#### NAME

gnutls\_certificate\_set\_retrieve\_function3 - API function

#### SYNOPSIS

#include <gnutls/abstract.h>

void gnutls\_certificate\_set\_retrieve\_function3(gnutls\_certificate\_credentials\_t cred, gnutls\_certificate\_retrieve\_function3 \* func);

## ARGUMENTS

gnutls\_certificate\_credentials\_t cred is a **gnutls\_certificate\_credentials\_t** type.

gnutls\_certificate\_retrieve\_function3 \* func is the callback function

#### DESCRIPTION

This function sets a callback to be called in order to retrieve the certificate and OCSP responses to be used in the handshake. *func* will be called only if the peer requests a certificate either during handshake or during post-handshake authentication.

The callback's function prototype is defined in 'abstract.h':

int gnutls\_certificate\_retrieve\_function3( gnutls\_session\_t, const struct gnutls\_cert\_retr\_st \*info, gnutls\_pcert\_st \*\*certs, unsigned int \*certs\_length, gnutls\_ocsp\_data\_st \*\*ocsp, unsigned int \*ocsp\_length, gnutls\_privkey\_t \*privkey, unsigned int \*flags);

The info field of the callback contains:

*req\_ca\_dn* which is a list with the CA names that the server considers trusted. This is a hint and typically the client should send a certificate that is signed by one of these CAs. These names, when available, are DER encoded. To get a more meaningful value use the function **gnutls\_x509\_rdn\_get(**). *pk\_algos* contains a list with server's acceptable public key algorithms. The certificate returned should support the server's given algorithms.

The callback should fill-in the following values:

*certs* should contain an allocated list of certificates and public keys. *certs\_length* is the size of the previous list. *ocsp* should contain an allocated list of OCSP responses. *ocsp\_length* is the size of the previous list. *privkey* is the private key.

If flags in the callback are set to **GNUTLS\_CERT\_RETR\_DEINIT\_ALL** then all provided values must be allocated using **gnutls\_malloc()**, and will be released by gnutls; otherwise they will not be touched by gnutls.

The callback function should set the certificate and OCSP response list to be sent, and return 0 on success. If no certificates are available, the *certs\_length* and *ocsp\_length* should be set to zero. The return value (-1) indicates error and the handshake will be terminated. If both certificates are set in the credentials and a callback is available, the callback takes predence.

Raw public-keys: In case raw public-keys are negotiated as certificate type, certificates that would normally hold the public-key material are not available. In that case,

*certs* contains an allocated list with only the public key. Since there is no certificate, there is also no certificate status. Therefore, OCSP information should not be set.

## SINCE

3.6.3

## **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/