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### ***Rocky Enterprise Linux 9.2 Manual Pages on command 'CMS\_get0\_type.3ossl'***

***\$ man CMS\_get0\_type.3ossl***

CMS\_GET0\_TYPE(3ossl)          OpenSSL          CMS\_GET0\_TYPE(3ossl)

#### NAME

CMS\_get0\_type, CMS\_set1\_eContentType, CMS\_get0\_eContentType,  
CMS\_get0\_content - get and set CMS content types and content

#### SYNOPSIS

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

```
const ASN1_OBJECT *CMS_get0_type(const CMS_ContentInfo *cms);  
int CMS_set1_eContentType(CMS_ContentInfo *cms, const ASN1_OBJECT *oid);  
const ASN1_OBJECT *CMS_get0_eContentType(CMS_ContentInfo *cms);  
ASN1_OCTET_STRING **CMS_get0_content(CMS_ContentInfo *cms);
```

#### DESCRIPTION

CMS\_get0\_type() returns the content type of a CMS\_ContentInfo structure as an ASN1\_OBJECT pointer. An application can then decide how to process the CMS\_ContentInfo structure based on this value.

CMS\_set1\_eContentType() sets the embedded content type of a CMS\_ContentInfo structure. It should be called with CMS functions (such as CMS\_sign(3), CMS\_encrypt(3)) with the CMS\_PARTIAL flag and before the structure is finalised, otherwise the results are undefined.

ASN1\_OBJECT \*CMS\_get0\_eContentType() returns a pointer to the embedded content type.

CMS\_get0\_content() returns a pointer to the ASN1\_OCTET\_STRING pointer containing the embedded content.

## NOTES

As the 0 implies CMS\_get0\_type(), CMS\_get0\_eContentType() and CMS\_get0\_content() return internal pointers which should not be freed up. CMS\_set1\_eContentType() copies the supplied OID and it should be freed up after use.

The ASN1\_OBJECT values returned can be converted to an integer NID value using OBJ\_obj2nid(). For the currently supported content types the following values are returned:

NID\_pkcs7\_data

NID\_pkcs7\_signed

NID\_pkcs7\_digest

NID\_id\_smime\_ct\_compressedData:

NID\_pkcs7\_encrypted

NID\_pkcs7\_enveloped

The return value of CMS\_get0\_content() is a pointer to the ASN1\_OCTET\_STRING content pointer. That means that for example:

```
ASN1_OCTET_STRING **pconf = CMS_get0_content/cms;
```

\*pconf could be NULL if there is no embedded content. Applications can access, modify or create the embedded content in a CMS\_ContentInfo structure using this function. Applications usually will not need to modify the embedded content as it is normally set by higher level functions.

## RETURN VALUES

CMS\_get0\_type() and CMS\_get0\_eContentType() return an ASN1\_OBJECT structure.

CMS\_set1\_eContentType() returns 1 for success or 0 if an error occurred. The error can be obtained from ERR\_get\_error(3).

## SEE ALSO

ERR\_get\_error(3)

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