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### ***Rocky Enterprise Linux 9.2 Manual Pages on command 'CTLOG\_new\_from\_base64\_ex.3ossl'***

***\$ man CTLOG\_new\_from\_base64\_ex.3ossl***

CTLOG\_NEW(3ossl)                      OpenSSL                      CTLOG\_NEW(3ossl)

#### NAME

CTLOG\_new\_ex, CTLOG\_new, CTLOG\_new\_from\_base64,  
CTLOG\_new\_from\_base64\_ex, CTLOG\_free, CTLOG\_get0\_name,  
CTLOG\_get0\_log\_id, CTLOG\_get0\_public\_key - encapsulates information  
about a Certificate Transparency log

#### SYNOPSIS

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

```
CTLOG *CTLOG_new_ex(EVP_PKEY *public_key, const char *name,  
                    OSSL_LIB_CTX *libctx, const char *propq);
```

```
CTLOG *CTLOG_new(EVP_PKEY *public_key, const char *name);
```

```
int CTLOG_new_from_base64_ex(CTLOG **ct_log, const char *pkey_base64,  
                              const char *name, OSSL_LIB_CTX *libctx,  
                              const char *propq);
```

```
int CTLOG_new_from_base64(CTLOG ** ct_log,  
                          const char *pkey_base64, const char *name);  
void CTLOG_free(CTLOG *log);  
const char *CTLOG_get0_name(const CTLOG *log);  
void CTLOG_get0_log_id(const CTLOG *log, const uint8_t **log_id,  
                       size_t *log_id_len);  
EVP_PKEY *CTLOG_get0_public_key(const CTLOG *log);
```

## DESCRIPTION

CTLOG\_new\_ex() returns a new CTLOG that represents the Certificate Transparency (CT) log with the given public key and associates it with the library context libctx and property query string propq. A name must also be provided that can be used to help users identify this log. Ownership of the public key is transferred.

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

CTLOG\_new\_from\_base64\_ex() also creates a new CTLOG, but takes the public key in base64-encoded DER form and sets the ct\_log pointer to point to the new CTLOG. The base64 will be decoded and the public key parsed. The CTLOG will be associated with the given library context libctx and property query string propq.

CTLOG\_new\_from\_base64() does the same thing as CTLOG\_new\_from\_base64\_ex() except that the default library context and property query string are used.

Regardless of whether CTLOG\_new() or CTLOG\_new\_from\_base64() is used, it is the caller's responsibility to pass the CTLOG to CTLOG\_free() once it is no longer needed. This will delete it and, if created by CTLOG\_new(), the EVP\_PKEY that was passed to it.

CTLOG\_get0\_name() returns the name of the log, as provided when the CTLOG was created. Ownership of the string remains with the CTLOG.

CTLOG\_get0\_log\_id() sets \*log\_id to point to a string containing that log's LogID (see RFC 6962). It sets \*log\_id\_len to the length of that LogID. For a v1 CT log, the LogID will be a SHA-256 hash (i.e. 32 bytes long). Ownership of the string remains with the CTLOG.

CTLOG\_get0\_public\_key() returns the public key of the CT log. Ownership of the EVP\_PKEY remains with the CTLOG.

## RETURN VALUES

CTLOG\_new() will return NULL if an error occurs.

CTLOG\_new\_from\_base64() will return 1 on success, 0 otherwise.

## SEE ALSO

ct(7)

## HISTORY

The functions CTLOG\_new\_ex() and CTLOG\_new\_from\_base64\_ex() were added in OpenSSL 3.0. All other functions were added in OpenSSL 1.1.0.

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