NAME

BIO_s_core, BIO_new_from_core_bio − OSSL_CORE_BIO functions

SYNOPSIS

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

const BIO_METHOD *BIO_s_core(void);

BIO *BIO_new_from_core_bio(OSSL_LIB_CTX *libctx, OSSL_CORE_BIO *corebio);
```

DESCRIPTION

BIO_s_core() returns the core BIO method function.

A core BIO is treated as source/sink BIO which communicates to some external BIO. This is primarily useful to provider authors. A number of calls from libcrypto into a provider supply an OSSL_CORE_BIO parameter. This represents a BIO within libcrypto, but cannot be used directly by a provider. Instead it should be wrapped using a **BIO_s_core()**.

Once a BIO is constructed based on **BIO_s_core()**, the associated OSSL_CORE_BIO object should be set on it using **BIO_set_data** (3). Note that the BIO will only operate correctly if it is associated with a library context constructed using **OSSL_LIB_CTX_new_from_dispatch** (3). To associate the BIO with a library context construct it using **BIO_new_ex** (3).

BIO_new_from_core_bio() is a convenience function that constructs a new BIO based on **BIO_s_core()** and that is associated with the given library context. It then also sets the OSSL_CORE_BIO object on the BIO using **BIO_set_data** (3).

RETURN VALUES

BIO_s_core() return a core BIO **BIO_METHOD** structure.

BIO_new_from_core_bio() returns a BIO structure on success or NULL on failure. A failure will most commonly be because the library context was not constructed using **OSSL_LIB_CTX_new_from_dispatch** (3).

HISTORY

BIO_s_core() and **BIO_new_from_core_bio()** were added in OpenSSL 3.0.

EXAMPLES

Create a core BIO and write some data to it:

```
int some_function(OSSL_LIB_CTX *libctx, OSSL_CORE_BIO *corebio) {
    BIO *cbio = BIO_new_from_core_bio(libctx, corebio);

    if (cbio == NULL)
        return 0;

    BIO_puts(cbio, "Hello World\n");

    BIO_free(cbio);
    return 1;
}
```

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