

# globus gssapi gsi Reference Manual

## 10.2

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## 1 globus gssapi gsi Module Index

### 1.1 globus gssapi gsi Modules

Here is a list of all modules:

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### 2.1 globus gssapi gsi Related Pages

Here is a list of all related documentation pages:

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## 3 globus gssapi gsi Module Documentation

### 3.1 Functions for manipulating a buffer set

#### Create Empty Buffer Set

- OM\_uint32 **gss\_create\_empty\_buffer\_set** (OM\_uint32 \*minor\_status, gss\_buffer\_set\_t \*buffer\_set)

#### Add Buffer

- OM\_uint32 **gss\_add\_buffer\_set\_member** (OM\_uint32 \*minor\_status, const gss\_buffer\_t member\_buffer, gss\_buffer\_set\_t \*buffer\_set)

## Free Buffer Set

- OM\_uint32 **gss\_release\_buffer\_set** (OM\_uint32 \*minor\_status, gss\_buffer\_set\_t \*buffer\_set)

### 3.1.1 Function Documentation

#### 3.1.1.1 OM\_uint32 gss\_create\_empty\_buffer\_set (OM\_uint32 \* minor\_status, gss\_buffer\_set\_t \* buffer\_set)

Create a empty buffer set.

This function allocates and initializes a empty buffer set. The memory allocated in this function should be freed by a call to gss\_release\_buffer\_set.

##### Parameters:

*minor\_status* The minor status returned by this function. This paramter will be 0 upon success.

*buffer\_set* Pointer to a buffer set structure.

##### Returns:

GSS\_S\_COMPLETE upon success GSS\_S\_FAILURE failure

##### See also:

**gss\_add\_buffer\_set\_member**(p. 2)

**gss\_release\_buffer\_set**(p. 2)

#### 3.1.1.2 OM\_uint32 gss\_add\_buffer\_set\_member (OM\_uint32 \* minor\_status, const gss\_buffer\_t member\_buffer, gss\_buffer\_set\_t \* buffer\_set)

Add a buffer to a buffer set.

This function allocates a new gss\_buffer\_t, intializes it with the values in the member\_buffer parameter.

##### Parameters:

*minor\_status* The minor status returned by this function. This paramter will be 0 upon success.

*member\_buffer* Buffer to insert into the buffer set.

*buffer\_set* Pointer to a initialized buffer set structure.

##### Returns:

GSS\_S\_COMPLETE upon success GSS\_S\_FAILURE failure

##### See also:

**gss\_create\_empty\_buffer\_set**(p. 2)

**gss\_release\_buffer\_set**(p. 2)

#### 3.1.1.3 OM\_uint32 gss\_release\_buffer\_set (OM\_uint32 \* minor\_status, gss\_buffer\_set\_t \* buffer\_set)

Free all memory associated with a buffer set.

This function will free all memory associated with a buffer set. Note that it will also free all memory associated with the buffers int the buffer set.

##### Parameters:

*minor\_status* The minor status returned by this function. This paramter will be 0 upon success.

*buffer\_set* Pointer to a buffer set structure. This pointer will point at a NULL value upon return.

**Returns:**

GSS\_S\_COMPLETE upon success GSS\_S\_FAILURE failure

**See also:**

`gss_create_empty_buffer_set`(p. 2)

`gss_add_buffer_set_member`(p. 2)

## 3.2 GSI GSS-API Constants

## 3.3 Activation

Globus GSI GSSAPI uses standard Globus module activation and deactivation.

**Defines**

- `#define GLOBUS_GSI_GSSAPI_MODULE`

### 3.3.1 Detailed Description

Globus GSI GSSAPI uses standard Globus module activation and deactivation.

Before any Globus GSI GSSAPI functions are called, the following function should be called:

```
globus_module_activate(GLOBUS_GSI_GSSAPI_MODULE)
```

This function returns `GLOBUS_SUCCESS` if Globus GSI GSSAPI was successfully initialized, and you are therefore allowed to subsequently call Globus GSI GSSAPI functions. Otherwise, an error code is returned, and Globus GSI GSSAPI functions should not subsequently be called. This function may be called multiple times.

To deactivate Globus GSI GSSAPI, the following function should be called:

```
globus_module_deactivate(GLOBUS_GSI_GSSAPI_MODULE)
```

This function should be called once for each time Globus GSI GSSAPI was activated.

Note that it is not mandatory to call the above functions.

### 3.3.2 Define Documentation

#### 3.3.2.1 `#define GLOBUS_GSI_GSSAPI_MODULE`

Module descriptor.

## 3.4 GSS Req Flags

These macros set the REQUESTED type of context - these should be set (or not) in the context's `req_flags` (or in the context's `ret_flags` if `accept_sec_context` is being called).

**[NOHEADER]**

- `#define GSS_C_GLOBUS_DELEGATE_LIMITED_PROXY_FLAG` 4096

[NOHEADER]

- **#define GSS\_C\_GLOBUS\_ACCEPT\_PROXY\_SIGNED\_BY\_LIMITED\_PROXY\_FLAG 32768**

[NOHEADER]

- **#define GSS\_C\_GLOBUS\_ALLOW\_MISSING\_SIGNING\_POLICY 65536**

[NOHEADER]

- **#define GSS\_C\_GLOBUS\_FORCE\_SSL3 131072**

## Defines

- **#define GSS\_C\_GLOBUS\_DONT\_ACCEPT\_LIMITED\_PROXY\_FLAG 8192**

### 3.4.1 Detailed Description

These macros set the REQUESTED type of context - these should be set (or not) in the context's req\_flags (or in the context's ret\_flags if accept\_sec\_context is being called).

### 3.4.2 Define Documentation

#### 3.4.2.1 **#define GSS\_C\_GLOBUS\_DONT\_ACCEPT\_LIMITED\_PROXY\_FLAG 8192**

Set if you don't want a context to accept a limited proxy.

If this flag is set, and a limited proxy is received, the call will not be successful and the context will not be set up

#### 3.4.2.2 **#define GSS\_C\_GLOBUS\_DELEGATE\_LIMITED\_PROXY\_FLAG 4096**

Set if you want the delegated proxy to be a limited proxy.

#### 3.4.2.3 **#define GSS\_C\_GLOBUS\_ACCEPT\_PROXY\_SIGNED\_BY\_LIMITED\_PROXY\_FLAG 32768**

Set if you want to accept proxies signed by limited proxies.

### Deprecated

We now accept proxies signed by limited proxies if they are limited or independent.

#### 3.4.2.4 **#define GSS\_C\_GLOBUS\_ALLOW\_MISSING\_SIGNING\_POLICY 65536**

Set if you want to allow CA certs without a signing policy to verify.

#### 3.4.2.5 **#define GSS\_C\_GLOBUS\_FORCE\_SSL3 131072**

Set if you want to force SSLv3 instead of negotiating TLSv1 or SSLv3.

## 3.5 GSS Ret Flags

These macros set the RETURNED context type - these will be set (or not) in the context's ret\_flags.

[NOHEADER]

- `#define GSS_C_GLOBUS_RECEIVED_LIMITED_PROXY_DURING_DELEGATION_FLAG 4096`

## Defines

- `#define GSS_C_GLOBUS_RECEIVED_LIMITED_PROXY_FLAG 8192`

### 3.5.1 Detailed Description

These macros set the RETURNED context type - these will be set (or not) in the context's ret\_flags.

### 3.5.2 Define Documentation

#### 3.5.2.1 `#define GSS_C_GLOBUS_RECEIVED_LIMITED_PROXY_FLAG 8192`

If the proxy received is a limited proxy, this flag will be set in the returned context flags (ret\_flags).

#### 3.5.2.2 `#define GSS_C_GLOBUS_RECEIVED_LIMITED_PROXY_DURING_DELEGATION_FLAG 4096`

If the proxy received is a limited proxy received during delegation, this flag is set in the returned flags.

## 4 globus gssapi gsi Page Documentation

### 4.1 Deprecated List

Global `GSS_C_GLOBUS_ACCEPT_PROXY_SIGNED_BY_LIMITED_PROXY_FLAG`(p. 4) We now accept proxies signed by limited proxies if they are limited or independent.

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