

**NAME**

CMS\_ReceiptRequest\_create0\_ex, CMS\_ReceiptRequest\_create0, CMS\_add1\_ReceiptRequest, CMS\_get1\_ReceiptRequest, CMS\_ReceiptRequest\_get0\_values - CMS signed receipt request functions

**SYNOPSIS**

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

```
CMS_ReceiptRequest *CMS_ReceiptRequest_create0_ex(
    unsigned char *id, int idlen, int allorfirst,
    STACK_OF(GENERAL_NAMES) *receiptList, STACK_OF(GENERAL_NAMES) *receiptsTo,
    OSSL_LIB_CTX *libctx);
CMS_ReceiptRequest *CMS_ReceiptRequest_create0(
    unsigned char *id, int idlen, int allorfirst,
    STACK_OF(GENERAL_NAMES) *receiptList, STACK_OF(GENERAL_NAMES) *receiptsTo);
int CMS_add1_ReceiptRequest(CMS_SignerInfo *si, CMS_ReceiptRequest *rr);
int CMS_get1_ReceiptRequest(CMS_SignerInfo *si, CMS_ReceiptRequest **pr);
void CMS_ReceiptRequest_get0_values(CMS_ReceiptRequest *rr, ASN1_STRING **pcid,
    int *pallorfirst,
    STACK_OF(GENERAL_NAMES) **plist,
    STACK_OF(GENERAL_NAMES) **prto);
```

**DESCRIPTION**

**CMS\_ReceiptRequest\_create0\_ex()** creates a signed receipt request structure. The **signedContentIdentifier** field is set using *id* and *idlen*, or it is set to 32 bytes of pseudo random data if *id* is NULL. If *receiptList* is NULL the *allOrFirstTier* option in *receiptsFrom* is used and set to the value of the *allorfirst* parameter. If *receiptList* is not NULL the *receiptList* option in *receiptsFrom* is used. The *receiptsTo* parameter specifies the *receiptsTo* field value. The library context *libctx* is used to find the public random generator.

**CMS\_ReceiptRequest\_create0()** is similar to **CMS\_ReceiptRequest\_create0\_ex()** but uses default values of NULL for the library context *libctx*.

The **CMS\_add1\_ReceiptRequest()** function adds a signed receipt request **rr** to SignerInfo structure **si**.

int **CMS\_get1\_ReceiptRequest()** looks for a signed receipt request in **si**, if any is found it is decoded and written to **pr**.

**CMS\_ReceiptRequest\_get0\_values()** retrieves the values of a receipt request. The **signedContentIdentifier** is copied to **pcid**. If the **allOrFirstTier** option of **receiptsFrom** is used its value

is copied to **pa**llor**fi**rst otherwise the **re**ceipt**Li**st field is copied to **pl**ist. The **re**ceipt**To** parameter is copied to **pr**to.

## NOTES

For more details of the meaning of the fields see RFC2634.

The contents of a signed receipt should only be considered meaningful if the corresponding CMS\_ContentInfo structure can be successfully verified using **CMS\_verify()**.

## RETURN VALUES

**CMS\_ReceiptRequest\_create0\_ex()** and **CMS\_ReceiptRequest\_create0()** return a signed receipt request structure or NULL if an error occurred.

**CMS\_add1\_ReceiptRequest()** returns 1 for success or 0 if an error occurred.

**CMS\_get1\_ReceiptRequest()** returns 1 if a signed receipt request is found and decoded. It returns 0 if a signed receipt request is not present and -1 if it is present but malformed.

## SEE ALSO

**ERR\_get\_error(3)**, **CMS\_sign(3)**, **CMS\_sign\_receipt(3)**, **CMS\_verify(3)** **CMS\_verify\_receipt(3)**

## HISTORY

The function **CMS\_ReceiptRequest\_create0\_ex()** was added in OpenSSL 3.0.

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