

NAME

gnutls_transport_set_fastopen - API function

SYNOPSIS

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

```
void gnutls_transport_set_fastopen(gnutls_session_t session, int fd, struct sockaddr * connect_addr, socklen_t connect_addrlen, unsigned int flags);
```

ARGUMENTS

gnutls_session_t session

is a **gnutls_session_t** type.

int fd is the session's socket descriptor

struct sockaddr * connect_addr

is the address we want to connect to

socklen_t connect_addrlen

is the length of *connect_addr*

unsigned int flags

must be zero

DESCRIPTION

Enables TCP Fast Open (TFO) for the specified TLS client session. That means that TCP connection establishment and the transmission of the first TLS client hello packet are combined. The peer's address must be specified in *connect_addr* and *connect_addrlen*, and the socket specified by *fd* should not be connected.

TFO only works for TCP sockets of type AF_INET and AF_INET6. If the OS doesn't support TCP fast open this function will result to gnutls using **connect()** transparently during the first write.

NOTE

This function overrides all the transport callback functions. If this is undesirable, TCP Fast Open must be implemented on the user callback functions without calling this function. When using this function, transport callbacks must not be set, and **gnutls_transport_set_ptr()** or **gnutls_transport_set_int()** must not be called.

On GNU/Linux TFO has to be enabled at the system layer, that is in `/proc/sys/net/ipv4/tcp_fastopen`,

bit 0 has to be set.

This function has no effect on server sessions.

SINCE

3.5.3

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/>