



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

***\$ man X509\_CRL\_sort.3ossl***

X509\_CRL\_GET0\_BY\_SERIAL(3ossl)    OpenSSL    X509\_CRL\_GET0\_BY\_SERIAL(3ossl)

### NAME

X509\_CRL\_get0\_by\_serial, X509\_CRL\_get0\_by\_cert, X509\_CRL\_get\_REVOKED,  
X509\_REVOKED\_get0\_serialNumber, X509\_REVOKED\_get0\_revocationDate,  
X509\_REVOKED\_set\_serialNumber, X509\_REVOKED\_set\_revocationDate,  
X509\_CRL\_add0\_revoked, X509\_CRL\_sort - CRL revoked entry utility  
functions

### SYNOPSIS

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

```
int X509_CRL_get0_by_serial(X509_CRL *crl,  
                           X509_REVOKED **ret, const ASN1_INTEGER *serial);  
int X509_CRL_get0_by_cert(X509_CRL *crl, X509_REVOKED **ret, X509 *x);
```

```
STACK_OF(X509_REVOKED) *X509_CRL_get_REVOKED(X509_CRL *crl);
```

```
const ASN1_INTEGER *X509_REVOKED_get0_serialNumber(const X509_REVOKED *r);
```

```
const ASN1_TIME *X509_REVOKED_get0_revocationDate(const X509_REVOKED *r);
```

```
int X509_REVOKED_set_serialNumber(X509_REVOKED *r, ASN1_INTEGER *serial);
```

```
int X509_REVOKED_set_revocationDate(X509_REVOKED *r, ASN1_TIME *tm);
```

```
int X509_CRL_add0_revoked(X509_CRL *crl, X509_REVOKED *rev);
```

```
int X509_CRL_sort(X509_CRL *crl);
```

## DESCRIPTION

X509\_CRL\_get0\_by\_serial() attempts to find a revoked entry in crl for serial number serial. If it is successful, it sets \*ret to the internal pointer of the matching entry. As a result, \*ret MUST NOT be freed after the call.

X509\_CRL\_get0\_by\_cert() is similar to X509\_get0\_by\_serial() except it looks for a revoked entry using the serial number of certificate x.

X509\_CRL\_get\_REVOKED() returns an internal pointer to a STACK of all revoked entries for crl.

X509\_REVOKED\_get0\_serialNumber() returns an internal pointer to the serial number of r.

X509\_REVOKED\_get0\_revocationDate() returns an internal pointer to the revocation date of r.

X509\_REVOKED\_set\_serialNumber() sets the serial number of r to serial. The supplied serial pointer is not used internally so it should be freed after use.

X509\_REVOKED\_set\_revocationDate() sets the revocation date of r to tm. The supplied tm pointer is not used internally so it should be freed after use.

X509\_CRL\_add0\_revoked() appends revoked entry rev to CRL crl. The pointer rev is used internally so it MUST NOT be freed after the call:

it is freed when the parent CRL is freed.

X509\_CRL\_sort() sorts the revoked entries of crl into ascending serial number order.

## NOTES

Applications can determine the number of revoked entries returned by X509\_CRL\_get\_REVOKED() using sk\_X509\_REVOKED\_num() and examine each one in turn using sk\_X509\_REVOKED\_value().

## RETURN VALUES

X509\_CRL\_get0\_by\_serial() and X509\_CRL\_get0\_by\_cert() return 0 for failure, 1 on success except if the revoked entry has the reason "removeFromCRL" (8), in which case 2 is returned.

X509\_CRL\_get\_REVOKED() returns a STACK of revoked entries.

X509\_REVOKED\_get0\_serialNumber() returns an ASN1\_INTEGER structure.

X509\_REVOKED\_get0\_revocationDate() returns an ASN1\_TIME structure.

X509\_REVOKED\_set\_serialNumber(), X509\_REVOKED\_set\_revocationDate(), X509\_CRL\_add0\_revoked() and X509\_CRL\_sort() return 1 for success and 0 for failure.

## SEE ALSO

d2i\_X509(3), ERR\_get\_error(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\_get\_version(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)

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