

**NAME**

BIO\_s\_socket, BIO\_new\_socket - socket BIO

**SYNOPSIS**

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

BIO_METHOD *BIO_s_socket(void);

long BIO_set_fd(BIO *b, int fd, long close_flag);
long BIO_get_fd(BIO *b, int *c);

BIO *BIO_new_socket(int sock, int close_flag);
```

**DESCRIPTION**

*BIO\_s\_socket()* returns the socket BIO method. This is a wrapper round the platform's socket routines.

*BIO\_read()* and *BIO\_write()* read or write the underlying socket. *BIO\_puts()* is supported but *BIO\_gets()* is not.

If the close flag is set then the socket is shut down and closed when the BIO is freed.

*BIO\_set\_fd()* sets the socket of BIO **b** to **fd** and the close flag to **close\_flag**.

*BIO\_get\_fd()* places the socket in **c** if it is not NULL, it also returns the socket. If **c** is not NULL it should be of type (int \*).

*BIO\_new\_socket()* returns a socket BIO using **sock** and **close\_flag**.

**NOTES**

Socket BIOs also support any relevant functionality of file descriptor BIOs.

The reason for having separate file descriptor and socket BIOs is that on some platforms sockets are not file descriptors and use distinct I/O routines, Windows is one such platform. Any code mixing the two will not work on all platforms.

*BIO\_set\_fd()* and *BIO\_get\_fd()* are macros.

**RETURN VALUES**

*BIO\_s\_socket()* returns the socket BIO method.

*BIO\_set\_fd()* always returns 1.

*BIO\_get\_fd()* returns the socket or -1 if the BIO has not been initialized.

*BIO\_new\_socket()* returns the newly allocated BIO or NULL is an error occurred.

**SEE ALSO**

TBA