



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'inet_ntop.3' command

\$ man inet_ntop.3

INET_NTOP(3) Linux Programmer's Manual INET_NTOP(3)

NAME

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

SYNOPSIS

```
#include <arpa/inet.h>
```

```
const char *inet_ntop(int af, const void *src,  
                      char *dst, socklen_t size);
```

DESCRIPTION

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.

RETURN VALUE

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

EINVAL

af was not a valid address family.

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

ATTRIBUTES

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

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?Interface ? Attribute ? Value ?

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?inet_ntop() ? Thread safety ? MT-Safe locale ?

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CONFORMING TO

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

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

EXAMPLES

See inet_pton(3).

SEE ALSO

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

COLOPHON

This page is part of release 5.10 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

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