

**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.

## AUTHORS

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