

**NAME**

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

**SYNOPSIS**

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

```
const ASN1_OBJECT *CMS_get0_type(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 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\(3\)](#)

**HISTORY**

*CMS\_get0\_type()*, *CMS\_set1\_eContentType()* and *CMS\_get0\_eContentType()* were all first added to OpenSSL 0.9.8