



Rocky Enterprise Linux 9.2 Manual Pages on command 'SSL_CTX_get0_param.3ossl'

\$ man SSL_CTX_get0_param.3ossl

SSL_CTX_GET0_PARAM(3ossl) OpenSSL SSL_CTX_GET0_PARAM(3ossl)

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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