



*Full credit is given to the above companies including the OS that this PDF file was generated!*

### ***Rocky Enterprise Linux 9.2 Manual Pages on command 'SSL\_want.3ossl'***

***\$ man SSL\_want.3ossl***

SSL\_WANT(3ossl)            OpenSSL            SSL\_WANT(3ossl)

#### NAME

SSL\_want, SSL\_want\_nothing, SSL\_want\_read, SSL\_want\_write,  
SSL\_want\_x509\_lookup, SSL\_want\_retry\_verify, SSL\_want\_async,  
SSL\_want\_async\_job, SSL\_want\_client\_hello\_cb - obtain state information  
TLS/SSL I/O operation

#### SYNOPSIS

```
#include <openssl/ssl.h>
```

```
int SSL_want(const SSL *ssl);  
int SSL_want_nothing(const SSL *ssl);  
int SSL_want_read(const SSL *ssl);  
int SSL_want_write(const SSL *ssl);  
int SSL_want_x509_lookup(const SSL *ssl);  
int SSL_want_retry_verify(const SSL *ssl);  
int SSL_want_async(const SSL *ssl);
```

```
int SSL_want_async_job(const SSL *ssl);  
int SSL_want_client_hello_cb(const SSL *ssl);
```

## DESCRIPTION

SSL\_want() returns state information for the SSL object ssl.

The other SSL\_want\_\*( ) calls are shortcuts for the possible states returned by SSL\_want().

## NOTES

SSL\_want() examines the internal state information of the SSL object. Its return values are similar to that of SSL\_get\_error(3). Unlike SSL\_get\_error(3), which also evaluates the error queue, the results are obtained by examining an internal state flag only. The information must therefore only be used for normal operation under nonblocking I/O.

Error conditions are not handled and must be treated using SSL\_get\_error(3).

The result returned by SSL\_want() should always be consistent with the result of SSL\_get\_error(3).

## RETURN VALUES

The following return values can currently occur for SSL\_want():

### SSL\_NOTHING

There is no data to be written or to be read.

### SSL\_WRITING

There are data in the SSL buffer that must be written to the underlying BIO layer in order to complete the actual SSL\_\*( ) operation. A call to SSL\_get\_error(3) should return SSL\_ERROR\_WANT\_WRITE.

## SSL\_READING

More data must be read from the underlying BIO layer in order to complete the actual SSL\_\*() operation. A call to SSL\_get\_error(3) should return SSL\_ERROR\_WANT\_READ.

## SSL\_X509\_LOOKUP

The operation did not complete because an application callback set by SSL\_CTX\_set\_client\_cert\_cb() has asked to be called again. A call to SSL\_get\_error(3) should return SSL\_ERROR\_WANT\_X509\_LOOKUP.

## SSL\_RETRY\_VERIFY

The operation did not complete because a certificate verification callback has asked to be called again via SSL\_set\_retry\_verify(3). A call to SSL\_get\_error(3) should return SSL\_ERROR\_WANT\_RETRY\_VERIFY.

## SSL\_ASYNC\_PAUSED

An asynchronous operation partially completed and was then paused. See SSL\_get\_all\_async\_fds(3). A call to SSL\_get\_error(3) should return SSL\_ERROR\_WANT\_ASYNC.

## SSL\_ASYNC\_NO\_JOBS

The asynchronous job could not be started because there were no async jobs available in the pool (see ASYNC\_init\_thread(3)). A call to SSL\_get\_error(3) should return SSL\_ERROR\_WANT\_ASYNC\_JOB.

## SSL\_CLIENT\_HELLO\_CB

The operation did not complete because an application callback set by SSL\_CTX\_set\_client\_hello\_cb() has asked to be called again. A call to SSL\_get\_error(3) should return SSL\_ERROR\_WANT\_CLIENT\_HELLO\_CB.

SSL\_want\_x509\_lookup(), SSL\_want\_retry\_verify(), SSL\_want\_async(),  
SSL\_want\_async\_job(), and SSL\_want\_client\_hello\_cb() return 1 when the  
corresponding condition is true or 0 otherwise.

#### SEE ALSO

ssl(7), SSL\_get\_error(3)

#### HISTORY

The SSL\_want\_client\_hello\_cb() function and the SSL\_CLIENT\_HELLO\_CB  
return value were added in OpenSSL 1.1.1.

#### COPYRIGHT

Copyright 2001-2022 The OpenSSL Project Authors. All Rights Reserved.

Licensed under the Apache License 2.0 (the "License"). You may not use  
this file except in compliance with the License. You can obtain a copy  
in the file LICENSE in the source distribution or at  
<<https://www.openssl.org/source/license.html>>.

3.0.7

2023-07-13

SSL\_WANT(3ossl)