

# POI-HSSF and POI-XSSF - Java API To Access Microsoft Excel Format Files

## Overview

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### 1. Overview

HSSF is the POI Project's pure Java implementation of the Excel '97(-2007) file format. XSSF is the POI Project's pure Java implementation of the Excel 2007 OOXML (.xlsx) file format.

HSSF and XSSF provides ways to read spreadsheets create, modify, read and write XLS spreadsheets. They provide:

- low level structures for those with special needs
- an eventmodel api for efficient read-only access
- a full usermodel api for creating, reading and modifying XLS files

For people converting from pure HSSF usermodel, who wish to use the joint SS Usermodel for HSSF and XSSF support, then see the [ss usermodel converting guide](#).

An alternate way of generating a spreadsheet is via the [Cocoon](#) serializer (yet you'll still be using HSSF indirectly). With Cocoon you can serialize any XML datasource (which might be a ESQL page outputting in SQL for instance) by simply applying the stylesheet and designating the serializer.

If you're merely reading spreadsheet data, then use the eventmodel api in either the org.apache.poi.hssf.eventusermodel package, or the org.apache.poi.xssf.eventusermodel package, depending on your file format.

If you're modifying spreadsheet data then use the usermodel api. You can also generate spreadsheets this way.

Note that the usermodel system has a higher memory footprint than the low level eventusermodel, but have the major advantage of being much simpler to work with. Also please be aware that as the new XSSF supported Excel 2007 OOXML (.xlsx) files are XML based, the memory footprint for processing them is higher than for the older HSSF supported

(.xls) binary files.