



## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'X509\_add\_certs.3oss1' command**

**\$ man X509\_add\_certs.3oss1**

X509\_ADD\_CERT(3oss1)          OpenSSL          X509\_ADD\_CERT(3oss1)

### NAME

X509\_add\_cert, X509\_add\_certs - X509 certificate list addition functions

### SYNOPSIS

```
#include <openssl/x509.h>

int X509_add_cert(STACK_OF(X509) *sk, X509 *cert, int flags);

int X509_add_certs(STACK_OF(X509) *sk, STACK_OF(X509) *certs, int flags);
```

### DESCRIPTION

X509\_add\_cert() adds a certificate cert to the given list sk.

X509\_add\_certs() adds a list of certificate certs to the given list sk.

The certs argument may be NULL, which implies no effect. It does not modify the list certs but in case the X509\_ADD\_FLAG\_UP\_REF flag (described below) is set the reference counters of those of its members added to sk are increased.

Both these functions have a flags parameter, which is used to control details of the operation.

The value X509\_ADD\_FLAG\_DEFAULT, which equals 0, means no special semantics.

If X509\_ADD\_FLAG\_UP\_REF is set then the reference counts of those certificates added successfully are increased.

If X509\_ADD\_FLAG\_PREPEND is set then the certificates are prepended to sk. By default they are appended to sk. In both cases the original

order of the added certificates is preserved.

If `X509_ADD_FLAG_NO_DUP` is set then certificates already contained in `sk`, which is determined using `X509_cmp(3)`, are ignored.

If `X509_ADD_FLAG_NO_SS` is set then certificates that are marked self-signed, which is determined using `X509_self_signed(3)`, are ignored.

## RETURN VALUES

Both functions return 1 for success and 0 for failure.

## NOTES

If `X509_add_certs()` is used with the flags `X509_ADD_FLAG_NO_DUP` or `X509_ADD_FLAG_NO_SS` it is advisable to use also `X509_ADD_FLAG_UP_REF` because otherwise likely not for all members of the certs list the ownership is transferred to the list of certificates `sk`.

Care should also be taken in case the `certs` argument equals `sk`.

## SEE ALSO

`X509_cmp(3)` `X509_self_signed(3)`

## HISTORY

The functions `X509_add_cert()` and `X509_add_certs()` were added in OpenSSL 3.0.

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