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### ***Rocky Enterprise Linux 9.2 Manual Pages on command 'x509.7ossl'***

***\$ man x509.7ossl***

X509(7ossl)                      OpenSSL                      X509(7ossl)

#### NAME

x509 - X.509 certificate handling

#### SYNOPSIS

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

#### DESCRIPTION

An X.509 certificate is a structured grouping of information about an individual, a device, or anything one can imagine. An X.509 CRL (certificate revocation list) is a tool to help determine if a certificate is still valid. The exact definition of those can be found in the X.509 document from ITU-T, or in RFC3280 from PKIX. In OpenSSL, the type X509 is used to express such a certificate, and the type X509\_CRL is used to express a CRL.

A related structure is a certificate request, defined in PKCS#10 from

RSA Security, Inc, also reflected in RFC2896. In OpenSSL, the type X509\_REQ is used to express such a certificate request.

To handle some complex parts of a certificate, there are the types X509\_NAME (to express a certificate name), X509\_ATTRIBUTE (to express a certificate attribute), X509\_EXTENSION (to express a certificate extension) and a few more.

Finally, there's the supertype X509\_INFO, which can contain a CRL, a certificate and a corresponding private key.

X509\_XXX, d2i\_X509\_XXX, and i2d\_X509\_XXX functions handle X.509 certificates, with some exceptions, shown below.

X509\_CRL\_XXX, d2i\_X509\_CRL\_XXX, and i2d\_X509\_CRL\_XXX functions handle X.509 CRLs.

X509\_REQ\_XXX, d2i\_X509\_REQ\_XXX, and i2d\_X509\_REQ\_XXX functions handle PKCS#10 certificate requests.

X509\_NAME\_XXX functions handle certificate names.

X509\_ATTRIBUTE\_XXX functions handle certificate attributes.

X509\_EXTENSION\_XXX functions handle certificate extensions.

#### SEE ALSO

X509\_NAME\_ENTRY\_get\_object(3), X509\_NAME\_add\_entry\_by\_txt(3),  
X509\_NAME\_add\_entry\_by\_NID(3), X509\_NAME\_print\_ex(3), X509\_NAME\_new(3),  
PEM\_X509\_INFO\_read(3), d2i\_X509(3), d2i\_X509\_ALGOR(3), d2i\_X509\_CRL(3),  
d2i\_X509\_NAME(3), d2i\_X509\_REQ(3), d2i\_X509\_SIG(3), crypto(7)

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