# **DNS** utility functions

libuv provides asynchronous variants of getaddrinfo and getnameinfo.

## Data types

```
System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(\node-master\) [deps] [uv] [docs] [src] dns.rst, line 13)

Unknown directive type "ctype".

. c:type:: uv_getaddrinfo_t
    `getaddrinfo` request type.
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\[node-master] [deps] [uv] [docs] [src]dns.rst, line 17)

Unknown directive type "c:type".

.. c:type:: void (\*uv\_getaddrinfo\_cb) (uv\_getaddrinfo\_t\* req, int status, struct addrinfo\* res)

Callback which will be called with the getaddrinfo request result once
complete. In case it was cancelled, `status` will have a value of
``UV\_ECANCELED``.

System Message: ERROR/3 (p:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\[node-master] [deps] [uv] [docs] [src]dns.rst, line 23)

Unknown directive type "c:type".

.. c:type:: uv\_getnameinfo\_t
 `getnameinfo` request type.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\[node-master] [deps] [uv] [docs] [src]dns.rst, line 27)

Unknown directive type "c:type".

.. c:type:: void (\*uv\_getnameinfo\_cb) (uv\_getnameinfo\_t\* req, int status, const char\* hostname, const char\* service)

Callback which will be called with the getnameinfo request result once complete. In case it was cancelled, `status` will have a value of ``UV\_ECANCELED``.

## **Public members**

System Message: ERROR/3 (p:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\[node-master] [deps] [uv] [docs] [src]dns.rst, line 37)

Unknown directive type "c:member".

.. c:member:: uv\_loop\_t\* uv\_getaddrinfo\_t.loop
Loop that started this getaddrinfo request and where completion will be reported. Readonly.

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\[node-master] [deps] [uv] [docs] [src]dns.rst, line 42)

Unknown directive type "c:member".

.. c:member:: struct addrinfo\* uv\_getaddrinfo\_t.addrinfo

Pointer to a `struct addrinfo` containing the result. Must be freed by the user with :c:func:`uv\_freeaddrinfo`.

.. versionchanged:: 1.3.0 the field is declared as public.

System Message: ERROR/3 (p:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\[node-master] [deps] [uv] [docs] [src]dns.rst, line 49)

Unknown directive type "c:member".

.. c:member:: uv\_loop\_t\* uv\_getnameinfo\_t.loop
Loop that started this getnameinfo request and where completion will be reported. Readonly.

System Message: ERROR/3 (p:\onboarding-resources\sample-onboarding-resources\node master\deps\uv\docs\src\[node-master] [deps] [uv] [docs] [src]dns.rst, line 54)

Unknown directive type "c:member".

.. c:member:: char[NI\_MAXHOST] uv\_getnameinfo\_t.host

Char array containing the resulting host. It's null terminated.

.. versionchanged:: 1.3.0 the field is declared as public.

 $System Message: ERROR/3 (p:\onboarding-resources\ample-onboarding-resources\node-master) [deps] [uv] [docs] [src] dns.rst, line 60)$ 

Unknown directive type "c:member".

.. c:member:: char[NI\_MAXSERV] uv\_getnameinfo\_t.service

Char array containing the resulting service. It's null terminated.

.. versionchanged:: 1.3.0 the field is declared as public.

System Message: ERROR/3 (b:\onboarding-resources\sample-onboarding-resources\node master\deps\uv\docs\src\[node-master] [deps] [uv] [docs] [src]dns.rst, line 66)

Unknown directive type "seealso".

.. seealso:: The :c:type:`uv\_req\_t` members also apply.

## API

 $System Message: ERROR/3 (p:\onboarding-resources\ample-onboarding-resources\node-master) [deps] [uv] [docs] [src] dns.rst, line 72)$ 

### Unknown directive type "c:function".

.. c:function:: int uv\_getaddrinfo(uv\_loop\_t\* loop, uv\_getaddrinfo\_t\* req, uv\_getaddrinfo\_cb getaddrinfo\_cb, const char\* node, const

Asynchronous :man: `getaddrinfo(3) `.

Either node or service may be NULL but not both.

`hints` is a pointer to a struct addrinfo with additional address type constraints, or NULL. Consult `man -s 3 getaddrinfo` for more details.

Returns 0 on success or an error code < 0 on failure. If successful, the callback will get called sometime in the future with the lookup result, which is either:

\* status == 0, the res argument points to a valid `struct addrinfo`, or \* status < 0, the res argument is NULL. See the UV\_EAI\_\* constants.

Call :c:func:`uv freeaddrinfo` to free the addrinfo structure.

.. versionchanged:: 1.3.0 the callback parameter is now allowed to be NULL, in which case the request will run \*\*synchronously\*\*.

 $System \, Message: ERROR/3 \, (p:\onboarding-resources\ample-onboarding-resources\node-master\deps\uv\docs\src\[node-master\] \, [deps] \, [uv] \, [docs] \, [src] \, dns. \, rst, \, line \, 93)$ 

## Unknown directive type "c:function".

.. c:function:: void uv\_freeaddrinfo(struct addrinfo\* ai)

Free the struct addrinfo. Passing NULL is allowed and is a no-op.

 $System Message: ERROR/3 (p:\onboarding-resources\ample-onboarding-resources\node-master) [deps] [uv] [docs] [src] dns.rst, line 97)$ 

#### Unknown directive type "c:function".

.. c:function:: int uv\_getnameinfo(uv\_loop\_t\* loop, uv\_getnameinfo\_t\* req, uv\_getnameinfo\_cb getnameinfo\_cb, const struct sockaddr

Asynchronous :man: getnameinfo(3).

Returns 0 on success or an error code < 0 on failure. If successful, the callback will get called sometime in the future with the lookup result. Consult `man -s 3 getnameinfo` for more details.

.. versionchanged:: 1.3.0 the callback parameter is now allowed to be NULL, in which case the request will run \*\*synchronously\*\*.

 $System Message: ERROR/3 (p:\onboarding-resources\ample-onboarding-resources\node-master) [deps] [uv] [docs] [src] dns.rst, line 108) \\$ 

## Unknown directive type "seealso".

.. seealso:: The :c:type:`uv\_req\_t` API functions also apply.