

**NAME**

OSSL\_CRMF\_MSG\_get0\_regCtrl\_regToken, OSSL\_CRMF\_MSG\_set1\_regCtrl\_regToken,  
 OSSL\_CRMF\_MSG\_get0\_regCtrl\_authenticator, OSSL\_CRMF\_MSG\_set1\_regCtrl\_authenticator,  
 OSSL\_CRMF\_MSG\_PKIPublicationInfo\_push0\_SinglePubInfo,  
 OSSL\_CRMF\_MSG\_set0\_SinglePubInfo, OSSL\_CRMF\_MSG\_set\_PKIPublicationInfo\_action,  
 OSSL\_CRMF\_MSG\_get0\_regCtrl\_pkiPublicationInfo,  
 OSSL\_CRMF\_MSG\_set1\_regCtrl\_pkiPublicationInfo,  
 OSSL\_CRMF\_MSG\_get0\_regCtrl\_protocolEncrKey,  
 OSSL\_CRMF\_MSG\_set1\_regCtrl\_protocolEncrKey, OSSL\_CRMF\_MSG\_get0\_regCtrl\_oldCertID,  
 OSSL\_CRMF\_MSG\_set1\_regCtrl\_oldCertID, OSSL\_CRMF\_CERTID\_gen - functions getting or  
 setting CRMF Registration Controls

**SYNOPSIS**

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

```
ASN1_UTF8STRING
```

```
*OSSL_CRMF_MSG_get0_regCtrl_regToken(const OSSL_CRMF_MSG *msg);
int OSSL_CRMF_MSG_set1_regCtrl_regToken(OSSL_CRMF_MSG *msg,
    const ASN1_UTF8STRING *tok);
```

```
ASN1_UTF8STRING
```

```
*OSSL_CRMF_MSG_get0_regCtrl_authenticator(const OSSL_CRMF_MSG *msg);
int OSSL_CRMF_MSG_set1_regCtrl_authenticator(OSSL_CRMF_MSG *msg,
    const ASN1_UTF8STRING *auth);
```

```
int OSSL_CRMF_MSG_PKIPublicationInfo_push0_SinglePubInfo(
    OSSL_CRMF_PKIPUBLICATIONINFO *pi,
    OSSL_CRMF_SINGLEPUBINFO *spi);
```

```
int OSSL_CRMF_MSG_set0_SinglePubInfo(OSSL_CRMF_SINGLEPUBINFO *spi,
    int method, GENERAL_NAME *nm);
```

```
int OSSL_CRMF_MSG_set_PKIPublicationInfo_action(
    OSSL_CRMF_PKIPUBLICATIONINFO *pi, int action);
```

```
OSSL_CRMF_PKIPUBLICATIONINFO
```

```
*OSSL_CRMF_MSG_get0_regCtrl_pkiPublicationInfo(const OSSL_CRMF_MSG *msg);
int OSSL_CRMF_MSG_set1_regCtrl_pkiPublicationInfo(OSSL_CRMF_MSG *msg,
    const OSSL_CRMF_PKIPUBLICATIONINFO *pi);
```

```
X509_PUBKEY
```

```
*OSSL_CRMF_MSG_get0_regCtrl_protocolEncrKey(const OSSL_CRMF_MSG *msg);
int OSSL_CRMF_MSG_set1_regCtrl_protocolEncrKey(OSSL_CRMF_MSG *msg,
    const X509_PUBKEY *pubkey);
```

```
OSSL_CRMF_CERTID
```

```
*OSSL_CRMF_MSG_get0_regCtrl_oldCertID(const OSSL_CRMF_MSG *msg);
```

```
int OSSL_CRMF_MSG_set1_regCtrl_oldCertID(OSSL_CRMF_MSG *msg,
    const OSSL_CRMF_CERTID *cid);
OSSL_CRMF_CERTID *OSSL_CRMF_CERTID_gen(const X509_NAME *issuer,
    const ASN1_INTEGER *serial);
```

## DESCRIPTION

Each of the **OSSL\_CRMF\_MSG\_get0\_regCtrl\_X()** functions returns the respective control X in the given *msg*, if present.

**OSSL\_CRMF\_MSG\_set1\_regCtrl\_regToken()** sets the regToken control in the given *msg* copying the given *tok* as value. See RFC 4211, section 6.1.

**OSSL\_CRMF\_MSG\_set1\_regCtrl\_authenticator()** sets the authenticator control in the given *msg* copying the given *auth* as value. See RFC 4211, section 6.2.

**OSSL\_CRMF\_MSG\_PKIPublicationInfo\_push0\_SinglePubInfo()** pushes the given *spi* to *si*. Consumes the *spi* pointer.

**OSSL\_CRMF\_MSG\_set0\_SinglePubInfo()** sets in the given SinglePubInfo *spi* the *method* and publication location, in the form of a GeneralName, *nm*. The publication location is optional, and therefore *nm* may be NULL. The function consumes the *nm* pointer if present. Available methods are:

```
# define OSSL_CRMF_PUB_METHOD_DONTCARE 0
# define OSSL_CRMF_PUB_METHOD_X500    1
# define OSSL_CRMF_PUB_METHOD_WEB     2
# define OSSL_CRMF_PUB_METHOD_LDAP    3
```

**OSSL\_CRMF\_MSG\_set\_PKIPublicationInfo\_action()** sets the action in the given *pi* using the given *action* as value. See RFC 4211, section 6.3. Available actions are:

```
# define OSSL_CRMF_PUB_ACTION_DONTPUBLISH 0
# define OSSL_CRMF_PUB_ACTION_PLEASEPUBLISH 1
```

**OSSL\_CRMF\_MSG\_set1\_regCtrl\_pkiPublicationInfo()** sets the pkiPublicationInfo control in the given *msg* copying the given *tok* as value. See RFC 4211, section 6.3.

**OSSL\_CRMF\_MSG\_set1\_regCtrl\_protocolEncrKey()** sets the protocolEncrKey control in the given *msg* copying the given *pubkey* as value. See RFC 4211 section 6.6.

**OSSL\_CRMF\_MSG\_set1\_regCtrl\_oldCertID()** sets the **oldCertID** regToken control in the given *msg* copying the given *cid* as value. See RFC 4211, section 6.5.

OSSL\_CRMF\_CERTID\_gen produces an OSSL\_CRMF\_CERTID\_gen structure copying the given *issuer* name and *serial* number.

## RETURN VALUES

All OSSL\_CRMF\_MSG\_get0\_\*() functions return the respective pointer value or NULL if not present and on error.

All OSSL\_CRMF\_MSG\_set1\_\*() functions return 1 on success, 0 on error.

**OSSL\_CRMF\_CERTID\_gen()** returns a pointer to the resulting structure or NULL on error.

## NOTES

A function **OSSL\_CRMF\_MSG\_set1\_regCtrl\_pkiArchiveOptions()** for setting an Archive Options Control is not yet implemented due to missing features to create the needed OSSL\_CRMF\_PKIARCHIVEOPTINS content.

## SEE ALSO

RFC 4211

## HISTORY

The OpenSSL CRMF support was added in OpenSSL 3.0.

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