



## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'X509\_set0\_distinguishing\_id.3ossl' command**

```
$ man X509_set0_distinguishing_id.3ossl
```

```
X509_GET0_DISTINGUISHING_ID(3ossl) OpenSSL X509_GET0_DISTINGUISHING_ID(3ossl)
```

### NAME

```
X509_get0_distinguishing_id, X509_set0_distinguishing_id,  
X509_REQ_get0_distinguishing_id, X509_REQ_set0_distinguishing_id - get  
or set the Distinguishing ID for certificate operations
```

### SYNOPSIS

```
#include <openssl/x509.h>  
  
ASN1_OCTET_STRING *X509_get0_distinguishing_id(X509 *x);  
void X509_set0_distinguishing_id(X509 *x, ASN1_OCTET_STRING *distid);  
ASN1_OCTET_STRING *X509_REQ_get0_distinguishing_id(X509_REQ *x);  
void X509_REQ_set0_distinguishing_id(X509_REQ *x, ASN1_OCTET_STRING *distid);
```

### DESCRIPTION

The Distinguishing ID is defined in FIPS 196 as follows:

Distinguishing identifier

Information which unambiguously distinguishes an entity in the authentication process.

The SM2 signature algorithm requires a Distinguishing ID value when generating and verifying a signature, but the Distinguishing ID may also find other uses. In the context of SM2, the Distinguishing ID is often referred to as the "SM2 ID".

For the purpose of verifying a certificate or a certification request, a Distinguishing ID may be attached to it, so functions like

X509\_verify(3) or X509\_REQ\_verify(3) have easy access to that identity

for signature verification.

X509\_get0\_distinguishing\_id() gets the Distinguishing ID value of a certificate x by returning an ASN1\_OCTET\_STRING object which should not be freed by the caller.

X509\_set0\_distinguishing\_id() assigns distid to the certificate x.

Calling this function transfers the memory management of the value to the X509 object, and therefore the value that has been passed in should not be freed by the caller after this function has been called.

X509\_REQ\_get0\_distinguishing\_id() and X509\_REQ\_set0\_distinguishing\_id() have the same functionality as X509\_get0\_distinguishing\_id() and X509\_set0\_distinguishing\_id() except that they deal with X509\_REQ objects instead of X509.

#### RETURN VALUES

X509\_set0\_distinguishing\_id() and X509\_REQ\_set0\_distinguishing\_id() do not return a value.

#### SEE ALSO

X509\_verify(3), SM2(7)

#### COPYRIGHT

Copyright 2019-2020 The OpenSSL Project Authors. All Rights Reserved.  
Licensed under the Apache License 2.0 (the "License"). You may not use this file except in compliance with the License. You can obtain a copy in the file LICENSE in the source distribution or at  
<<https://www.openssl.org/source/license.html>>.

3.0.7                    2023-07-13X509\_GET0\_DISTINGUISHING\_ID(3ossl)