globus gssapi error

4.1

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1 Module Index

1.1 Modules

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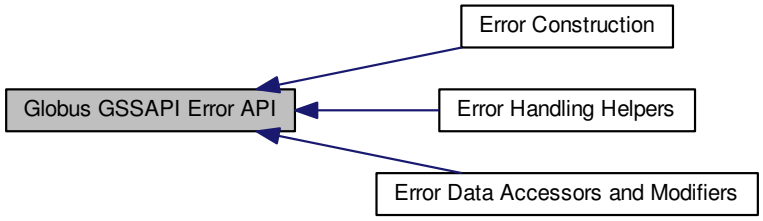
2 Module Documentation

2.1 Globus GSSAPI Error API

Collaboration diagram for Globus GSSAPI Error API:



Modules

- **Error Construction**
- **Error Data Accessors and Modifiers**
- **Error Handling Helpers**

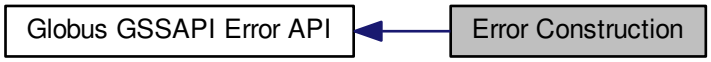
2.1.1 Detailed Description

These globus_error functions are motivated by the desire to provide a easier way of generating new error types, while at the same time preserving all features (e.g. memory management, chaining) of the current error handling framework. The functions in this API are auxiliary to the function in the Globus Generic Error API in the sense that they provide a wraper for representing GSSAPI errors in terms of a globus_error_t.

Any program that uses Globus GSSAPI Error functions must include "globus_error_gssapi.h".

2.2 Error Construction

Collaboration diagram for Error Construction:



Defines

- #define **GLOBUS_ERROR_TYPE_GSSAPI**

Construct Error

- globus_object_t * **globus_error_construct_gssapi_error** (globus_module_descriptor_t *base_source, globus_object_t *base_cause, const OM_uint32 major_status, const OM_uint32 minor_status)

Initialize Error

- globus_object_t * **globus_error_initialize_gssapi_error** (globus_object_t *error, globus_module_descriptor_t *base_source, globus_object_t *base_cause, const OM_uint32 major_status, const OM_uint32 minor_status)

2.2.1 Detailed Description

Create and initialize a Globus GSSAPI Error object. This section defines operations to create and initialize Globus GSSAPI Error objects.

2.2.2 Define Documentation

2.2.2.1 #define GLOBUS_ERROR_TYPE_GSSAPI

Error type definition.

2.2.3 Function Documentation

2.2.3.1 globus_object_t* globus_error_construct_gssapi_error (globus_module_descriptor_t * *base_source,* globus_object_t * *base_cause,* const OM_uint32 *major_status,* const OM_uint32 *minor_status*)

Allocate and initialize an error of type GLOBUS_ERROR_TYPE_GSSAPI.

Parameters

base_source	Pointer to the originating module.
base_cause	The error object causing the error. If this is the original error, this paramater may be NULL.
major_status	The GSSAPI major status
minor_status	The GSSAPI minor status

Returns

The resulting error object. It is the user's responsibility to eventually free this object using globus_object_free(). A globus_result_t may be obtained by calling globus_error_put() on this object.

2.2.3.2 globus_object_t* globus_error_initialize_gssapi_error (globus_object_t * *error*, globus_module_descriptor_t * *base_source*, globus_object_t * *base_cause*, const OM_uint32 *major_status*, const OM_uint32 *minor_status*)

Initialize a previously allocated error of type GLOBUS_ERROR_TYPE_GSSAPI.

Parameters

error	The previously allocated error object.
base_source	Pointer to the originating module.
base_cause	The error object causing the error. If this is the original error this paramater may be NULL.
major_status	The GSSAPI major status
minor_status	The GSSAPI minor status

Returns

The resulting error object. You may have to call globus_error_put() on this object before passing it on.

2.3 Error Data Accessors and Modifiers

Collaboration diagram for Error Data Accessors and Modifiers:



Get Major Status

- OM_uint32 **globus_error_gssapi_get_major_status** (globus_object_t ∗error)

Set Major Status

- void **globus_error_gssapi_set_major_status** (globus_object_t ∗error, const OM_uint32 major_status)

Get Minor Status

- OM_uint32 **globus_error_gssapi_get_minor_status** (globus_object_t ∗error)

2.3.1 Detailed Description

Get and set data in a Globus GSSAPI Error object. This section defines operations for accessing and modifying data in a Globus GSSAPI Error object.

2.3.2 Function Documentation

2.3.2.1 OM_uint32 globus_error_gssapi_get_major_status (globus_object_t ∗ *error*)

Retrieve the major status from a gssapi error object.

Parameters

error	The error from which to retrieve the major status

Returns

The major status stored in the object

2.3.2.2 void globus_error_gssapi_set_major_status (globus_object_t ∗ *error,* const OM_uint32 *major_status*)

Set the major status in a gssapi error object.

Parameters

error	The error object for which to set the major status
major_status	The major status

Returns

void

2.3.2.3 OM_uint32 globus_error_gssapi_get_minor_status (globus_object_t * *error*)

Retrieve the minor status from a gssapi error object.

Parameters

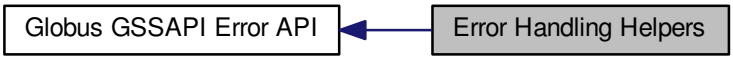
error	The error from which to retrieve the minor status

Returns

The minor status stored in the object

2.4 Error Handling Helpers

Collaboration diagram for Error Handling Helpers:



Error Match

- globus_bool_t **globus_error_gssapi_match** (globus_object_t *error, globus_module_descriptor_t *module, const OM_uint32 major_status)

Wrap GSSAPI Error

- globus_object_t * **globus_error_wrap_gssapi_error** (globus_module_descriptor_t *base_source, OM_uint32 major_status, OM_uint32 minor_status, int type, const char *source_file, const char *source_func, int source_line, const char *short_desc_format,...)

2.4.1 Detailed Description

Helper functions for dealing with Globus GSSAPI Error objects. This section defines utility functions for dealing with Globus GSSAPI Error objects.

2.4.2 Function Documentation

2.4.2.1 globus_bool_t globus_error_gssapi_match (globus_object_t * *error,* globus_module_descriptor_t * *module,* const OM_uint32 *major_status*)

Check whether the error originated from a specific module and match a specific major status.

This function checks whether the error or any of it's causative errors originated from a specific module and contains a specific major status. If the module descriptor is left unspecified this function will check for any error of the specified major_status and vice versa.

Parameters

error	The error object for which to perform the check
module	The module descriptor to check for
major_status	The major status to check for

Returns

GLOBUS_TRUE - the error matched the module and major status GLOBUS_FALSE - the error failed to match the module and major status

2.4.2.2 globus_object_t* globus_error_wrap_gssapi_error (globus_module_descriptor_t * *base_source,* OM_uint32 *major_status,* OM_uint32 *minor_status,* int *type,* const char * *source_file,* const char * *source_func,* int *source_line,* const char * *short_desc_format, ...*)

Allocate and initialize an error of type GLOBUS_ERROR_TYPE_GLOBUS which contains a causal error of type GLOBUS_ERROR_TYPE_GSSAPI.

Parameters

base_source	Pointer to the originating module.
major_status	The major status to use when generating the causal error.
minor_status	The minor status to use when generating the causal error.
type	The error type. We may reserve part of this namespace for common errors. Errors not in this space are assumed to be local to the originating module.
source_file	Name of file. Use __FILE__
source_func	Name of function. Use _globus_func_name and declare your func with GlobusFuncName(<name>)
source_line	Line number. Use __LINE__
short_desc_format	Short format string giving a succinct description of the error. To be passed on to the user.
...	Arguments for the format string.

Returns

The resulting error object. It is the user's responsibility to eventually free this object using globus_object_free(). A globus_result_t may be obtained by calling globus_error_put() on this object.