



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'OCSP_REQ_CTX.3ossl' command

\$ man OCSP_REQ_CTX.3ossl

OCSP_SENDREQ_NEW(3ossl) OpenSSL OCSP_SENDREQ_NEW(3ossl)

NAME

OCSP_REQ_CTX, OCSP_sendreq_new, OCSP_sendreq_nbio, OCSP_sendreq_bio,
OCSP_REQ_CTX_i2d, OCSP_REQ_CTX_add1_header, OCSP_REQ_CTX_free,
OCSP_set_max_response_length, OCSP_REQ_CTX_set1_req - OCSP responder
query functions

SYNOPSIS

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

```
OSSL_HTTP_REQ_CTX *OCSP_sendreq_new(BIO *io, const char *path,  
                                     const OCSP_REQUEST *req, int buf_size);
```

```
OCSP_RESPONSE *OCSP_sendreq_bio(BIO *io, const char *path, OCSP_REQUEST *req);
```

The following functions have been deprecated since OpenSSL 3.0, and can
be hidden entirely by defining OPENSSL_API_COMPAT with a suitable
version value, see openssl_user_macros(7):

```
typedef OSSL_HTTP_REQ_CTX OCSP_REQ_CTX;
```

```
int OCSP_sendreq_nbio(OCSP_RESPONSE **presp, OSSL_HTTP_REQ_CTX *rctx);
```

```
int OCSP_REQ_CTX_i2d(OCSP_REQ_CTX *rctx, const ASN1_ITEM *it, ASN1_VALUE *req);
```

```
int OCSP_REQ_CTX_add1_header(OCSP_REQ_CTX *rctx,  
                             const char *name, const char *value);
```

```
void OCSP_REQ_CTX_free(OCSP_REQ_CTX *rctx);
```

```
void OCSP_set_max_response_length(OCSP_REQ_CTX *rctx, unsigned long len);
```

```
int OCSP_REQ_CTX_set1_req(OCSP_REQ_CTX *rctx, const OCSP_REQUEST *req);
```

DESCRIPTION

These functions perform an OCSP POST request / response transfer over HTTP, using the HTTP request functions described in `OSSL_HTTP_REQ_CTX(3)`.

The function `OCSP_sendreq_new()` builds a complete `OSSL_HTTP_REQ_CTX` structure with the BIO io to be used for requests and response, the URL path `path`, optionally the OCSP request `req`, and a response header maximum line length of `buf_size`. If `buf_size` is zero a default value of 4KiB is used. The `req` may be set to NULL and provided later using `OCSP_REQ_CTX_set1_req()` or `OSSL_HTTP_REQ_CTX_set1_req(3)`. The io and path arguments to `OCSP_sendreq_new()` correspond to the components of the URL. For example if the responder URL is

"http://example.com/ocspreq" the BIO io should have been connected to host "example.com" on port 80 and path should be set to "/ocspreq".

`OCSP_sendreq_nbio()` attempts to send the request prepared in `rctx` and to gather the response via HTTP, using the BIO io and path that were given when calling `OCSP_sendreq_new()`. If the operation gets completed it assigns the response, a pointer to a `OCSP_RESPONSE` structure, in `*presp`. The function may need to be called again if its result is -1, which indicates `BIO_should_retry(3)`. In such a case it is advisable to sleep a little in between, using `BIO_wait(3)` on the read BIO to prevent a busy loop.

`OCSP_sendreq_bio()` combines `OCSP_sendreq_new()` with as many calls of `OCSP_sendreq_nbio()` as needed and then `OCSP_REQ_CTX_free()`, with a response header maximum line length 4k. It waits indefinitely on a response. It does not support setting a timeout or adding headers and is retained for compatibility; use `OSSL_HTTP_transfer(3)` instead.

`OCSP_REQ_CTX_i2d(rctx, it, req)` is equivalent to the following:

```
OSSL_HTTP_REQ_CTX_set1_req(rctx, "application/ocsp-request", it, req)
```

`OCSP_REQ_CTX_set1_req(rctx, req)` is equivalent to the following:

```
OSSL_HTTP_REQ_CTX_set1_req(rctx, "application/ocsp-request",  
    ASN1_ITEM_rptr(OCSP_REQUEST),  
    (const ASN1_VALUE *)req)
```

The deprecated type and the remaining deprecated functions have been

superseded by the following equivalents: OCSP_REQ_CTX by OSSL_HTTP_REQ_CTX(3), OCSP_REQ_CTX_add1_header() by OSSL_HTTP_REQ_CTX_add1_header(3), OCSP_REQ_CTX_free() by OSSL_HTTP_REQ_CTX_free(3), and OCSP_set_max_response_length() by OSSL_HTTP_REQ_CTX_set_max_response_length(3).

RETURN VALUES

OCSP_sendreq_new() returns a valid OSSL_HTTP_REQ_CTX structure or NULL if an error occurred.

OCSP_sendreq_nbio() returns 1 for success, 0 on error, -1 if retry is needed.

OCSP_sendreq_bio() returns the OCSP_RESPONSE structure sent by the responder or NULL if an error occurred.

SEE ALSO

OSSL_HTTP_REQ_CTX(3), OSSL_HTTP_transfer(3), OCSP_cert_to_id(3), OCSP_request_add1_nonce(3), OCSP_REQUEST_new(3), OCSP_resp_find_status(3), OCSP_response_status(3)

HISTORY

OCSP_REQ_CTX, OCSP_REQ_CTX_i2d(), OCSP_REQ_CTX_add1_header(), OCSP_REQ_CTX_free(), OCSP_set_max_response_length(), and OCSP_REQ_CTX_set1_req() were deprecated in OpenSSL 3.0.

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