man7.org > Linux > man-pages

Linux/UNIX system programming training

NAME | SYNOPSIS | DESCRIPTION | RETURN VALUE | ERRORS | ATTRIBUTES | CONFORMING TO | BUGS | EXAMPLE | SEE ALSO | COLOPHON

Search online pages

INET NTOP(3)

Linux Programmer's Manual

INET NTOP(3)

NAME top

inet_ntop - convert IPv4 and IPv6 addresses from binary to text form

SYNOPSIS top

DESCRIPTION top

This function converts the network address structure src in the af address family into a character string. The resulting string is copied to the buffer pointed to by dst, which must be a non-null pointer. The caller specifies the number of bytes available in this buffer in the argument size.

inet_ntop() extends the inet_ntoa(3) function to support multiple
address families, inet_ntoa(3) is now considered to be deprecated in
favor of inet_ntop(). The following address families are currently
supported:

AF INET

src points to a struct in_addr (in network byte order) which
is converted to an IPv4 network address in the dotted-decimal
format, "ddd.ddd.ddd.ddd". The buffer dst must be at least
INET_ADDRSTRLEN bytes long.

AF INET6

src points to a struct in6_addr (in network byte order) which
is converted to a representation of this address in the most
appropriate IPv6 network address format for this address. The
buffer dst must be at least INET6 ADDRSTRLEN bytes long.

1 of 3 10/24/19, 12:00 PM

RETURN VALUE top

On success, **inet_ntop**() returns a non-null pointer to *dst*. NULL is returned if there was an error, with *errno* set to indicate the error.

ERRORS top

EAFNOSUPPORT

af was not a valid address family.

ENOSPC The converted address string would exceed the size given by size.

ATTRIBUTES top

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

Interface	Attribute	Value
<pre>inet_ntop()</pre>	Thread safety	MT-Safe locale

CONFORMING TO top

POSIX.1-2001, POSIX.1-2008. Note that RFC 2553 defines a prototype where the last argument size is of type $size_t$. Many systems follow RFC 2553. Glibc 2.0 and 2.1 have $size_t$, but 2.2 and later have $socklen_t$.

BUGS top

AF_INET6 converts IPv4-mapped IPv6 addresses into an IPv6 format.

EXAMPLE top

See inet_pton(3).

SEE ALSO top

getnameinfo(3), inet(3), inet_pton(3)

2 of 3 10/24/19, 12:00 PM

COLOPHON top

This page is part of release 5.03 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/.

Linux 2017-09-15 INET_NTOP(3)

Pages that refer to this page: gethostbyname(3), getipnodebyname(3), getnameinfo(3), inet(3), inet pton(3)

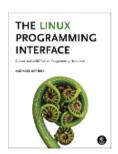
Copyright and license for this manual page

HTML rendering created 2019-10-11 by Michael Kerrisk, author of *The Linux Programming Interface*, maintainer of the Linux *man-pages* project.

For details of in-depth **Linux/UNIX system programming training courses** that I teach, look here.

Hosting by jambit GmbH.





3 of 3 10/24/19, 12:00 PM