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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