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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'CMS\_add0\_cert.3oss1' command**

**\$ man CMS\_add0\_cert.3oss1**

CMS\_ADD0\_CERT(3oss1)          OpenSSL          CMS\_ADD0\_CERT(3oss1)

### NAME

CMS\_add0\_cert, CMS\_add1\_cert, CMS\_get1\_certs, CMS\_add0\_crl,  
CMS\_add1\_crl, CMS\_get1\_crls - CMS certificate and CRL utility functions

### SYNOPSIS

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

```
int CMS_add0_cert(CMS_ContentInfo *cms, X509 *cert);  
int CMS_add1_cert(CMS_ContentInfo *cms, X509 *cert);  
STACK_OF(X509) *CMS_get1_certs(CMS_ContentInfo *cms);  
  
int CMS_add0_crl(CMS_ContentInfo *cms, X509_CRL *crl);  
int CMS_add1_crl(CMS_ContentInfo *cms, X509_CRL *crl);  
STACK_OF(X509_CRL) *CMS_get1_crls(CMS_ContentInfo *cms);
```

### DESCRIPTION

CMS\_add0\_cert() and CMS\_add1\_cert() add certificate cert to cms. cms must be of type signed data or (authenticated) enveloped data. For signed data, such a certificate can be used when signing or verifying to fill in the signer certificate or to provide an extra CA certificate that may be needed for chain building in certificate validation.

CMS\_get1\_certs() returns all certificates in cms.

CMS\_add0\_crl() and CMS\_add1\_crl() add CRL crl to cms. cms must be of type signed data or (authenticated) enveloped data. For signed data, such a CRL may be used in certificate validation. It may be given both for inclusion when signing a CMS message and when verifying a signed CMS message.

CMS\_get1\_crls() returns all CRLs in cms.

## NOTES

The CMS\_ContentInfo structure cms must be of type signed data or enveloped data or an error will be returned.

For signed data certificates and CRLs are added to the certificates and crls fields of SignedData structure. For enveloped data they are added to OriginatorInfo.

As the 0 implies CMS\_add0\_cert() adds cert internally to cms and it must not be freed up after the call as opposed to CMS\_add1\_cert() where cert must be freed up.

The same certificate or CRL must not be added to the same cms structure more than once.

## RETURN VALUES

CMS\_add0\_cert(), CMS\_add1\_cert() and CMS\_add0\_crl() and CMS\_add1\_crl() return 1 for success and 0 for failure.

CMS\_get1\_certs() and CMS\_get1\_crls() return the STACK of certificates or CRLs or NULL if there are none or an error occurs. The only error which will occur in practice is if the cms type is invalid.

## SEE ALSO

`ERR_get_error(3)`, `CMS_sign(3)`, `CMS_encrypt(3)`

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