

# 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 "c:type".

```
.. 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 (D:\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 (D:\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 (D:\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 (D:\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 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\ (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 (D:\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 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\ (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 char* service, const struct addrinfo* hints)

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 (D:\onboarding-resources\sample-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 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\ (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* sock, socklen_t socklen, struct addrinfo* hints)

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 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\ (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.