

NAME

SSL_want, SSL_want_nothing, SSL_want_read, SSL_want_write, SSL_want_x509_lookup, SSL_want_async, SSL_want_async_job - 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_async(const SSL *ssl);
int SSL_want_async_job(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 non-blocking 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_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_want_nothing(), *SSL_want_read()*, *SSL_want_write()*, *SSL_want_x509_lookup()*, *SSL_want_async()* and *SSL_want_async_job()* return 1, when the corresponding condition is true or 0 otherwise.

SEE ALSO

[ssl\(3\)](#), [err\(3\)](#), [SSL_get_error\(3\)](#)

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