



## ***Rocky Enterprise Linux 9.2 Manual Pages on command 'ether\_ntohost.3'***

**C:\>man ether\_ntohost.3**

ETHER\_ATON(3)                      Linux Programmer's Manual                      ETHER\_ATON(3)

### NAME

ether\_aton, ether\_ntoa, ether\_ntohost, ether\_hostton, ether\_line, ether\_ntoa\_r,  
ether\_aton\_r - Ethernet address manipulation routines

### SYNOPSIS

```
#include <netinet/ether.h>

char *ether_ntoa(const struct ether_addr *addr);

struct ether_addr *ether_aton(const char *asc);

int ether_ntohost(char *hostname, const struct ether_addr *addr);

int ether_hostton(const char *hostname, struct ether_addr *addr);

int ether_line(const char *line, struct ether_addr *addr,
               char *hostname);

/* GNU extensions */

char *ether_ntoa_r(const struct ether_addr *addr, char *buf);

struct ether_addr *ether_aton_r(const char *asc,
                               struct ether_addr *addr);
```

### DESCRIPTION

ether\_aton() converts the 48-bit Ethernet host address asc from the standard hex-digits-and-colons notation into binary data in network byte order and returns a pointer to it in a statically allocated buffer, which subsequent calls will overwrite. ether\_aton() returns NULL if the address is invalid.

The ether\_ntoa() function converts the Ethernet host address addr given in network

byte order to a string in standard hex-digits-and-colons notation, omitting leading zeros. The string is returned in a statically allocated buffer, which subsequent calls will overwrite.

The `ether_ntohost()` function maps an Ethernet address to the corresponding hostname in `/etc/ethers` and returns nonzero if it cannot be found.

The `ether_hostton()` function maps a hostname to the corresponding Ethernet address in `/etc/ethers` and returns nonzero if it cannot be found.

The `ether_line()` function parses a line in `/etc/ethers` format (ethernet address followed by whitespace followed by hostname; '#' introduces a comment) and returns an address and hostname pair, or nonzero if it cannot be parsed. The buffer pointed to by `hostname` must be sufficiently long, for example, have the same length as `line`.

The functions `ether_ntoa_r()` and `ether_aton_r()` are reentrant thread-safe versions of `ether_ntoa()` and `ether_aton()` respectively, and do not use static buffers.

The structure `ether_addr` is defined in `<net/ethernet.h>` as:

```
struct ether_addr {
    uint8_t ether_addr_octet[6];
}
```

## ATTRIBUTES

For an explanation of the terms used in this section, see [attributes\(7\)](#).

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?Interface                    ? Attribute   ? Value   ?

??

?`ether_aton()`, `ether_ntoa()`   ? Thread safety ? MT-Unsafe ?

??

?`ether_ntohost()`, `ether_hostton()`, ? Thread safety ? MT-Safe ?

?`ether_line()`, `ether_ntoa_r()`,   ?           ?           ?

?`ether_aton_r()`                    ?           ?           ?

??

## CONFORMING TO

4.3BSD, SunOS.

## BUGS

In `glibc 2.2.5` and earlier, the implementation of `ether_line()` is broken.

## SEE ALSO

ethers(5)

## COLOPHON

This page is part of release 5.05 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

GNU

2017-09-15

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