryFilename = vm["inventory"].as< std::string >();

```

```

00234         std::cout << "Input inventory filename is: " << ioInventoryFilename
00235                 << std::endl;
00236
00237     } else {
00238         // The built-in option is not selected. However, no inventory dump
00239         // file is specified
00240         std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00241                 << " -f/--for_schedule and -s/--schedule options "
00242                 << "must be specified" << std::endl;
00243     }
00244
00245     } else {
00246         // The BOM tree should be built from parsing a schedule (and O&D) file
00247         if (vm.count ("schedule")) {
00248             ioScheduleInputFilename = vm["schedule"].as< std::string >();
00249             std::cout << "Input schedule filename is: " << ioScheduleInputFilename
00250                     << std::endl;
00251
00252         } else {
00253             // The built-in option is not selected. However, no schedule file
00254             // is specified
00255             std::cerr << "Either one among the -b/--builtin, -i/--inventory or "
00256                     << " -f/--for_schedule and -s/--schedule options "
00257                     << "must be specified" << std::endl;
00258         }
00259
00260         if (vm.count ("ond")) {
00261             ioODInputFilename = vm["ond"].as< std::string >();
00262             std::cout << "Input O&D filename is: " << ioODInputFilename << std::endl;
00263
00264         }
00265
00266         if (vm.count ("frat5")) {
00267             ioFRAT5Filename = vm["frat5"].as< std::string >();
00268             std::cout << "FRAT5 input filename is: " << ioFRAT5Filename << std::endl;
00269
00270         }
00271
00272         if (vm.count ("ff_disutility")) {
00273             ioFFDisutilityFilename = vm["ff_disutility"].as< std::string >();
00274             std::cout << "FF disutility input filename is: "
00275                     << ioFFDisutilityFilename << std::endl;
00276         }
00277
00278         if (vm.count ("yield")) {
00279             ioYieldInputFilename = vm["yield"].as< std::string >();
00280             std::cout << "Input yield filename is: " << ioYieldInputFilename << std:::
00281         endl;
00282     }
00283 }
00284
00285 if (vm.count ("log")) {
00286     ioLogFilename = vm["log"].as< std::string >();
00287     std::cout << "Log filename is: " << ioLogFilename << std::endl;
00288 }
00289
00290 return 0;
00291 }
00292
00293 // //////////////////////////////////////
00294 void initReadline (swift::SReadline& ioInputReader) {
00295
00296     // Prepare the list of my own completers
00297     std::vector<std::string> Completers;

```

```

00298
00299 // The following is supported:
00300 // - "identifiers"
00301 // - special identifier %file - means to perform a file name completion
00302 Completers.push_back ("help");
00303 Completers.push_back ("list %airline_code %flight_number");
00304 Completers.push_back ("select %airline_code %flight_number %flight_date");
00305 Completers.push_back ("display");
00306 Completers.push_back ("sell %booking_class %party_size %origin %destination");
00307 Completers.push_back ("quit");
00308 Completers.push_back ("json_list");
00309 Completers.push_back ("json_display");
00310
00311
00312 // Now register the completers.
00313 // Actually it is possible to re-register another set at any time
00314 ioInputReader.RegisterCompletions (Completers);
00315 }
00316
00317 // //////////////////////////////////////
00318 Command_T::Type_T extractCommand (TokenList_T& ioTokenList) {
00319     Command_T::Type_T oCommandType = Command_T::LAST_VALUE;
00320
00321     // Interpret the user input
00322     if (ioTokenList.empty() == false) {
00323         TokenList_T::iterator itTok = ioTokenList.begin();
00324         std::string lCommand (*itTok);
00325         boost::algorithm::to_lower (lCommand);
00326
00327         if (lCommand == "help") {
00328             oCommandType = Command_T::HELP;
00329
00330         } else if (lCommand == "list") {
00331             oCommandType = Command_T::LIST;
00332
00333         } else if (lCommand == "display") {
00334             oCommandType = Command_T::DISPLAY;
00335
00336         } else if (lCommand == "select") {
00337             oCommandType = Command_T::SELECT;
00338
00339         } else if (lCommand == "sell") {
00340             oCommandType = Command_T::SELL;
00341
00342         } else if (lCommand == "json_list") {
00343             oCommandType = Command_T::JSON_LIST;
00344
00345         } else if (lCommand == "json_display") {
00346             oCommandType = Command_T::JSON_DISPLAY;
00347
00348         } else if (lCommand == "quit") {
00349             oCommandType = Command_T::QUIT;
00350         }
00351
00352         // Remove the first token (the command), as the corresponding information
00353         // has been extracted in the form of the returned command type enumeration
00354         ioTokenList.erase (itTok);
00355
00356     } else {
00357         oCommandType = Command_T::NOP;
00358     }
00359
00360     return oCommandType;
00361 }
00362
00363 // //////////////////////////////////////
00364 void parseFlightKey (const TokenList_T& iTokenList,

```

```

00365             stdair::AirlineCode_T& ioAirlineCode,
00366             stdair::FlightNumber_T& ioFlightNumber) {
00367 // Interpret the user input
00368 if (iTokenList.empty() == false) {
00369
00370 // Read the airline code
00371 TokenList_T::const_iterator itTok = iTokenList.begin();
00372 if (itTok->empty() == false) {
00373     ioAirlineCode = *itTok;
00374     boost::algorithm::to_upper (ioAirlineCode);
00375 }
00376
00377 // Read the flight-number
00378 ++itTok;
00379 if (itTok != iTokenList.end()) {
00380
00381     if (itTok->empty() == false) {
00382         try {
00383
00384             ioFlightNumber = boost::lexical_cast<stdair::FlightNumber_T> (*itTok);
00385
00386         } catch (boost::bad_lexical_cast& eCast) {
00387             std::cerr << "The flight number ('" << *itTok
00388                 << "') cannot be understood. "
00389                 << "The default value (all) is kept."
00390                 << std::endl;
00391             return;
00392         }
00393     }
00394 } else {
00395     return;
00396 }
00397 }
00398 }
00399 }
00400
00401 // //////////////////////////////////////
00402 void parseFlightDateKey (const TokenList_T& iTokenList,
00403                         stdair::AirlineCode_T& ioAirlineCode,
00404                         stdair::FlightNumber_T& ioFlightNumber,
00405                         stdair::Date_T& ioDepartureDate) {
00406 //
00407 const std::string kMonthStr[12] = {"Jan", "Feb", "Mar", "Apr", "May", "Jun",
00408                                     "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"};
00409 //
00410 unsigned short ioDepartureDateYear = ioDepartureDate.year();
00411 unsigned short ioDepartureDateMonth = ioDepartureDate.month();
00412 std::string ioDepartureDateMonthStr = kMonthStr[ioDepartureDateMonth-1];
00413 unsigned short ioDepartureDateDay = ioDepartureDate.day();
00414
00415 // Interpret the user input
00416 if (iTokenList.empty() == false) {
00417
00418 // Read the airline code
00419 TokenList_T::const_iterator itTok = iTokenList.begin();
00420 if (itTok->empty() == false) {
00421     ioAirlineCode = *itTok;
00422     boost::algorithm::to_upper (ioAirlineCode);
00423 }
00424
00425 // Read the flight-number
00426 ++itTok;
00427 if (itTok != iTokenList.end()) {
00428
00429     if (itTok->empty() == false) {
00430         try {

```

```

00432         ioFlightNumber = boost::lexical_cast<stdair::FlightNumber_T> (*itTok);
00433
00434     } catch (boost::bad_lexical_cast& eCast) {
00435         std::cerr << "The flight number ('" << *itTok
00436             << "') cannot be understood. "
00437             << "The default value (all) is kept."
00438             << std::endl;
00439         return;
00440     }
00441 }
00442
00443 } else {
00444     return;
00445 }
00446
00447 // Read the year for the departure date
00448 ++itTok;
00449 if (itTok != iTokenList.end()) {
00450
00451     if (itTok->empty() == false) {
00452         try {
00453
00454             ioDepartureDateYear = boost::lexical_cast<unsigned short> (*itTok);
00455             if (ioDepartureDateYear < 100) {
00456                 ioDepartureDateYear += 2000;
00457             }
00458
00459         } catch (boost::bad_lexical_cast& eCast) {
00460             std::cerr << "The year of the flight departure date ('" << *itTok
00461                 << "') cannot be understood. The default value ("
00462                 << ioDepartureDateYear << ") is kept. " << std::endl;
00463             return;
00464         }
00465     }
00466
00467 } else {
00468     return;
00469 }
00470
00471 // Read the month for the departure date
00472 ++itTok;
00473 if (itTok != iTokenList.end()) {
00474
00475     if (itTok->empty() == false) {
00476         try {
00477
00478             const boost::regex lMonthRegex ("^(\\d{1,2})$");
00479             const bool isMonthANumber = regex_match (*itTok, lMonthRegex);
00480
00481             if (isMonthANumber == true) {
00482                 const unsigned short lMonth =
00483                     boost::lexical_cast<unsigned short> (*itTok);
00484                 if (lMonth > 12) {
00485                     throw boost::bad_lexical_cast();
00486                 }
00487                 ioDepartureDateMonthStr = kMonthStr[lMonth-1];
00488
00489             } else {
00490                 const std::string lMonthStr (*itTok);
00491                 if (lMonthStr.size() < 3) {
00492                     throw boost::bad_lexical_cast();
00493                 }
00494                 std::string lMonthStr1 (lMonthStr.substr (0, 1));
00495                 boost::algorithm::to_upper (lMonthStr1);
00496                 std::string lMonthStr23 (lMonthStr.substr (1, 2));
00497                 boost::algorithm::to_lower (lMonthStr23);
00498                 ioDepartureDateMonthStr = lMonthStr1 + lMonthStr23;

```

```

00499         }
00500
00501     } catch (boost::bad_lexical_cast& eCast) {
00502         std::cerr << "The month of the flight departure date ('" << *itTok
00503             << "') cannot be understood. The default value ("
00504             << ioDepartureDateMonthStr << ") is kept. " << std::endl;
00505         return;
00506     }
00507 }
00508
00509 } else {
00510     return;
00511 }
00512
00513 // Read the day for the departure date
00514 ++itTok;
00515 if (itTok != iTokenList.end()) {
00516     if (itTok->empty() == false) {
00517         try {
00518             ioDepartureDateDay = boost::lexical_cast<unsigned short> (*itTok);
00519
00520         } catch (boost::bad_lexical_cast& eCast) {
00521             std::cerr << "The day of the flight departure date ('" << *itTok
00522                 << "') cannot be understood. The default value ("
00523                 << ioDepartureDateDay << ") is kept. " << std::endl;
00524             return;
00525         }
00526     }
00527 }
00528
00529 } else {
00530     return;
00531 }
00532
00533 // Re-compose the departure date
00534 std::ostringstream lDepartureDateStr;
00535 lDepartureDateStr << ioDepartureDateYear << "-" << ioDepartureDateMonthStr
00536     << "-" << ioDepartureDateDay;
00537
00538 try {
00539     ioDepartureDate =
00540         boost::gregorian::from_simple_string (lDepartureDateStr.str());
00541
00542 } catch (boost::gregorian::bad_month& eCast) {
00543     std::cerr << "The flight departure date ('" << lDepartureDateStr.str()
00544         << "') cannot be understood. The default value ("
00545         << ioDepartureDate << ") is kept. " << std::endl;
00546     return;
00547 }
00548
00549 }
00550
00551 }
00552 }
00553
00554 // //////////////////////////////////////
00555 void parseBookingClassKey (const TokenList_T& iTokenList,
00556     stdair::ClassCode_T& ioBookingClass,
00557     stdair::PartySize_T& ioPartySize,
00558     stdair::AirportCode_T& ioOrigin,
00559     stdair::AirportCode_T& ioDestination) {
00560     // Interpret the user input
00561     if (iTokenList.empty() == false) {
00562
00563         // Read the booking class
00564         TokenList_T::const_iterator itTok = iTokenList.begin();
00565         if (itTok->empty() == false) {

```

```

00566         ioBookingClass = *itTok;
00567         boost::algorithm::to_upper (ioBookingClass);
00568     }
00569
00570     // Read the party size
00571     ++itTok;
00572     if (itTok != iTokenList.end()) {
00573         if (itTok->empty() == false) {
00574             try {
00575                 ioPartySize = boost::lexical_cast<stdair::PartySize_T> (*itTok);
00576             } catch (boost::bad_lexical_cast& eCast) {
00577                 std::cerr << "The party size ('" << *itTok
00578                     << "') cannot be understood. The default value ("
00579                     << ioPartySize << ") is kept." << std::endl;
00580                 return;
00581             }
00582         } else {
00583             return;
00584         }
00585     }
00586
00587     } else {
00588         return;
00589     }
00590
00591     // Read the origin
00592     ++itTok;
00593     if (itTok != iTokenList.end()) {
00594         if (itTok->empty() == false) {
00595             ioOrigin = *itTok;
00596             boost::algorithm::to_upper (ioOrigin);
00597         }
00598     } else {
00599         return;
00600     }
00601
00602     // Read the destination
00603     ++itTok;
00604     if (itTok != iTokenList.end()) {
00605         if (itTok->empty() == false) {
00606             ioDestination = *itTok;
00607             boost::algorithm::to_upper (ioDestination);
00608         }
00609     } else {
00610         return;
00611     }
00612
00613     }
00614 }
00615
00616 // //////////////////////////////////////
00617 std::string toString (const TokenList_T& iTokenList) {
00618     std::ostringstream oStr;
00619
00620     // Re-create the string with all the tokens, trimmed by read-line
00621     unsigned short idx = 0;
00622     for (TokenList_T::const_iterator itTok = iTokenList.begin();
00623          itTok != iTokenList.end(); ++itTok, ++idx) {
00624         if (idx != 0) {
00625             oStr << " ";
00626         }
00627         oStr << *itTok;
00628     }
00629 }
00630
00631
00632

```



```

00633     return oStr.str();
00634 }
00635
00636 // //////////////////////////////////////
00637 TokenList_T extractTokenList (const TokenList_T& iTokenList,
00638                               const std::string& iRegularExpression) {
00639     TokenList_T oTokenList;
00640
00641     // Re-create the string with all the tokens (which had been trimmed
00642     // by read-line)
00643     const std::string lFullLine = toString (iTokenList);
00644
00645     // See the caller for the regular expression
00646     boost::regex expression (iRegularExpression);
00647
00648     std::string::const_iterator start = lFullLine.begin();
00649     std::string::const_iterator end = lFullLine.end();
00650
00651     boost::match_results<std::string::const_iterator> what;
00652     boost::match_flag_type flags = boost::match_default | boost::format_sed;
00653     regex_search (start, end, what, expression, flags);
00654
00655     // Put the matched strings in the list of tokens to be returned back
00656     // to the caller
00657     const unsigned short lMatchSetSize = what.size();
00658     for (unsigned short matchIdx = 1; matchIdx != lMatchSetSize; ++matchIdx) {
00659         const std::string lMatchedString (std::string (what[matchIdx].first,
00660                                                         what[matchIdx].second));
00661         //if (lMatchedString.empty() == false) {
00662         oTokenList.push_back (lMatchedString);
00663         //}
00664     }
00665
00666     // DEBUG
00667     // std::cout << "After (token list): " << oTokenList << std::endl;
00668
00669     return oTokenList;
00670 }
00671
00672 // //////////////////////////////////////
00673 TokenList_T extractTokenListForFlight (const TokenList_T& iTokenList) {
00674     const std::string lRegex ("^([[:alpha:]]{2,3})?"
00675                               "[[:space:]]*([[:digit:]]{1,4})?");
00676
00677     //
00678     const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegex);
00679     return oTokenList;
00680 }
00681
00682 // //////////////////////////////////////
00683 TokenList_T extractTokenListForFlightDate (const TokenList_T& iTokenList) {
00684     const std::string lRegex ("^([[:alpha:]]{2,3})?"
00685                               "[[:space:]]*([[:digit:]]{1,4})?"
00686                               "[/ ]*"
00687                               "([[:digit:]]{2,4})?[/-]?[[:space:]]*"
00688                               "([[:alpha:]]{3}|[[:digit:]]{1,2})?[/-]?[[:space:]]*"
00689                               "([[:digit:]]{1,2})?");
00690
00691     //
00692     const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegex);
00693     return oTokenList;
00694 }
00695
00696 // //////////////////////////////////////
00697 TokenList_T extractTokenListForClass (const TokenList_T& iTokenList) {
00698     const std::string lRegex ("^([[:alpha:]]?"
00699                               "[[:space:]]*([[:digit:]]{1,3})?");

```

```

00724             "[[:space:]]*([[:alpha:]]{3})?"
00725             "[[:space:]]*([[:alpha:]]{3})?$");
00726
00727 //
00728 const TokenList_T& oTokenList = extractTokenList (iTokenList, lRegex);
00729 return oTokenList;
00730 }
00731
00732
00733 // ////////// M A I N //////////
00734 int main (int argc, char* argv[]) {
00735
00736     // State whether the BOM tree should be built-in or parsed from an
00737     // input file
00738     bool isBuiltin;
00739     bool isForSchedule;
00740
00741     // Input file names
00742     stdair::Filename_T lInventoryFilename;
00743     stdair::Filename_T lScheduleInputFilename;
00744     stdair::Filename_T lODInputFilename;
00745     stdair::Filename_T lFRAT5InputFilename;
00746     stdair::Filename_T lFFDisutilityInputFilename;
00747     stdair::Filename_T lYieldInputFilename;
00748
00749     // Readline history
00750     const unsigned int lHistorySize (100);
00751     const std::string lHistoryFilename ("airinv.hist");
00752     const std::string lHistoryBackupFilename ("airinv.hist.bak");
00753
00754     // Default parameters for the interactive session
00755     stdair::AirlineCode_T lLastInteractiveAirlineCode;
00756     stdair::FlightNumber_T lLastInteractiveFlightNumber;
00757     stdair::Date_T lLastInteractiveDate;
00758     stdair::AirlineCode_T lInteractiveAirlineCode;
00759     stdair::FlightNumber_T lInteractiveFlightNumber;
00760     stdair::Date_T lInteractiveDate;
00761     stdair::AirportCode_T lInteractiveOrigin;
00762     stdair::AirportCode_T lInteractiveDestination;
00763     stdair::ClassCode_T lInteractiveBookingClass;
00764     stdair::PartySize_T lInteractivePartySize;
00765
00766     // Parameters for the sale
00767     std::string lSegmentDateKey;
00768
00769     // Output log File
00770     stdair::Filename_T lLogFilename;
00771
00772     // Call the command-line option parser
00773     const int lOptionParserStatus =
00774         readConfiguration (argc, argv, isBuiltin, isForSchedule, lInventoryFilename,
00775                             lScheduleInputFilename, lODInputFilename,
00776                             lFRAT5InputFilename, lFFDisutilityInputFilename,
00777                             lYieldInputFilename, lLogFilename);
00778
00779     if (lOptionParserStatus == K_AIRINV_EARLY_RETURN_STATUS) {
00780         return 0;
00781     }
00782
00783     // Set the log parameters
00784     std::ofstream logOutputFile;
00785     // Open and clean the log outputfile
00786     logOutputFile.open (lLogFilename.c_str());
00787     logOutputFile.clear();
00788
00789     // Initialise the inventory service
00790     const stdair::BasLogParams lLogParams (stdair::LOG::DEBUG, logOutputFile);

```

```

00791  AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00792
00793  // DEBUG
00794  STDAIR_LOG_DEBUG ("Welcome to AirInv");
00795
00796  // Check wether or not a (CSV) input file should be read
00797  if (isBuiltin == true) {
00798
00799      // Build the sample BOM tree for RMOL
00800      airinvService.buildSampleBom();
00801
00802      // Update the default parameters for the following interactive session
00803      lInteractiveAirlineCode = "BA";
00804      lInteractiveFlightNumber = 9;
00805      lInteractiveDate = stdair::Date_T (2011, 06, 10);
00806      lInteractiveBookingClass = "Q";
00807      lInteractivePartySize = 2;
00808      lInteractiveOrigin = "LHR";
00809      lInteractiveDestination = "SYD";
00810
00811  } else {
00812      if (isForSchedule == true) {
00813          // Build the BOM tree from parsing a schedule file (and O&D list)
00814          stdair::ScheduleFilePath lScheduleFilePath (lScheduleInputFilename);
00815          stdair::ODFilePath lODFilePath (lODInputFilename);
00816          stdair::FRAT5FilePath lFRAT5FilePath (lFRAT5InputFilename);
00817          stdair::FFDisutilityFilePath lFFDisutilityFilePath (lFFDisutilityInputFilen
ame);
00818          AIRRAC::YieldFilePath lYieldFilePath (lYieldInputFilename);
00819          airinvService.parseAndLoad (lScheduleFilePath, lODFilePath,
00820                                     lFRAT5FilePath, lFFDisutilityFilePath,
00821                                     lYieldFilePath);
00822
00823          // Update the default parameters for the following interactive session
00824          lInteract = "SQ";
00825          lInteractiveFlightNumber = 11;
00826          lInteractiveDate = stdair::Date_T (2010, 01, 15);
00827          lInteractiveBookingClass = "Y";
00828          lInteractivePartySize = 2;
00829          lInteractiveOrigin = "SIN";
00830          lInteractiveDestination = "BKK";
00831
00832      } else {
00833          // Build the BOM tree from parsing an inventory dump file
00834          AIRINV::InventoryFilePath lInventoryFilePath (lInventoryFilename);
00835          airinvService.parseAndLoad (lInventoryFilePath);
00836
00837          // Update the default parameters for the following interactive session
00838          lInteractiveAirlineCode = "SV";
00839          lInteractiveFlightNumber = 5;
00840          lInteractiveDate = stdair::Date_T (2010, 03, 11);
00841          lInteractiveBookingClass = "Y";
00842          lInteractivePartySize = 2;
00843          lInteractiveOrigin = "KBP";
00844          lInteractiveDestination = "JFK";
00845      }
00846  }
00847
00848  // Save the last state
00849  lLastInteractiveAirlineCode = lInteractiveAirlineCode;
00850  lLastInteractiveFlightNumber = lInteractiveFlightNumber;
00851  lLastInteractiveDate = lInteractiveDate;
00852
00853  // DEBUG
00854  STDAIR_LOG_DEBUG ("=====");
00855  STDAIR_LOG_DEBUG ("=          Beginning of the interactive session          =");
00856  STDAIR_LOG_DEBUG ("=====");

```

```

00857
00858 // Initialise the GNU readline wrapper
00859 swift::SReadline lReader (lHistoryFilename, lHistorySize);
00860 initReadline (lReader);
00861
00862 // Now we can ask user for a line
00863 std::string lUserInput;
00864 bool EndOfInput (false);
00865 Command_T::Type_T lCommandType (Command_T::NOP);
00866
00867 while (lCommandType != Command_T::QUIT && EndOfInput == false) {
00868     // Prompt
00869     std::ostream oPromptStr;
00870     oPromptStr << "airinv "
00871         << lInteractiveAirlineCode << lInteractiveFlightNumber
00872         << " / " << lInteractiveDate
00873         << "> ";
00874     // Call read-line, which will fill the list of tokens
00875     TokenList_T lTokenListByReadline;
00876     lUserInput = lReader.GetLine (oPromptStr.str(), lTokenListByReadline,
00877         EndOfInput);
00878
00879     // The history can be saved to an arbitrary file at any time
00880     lReader.SaveHistory (lHistoryBackupFilename);
00881
00882     // The end-of-input typically corresponds to a CTRL-D typed by the user
00883     if (EndOfInput) {
00884         std::cout << std::endl;
00885         break;
00886     }
00887
00888     // Interpret the user input
00889     lCommandType = extractCommand (lTokenListByReadline);
00890
00891     switch (lCommandType) {
00892
00893         // ////////////////////////////////// Help //////////////////////////////////
00894     case Command_T::HELP: {
00895         std::cout << std::endl;
00896         std::cout << "Commands: " << std::endl;
00897         std::cout << " help" << "\t\t" << "Display this help" << std::endl;
00898         std::cout << " quit" << "\t\t" << "Quit the application" << std::endl;
00899         std::cout << " list" << "\t\t"
00900             << "List airlines, flights and departure dates" << std::endl;
00901         std::cout << " select" << "\t\t"
00902             << "Select a flight-date to become the current one"
00903             << std::endl;
00904         std::cout << " display" << "\t"
00905             << "Display the current flight-date" << std::endl;
00906         std::cout << " sell" << "\t\t"
00907             << "Make a booking on the current flight-date" << std::endl;
00908         std::cout << " \nDebug Commands" << std::endl;
00909         std::cout << " json_list" << "\t"
00910             << "List airlines, flights and departure dates in a JSON format"
00911             << std::endl;
00912         std::cout << " json_display" << "\t"
00913             << "Display the current flight-date in a JSON format"
00914             << std::endl;
00915         std::cout << std::endl;
00916         break;
00917     }
00918
00919     // ////////////////////////////////// Quit //////////////////////////////////
00920 case Command_T::QUIT: {
00921     break;
00922 }
00923

```

```

00924 // ////////////////////////////////// List //////////////////////////////////
00925 case Command_T::LIST: {
00926 //
00927 TokenList_T lTokenList = extractTokenListForFlight (lTokenListByReadline);
00928
00929 stdair::AirlineCode_T lAirlineCode ("all");
00930 stdair::FlightNumber_T lFlightNumber (0);
00931 // Parse the parameters given by the user, giving default values
00932 // in case the user does not specify some (or all) of them
00933 parseFlightKey (lTokenList, lAirlineCode, lFlightNumber);
00934
00935 //
00936 const std::string lFlightNumberStr = (lFlightNumber == 0) ? " (all)":"";
00937 std::cout << "List of flights for "
00938 << lAirlineCode << " " << lFlightNumber << lFlightNumberStr
00939 << std::endl;
00940
00941 // DEBUG: Display the flight-date
00942 const std::string& lFlightDateListStr =
00943 airinvService.list (lAirlineCode, lFlightNumber);
00944
00945 if (lFlightDateListStr.empty() == false) {
00946 std::cout << lFlightDateListStr << std::endl;
00947 STDAIR_LOG_DEBUG (lFlightDateListStr);
00948
00949 } else {
00950 std::cerr << "There is no result for "
00951 << lAirlineCode << " " << lFlightNumber << lFlightNumberStr
00952 << ". Just type the list command without any parameter "
00953 << "to see the flight-dates for all the airlines and for all "
00954 << "the flight numbers."
00955 << std::endl;
00956 }
00957
00958 break;
00959 }
00960
00961 // ////////////////////////////////// Select //////////////////////////////////
00962 case Command_T::SELECT: {
00963 //
00964 TokenList_T lTokenList =
00965 extractTokenListForFlightDate (lTokenListByReadline);
00966
00967 // Check whether the user wants to select the last saved flight-date
00968 if (lTokenList.empty() == false) {
00969 // Read the booking class
00970 TokenList_T::const_iterator itTok = lTokenList.begin();
00971
00972 if (*itTok == "-") {
00973
00974 // Swap the current state with the last state
00975 boost::swap (lInteractiveAirlineCode, lLastInteractiveAirlineCode);
00976 boost::swap (lInteractiveFlightNumber, lLastInteractiveFlightNumber);
00977 boost::swap (lInteractiveDate, lLastInteractiveDate);
00978
00979 break;
00980 }
00981 }
00982
00983 // Parse the parameters given by the user, giving default values
00984 // in case the user does not specify some (or all) of them
00985 parseFlightDateKey (lTokenList, lInteractiveAirlineCode,
00986 lInteractiveFlightNumber, lInteractiveDate);
00987
00988 // Check whether the selected flight-date is valid
00989 const bool isFlightDateValid =
00990 airinvService.check (lInteractiveAirlineCode, lInteractiveFlightNumber,

```

```

00991         lInteractiveDate);
00992     if (isFlightDateValid == false) {
00993         std::ostringstream oFDKStr;
00994         oFDKStr << "The " << lInteractiveAirlineCode
00995             << lInteractiveFlightNumber << " / " << lInteractiveDate
00996             << " flight-date is not valid. Make sure it exists (e.g., "
00997             << " with the list command). The current flight-date is kept "
00998             << " selected.";
00999         std::cout << oFDKStr.str() << std::endl;
01000         STDAIR_LOG_ERROR (oFDKStr.str());
01001
01002         // Restore the last state
01003         lInteractiveAirlineCode = lLastInteractiveAirlineCode;
01004         lInteractiveFlightNumber = lLastInteractiveFlightNumber;
01005         lInteractiveDate = lLastInteractiveDate;
01006
01007         break;
01008     }
01009
01010     // DEBUG: Display the flight-date selection
01011     std::ostringstream oFDKStr;
01012     oFDKStr << "Selected the " << lInteractiveAirlineCode
01013         << lInteractiveFlightNumber << " / " << lInteractiveDate
01014         << " flight-date";
01015     std::cout << oFDKStr.str() << std::endl;
01016     STDAIR_LOG_DEBUG (oFDKStr.str());
01017
01018     // Save the last state
01019     lLastInteractiveAirlineCode = lInteractiveAirlineCode;
01020     lLastInteractiveFlightNumber = lInteractiveFlightNumber;
01021     lLastInteractiveDate = lInteractiveDate;
01022
01023     break;
01024 }
01025
01026 // ////////////////////////////////// Display //////////////////////////////////
01027 case Command_T::DISPLAY: {
01028     // DEBUG: Display the flight-date
01029     const std::string& lCSVFlightDateDump =
01030         airinvService.csvDisplay (lInteractiveAirlineCode,
01031             lInteractiveFlightNumber, lInteractiveDate);
01032     std::cout << lCSVFlightDateDump << std::endl;
01033     STDAIR_LOG_DEBUG (lCSVFlightDateDump);
01034
01035     break;
01036 }
01037
01038 // ////////////////////////////////// Sell //////////////////////////////////
01039 case Command_T::SELL: {
01040     //
01041     TokenList_T lTokenList = extractTokenListForClass (lTokenListByReadline);
01042
01043     // Parse the parameters given by the user, giving default values
01044     // in case the user does not specify some (or all) of them
01045     parseBookingClassKey (lTokenList, lInteractiveBookingClass,
01046         lInteractivePartySize,
01047         lInteractiveOrigin, lInteractiveDestination);
01048
01049     // DEBUG: Display the flight-date before the sell
01050     const std::string& lCSVFlightDateDumpBefore =
01051         airinvService.csvDisplay (lInteractiveAirlineCode,
01052             lInteractiveFlightNumber, lInteractiveDate);
01053     //std::cout << lCSVFlightDateDumpBefore << std::endl;
01054     STDAIR_LOG_DEBUG (lCSVFlightDateDumpBefore);
01055
01056     // Make a booking
01057     std::ostringstream oSDKStr;

```

```

01058         oSDKStr << lInteractiveAirlineCode << ", "
01059         << lInteractiveFlightNumber << ", "
01060         << lInteractiveDate << ", "
01061         << lInteractiveOrigin << ", " << lInteractiveDestination;
01062     const std::string lSegmentDateKey (oSDKStr.str());
01063
01064     // Perform the sell
01065     const bool isSellSuccessful =
01066         airinvService.sell (lSegmentDateKey,
01067                             lInteractiveBookingClass, lInteractivePartySize);
01068
01069     // DEBUG
01070     const std::string isSellSuccessfulStr =
01071         (isSellSuccessful == true)?"Yes":"No";
01072     std::ostream oSaleStr;
01073     oSaleStr << "Sale (' " << lSegmentDateKey << "', "
01074         << lInteractiveBookingClass << ": " << lInteractivePartySize
01075         << ") successful? " << isSellSuccessfulStr;
01076     std::cout << oSaleStr.str() << std::endl;
01077
01078     // DEBUG
01079     STDAIR_LOG_DEBUG (oSaleStr.str());
01080
01081     // DEBUG: Display the flight-date after the sell
01082     const std::string& lCSVFlightDateDumpAfter =
01083         airinvService.csvDisplay (lInteractiveAirlineCode,
01084                                   lInteractiveFlightNumber, lInteractiveDate);
01085     //std::cout << lCSVFlightDateDumpAfter << std::endl;
01086     STDAIR_LOG_DEBUG (lCSVFlightDateDumpAfter);
01087
01088     break;
01089 }
01090
01091 // ////////////////////////////////// JSoN List //////////////////////////////////
01092
01093 case Command_T::JSON_LIST: {
01094
01095     //
01096     TokenList_T lTokenList = extractTokenListForFlight (lTokenListByReadline);
01097
01098     stdair::AirlineCode_T lAirlineCode ("all");
01099     stdair::FlightNumber_T lFlightNumber (0);
01100     // Parse the parameters given by the user, giving default values
01101     // in case the user does not specify some (or all) of them
01102     parseFlightKey (lTokenList, lAirlineCode, lFlightNumber);
01103
01104     //
01105     const std::string lFlightNumberStr = (lFlightNumber ==0)?" (all)": "";
01106     std::cout << "JSON list of flights for "
01107         << lAirlineCode << " " << lFlightNumber << lFlightNumberStr
01108         << std::endl;
01109
01110     std::stringstream lMyCommandJSONstream;
01111     lMyCommandJSONstream << "{ \"list\": "
01112         << "{ \"airline_code\": \" " << lAirlineCode
01113         << "\", \"flight_number\": \" " << lFlightNumber
01114         << "\" } }";
01115
01116     const stdair::JSONString lJSONCommandString (lMyCommandJSONstream.str());
01117     const std::string& lFlightDateListJSONStr =
01118         airinvService.jsonHandler (lJSONCommandString);
01119
01120     // Display the flight-date JSON string
01121     std::cout << lFlightDateListJSONStr << std::endl;
01122     STDAIR_LOG_DEBUG (lFlightDateListJSONStr);
01123
01124     break;

```

```

01125     }
01126
01127     // ////////////////////////////////// JSon Display //////////////////////////////////
01128
01129     case Command_T::JSON_DISPLAY: {
01130
01131         // Construct the JSON command string for the current parameters (current
01132         // airline code, current flight number and current date)
01133         std::ostringstream lMyCommandJSONstream;
01134         lMyCommandJSONstream << "{ \"flight_date\": \"
01135                                << \" \"departure_date\": \" \" << lInteractiveDate
01136                                << \" \"airline_code\": \" \" << lInteractiveAirlineCode
01137
01138                                << \" \"flight_number\": \" \" << lInteractiveFlightNumb
er
01138                                << \" \"}\"";
01139
01140         // Get the flight-date details in a JSON string
01141         const stdair::JSONString lJSONCommandString (lMyCommandJSONstream.str());
01142         const std::string& lCSVFlightDateDump =
01143             airinvService.jsonHandler (lJSONCommandString);
01144
01145         // Display the flight-date JSON string
01146         std::cout << lCSVFlightDateDump << std::endl;
01147         STDAIR_LOG_DEBUG (lCSVFlightDateDump);
01148
01149         break;
01150     }
01151
01152     // ////////////////////////////////// Default / No value //////////////////////////////////
01153     case Command_T::NOP: {
01154         break;
01155     }
01156
01157     case Command_T::LAST_VALUE:
01158     default: {
01159         // DEBUG
01160         std::ostringstream oStr;
01161         oStr << "That command is not yet understood: ' " << lUserInput
01162             << "' => " << lTokenListByReadline;
01163         STDAIR_LOG_DEBUG (oStr.str());
01164         std::cout << oStr.str() << std::endl;
01165     }
01166 }
01167 }
01168
01169 // DEBUG
01170 STDAIR_LOG_DEBUG ("End of the session. Exiting.");
01171 std::cout << "End of the session. Exiting." << std::endl;
01172
01173 // Close the Log outputFile
01174 logOutputFile.close();
01175
01176 /*
01177     Note: as that program is not intended to be run on a server in
01178     production, it is better not to catch the exceptions. When it
01179     happens (that an exception is throwned), that way we get the
01180     call stack.
01181 */
01182
01183 return 0;
01184 }

```



- 25.255 doc/local/authors.doc File Reference**
- 25.256 doc/local/codingrules.doc File Reference**
- 25.257 doc/local/copyright.doc File Reference**
- 25.258 doc/local/documentation.doc File Reference**
- 25.259 doc/local/features.doc File Reference**
- 25.260 doc/local/help\_wanted.doc File Reference**
- 25.261 doc/local/howto\_release.doc File Reference**
- 25.262 doc/local/index.doc File Reference**
- 25.263 doc/local/installation.doc File Reference**
- 25.264 doc/local/linking.doc File Reference**
- 25.265 doc/local/test.doc File Reference**
- 25.266 doc/local/users\_guide.doc File Reference**
- 25.267 doc/local/verification.doc File Reference**
- 25.268 doc/tutorial/tutorial.doc File Reference**
- 25.269 test/airinv/InventoryTestSuite.cpp File Reference**

**25.270 InventoryTestSuite.cpp**

```

00001
00005 // //////////////////////////////////////
00006 // Import section
00007 // //////////////////////////////////////
00008 // STL
00009 #include <sstream>
00010 #include <fstream>
00011 #include <string>
00012 // Boost Unit Test Framework (UTF)
00013 #define BOOST_TEST_DYN_LINK
00014 #define BOOST_TEST_MAIN
00015 #define BOOST_TEST_MODULE InventoryTestSuite
00016 #include <boost/test/unit_test.hpp>
00017 // StdAir
00018 #include <stdair/basic/BasLogParams.hpp>
00019 #include <stdair/basic/BasDBParams.hpp>
00020 #include <stdair/basic/BasFileMgr.hpp>
00021 #include <stdair/bom/TravelSolutionStruct.hpp>
00022 #include <stdair/bom/BookingRequestStruct.hpp>
00023 #include <stdair/service/Logger.hpp>
00024 #include <stdair/stdair_exceptions.hpp>
00025 // Airinv
00026 #include <airinv/AIRINV_Types.hpp>
00027 #include <airinv/AIRINV_Master_Service.hpp>
00028 #include <airinv/config/airinv-paths.hpp>
00029
00030 namespace boost_utf = boost::unit_test;
00031
00032 // (Boost) Unit Test XML Report
00033 std::ofstream utfReportStream ("InventoryTestSuite_utfresults.xml");
00034
00035 struct UnitTestConfig {
00036     UnitTestConfig() {
00037         boost_utf::unit_test_log.set_stream (utfReportStream);
00038         boost_utf::unit_test_log.set_format (boost_utf::XML);
00039         boost_utf::unit_test_log.set_threshold_level (boost_utf::log_test_units);
00040         //boost_utf::unit_test_log.set_threshold_level (boost_utf::log_successful_tes
00041         ts);
00042     }
00043     ~UnitTestConfig() {
00044     }
00045 };
00046
00047 bool testInventoryHelper (const unsigned short iTestFlag,
00048                          const stdair::Filename_T& iInventoryInputFilename,
00049                          const stdair::Filename_T& iScheduleInputFilename,
00050                          const stdair::Filename_T& iODInputFilename,
00051                          const stdair::Filename_T& iFRAT5InputFilename,
00052                          const stdair::Filename_T& iFFDisutilityInputFilename,
00053                          const stdair::Filename_T& iYieldInputFilename,
00054                          const bool isBuiltin,
00055                          const bool isForSchedule) {
00056
00057     // Output log File
00058     std::ostringstream oStr;
00059     oStr << "InventoryTestSuite_" << iTestFlag << ".log";
00060     const stdair::Filename_T lLogFilename (oStr.str());
00061
00062     // Set the log parameters
00063     std::ofstream logOutputFile;
00064     // Open and clean the log outputfile
00065     logOutputFile.open (lLogFilename.c_str());
00066     logOutputFile.clear();

```

```

00076
00077 // Initialise the AirInv service object
00078 stdair::BasLogParams lLogParams (stdair::LOG::DEBUG,
00079                                 logOutputFile);
00080
00081 // Initialise the inventory service
00082 AIRINV::AIRINV_Master_Service airinvService (lLogParams);
00083
00084 // Parameters for the sale
00085 std::string lSegmentDateKey;
00086 stdair::ClassCode_T lClassCode;
00087 const stdair::PartySize_T lPartySize (2);
00088
00089 // Check whether or not a (CSV) input file should be read
00090 if (isBuiltin == true) {
00091
00092     // Build the default sample BOM tree (filled with inventories) for AirInv
00093     airinvService.buildSampleBom();
00094
00095     // Define a specific segment-date key for the sample BOM tree
00096     lSegmentDateKey = "BA,9,2011-06-10,LHR,SYD";
00097     lClassCode = "Q";
00098
00099 } else {
00100
00101     if (isForSchedule == true) {
00102         // Build the BOM tree from parsing a schedule file (and O&D list)
00103         stdair::ScheduleFilePath lScheduleFilePath (iScheduleInputFilename);
00104         stdair::ODFilePath lODFilePath (iODInputFilename);
00105         stdair::FRAT5FilePath lFRAT5FilePath (iFRAT5InputFilename);
00106         stdair::FFDisutilityFilePath lFFDisutilityFilePath (iFFDisutilityInputFilename);
00107         AIRRAC::YieldFilePath lYieldFilePath (iYieldInputFilename);
00108         airinvService.parseAndLoad (lScheduleFilePath, lODFilePath,
00109                                     lFRAT5FilePath, lFFDisutilityFilePath,
00110                                     lYieldFilePath);
00111
00112         // Define a specific segment-date key for the schedule-based inventory
00113         lSegmentDateKey = "SQ,11,2010-01-15,SIN,BKK";
00114         lClassCode = "Y";
00115
00116     } else {
00117
00118         // Build the BOM tree from parsing an inventory dump file
00119         AIRINV::InventoryFilePath lInventoryFilePath (iInventoryInputFilename);
00120         airinvService.parseAndLoad (lInventoryFilePath);
00121
00122         // Define a specific segment-date key for the inventory parsed file
00123         //const std::string lSegmentDateKey ("SV, 5, 2010-03-11, KBP, JFK, 08:00:00
00124         ");
00125         lSegmentDateKey = "SV, 5, 2010-03-11, KBP, JFK, 08:00:00";
00126         lClassCode = "J";
00127     }
00128 }
00129
00130 // Make a booking
00131 const bool hasSaleBeenSuccessful =
00132     airinvService.sell (lSegmentDateKey, lClassCode, lPartySize);
00133
00134 // DEBUG: Display the list of travel solutions
00135 const std::string& lCSVDump = airinvService.csvDisplay();
00136 STDAIR_LOG_DEBUG (lCSVDump);
00137
00138 // Close the log file
00139 logOutputFile.close();
00140

```

```

00141     if (hasSaleBeenSuccessful == false) {
00142         STDAIR_LOG_DEBUG ("No sale can be made for '" << lSegmentDateKey
00143             << "'");
00144     }
00145
00146     return hasSaleBeenSuccessful;
00147
00148 }
00149
00150 // ////////////////////////////////// Main: Unit Test Suite //////////////////////////////////
00151
00152 // Set the UTF configuration (re-direct the output to a specific file)
00153 BOOST_GLOBAL_FIXTURE (UnitTestFixture);
00154
00155 // Start the test suite
00156 BOOST_AUTO_TEST_SUITE (master_test_suite)
00157
00158
00161 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell) {
00162
00163     // Input file name
00164     const stdair::Filename_T lInventoryInputFilename (STDAIR_SAMPLE_DIR
00165         "/invdump01.csv");
00166
00167     // State whether the BOM tree should be built-in or parsed from an input file
00168     const bool isBuiltin = false;
00169     // State whether the BOM tree should be built from a schedule file (instead of
    from an inventory dump)
00170     const bool isForSchedule = false;
00171
00172     // Try sell a default segment.
00173     bool hasTestBeenSuccessful = false;
00174     BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00175         testInventoryHelper (0, lInventoryInputFilename,
00176             " ", " ", " ", " ", " ", " ", isBuiltin,
    isForSchedule));
00177     BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00178
00179 }
00180
00184 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_built_in) {
00185
00186     // State whether the BOM tree should be built-in or parsed from an input file
00187     const bool isBuiltin = true;
00188     // State whether the BOM tree should be built from a schedule file (instead of
    from an inventory dump)
00189     const bool isForSchedule = false;
00190
00191     // Try sell a default segment.
00192     bool hasTestBeenSuccessful = false;
00193     BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00194         testInventoryHelper (1, " ", " ", " ", " ", " ", " ", " ",
    isBuiltin, isForSchedule));
00196     BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00197
00198 }
00199
00203 BOOST_AUTO_TEST_CASE (airinv_simple_inventory_sell_schedule) {
00204
00205     // Input file names
00206     const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00207         "/schedule01.csv");
00208     const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00209         "/ond01.csv");
00210     const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
00211         "/frat5.csv");
00212     const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR

```

```

00213                                     "/ffDisutility.csv");
00214     const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00215                                     "/yieldstore01.csv");
00216
00217     // State whether the BOM tree should be built-in or parsed from an input file
00218     const bool isBuiltin = false;
00219     // State whether the BOM tree should be built from a schedule file (instead of
    from an inventory dump)
00220     const bool isForSchedule = true;
00221
00222     // Try sell a default segment.
00223     bool hasTestBeenSuccessful = false;
00224     BOOST_CHECK_NO_THROW (hasTestBeenSuccessful =
00225         testInventoryHelper (2, " ",
00226             lScheduleInputFilename,
00227             lODInputFilename,
00228             lFRAT5InputFilename,
00229             lFFDisutilityInputFilename,
00230             lYieldInputFilename,
00231             isBuiltin, isForSchedule));
00232     BOOST_CHECK_EQUAL (hasTestBeenSuccessful, true);
00233 }
00234 }
00235
00240 BOOST_AUTO_TEST_CASE (airinv_error_inventory_input_file) {
00241
00242     // Inventory input file name
00243     const stdair::Filename_T lMissingInventoryFilename (STDAIR_SAMPLE_DIR
00244                                     "/missingFile.csv");
00245
00246     // State whether the BOM tree should be built-in or parsed from an input file
00247     const bool isBuiltin = false;
00248     // State whether the BOM tree should be built from a schedule file (instead of
    from an inventory dump)
00249     const bool isForSchedule = false;
00250
00251     // Try sell a default segment.
00252     BOOST_CHECK_THROW (testInventoryHelper (3, lMissingInventoryFilename,
00253         " ", " ", " ", " ", " ", " ", isBuiltin, isF
    orSchedule),
00254         AIRINV::InventoryInputFileNotFoundException);
00255
00256 }
00257
00262 BOOST_AUTO_TEST_CASE (airinv_error_schedule_input_file) {
00263
00264     // Schedule input file name
00265     const stdair::Filename_T lMissingScheduleFilename (STDAIR_SAMPLE_DIR
00266                                     "/missingFile.csv");
00267     const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
00268                                     "/frat5.csv");
00269     const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
00270                                     "/ffDisutility.csv");
00271
00272     // State whether the BOM tree should be built-in or parsed from an input file
00273     const bool isBuiltin = false;
00274     // State whether the BOM tree should be built from a schedule file (instead of
    from an inventory dump)
00275     const bool isForSchedule = true;
00276
00277     // Try sell a default segment.
00278     BOOST_CHECK_THROW (testInventoryHelper (4, " ", lMissingScheduleFilename,
00279         " ", lFRAT5InputFilename,
00280         lFFDisutilityInputFilename, " ",
00281         isBuiltin, isForSchedule),
00282         AIRINV::ScheduleInputFileNotFoundException);
00283

```

```

00284 }
00285
00290 BOOST_AUTO_TEST_CASE (airinv_error_yield_input_file) {
00291
00292     // Input file names
00293     const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00294                                                         "/schedule01.csv");
00295     const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00296                                                  "/ond01.csv");
00297     const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
00298                                                    "/frat5.csv");
00299     const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
00300                                                          "/ffDisutility.csv");
00301     const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00302                                                    "/missingFile.csv");
00303
00304     // State whether the BOM tree should be built-in or parsed from an input file
00305     const bool isBuiltin = false;
00306     // State whether the BOM tree should be built from a schedule file (instead of
00307     // from an inventory dump)
00308     const bool isForSchedule = true;
00309
00309     // Try sell a default segment.
00310     BOOST_CHECK_THROW (testInventoryHelper (5, " ",
00311                                             lScheduleInputFilename,
00312                                             lODInputFilename,
00313                                             lFRAT5InputFilename,
00314                                             lFFDisutilityInputFilename,
00315                                             lYieldInputFilename,
00316                                             isBuiltin, isForSchedule),
00317                       AIRRAC::YieldInputFileNotFoundException);
00318
00319 }
00320
00325 BOOST_AUTO_TEST_CASE (airinv_error_flight_date_duplication) {
00326
00327     // Input file names
00328     const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00329                                                         "/scheduleError01.csv");
00330     const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00331                                                  "/ond01.csv");
00332     const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
00333                                                    "/frat5.csv");
00334     const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
00335                                                          "/ffDisutility.csv");
00336     const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00337                                                    "/missingFile.csv");
00338
00339     // State whether the BOM tree should be built-in or parsed from an input file
00340     const bool isBuiltin = false;
00341     // State whether the BOM tree should be built from a schedule file (instead of
00342     // from an inventory dump)
00343     const bool isForSchedule = true;
00344
00344     // Try sell a default segment.
00345     BOOST_CHECK_THROW (testInventoryHelper (6, " ",
00346                                             lScheduleInputFilename,
00347                                             lODInputFilename,
00348                                             lFRAT5InputFilename,
00349                                             lFFDisutilityInputFilename,
00350                                             lYieldInputFilename,
00351                                             isBuiltin, isForSchedule),
00352                       AIRINV::FlightDateDuplicationException);
00353
00354 }
00355
00360 BOOST_AUTO_TEST_CASE (airinv_error_schedule_parsing_failed) {

```

```
00361
00362 // Input file names
00363 const stdair::Filename_T lScheduleInputFilename (STDAIR_SAMPLE_DIR
00364                                                    "/scheduleError02.csv");
00365 const stdair::Filename_T lODInputFilename (STDAIR_SAMPLE_DIR
00366                                              "/ond01.csv");
00367 const stdair::Filename_T lFRAT5InputFilename (STDAIR_SAMPLE_DIR
00368                                                "/frat5.csv");
00369 const stdair::Filename_T lFFDisutilityInputFilename (STDAIR_SAMPLE_DIR
00370                                                       "/ffDisutility.csv");
00371 const stdair::Filename_T lYieldInputFilename (STDAIR_SAMPLE_DIR
00372                                                "/yieldstore01.csv");
00373
00374 // State whether the BOM tree should be built-in or parsed from an input file
00375 const bool isBuiltin = false;
00376 // State whether the BOM tree should be built from a schedule file (instead of
00377 // from an inventory dump)
00378 const bool isForSchedule = true;
00379
00379 // Try sell a default segment.
00380 BOOST_CHECK_THROW (testInventoryHelper (7, " ",
00381                                         lScheduleInputFilename,
00382                                         lODInputFilename,
00383                                         lFRAT5InputFilename,
00384                                         lFFDisutilityInputFilename,
00385                                         lYieldInputFilename,
00386                                         isBuiltin, isForSchedule),
00387                     AIRINV::ScheduleFileParsingFailedException);
00388
00389 }
00390
00391 // End the test suite
00392 BOOST_AUTO_TEST_SUITE_END()
00393
00394
```

## 25.271 test/airinv/InventoryTestSuite.hpp File Reference

```
#include <iosfwd>
```

```
#include <cppunit/extensions/HelperMacros.h>
```

### Classes

- class [InventoryTestSuite](#)

### Functions

- [CPPUNIT\\_TEST\\_SUITE\\_REGISTRATION](#) ([InventoryTestSuite](#))

#### 25.271.1 Function Documentation

##### 25.271.1.1 CPPUNIT\_TEST\_SUITE\_REGISTRATION ([InventoryTestSuite](#))



**25.272 InventoryTestSuite.hpp**

```
00001 // STL
00002 #include <iosfwd>
00003 // CPPUNIT
00004 #include <cppunit/extensions/HelperMacros.h>
00005
00007 class InventoryTestSuite : public CppUnit::TestFixture {
00008     CPPUNIT_TEST_SUITE (InventoryTestSuite);
00009     CPPUNIT_TEST (simpleInventory);
00010     // CPPUNIT_TEST (errorCase);
00011     CPPUNIT_TEST_SUITE_END ();
00012 public:
00013
00015     void simpleInventory();
00016
00018     // void errorCase ();
00019
00021     InventoryTestSuite ();
00022
00023 private:
00025     void simpleInventoryHelper();
00026
00027 protected:
00028     std::stringstream _describeKey;
00029 };
00030
00031 CPPUNIT_TEST_SUITE_REGISTRATION (InventoryTestSuite);
```