



## ***Linux Ubuntu 26.04 Manual Pages on command 'inet\_ntop.3'***

***\$ man inet\_ntop.3***

inet\_ntop(3)                      Library Functions Manual                      inet\_ntop(3)

### NAME

inet\_ntop - convert IPv4 and IPv6 addresses from binary to text form

### LIBRARY

Standard C library (libc, -lc)

### SYNOPSIS

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

const char *inet_ntop(socklen_t size;
                      int af, const void *restrict src,
                      char dst[restrict size], 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

EAFNOSUPPORT

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).

|             |               |                |
|-------------|---------------|----------------|
| Interface   | Attribute     | Value          |
| inet_ntop() | Thread safety | MT-Safe locale |

STANDARDS

POSIX.1-2008.

HISTORY

POSIX.1-2001.

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)