



*Full credit is given to the above companies including the OS that this PDF file was generated!*

## **Red Hat Enterprise Linux Release 9.2 Manual Pages on 'SSL\_CTX\_get0\_param.3ossl' command**

**`$ 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.

## COPYRIGHT

Copyright 2015-2022 The OpenSSL Project Authors. All Rights Reserved.

Licensed under the Apache License 2.0 (the "License"). You may not use this file except in compliance with the License. You can obtain a copy in the file LICENSE in the source distribution or at <https://www.openssl.org/source/license.html>.

3.0.7                    2023-07-13        SSL\_CTX\_GET0\_PARAM(3ossl)