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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