

**NAME**

SSL\_set\_shutdown, SSL\_get\_shutdown - manipulate shutdown state of an SSL connection

**SYNOPSIS**

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

void SSL_set_shutdown(SSL *ssl, int mode);

int SSL_get_shutdown(const SSL *ssl);
```

**DESCRIPTION**

*SSL\_set\_shutdown()* sets the shutdown state of **ssl** to **mode**.

*SSL\_get\_shutdown()* returns the shutdown mode of **ssl**.

**NOTES**

The shutdown state of an ssl connection is a bitmask of:

0 No shutdown setting, yet.

SSL\_SENT\_SHUTDOWN

A “close notify” shutdown alert was sent to the peer, the connection is being considered closed and the session is closed and correct.

SSL\_RECEIVED\_SHUTDOWN

A shutdown alert was received from the peer, either a normal “close notify” or a fatal error.

SSL\_SENT\_SHUTDOWN and SSL\_RECEIVED\_SHUTDOWN can be set at the same time.

The shutdown state of the connection is used to determine the state of the ssl session. If the session is still open, when *SSL\_clear(3)* or *SSL\_free(3)* is called, it is considered bad and removed according to RFC2246. The actual condition for a correctly closed session is SSL\_SENT\_SHUTDOWN (according to the TLS RFC, it is acceptable to only send the “close notify” alert but to not wait for the peer’s answer, when the underlying connection is closed). *SSL\_set\_shutdown()* can be used to set this state without sending a close alert to the peer (see *SSL\_shutdown(3)*).

If a “close notify” was received, SSL\_RECEIVED\_SHUTDOWN will be set, for setting SSL\_SENT\_SHUTDOWN the application must however still call *SSL\_shutdown(3)* or *SSL\_set\_shutdown()* itself.

**RETURN VALUES**

*SSL\_set\_shutdown()* does not return diagnostic information.

*SSL\_get\_shutdown()* returns the current setting.

**SEE ALSO**

*ssl(3)*, *SSL\_shutdown(3)*, *SSL\_CTX\_set\_quiet\_shutdown(3)*, *SSL\_clear(3)*, *SSL\_free(3)*

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