PERL GETSOCKOPT FUNCTION

Description

This function gets the socket options set on SOCKET at the socket implementation level LEVEL for the option OPTNAME. Some sample values for OPTNAME at a socket level are given in Table below −

```
OPTNAME   Result
SO_DEBUG  Get status of recording of debugging information
SO_REUSEADDR  Get status of local address reuse
SO_KEEPALIVE  Get status of keep connections alive
SO_DONTROUTE  Get status of routing bypass for outgoing messages
SO_LINGER  Get status of linger on close if data is present
SO_BROADCAST  Get status of permission to transmit broadcast messages
SO_OOBINLINE  Get status of out-of-band data in band
SO_SNDBUF  Get buffer size for output
SO_RCVBUF  Get buffer size for input
SO_TYPE  Get the type of the socket
SO_ERROR  Get and clear error on the socket
TCP_NODELAY     To disable the Nagle buffering algorithm.
```

What exactly is in the packed string depends in the LEVEL and OPTNAME, consult your system documentation for details.

Syntax

Following is the simple syntax for this function −

```
getsockopt SOCKET, LEVEL, OPTNAME
```

Return Value

This function returns undef on error otherwise option value in scalar context.

Example

Following is the example code showing its basic usage, this will check if Nagle's algorithm is turned on on a socket. But, here you would have to open one socket to provide socked ID in this example −

```perl
#!/usr/bin/perl

use Socket qw(:all);

defined(my $tcp = getprotobyname("tcp"))
   or die "Could not determine the protocol number for tcp";
# my $tcp = IPPROTO_TCP; # Alternative

my $packed = getsockopt($socket, $tcp, TCP_NODELAY)
   or die "Could not query TCP_NODELAY socket option: $!";
my $nodelay = unpack("I", $packed);

print "Nagle's algorithm is turned ", $nodelay ? "off\n" : "on\n";
```

When above code is executed, it produces the following result −