

**NAME**

CMS\_EncryptedData\_encrypt\_ex, CMS\_EncryptedData\_encrypt - Create CMS EncryptedData

**SYNOPSIS**

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

```
CMS_ContentInfo *CMS_EncryptedData_encrypt_ex(BIO *in,
                                               const EVP_CIPHER *cipher,
                                               const unsigned char *key,
                                               size_t keylen,
                                               unsigned int flags,
                                               OSSL_LIB_CTX *ctx,
                                               const char *propq);
```

```
CMS_ContentInfo *CMS_EncryptedData_encrypt(BIO *in,
                                             const EVP_CIPHER *cipher, const unsigned char *key, size_t keylen,
                                             unsigned int flags);
```

**DESCRIPTION**

**CMS\_EncryptedData\_encrypt\_ex()** creates a **CMS\_ContentInfo** structure with a type **NID\_pkcs7\_encrypted**. *in* is a BIO containing the data to encrypt using *cipher* and the encryption key *key* of size *keylen* bytes. The library context *libctx* and the property query *propq* are used when retrieving algorithms from providers. *flags* is a set of optional flags.

The *flags* field supports the options **CMS\_DETACHED**, **CMS\_STREAM** and **CMS\_PARTIAL**. Internally **CMS\_final()** is called unless **CMS\_STREAM** and/or **CMS\_PARTIAL** is specified.

The algorithm passed in the *cipher* parameter must support ASN1 encoding of its parameters.

The **CMS\_ContentInfo** structure can be freed using **CMS\_ContentInfo\_free(3)**.

**CMS\_EncryptedData\_encrypt()** is similar to **CMS\_EncryptedData\_encrypt\_ex()** but uses default values of NULL for the library context *libctx* and the property query *propq*.

**RETURN VALUES**

If the allocation fails, **CMS\_EncryptedData\_encrypt\_ex()** and **CMS\_EncryptedData\_encrypt()** return NULL and set an error code that can be obtained by **ERR\_get\_error(3)**. Otherwise they return a pointer to the newly allocated structure.

**SEE ALSO**

CMS\_ENCRYPTEDDATA\_ENCRYPT(3ossl) OpenSSL CMS\_ENCRYPTEDDATA\_ENCRYPT(3ossl)

**ERR\_get\_error(3), CMS\_final(3), CMS\_EncryptedData\_decrypt(3)**

## **HISTORY**

The **CMS\_EncryptedData\_encrypt\_ex()** method was added in OpenSSL 3.0.

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