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_CT *rctx, const ASN1_ITEM *it, ASN1_VALUE *req);
int OCSP_REQ_CTX_add1_header(OCSP_REQ_CT *rctx,
                             const char *name, const char *value);
void OCSP_REQ_CTX_free(OCSP_REQ_CTX *rctx);
void OCSP_set_max_response_length(OCSP_REQ_CT *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 haven 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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