

**NAME**

SSL\_accept - wait for a TLS/SSL client to initiate a TLS/SSL handshake

**SYNOPSIS**

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

```
int SSL_accept(SSL *ssl);
```

**DESCRIPTION**

**SSL\_accept()** waits for a TLS/SSL client to initiate the TLS/SSL handshake. The communication channel must already have been set and assigned to the **ssl** by setting an underlying **BIO**.

**NOTES**

The behaviour of **SSL\_accept()** depends on the underlying **BIO**.

If the underlying **BIO** is **blocking**, **SSL\_accept()** will only return once the handshake has been finished or an error occurred.

If the underlying **BIO** is **nonblocking**, **SSL\_accept()** will also return when the underlying **BIO** could not satisfy the needs of **SSL\_accept()** to continue the handshake, indicating the problem by the return value -1. In this case a call to **SSL\_get\_error()** with the return value of **SSL\_accept()** will yield **SSL\_ERROR\_WANT\_READ** or **SSL\_ERROR\_WANT\_WRITE**. The calling process then must repeat the call after taking appropriate action to satisfy the needs of **SSL\_accept()**. The action depends on the underlying **BIO**. When using a nonblocking socket, nothing is to be done, but **select()** can be used to check for the required condition. When using a buffering **BIO**, like a **BIO** pair, data must be written into or retrieved out of the **BIO** before being able to continue.

**RETURN VALUES**

The following return values can occur:

- 0 The TLS/SSL handshake was not successful but was shut down controlled and by the specifications of the TLS/SSL protocol. Call **SSL\_get\_error()** with the return value **ret** to find out the reason.
- 1 The TLS/SSL handshake was successfully completed, a TLS/SSL connection has been established.
- <0 The TLS/SSL handshake was not successful because a fatal error occurred either at the protocol level or a connection failure occurred. The shutdown was not clean. It can also occur if action is needed to continue the operation for nonblocking **BIO**s. Call **SSL\_get\_error()** with the return

value **ret** to find out the reason.

### SEE ALSO

**SSL\_get\_error(3)**, **SSL\_connect(3)**, **SSL\_shutdown(3)**, **ssl(7)**, **bio(7)**, **SSL\_set\_connect\_state(3)**, **SSL\_do\_handshake(3)**, **SSL\_CTX\_new(3)**

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