

NAME

`if_nametoindex`, `if_indextoname` – mappings between network interface names and indexes

SYNOPSIS

```
#include <net/if.h>
```

```
unsigned int if_nametoindex(const char *ifname);
```

```
char *if_indextoname(unsigned int ifindex, char *ifname);
```

DESCRIPTION

The `if_nametoindex()` function returns the index of the network interface corresponding to the name *ifname*.

The `if_indextoname()` function returns the name of the network interface corresponding to the interface index *ifindex*. The name is placed in the buffer pointed to by *ifname*. The buffer must allow for the storage of at least `IF_NAMESIZE` bytes.

RETURN VALUE

On success, `if_nametoindex()` returns the index number of the network interface; on error, 0 is returned and *errno* is set appropriately.

On success, `if_indextoname()` returns *ifname*; on error, NULL is returned and *errno* is set appropriately.

ERRORS

`if_nametoindex()` may fail and set *errno* if:

ENODEV

No interface found with given name.

`if_indextoname()` may fail and set *errno* if:

ENXIO

No interface found for the index.

`if_nametoindex()` and `if_indextoname()` may also fail for any of the errors specified for `socket(2)` or `ioctl(2)`.

ATTRIBUTES

For an explanation of the terms used in this section, see `attributes(7)`.

| Interface | Attribute | Value |
|---|---------------|---------|
| <code>if_nametoindex()</code> , <code>if_indextoname()</code> | Thread safety | MT-Safe |

CONFORMING TO

POSIX.1-2001, POSIX.1-2008, RFC 3493.

This function first appeared in BSDi.

SEE ALSO

`getifaddrs(3)`, `if_nameindex(3)`, `ifconfig(8)`

COLOPHON

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