

NAME

PEM_X509_INFO_read_ex, PEM_X509_INFO_read, PEM_X509_INFO_read_bio_ex,
 PEM_X509_INFO_read_bio - read PEM-encoded data structures into one or more X509_INFO objects

SYNOPSIS

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

```
STACK_OF(X509_INFO) *PEM_X509_INFO_read_ex(FILE *fp, STACK_OF(X509_INFO) *sk,
    pem_password_cb *cb, void *u,
    OSSL_LIB_CTX *libctx,
    const char *propq);
```

```
STACK_OF(X509_INFO) *PEM_X509_INFO_read(FILE *fp, STACK_OF(X509_INFO) *sk,
    pem_password_cb *cb, void *u);
```

```
STACK_OF(X509_INFO) *PEM_X509_INFO_read_bio_ex(BIO *bio,
    STACK_OF(X509_INFO) *sk,
    pem_password_cb *cb, void *u,
    OSSL_LIB_CTX *libctx,
    const char *propq);
```

```
STACK_OF(X509_INFO) *PEM_X509_INFO_read_bio(BIO *bp, STACK_OF(X509_INFO) *sk,
    pem_password_cb *cb, void *u);
```

DESCRIPTION

PEM_X509_INFO_read_ex() loads the **X509_INFO** objects from a file *fp*.

PEM_X509_INFO_read() is similar to **PEM_X509_INFO_read_ex()** but uses the default (NULL) library context *libctx* and empty property query *propq*.

PEM_X509_INFO_read_bio_ex() loads the **X509_INFO** objects using a bio *bp*.

PEM_X509_INFO_read_bio() is similar to **PEM_X509_INFO_read_bio_ex()** but uses the default (NULL) library context *libctx* and empty property query *propq*.

Each of the loaded **X509_INFO** objects can contain a CRL, a certificate, and/or a private key. The elements are read sequentially, and as far as they are of different type than the elements read before, they are combined into the same **X509_INFO** object. The idea behind this is that if, for instance, a certificate is followed by a private key, the private key is supposed to correspond to the certificate.

If the input stack *sk* is NULL a new stack is allocated, else the given stack is extended.

The optional *cb* and *u* parameters can be used for providing a pass phrase needed for decrypting

encrypted PEM structures (normally only private keys). See **PEM_read_bio_PrivateKey(3)** and **passphrase-encoding(7)** for details.

The library context *libctx* and property query *propq* are used for fetching algorithms from providers.

RETURN VALUES

PEM_X509_INFO_read_ex(), **PEM_X509_INFO_read()**, **PEM_X509_INFO_read_bio_ex()** and **PEM_X509_INFO_read_bio()** return a stack of **X509_INFO** objects or NULL on failure.

SEE ALSO

PEM_read_bio_ex(3), **PEM_read_bio_PrivateKey(3)**, **passphrase-encoding(7)**

HISTORY

The functions **PEM_X509_INFO_read_ex()** and **PEM_X509_INFO_read_bio_ex()** were added in OpenSSL 3.0.

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