NAME

SSL_CTX_get0_param, SSL_get0_param, SSL_CTX_set1_param, SSL_set1_param,
SSL_CTX_set_purpose, SSL_CTX_set_trust, SSL_set_purpose, SSL_set_trust - get and set
verification parameters

SYNOPSIS

#include <openssl/ssl.h>

X509_VERIFY_PARAM *SSL_CTX_get0_param(SSL_CTX *ctx);
X509_VERIFY_PARAM *SSL_get0_param(SSL *ssl);
int SSL_CTX_set1_param(SSL_CTX *ctx, X509_VERIFY_PARAM *vpm);
int SSL_set1_param(SSL *ssl, X509_VERIFY_PARAM *vpm);

int SSL_CTX_set_purpose(SSL_CTX *ctx, int purpose);
int SSL_set_purpose(SSL *ssl, int purpose);

int SSL_CTX_set_trust(SSL_CTX *ctx, int trust);
int SSL_set_trust(SSL *ssl, int trust);

DESCRIPTION

SSL_CTX_get0_param() and **SSL_get0_param**() retrieve an internal pointer to the verification
parameters for **ctx** or **ssl** respectively. The returned pointer must not be freed by the calling application.

SSL_CTX_set1_param() and **SSL_set1_param**() set the verification parameters to **vpm** for **ctx** or **ssl**.

The functions **SSL_CTX_set_purpose**() and **SSL_set_purpose**() are shorthands which set the purpose
parameter on the verification parameters object. These functions are equivalent to calling
X509_VERIFY_PARAM_set_purpose() directly.

The functions **SSL_CTX_set_trust**() and **SSL_set_trust**() are similarly shorthands which set the trust
parameter on the verification parameters object. These functions are equivalent to calling
X509_VERIFY_PARAM_set_trust() directly.

NOTES

Typically parameters are retrieved from an **SSL_CTX** or **SSL** structure using **SSL_CTX_get0_param**()
or **SSL_get0_param**() and an application modifies them to suit its needs: for example to add a
hostname check.

RETURN VALUES

SSL_CTX_get0_param() and **SSL_get0_param**() return a pointer to an **X509_VERIFY_PARAM**

structure.

SSL_CTX_set1_param(), **SSL_set1_param**(), **SSL_CTX_set_purpose**(), **SSL_set_purpose**(), **SSL_CTX_set_trust()** and **SSL_set_trust()** return 1 for success and 0 for failure.

EXAMPLES

Check hostname matches "www.foo.com" in peer certificate:

```
X509_VERIFY_PARAM *vpm = SSL_get0_param(ssl);
X509_VERIFY_PARAM_set1_host(vpm, "www.foo.com", 0);
```

SEE ALSO

ssl(7), **X509_VERIFY_PARAM_set_flags**(3)

HISTORY

These functions were added in OpenSSL 1.0.2.

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