

## NAME

arpa/inet.h - definitions for internet operations


## SYNOPSIS

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

## DESCRIPTION

The `<arpa/inet.h>` header shall define the `in_port_t` and `in_addr_t` types as described in [<netinet/in.h>](#).

The `<arpa/inet.h>` header shall define the `in_addr` structure as described in [<netinet/in.h>](#).

The `<arpa/inet.h>` header shall define the `INET_ADDRSTRLEN` [\[IP6\]](#)  and `INET6_ADDRSTRLEN`  macros as described in [<netinet/in.h>](#).

The following shall be declared as functions, or defined as macros, or both. If functions are declared, function prototypes shall be provided.

```
uint32_t htonl(uint32_t);  
uint16_t htons(uint16_t);  
uint32_t ntohl(uint32_t);  
uint16_t ntohs(uint16_t);
```

The `<arpa/inet.h>` header shall define the `uint32_t` and `uint16_t` types as described in [<inttypes.h>](#).

The following shall be declared as functions and may also be defined as macros. Function prototypes shall be provided.

```
in_addr_t    inet_addr(const char *);  
char         *inet_ntoa(struct in_addr);  
const char   *inet_ntop(int, const void *restrict, char *restrict,  
                        socklen_t);  
int          inet_pton(int, const char *restrict, void *restrict);
```

Inclusion of the `<arpa/inet.h>` header may also make visible all symbols from [<netinet/in.h>](#) and [<inttypes.h>](#).

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*The following sections are informative.*

## APPLICATION USAGE

None.

## RATIONALE

None.

## FUTURE DIRECTIONS

None.

## SEE ALSO

[<inttypes.h>](#), [<netinet/in.h>](#)

XSH [htonl](#), [inet\\_addr](#), [inet\\_ntop](#)

## CHANGE HISTORY

First released in Issue 6. Derived from the XNS, Issue 5.2 specification.

The **restrict** keyword is added to the prototypes for [inet\\_ntop\(\)](#) and [inet\\_pton\(\)](#).

## Issue 7

SD5-XBD-ERN-6 is applied.

*End of informative text.*

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