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 and 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 and 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