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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