

**NAME**

**gss\_verify\_mic**, **gss\_verify** - Check a MIC against a message; verify integrity of a received message

**SYNOPSIS**

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

*OM\_uint32*

```
gss_verify_mic(OM_uint32 *minor_status, const gss_ctx_id_t context_handle,  
               const gss_buffer_t message_buffer, const gss_buffer_t token_buffer, gss_qop_t *qop_state);
```

*OM\_uint32*

```
gss_verify(OM_uint32 *minor_status, gss_ctx_id_t context_handle, gss_buffer_t message_buffer,  
           gss_buffer_t token_buffer, gss_qop_t *qop_state);
```

**DESCRIPTION**

Verifies that a cryptographic MIC, contained in the token parameter, fits the supplied message. The *qop\_state* parameter allows a message recipient to determine the strength of protection that was applied to the message.

Since some application-level protocols may wish to use tokens emitted by **gss\_wrap()** to provide "secure framing", implementations must support the calculation and verification of MICs over zero-length messages.

The **gss\_verify()** routine is an obsolete variant of **gss\_verify\_mic()**. It is provided for backwards compatibility with applications using the GSS-API V1 interface. A distinct entrypoint (as opposed to `#define`) is provided, both to allow GSS-API V1 applications to link and to retain the slight parameter type differences between the obsolete versions of this routine and its current form.

**PARAMETERS**

*minor\_status*    Mechanism specific status code.

*context\_handle* Identifies the context on which the message arrived.

*message\_buffer*  
                  Message to be verified.

*token\_buffer*    Token associated with message.

*qop\_state*        Quality of protection gained from MIC. Specify NULL if not required.

**RETURN VALUES**

GSS_S_COMPLETE	Successful completion
GSS_S_DEFECTIVE_TOKEN	The token failed consistency checks
GSS_S_BAD_SIG	The MIC was incorrect
GSS_S_DUPLICATE_TOKEN	The token was valid, and contained a correct MIC for the message, but it had already been processed
GSS_S_OLD_TOKEN	The token was valid, and contained a correct MIC for the message, but it is too old to check for duplication
GSS_S_UNSEQ_TOKEN	The token was valid, and contained a correct MIC for the message, but has been verified out of sequence; a later token has already been received.
GSS_S_GAP_TOKEN	The token was valid, and contained a correct MIC for the message, but has been verified out of sequence; an earlier expected token has not yet been received
GSS_S_CONTEXT_EXPIRED	The context has already expired
GSS_S_NO_CONTEXT	The context_handle parameter did not identify a valid context

**SEE ALSO**

gss\_wrap(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\_verify\_mic** function first appeared in FreeBSD 7.0.

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