



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'CMS_get0_type.3oss1' command

\$ man CMS_get0_type.3oss1

CMS_GET0_TYPE(3oss1) OpenSSL CMS_GET0_TYPE(3oss1)

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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