

**NAME**

CTLOG\_STORE\_new\_ex, CTLOG\_STORE\_new, CTLOG\_STORE\_free,  
 CTLOG\_STORE\_load\_default\_file, CTLOG\_STORE\_load\_file - Create and populate a Certificate  
 Transparency log list

**SYNOPSIS**

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

```
CTLOG_STORE *CTLOG_STORE_new_ex(OSSL_LIB_CTX *libctx, const char *propq);
CTLOG_STORE *CTLOG_STORE_new(void);
void CTLOG_STORE_free(CTLOG_STORE *store);
```

```
int CTLOG_STORE_load_default_file(CTLOG_STORE *store);
int CTLOG_STORE_load_file(CTLOG_STORE *store, const char *file);
```

**DESCRIPTION**

A CTLOG\_STORE is a container for a list of CTLOGs (Certificate Transparency logs). The list can be loaded from one or more files and then searched by LogID (see RFC 6962, Section 3.2, for the definition of a LogID).

**CTLOG\_STORE\_new\_ex()** creates an empty list of CT logs associated with the library context *libctx* and the property query string *propq*.

**CTLOG\_STORE\_new()** does the same thing as **CTLOG\_STORE\_new\_ex()** but with the default library context and property query string.

The CTLOG\_STORE is then populated by **CTLOG\_STORE\_load\_default\_file()** or **CTLOG\_STORE\_load\_file()**. **CTLOG\_STORE\_load\_default\_file()** loads from the default file, which is named *ct\_log\_list.cnf* in OPENSSLDIR (see the output of **openssl-version(1)**). This can be overridden using an environment variable named **CTLOG\_FILE**. **CTLOG\_STORE\_load\_file()** loads from a caller-specified file path instead. Both of these functions append any loaded CT logs to the CTLOG\_STORE.

The expected format of the file is:

```
enabled_logs=foo,bar
```

```
[foo]
```

```
description = Log 1
```

```
key = <base64-encoded DER SubjectPublicKeyInfo here>
```

```
[bar]
description = Log 2
key = <base64-encoded DER SubjectPublicKeyInfo here>
```

Once a CTLOG\_STORE is no longer required, it should be passed to **CTLOG\_STORE\_free()**. This will delete all of the CTLOGs stored within, along with the CTLOG\_STORE itself.

## NOTES

If there are any invalid CT logs in a file, they are skipped and the remaining valid logs will still be added to the CTLOG\_STORE. A CT log will be considered invalid if it is missing a "key" or "description" field.

## RETURN VALUES

Both **CTLOG\_STORE\_load\_default\_file** and **CTLOG\_STORE\_load\_file** return 1 if all CT logs in the file are successfully parsed and loaded, 0 otherwise.

## SEE ALSO

**ct(7)**, **CTLOG\_STORE\_get0\_log\_by\_id(3)**, **SSL\_CTX\_set\_ctlog\_list\_file(3)**

## HISTORY

CTLOG\_STORE\_new\_ex was added in OpenSSL 3.0. All other functions were added in OpenSSL 1.1.0.

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