Error handling

In libuv errors are negative numbered constants. As a rule of thumb, whenever there is a status parameter, or an API functions returns an integer, a negative number will imply an error.

When a function which takes a callback returns an error, the callback will never be called.

> **Note**
>
> Implementation detail: on Unix error codes are the negated *errno* (or *-errno*), while on Windows they are defined by libuv to arbitrary negative numbers.

Error constants

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 22)

Unknown directive type "c:macro".

```
.. c:macro:: UV_E2BIG

    argument list too long
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 26)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EACCES

    permission denied
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 30)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EADDRINUSE

    address already in use
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 34)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EADDRNOTAVAIL

    address not available
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 38)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAFNOSUPPORT

    address family not supported
```

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

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAGAIN
```

```
resource temporarily unavailable
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 46)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_ADDRFAMILY

   address family not supported
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 50)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_AGAIN

   temporary failure
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 54)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_BADFLAGS

   bad ai_flags value
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 58)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_BADHINTS

   invalid value for hints
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 62)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_CANCELED

   request canceled
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 66)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_FAIL

   permanent failure
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`, line 70)

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_FAMILY

   ai_family not supported
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst**, line 74)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_MEMORY

    out of memory
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst**, line 78)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_NODATA

    no address
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst**, line 82)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_NONAME

    unknown node or service
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst**, line 86)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_OVERFLOW

    argument buffer overflow
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst**, line 90)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_PROTOCOL

    resolved protocol is unknown
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst**, line 94)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_SERVICE

    service not available for socket type
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst**, line 98)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EAI_SOCKTYPE

    socket type not supported
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst**, line 102)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EALREADY

    connection already in progress
```

```
.. c:macro:: UV_EBADF

    bad file descriptor
```

```
.. c:macro:: UV_EBUSY

    resource busy or locked
```

```
.. c:macro:: UV_ECANCELED

    operation canceled
```

```
.. c:macro:: UV_ECHARSET

    invalid Unicode character
```

```
.. c:macro:: UV_ECONNABORTED

    software caused connection abort
```

```
.. c:macro:: UV_ECONNREFUSED

    connection refused
```

```
.. c:macro:: UV_ECONNRESET

    connection reset by peer
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, line 134**)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EDESTADDRREQ

    destination address required
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, line 138**)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EEXIST

    file already exists
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, line 142**)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EFAULT

    bad address in system call argument
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, line 146**)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EFBIG

    file too large
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, line 150**)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EHOSTUNREACH

    host is unreachable
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, line 154**)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EINTR

    interrupted system call
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, line 158**)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EINVAL

    invalid argument
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, line 162**)**

Unknown directive type "c:macro".

```
    .. c:macro:: UV_EIO

        i/o error
```

```
    .. c:macro:: UV_EISCONN

        socket is already connected
```

```
    .. c:macro:: UV_EISDIR

        illegal operation on a directory
```

```
    .. c:macro:: UV_ELOOP

        too many symbolic links encountered
```

```
    .. c:macro:: UV_EMFILE

        too many open files
```

```
    .. c:macro:: UV_EMSGSIZE

        message too long
```

```
    .. c:macro:: UV_ENAMETOOLONG

        name too long
```

```
    .. c:macro:: UV_ENETDOWN

        network is down
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, **line 194)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENETUNREACH

    network is unreachable
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, **line 198)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENFILE

    file table overflow
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, **line 202)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOBUFS

    no buffer space available
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, **line 206)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENODEV

    no such device
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, **line 210)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOENT

    no such file or directory
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, **line 214)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOMEM

    not enough memory
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, **line 218)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENONET

    machine is not on the network
```

System Message: ERROR/3 (D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst, **line 222)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOPROTOOPT

   protocol not available
```

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOSPC

   no space left on device
```

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOSYS

   function not implemented
```

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOTCONN

   socket is not connected
```

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOTDIR

   not a directory
```

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOTEMPTY

   directory not empty
```

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOTSOCK

   socket operation on non-socket
```

Unknown directive type "c:macro".

```
.. c:macro:: UV_ENOTSUP
```

```
   operation not supported on socket
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst,` **line 254)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EOVERFLOW

   value too large for defined data type
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst,` **line 258)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EPERM

   operation not permitted
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst,` **line 262)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EPIPE

   broken pipe
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst,` **line 266)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EPROTO

   protocol error
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst,` **line 270)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EPROTONOSUPPORT

   protocol not supported
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst,` **line 274)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EPROTOTYPE

   protocol wrong type for socket
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst,` **line 278)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ERANGE

   result too large
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`**, line 282)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EROFS

   read-only file system
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`**, line 286)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ESHUTDOWN

   cannot send after transport endpoint shutdown
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`**, line 290)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ESPIPE

   invalid seek
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`**, line 294)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ESRCH

   no such process
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`**, line 298)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ETIMEDOUT

   connection timed out
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`**, line 302)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_ETXTBSY

   text file is busy
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`**, line 306)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_EXDEV

   cross-device link not permitted
```

System Message: ERROR/3 (`D:\onboarding-resources\sample-onboarding-resources\node-master\deps\uv\docs\src\(node-master)(deps)(uv)(docs)(src)errors.rst`**, line 310)**

Unknown directive type "c:macro".

```
.. c:macro:: UV_UNKNOWN

   unknown error
```

```
.. c:macro:: UV_EOF

   end of file
```

```
.. c:macro:: UV_ENXIO

   no such device or address
```

```
.. c:macro:: UV_EMLINK

   too many links
```

```
.. c:macro:: UV_ENOTTY

   inappropriate ioctl for device
```

```
.. c:macro:: UV_EFTYPE

   inappropriate file type or format
```

```
.. c:macro:: UV_EILSEQ

   illegal byte sequence
```

```
.. c:macro:: UV_ESOCKTNOSUPPORT

   socket type not supported
```

API

```
.. c:macro:: UV_ERRNO_MAP(iter_macro)

   Macro that expands to a series of invocations of `iter_macro` for
   each of the error constants above. `iter_macro` is invoked with two
   arguments: the name of the error constant without the `UV_` prefix,
   and the error message string literal.
```

```
.. c:function:: const char* uv_strerror(int err)

   Returns the error message for the given error code.  Leaks a few bytes
   of memory when you call it with an unknown error code.
```

```
.. c:function:: char* uv_strerror_r(int err, char* buf, size_t buflen)

   Returns the error message for the given error code. The zero-terminated
   message is stored in the user-supplied buffer `buf` of at most `buflen` bytes.

   .. versionadded:: 1.22.0
```

```
.. c:function:: const char* uv_err_name(int err)

   Returns the error name for the given error code.  Leaks a few bytes
   of memory when you call it with an unknown error code.
```

```
.. c:function:: char* uv_err_name_r(int err, char* buf, size_t buflen)

   Returns the error name for the given error code. The zero-terminated
   name is stored in the user-supplied buffer `buf` of at most `buflen` bytes.

   .. versionadded:: 1.22.0
```

```
.. c:function:: int uv_translate_sys_error(int sys_errno)

   Returns the libuv error code equivalent to the given platform dependent error
```

code: POSIX error codes on Unix (the ones stored in `errno`), and Win32 error
codes on Windows (those returned by `GetLastError()` or `WSAGetLastError()`).

If `sys_errno` is already a libuv error, it is simply returned.

.. versionchanged:: 1.10.0 function declared public.