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Red Hat Enterprise Linux Release 9.2 Manual Pages on 'BIO_wait.3oss1' command

\$ man BIO_wait.3oss1

BIO_SOCKET_WAIT(3oss1) OpenSSL BIO_SOCKET_WAIT(3oss1)

NAME

BIO_socket_wait, BIO_wait, BIO_do_connect_retry - BIO connection utility functions

SYNOPSIS

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

#ifdef OPENSSL_NO_SOCKET
int BIO_socket_wait(int fd, int for_read, time_t max_time);
#endif

int BIO_wait(BIO *bio, time_t max_time, unsigned int nap_milliseconds);
int BIO_do_connect_retry(BIO *bio, int timeout, int nap_milliseconds);
```

DESCRIPTION

BIO_socket_wait() waits on the socket fd for reading if for_read is not 0, else for writing, at most until max_time. It succeeds immediately if max_time == 0 (which means no timeout given).

BIO_wait() waits at most until max_time on the given (typically socket-based) bio, for reading if bio is supposed to read, else for writing.

It is used by BIO_do_connect_retry() and can be used together

BIO_read(3). It succeeds immediately if max_time == 0 (which means no timeout given). If sockets are not available it supports polling by succeeding after sleeping at most the given nap_milliseconds in order to avoid a tight busy loop. Via nap_milliseconds the caller determines the polling granularity.

BIO_do_connect_retry() connects via the given bio. It retries BIO_do_connect() as far as needed to reach a definite outcome, i.e., connection succeeded, timeout has been reached, or an error occurred. For nonblocking and potentially even non-socket BIOs it polls every nap_milliseconds and sleeps in between using BIO_wait(). If nap_milliseconds is < 0 then a default value of 100 ms is used. If the timeout parameter is > 0 this indicates the maximum number of seconds to wait until the connection is established or a definite error occurred. A value of 0 enables waiting indefinitely (i.e, no timeout), while a value < 0 means that BIO_do_connect() is tried only once. The function may, directly or indirectly, invoke ERR_clear_error().

RETURN VALUES

BIO_socket_wait(), BIO_wait(), and BIO_do_connect_retry() return -1 on error, 0 on timeout, and 1 on success.

SEE ALSO

BIO_do_connect(3), BIO_read(3)

HISTORY

BIO_socket_wait(), BIO_wait(), and BIO_do_connect_retry() were added in OpenSSL 3.0.

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