

NAME

gnutls_prf_raw - API function

SYNOPSIS

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

```
int gnutls_prf_raw(gnutls_session_t session, size_t label_size, const char * label, size_t seed_size,
const char * seed, size_t outsize, char * out);
```

ARGUMENTS

gnutls_session_t session

is a **gnutls_session_t** type.

size_t label_size

length of the *label* variable.

const char * label

label used in PRF computation, typically a short string.

size_t seed_size

length of the *seed* variable.

const char * seed

optional extra data to seed the PRF with.

size_t outsize size of pre-allocated output buffer to hold the output.

char * out pre-allocated buffer to hold the generated data.

DESCRIPTION

Apply the TLS Pseudo-Random-Function (PRF) on the master secret and the provided data.

The *label* variable usually contains a string denoting the purpose for the generated data. The *seed* usually contains data such as the client and server random, perhaps together with some additional data that is added to guarantee uniqueness of the output for a particular purpose.

Because the output is not guaranteed to be unique for a particular session unless *seed* includes the client random and server random fields (the PRF would output the same data on another connection resumed from the first one), it is not recommended to use this function directly. The **gnutls_prf()** function seeds the PRF with the client and server random fields directly, and is recommended if you

want to generate pseudo random data unique for each session.

NOTE

This function will only operate under TLS versions prior to 1.3. In TLS1.3 the use of PRF is replaced with HKDF and the generic exporters like **gnutls_prf_rfc5705()** should be used instead. Under TLS1.3 this function returns **GNUTLS_E_INVALID_REQUEST**.

RETURNS

GNUTLS_E_SUCCESS on success, or an error code.

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/>