

NAME

gss_display_status - Convert a GSS-API status code to text

SYNOPSIS

```
#include <gssapi/gssapi.h>
```

```
OM_uint32
```

```
gss_display_status(OM_uint32 *minor_status, OM_uint32 status_value, int status_type,
    const gss_OID mech_type, OM_uint32 *message_context, gss_buffer_t status_string);
```

DESCRIPTION

Allows an application to obtain a textual representation of a GSS-API status code, for display to the user or for logging purposes. Since some status values may indicate multiple conditions, applications may need to call **gss_display_status()** multiple times, each call generating a single text string. The *message_context* parameter is used by **gss_display_status()** to store state information about which error messages have already been extracted from a given *status_value*; *message_context* must be initialized to zero by the application prior to the first call, and **gss_display_status()** will return a non-zero value in this parameter if there are further messages to extract.

The *message_context* parameter contains all state information required by **gss_display_status()** in order to extract further messages from the *status_value*; even when a non-zero value is returned in this parameter, the application is not required to call **gss_display_status()** again unless subsequent messages are desired. The following code extracts all messages from a given status code and prints them to stderr:

```
OM_uint32 message_context;
OM_uint32 status_code;
OM_uint32 maj_status;
OM_uint32 min_status;
gss_buffer_desc status_string;

...

message_context = 0;

do {

    maj_status = gss_display_status (
        &min_status,
        status_code,
        GSS_C_GSS_CODE,
```

```

        GSS_C_NO_OID,
        &message_context,
        &status_string)

fprintf(stderr,
        "%.*s\n",
        (int)status_string.length,
        (char *)status_string.value);

gss_release_buffer(&min_status, &status_string);

} while (message_context != 0);

```

PARAMETERS

`minor_status` Mechanism specific status code.

`status_value` Status value to be converted

`status_type`

`GSS_C_GSS_CODE` *status_value* is a GSS status code

`GSS_C_MECH_CODE` *status_value* is a mechanism status code

`mech_type` Underlying mechanism (used to interpret a minor status value). Supply `GSS_C_NO_OID` to obtain the system default.

`message_context`

Should be initialized to zero by the application prior to the first call. On return from **gss_display_status()**, a non-zero `status_value` parameter indicates that additional messages may be extracted from the status code via subsequent calls to **gss_display_status()**, passing the same *status_value*, *status_type*, *mech_type*, and *message_context* parameters.

`status_string` Textual interpretation of the *status_value*. Storage associated with this parameter must be freed by the application after use with a call to **gss_release_buffer()**.

RETURN VALUES

`GSS_S_COMPLETE` Successful completion

`GSS_S_BAD_MECH` Indicates that translation in accordance with an unsupported mechanism type

was requested

GSS_S_BAD_STATUS The status value was not recognized, or the status type was neither **GSS_C_GSS_CODE** nor **GSS_C_MECH_CODE**.

SEE ALSO

`gss_release_buffer(3)`

STANDARDS

RFC 2743 Generic Security Service Application Program Interface Version 2, Update 1

RFC 2744 Generic Security Service API Version 2 : C-bindings

HISTORY

The **gss_display_status** function first appeared in FreeBSD 7.0.

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