

**NAME**

gnutls\_certificate\_verify\_peers - API function

**SYNOPSIS**

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

```
int gnutls_certificate_verify_peers(gnutls_session_t session, gnutls_typed_vdata_st * data, unsigned int elements, unsigned int * status);
```

**ARGUMENTS**

gnutls\_session\_t session

is a gnutls session

gnutls\_typed\_vdata\_st \* data

an array of typed data

unsigned int elements

the number of data elements

unsigned int \* status

is the output of the verification

**DESCRIPTION**

This function will verify the peer's certificate and store the the status in the *status* variable as a bitwise OR of `gnutls_certificate_status_t` values or zero if the certificate is trusted. Note that value in *status* is set only when the return value of this function is success (i.e, failure to trust a certificate does not imply a negative return value). The default verification flags used by this function can be overridden using `gnutls_certificate_set_verify_flags()`. See the documentation of `gnutls_certificate_verify_peers2()` for details in the verification process.

This function will take into account the stapled OCSP responses sent by the server, as well as the following X.509 certificate extensions: Name Constraints, Key Usage, and Basic Constraints (pathlen).

The acceptable *data* types are `GNUTLS_DT_DNS_HOSTNAME`, `GNUTLS_DT_RFC822NAME` and `GNUTLS_DT_KEY_PURPOSE_OID`. The former two accept as data a null-terminated hostname or email address, and the latter a null-terminated object identifier (e.g., `GNUTLS_KP_TLS_WWW_SERVER`).

If a DNS hostname is provided then this function will compare the hostname in the certificate against the given. If names do not match the `GNUTLS_CERT_UNEXPECTED_OWNER` status flag will be

set. If a key purpose OID is provided and the end-certificate contains the extended key usage PKIX extension, it will be required to have the provided key purpose or be marked for any purpose, otherwise verification status will have the **GNUTLS\_CERT\_SIGNER\_CONSTRAINTS\_FAILURE** flag set.

To avoid denial of service attacks some default upper limits regarding the certificate key size and chain size are set. To override them use **gnutls\_certificate\_set\_verify\_limits()**.

Note that when using raw public-keys verification will not work because there is no corresponding certificate body belonging to the raw key that can be verified. In that case this function will return **GNUTLS\_E\_INVALID\_REQUEST**.

## RETURNS

**GNUTLS\_E\_SUCCESS** (0) when the validation is performed, or a negative error code otherwise. A successful error code means that the *status* parameter must be checked to obtain the validation status.

## SINCE

3.3.0

## REPORTING BUGS

Report bugs to <bugs@gnutls.org>.

Home page: <https://www.gnutls.org>

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## SEE ALSO

The full documentation for **gnutls** is maintained as a Texinfo manual. If the `/usr/local/share/doc/gnutls/` directory does not contain the HTML form visit

<https://www.gnutls.org/manual/>