



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'X509_get_X509_PUBKEY.3ossl' command

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$ man X509_get_X509_PUBKEY.3ossl
```

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X509_GET_PUBKEY(3ossl)      OpenSSL      X509_GET_PUBKEY(3ossl)
```

NAME

X509_get_pubkey, X509_get0_pubkey, X509_set_pubkey,
X509_get_X509_PUBKEY, X509_REQ_get_pubkey, X509_REQ_get0_pubkey,
X509_REQ_set_pubkey, X509_REQ_get_X509_PUBKEY - get or set certificate
or certificate request public key

SYNOPSIS

```
#include <openssl/x509.h>  
  
EVP_PKEY *X509_get_pubkey(X509 *x);  
  
EVP_PKEY *X509_get0_pubkey(const X509 *x);  
  
int X509_set_pubkey(X509 *x, EVP_PKEY *pkey);  
  
X509_PUBKEY *X509_get_X509_PUBKEY(const X509 *x);  
  
EVP_PKEY *X509_REQ_get_pubkey(X509_REQ *req);  
  
EVP_PKEY *X509_REQ_get0_pubkey(X509_REQ *req);  
  
int X509_REQ_set_pubkey(X509_REQ *x, EVP_PKEY *pkey);  
  
X509_PUBKEY *X509_REQ_get_X509_PUBKEY(X509_REQ *x);
```

DESCRIPTION

X509_get_pubkey() attempts to decode the public key for certificate x.
If successful it returns the public key as an EVP_PKEY pointer with its
reference count incremented: this means the returned key must be freed
up after use. X509_get0_pubkey() is similar except it does not
increment the reference count of the returned EVP_PKEY so it must not
be freed up after use.

X509_get_X509_PUBKEY() returns an internal pointer to the X509_PUBKEY structure which encodes the certificate of x. The returned value must not be freed up after use.

X509_set_pubkey() attempts to set the public key for certificate x to pkey. The key pkey should be freed up after use.

X509_REQ_get_pubkey(), X509_REQ_get0_pubkey(), X509_REQ_set_pubkey() and X509_REQ_get_X509_PUBKEY() are similar but operate on certificate request req.

NOTES

The first time a public key is decoded the EVP_PKEY structure is cached in the certificate or certificate request itself. Subsequent calls return the cached structure with its reference count incremented to improve performance.

RETURN VALUES

X509_get_pubkey(), X509_get0_pubkey(), X509_get_X509_PUBKEY(), X509_REQ_get_pubkey() and X509_REQ_get_X509_PUBKEY() return a public key or NULL if an error occurred.

X509_set_pubkey() and X509_REQ_set_pubkey() return 1 for success and 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_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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