

**NAME**

OSSL\_CRMF\_MSG\_get0\_tmpl, OSSL\_CRMF\_CERTTEMPLATE\_get0\_serialNumber, OSSL\_CRMF\_CERTTEMPLATE\_get0\_subject, OSSL\_CRMF\_CERTTEMPLATE\_get0\_issuer, OSSL\_CRMF\_CERTTEMPLATE\_get0\_extensions, OSSL\_CRMF\_CERTID\_get0\_serialNumber, OSSL\_CRMF\_CERTID\_get0\_issuer, OSSL\_CRMF\_ENCRYPTEDVALUE\_get1\_encCert, OSSL\_CRMF\_MSG\_get\_certReqId - functions reading from CRMF CertReqMsg structures

**SYNOPSIS**

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

OSSL_CRMF_CERTTEMPLATE *OSSL_CRMF_MSG_get0_tmpl(const OSSL_CRMF_MSG *crm);
const ASN1_INTEGER
*OSSL_CRMF_CERTTEMPLATE_get0_serialNumber(const OSSL_CRMF_CERTTEMPLATE *tmpl);
const X509_NAME
*OSSL_CRMF_CERTTEMPLATE_get0_subject(const OSSL_CRMF_CERTTEMPLATE *tmpl);
const X509_NAME
*OSSL_CRMF_CERTTEMPLATE_get0_issuer(const OSSL_CRMF_CERTTEMPLATE *tmpl);
X509_EXTENSIONS
*OSSL_CRMF_CERTTEMPLATE_get0_extensions(const OSSL_CRMF_CERTTEMPLATE *tmpl);

const ASN1_INTEGER
*OSSL_CRMF_CERTID_get0_serialNumber(const OSSL_CRMF_CERTID *cid);
const X509_NAME *OSSL_CRMF_CERTID_get0_issuer(const OSSL_CRMF_CERTID *cid);

X509
*OSSL_CRMF_ENCRYPTEDVALUE_get1_encCert(const OSSL_CRMF_ENCRYPTEDVALUE *ecert,
                                       OSSL_LIB_CTX *libctx, const char *propq,
                                       EVP_PKEY *pkey);

int OSSL_CRMF_MSG_get_certReqId(const OSSL_CRMF_MSG *crm);
```

**DESCRIPTION**

**OSSL\_CRMF\_MSG\_get0\_tmpl()** retrieves the certificate template of *crm*.

**OSSL\_CRMF\_CERTTEMPLATE\_get0\_serialNumber()** retrieves the serialNumber of the given certificate template *tmpl*.

**OSSL\_CRMF\_CERTTEMPLATE\_get0\_subject()** retrieves the subject name of the given certificate template *tmpl*.

**OSSL\_CRMF\_CERTTEMPLATE\_get0\_issuer()** retrieves the issuer name of the given certificate template *tmpl*.

**OSSL\_CRMF\_CERTTEMPLATE\_get0\_extensions()** retrieves the X.509 extensions of the given certificate template *tmpl*, or NULL if not present.

**OSSL\_CRMF\_CERTID\_get0\_serialNumber** retrieves the serialNumber of the given CertId *cid*.

**OSSL\_CRMF\_CERTID\_get0\_issuer** retrieves the issuer name of the given CertId *cid*, which must be of ASN.1 type GEN\_DIRNAME.

**OSSL\_CRMF\_ENCRYPTEDVALUE\_get1\_encCert()** decrypts the certificate in the given encryptedValue *ecert*, using the private key *pkey*, library context *libctx* and property query string *propq* (see **OSSL\_LIB\_CTX(3)**). This is needed for the indirect POPO method as in RFC 4210 section 5.2.8.2. The function returns the decrypted certificate as a copy, leaving its ownership with the caller, who is responsible for freeing it.

**OSSL\_CRMF\_MSG\_get\_certReqId()** retrieves the certReqId of *crm*.

## RETURN VALUES

**OSSL\_CRMF\_MSG\_get\_certReqId()** returns the certificate request ID as a nonnegative integer or -1 on error.

All other functions return a pointer with the intended result or NULL on error.

## SEE ALSO

RFC 4211

## HISTORY

The OpenSSL CRMF support was added in OpenSSL 3.0.

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