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## *Red Hat Enterprise Linux Release 9.2 Manual Pages on 'SMIME_read_ASN1.3ossl' command*

***$ man SMIME_read_ASN1.3ossl***

SMIME_READ_ASN1(3ossl) OpenSSL SMIME_READ_ASN1(3ossl)

NAME

SMIME_read_ASN1_ex, SMIME_read_ASN1 - parse S/MIME message

SYNOPSIS

```
#include <openssl/asn1.h>

ASN1_VALUE *SMIME_read_ASN1_ex(BIO *in, int flags, BIO **bcont,
                               const ASN1_ITEM *it, ASN1_VALUE **x,
                               OSSL_LIB_CTX *libctx, const char *propq);
ASN1_VALUE *SMIME_read_ASN1(BIO *in, BIO **bcont, const ASN1_ITEM *it);
```

DESCRIPTION

SMIME_read_ASN1_ex() parses a message in S/MIME format.

in is a BIO to read the message from. If the flags argument contains CMS_BINARY then the input is assumed to be in binary format and is not translated to canonical form. If in addition SMIME_ASCIICRLF is set then the binary input is assumed to be followed by CR and LF characters, else only by an LF character. x can be used to optionally supply a previously created it ASN1_VALUE object (such as CMS_ContentInfo or PKCS7), it can be set to NULL. Valid values that can

be used by ASN.1 structure it are ASN1_ITEM_rptr(PKCS7) or ASN1_ITEM_rptr(CMS_ContentInfo). Any algorithm fetches that occur during the operation will use the OSSL_LIB_CTX supplied in the libctx parameter, and use the property query string propq See "ALGORITHM FETCHING" in crypto(7) for further details about algorithm fetching.

If cleartext signing is used then the content is saved in a memory bio which is written to *bcont, otherwise *bcont is set to NULL.

The parsed ASN1_VALUE structure is returned or NULL if an error occurred.

SMIME_read_ASN1() is similar to SMIME_read_ASN1_ex() but sets the value of x to NULL and the value of flags to 0.

## NOTES

The higher level functions SMIME_read_CMS_ex(3) and SMIME_read_PKCS7_ex(3) should be used instead of SMIME_read_ASN1_ex().

To support future functionality if bcont is not NULL *bcont should be initialized to NULL.

## BUGS

The MIME parser used by SMIME_read_ASN1_ex() is somewhat primitive. While it will handle most S/MIME messages more complex compound formats may not work.

The use of a memory BIO to hold the signed content limits the size of message which can be processed due to memory restraints: a streaming single pass option should be available.

## RETURN VALUES

SMIME_read_ASN1_ex() and SMIME_read_ASN1() return a valid ASN1_VALUE

structure or NULL if an error occurred. The error can be obtained from ERR_get_error(3).

## SEE ALSO

ERR_get_error(3), SMIME_read_CMS_ex(3), SMIME_read_PKCS7_ex(3), SMIME_write_ASN1(3), SMIME_write_ASN1_ex(3)

## HISTORY

The function SMIME_read_ASN1_ex() was added in OpenSSL 3.0.

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