

**NAME**

SSL\_load\_client\_CA\_file\_ex, SSL\_load\_client\_CA\_file, SSL\_add\_file\_cert\_subjects\_to\_stack, SSL\_add\_dir\_cert\_subjects\_to\_stack, SSL\_add\_store\_cert\_subjects\_to\_stack - load certificate names

**SYNOPSIS**

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

```
STACK_OF(X509_NAME) *SSL_load_client_CA_file_ex(const char *file,  
                                                OSSL_LIB_CTX *libctx,  
                                                const char *propq);
```

```
STACK_OF(X509_NAME) *SSL_load_client_CA_file(const char *file);
```

```
int SSL_add_file_cert_subjects_to_stack(STACK_OF(X509_NAME) *stack,  
                                       const char *file);
```

```
int SSL_add_dir_cert_subjects_to_stack(STACK_OF(X509_NAME) *stack,  
                                       const char *dir);
```

```
int SSL_add_store_cert_subjects_to_stack(STACK_OF(X509_NAME) *stack,  
                                       const char *store);
```

**DESCRIPTION**

**SSL\_load\_client\_CA\_file\_ex()** reads certificates from *file* and returns a `STACK_OF(X509_NAME)` with the subject names found. The library context *libctx* and property query *propq* are used when fetching algorithms from providers.

**SSL\_load\_client\_CA\_file()** is similar to **SSL\_load\_client\_CA\_file\_ex()** but uses `NULL` for the library context *libctx* and property query *propq*.

**SSL\_add\_file\_cert\_subjects\_to\_stack()** reads certificates from *file*, and adds their subject name to the already existing *stack*.

**SSL\_add\_dir\_cert\_subjects\_to\_stack()** reads certificates from every file in the directory *dir*, and adds their subject name to the already existing *stack*.

**SSL\_add\_store\_cert\_subjects\_to\_stack()** loads certificates from the *store* URI, and adds their subject name to the already existing *stack*.

**NOTES**

**SSL\_load\_client\_CA\_file()** reads a file of PEM formatted certificates and extracts the `X509_NAMES` of the certificates found. While the name suggests the specific usage as support function for **SSL\_CTX\_set\_client\_CA\_list(3)**, it is not limited to CA certificates.

## RETURN VALUES

The following return values can occur:

NULL

The operation failed, check out the error stack for the reason.

Pointer to STACK\_OF(X509\_NAME)

Pointer to the subject names of the successfully read certificates.

## EXAMPLES

Load names of CAs from file and use it as a client CA list:

```
SSL_CTX *ctx;
STACK_OF(X509_NAME) *cert_names;

...
cert_names = SSL_load_client_CA_file("/path/to/CAfile.pem");
if (cert_names != NULL)
    SSL_CTX_set_client_CA_list(ctx, cert_names);
else
    /* error */
...
```

## SEE ALSO

`ssl(7)`, `ossl_store(7)`, `SSL_CTX_set_client_CA_list(3)`

## HISTORY

`SSL_load_client_CA_file_ex()` and `SSL_add_store_cert_subjects_to_stack()` were added in OpenSSL 3.0.

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