NAME

htonl, **htons**, **ntohl**, **ntohs** - convert values between host and network byte order

LIBRARY

Standard C Library (libc, -lc)

SYNOPSIS

#include <arpa/inet.h>

or

#include <netinet/in.h>

uint32_t
htonl(*uint32_t hostlong*);

uint16_t
htons(*uint16_t hostshort*);

uint32_t
ntohl(*uint32_t netlong*);

uint16_t
ntohs(*uint16_t netshort*);

DESCRIPTION

These routines convert 16 and 32 bit quantities between network byte order and host byte order. On machines which have a byte order which is the same as the network order, routines are defined as null macros.

These routines are most often used in conjunction with Internet addresses and ports as returned by gethostbyname(3) and getservent(3).

SEE ALSO

gethostbyname(3), getservent(3), byteorder(9)

STANDARDS

The **byteorder** functions conform to IEEE Std 1003.1-2001 ("POSIX.1").

HISTORY

The **byteorder** functions appeared in 4.2BSD.

BUGS

On the VAX bytes are handled backwards from most everyone else in the world. This is not expected to be fixed in the near future.