

NAME

IO::Socket::INET - Object interface for AF_INET domain sockets

SYNOPSIS

```
use IO::Socket::INET;
```

DESCRIPTION

IO::Socket::INET provides an object interface to creating and using sockets in the AF_INET domain. It is built upon the IO::Socket interface and inherits all the methods defined by IO::Socket.

CONSTRUCTOR

new ([ARGS])

Creates an IO::Socket::INET object, which is a reference to a newly created symbol (see the Symbol package). new optionally takes arguments, these arguments are in key-value pairs.

In addition to the key-value pairs accepted by IO::Socket, IO::Socket::INET provides.

| | | |
|------------|--|--------------------------------|
| PeerAddr | Remote host address | <hostname>[:<port>] |
| PeerHost | Synonym for PeerAddr | |
| PeerPort | Remote port or service | <service>[(<no>)] <no> |
| LocalAddr | Local host bind address | hostname[:port] |
| LocalHost | Synonym for LocalAddr | |
| LocalPort | Local host bind port | <service>[(<no>)] <no> |
| Proto | Protocol name (or number) | "tcp" "udp" ... |
| Type | Socket type | SOCK_STREAM SOCK_DGRAM ... |
| Listen | Queue size for listen | |
| ReuseAddr | Set SO_REUSEADDR before binding | |
| Reuse | Set SO_REUSEADDR before binding (deprecated, prefer ReuseAddr) | |
| ReusePort | Set SO_REUSEPORT before binding | |
| Broadcast | Set SO_BROADCAST before binding | |
| Timeout | Timeout value for various operations | |
| MultiHomed | Try all addresses for multi-homed hosts | |
| Blocking | Determine if connection will be blocking mode | |

If Listen is defined then a listen socket is created, else if the socket type, which is derived from the protocol, is SOCK_STREAM then connect() is called.

Although it is not illegal, the use of MultiHomed on a socket which is in non-blocking mode is of little use. This is because the first connect will never fail with a timeout as the connect call will not block.

The PeerAddr can be a hostname or the IP-address on the "xx.xx.xx.xx" form. The PeerPort can be a number or a symbolic service name. The service name might be followed by a number in parenthesis which is used if the service is not known by the system. The PeerPort specification can also be embedded in the PeerAddr by preceding it with a ":".

If Proto is not given and you specify a symbolic PeerPort port, then the constructor will try to derive Proto from the service name. As a last resort Proto "tcp" is assumed. The Type parameter will be deduced from Proto if not specified.

If the constructor is only passed a single argument, it is assumed to be a PeerAddr specification.

If Blocking is set to 0, the connection will be in nonblocking mode. If not specified it defaults to 1 (blocking mode).

Examples:

```
$sock = IO::Socket::INET->new(PeerAddr => 'www.perl.org',
```

```
PeerPort => 'http(80)',
Proto    => 'tcp');

$sock = IO::Socket::INET->new(PeerAddr => 'localhost:smtp(25)');

$sock = IO::Socket::INET->new(Listen    => 5,
                              LocalAddr => 'localhost',
                              LocalPort => 9000,
                              Proto     => 'tcp');

$sock = IO::Socket::INET->new('127.0.0.1:25');

$sock = IO::Socket::INET->new(
    PeerPort => 9999,
    PeerAddr => inet_ntoa(INADDR_BROADCAST),
    Proto    => udp,
    LocalAddr => 'localhost',
    Broadcast => 1 )
    or die "Can't bind : $@\n";
```

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE

As of VERSION 1.18 all IO::Socket objects have autoflush turned on by default. This was not the case with earlier releases.

NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE NOTE

METHODS

sockaddr ()

Return the address part of the sockaddr structure for the socket

sockport ()

Return the port number that the socket is using on the local host

sockhost ()

Return the address part of the sockaddr structure for the socket in a text form xx.xx.xx.xx

peeraddr ()

Return the address part of the sockaddr structure for the socket on the peer host

peerport ()

Return the port number for the socket on the peer host.

peerhost ()

Return the address part of the sockaddr structure for the socket on the peer host in a text form xx.xx.xx.xx

SEE ALSO

Socket, *IO::Socket*

AUTHOR

Graham Barr. Currently maintained by the Perl Porters. Please report all bugs to <perlbug@perl.org>.

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