Rocky Enterprise Linux 9.2 Manual Pages on command 'ether_aton.3'

C:\>man ether_aton.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 over?

write. 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).

Interface	Attribute	Value
ether_aton(), ether_ntoa()	Thread safety	MT-Unsafe
ether_ntohost(), ether_hostton(), ether_line(), ether_ntoa_r(), ether_aton_r()	Thread safety	MT-Safe

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/.