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Rocky Enterprise Linux 9.2 Manual Pages on command 'BIO_do_connect_retry.3ossl'

\$ man BIO_do_connect_retry.3ossl

BIO_SOCKET_WAIT(3ossl) OpenSSL BIO_SOCKET_WAIT(3ossl)

NAME

BIO_socket_wait, BIO_wait, BIO_do_connect_retry - BIO connection utility functions

SYNOPSIS

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

#ifdef OPENSSSL_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 with `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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