

gnutls\_x509\_cert\_get\_authority\_info\_access(3)      gnutls      gnutls\_x509\_cert\_get\_authority\_info\_access(3)

## NAME

gnutls\_x509\_cert\_get\_authority\_info\_access - API function

## SYNOPSIS

```
#include <gnutls/x509.h>
```

```
int gnutls_x509_cert_get_authority_info_access(gnutls_x509_cert_t crt, unsigned int seq, int what,  
gnutls_datum_t * data, unsigned int * critical);
```

## ARGUMENTS

gnutls\_x509\_cert\_t crt

Holds the certificate

unsigned int seq

specifies the sequence number of the access descriptor (0 for the first one, 1 for the second etc.)

int what

what data to get, a **gnutls\_info\_access\_what\_t** type.

gnutls\_datum\_t \* data

output data to be freed with **gnutls\_free()**.

unsigned int \* critical

pointer to output integer that is set to non-zero if the extension is marked as critical (may be **NULL**)

## DESCRIPTION

Note that a simpler API to access the authority info data is provided by **gnutls\_x509\_aia\_get()** and **gnutls\_x509\_ext\_import\_aia()**.

This function extracts the Authority Information Access (AIA) extension, see RFC 5280 section 4.2.2.1 for more information. The AIA extension holds a sequence of AccessDescription (AD) data.

The *seq* input parameter is used to indicate which member of the sequence the caller is interested in. The first member is 0, the second member 1 and so on. When the *seq* value is out of bounds, **GNUTLS\_E\_REQUESTED\_DATA\_NOT\_AVAILABLE** is returned.

The type of data returned in *data* is specified via *what* which should be **gnutls\_info\_access\_what\_t** values.

If *what* is **GNUTLS\_IA\_ACCESSMETHOD\_OID** then *data* will hold the accessMethod OID (e.g., "1.3.6.1.5.5.7.48.1").

If *what* is **GNUTLS\_IA\_ACCESSLOCATION\_GENERALNAME\_TYPE**, *data* will hold the accessLocation GeneralName type (e.g., "uniformResourceIdentifier").

If *what* is **GNUTLS\_IA\_URI**, *data* will hold the accessLocation URI data. Requesting this *what* value leads to an error if the accessLocation is not of the "uniformResourceIdentifier" type.

If *what* is **GNUTLS\_IA\_OCSP\_URI**, *data* will hold the OCSP URI. Requesting this *what* value leads to an error if the accessMethod is not 1.3.6.1.5.5.7.48.1 aka OCSP, or if accessLocation is not of the "uniformResourceIdentifier" type. In that case **GNUTLS\_E\_UNKNOWN\_ALGORITHM** will be returned, and *seq* should be increased and this function called again.

If *what* is **GNUTLS\_IA\_CAISSUERS\_URI**, *data* will hold the caIssuers URI. Requesting this *what* value leads to an error if the accessMethod is not 1.3.6.1.5.5.7.48.2 aka caIssuers, or if accessLocation is not of the "uniformResourceIdentifier" type. In that case handle as in **GNUTLS\_IA\_OCSP\_URI**.

More *what* values may be allocated in the future as needed.

If *data* is NULL, the function does the same without storing the output data, that is, it will set *critical* and do error checking as usual.

The value of the critical flag is returned in \* *critical* . Supply a NULL *critical* if you want the function to make sure the extension is non-critical, as required by RFC 5280.

## RETURNS

**GNUTLS\_E\_SUCCESS** on success, **GNUTLS\_E\_INVALID\_REQUEST** on invalid *crt* , **GNUTLS\_E\_CONSTRAINT\_ERROR** if the extension is incorrectly marked as critical (use a non-NULL *critical* to override), **GNUTLS\_E\_UNKNOWN\_ALGORITHM** if the requested OID does not match (e.g., when using **GNUTLS\_IA\_OCSP\_URI**), otherwise a negative error code.

## SINCE

3.0

## REPORTING BUGS

Report bugs to <bugs@gnutls.org>.

Home page: <https://www.gnutls.org>

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## **SEE ALSO**

The full documentation for **gnutls** is maintained as a Texinfo manual. If the /usr/local/share/doc/gnutls/ directory does not contain the HTML form visit

<https://www.gnutls.org/manual/>