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## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'X509\_getm\_notBefore.3ossl' command**

**\$ man X509\_getm\_notBefore.3ossl**

X509\_GET0\_NOTBEFORE(3ossl)      OpenSSL      X509\_GET0\_NOTBEFORE(3ossl)

### NAME

X509\_get0\_notBefore, X509\_getm\_notBefore, X509\_get0\_notAfter,  
X509\_getm\_notAfter, X509\_set1\_notBefore, X509\_set1\_notAfter,  
X509\_CRL\_get0\_lastUpdate, X509\_CRL\_get0\_nextUpdate,  
X509\_CRL\_set1\_lastUpdate, X509\_CRL\_set1\_nextUpdate - get or set  
certificate or CRL dates

### SYNOPSIS

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

```
const ASN1_TIME *X509_get0_notBefore(const X509 *x);
```

```
const ASN1_TIME *X509_get0_notAfter(const X509 *x);
```

```
ASN1_TIME *X509_getm_notBefore(const X509 *x);
```

```
ASN1_TIME *X509_getm_notAfter(const X509 *x);
```

```
int X509_set1_notBefore(X509 *x, const ASN1_TIME *tm);
```

```
int X509_set1_notAfter(X509 *x, const ASN1_TIME *tm);
```

```
const ASN1_TIME *X509_CRL_get0_lastUpdate(const X509_CRL *crl);
```

```
const ASN1_TIME *X509_CRL_get0_nextUpdate(const X509_CRL *crl);
```

```
int X509_CRL_set1_lastUpdate(X509_CRL *x, const ASN1_TIME *tm);  
int X509_CRL_set1_nextUpdate(X509_CRL *x, const ASN1_TIME *tm);
```

## DESCRIPTION

X509\_get0\_notBefore() and X509\_get0\_notAfter() return the notBefore and notAfter fields of certificate x respectively. The value returned is an internal pointer which must not be freed up after the call.

X509\_getm\_notBefore() and X509\_getm\_notAfter() are similar to X509\_get0\_notBefore() and X509\_get0\_notAfter() except they return non-constant mutable references to the associated date field of the certificate.

X509\_set1\_notBefore() and X509\_set1\_notAfter() set the notBefore and notAfter fields of x to tm. Ownership of the passed parameter tm is not transferred by these functions so it must be freed up after the call.

X509\_CRL\_get0\_lastUpdate() and X509\_CRL\_get0\_nextUpdate() return the lastUpdate and nextUpdate fields of crl. The value returned is an internal pointer which must not be freed up after the call. If the nextUpdate field is absent from crl then NULL is returned.

X509\_CRL\_set1\_lastUpdate() and X509\_CRL\_set1\_nextUpdate() set the lastUpdate and nextUpdate fields of crl to tm. Ownership of the passed parameter tm is not transferred by these functions so it must be freed up after the call.

## RETURN VALUES

X509\_get0\_notBefore(), X509\_get0\_notAfter() and X509\_CRL\_get0\_lastUpdate() return a pointer to an ASN1\_TIME structure.

X509\_CRL\_get0\_lastUpdate() return a pointer to an ASN1\_TIME structure

or NULL if the lastUpdate field is absent.

X509\_set1\_notBefore(), X509\_set1\_notAfter(), X509\_CRL\_set1\_lastUpdate()  
and X509\_CRL\_set1\_nextUpdate() return 1 for success or 0 for failure.

## SEE ALSO

d2i\_X509(3), ERR\_get\_error(3), X509\_CRL\_get0\_by\_serial(3),  
X509\_get0\_signature(3), X509\_get\_ext\_d2i(3),  
X509\_get\_extension\_flags(3), X509\_get\_pubkey(3),  
X509\_get\_subject\_name(3), X509\_NAME\_add\_entry\_by\_txt(3),  
X509\_NAME\_ENTRY\_get\_object(3), X509\_NAME\_get\_index\_by\_NID(3),  
X509\_NAME\_print\_ex(3), X509\_new(3), X509\_sign(3), X509V3\_get\_d2i(3),  
X509\_verify\_cert(3)

## HISTORY

These functions are available in all versions of OpenSSL.

X509\_get\_notBefore() and X509\_get\_notAfter() were deprecated in OpenSSL

1.1.0

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