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

***\$ man SSL\_want\_retry\_verify.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

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