



Linux Ubuntu 26.04 Manual Pages on command 'getpeername.2'

\$ man getpeername.2

getpeername(2) System Calls Manual getpeername(2)

NAME

getpeername - get name of connected peer socket

LIBRARY

Standard C library (libc, -lc)

SYNOPSIS

```
#include <sys/socket.h>
```

```
int getpeername(int sockfd, struct sockaddr *restrict addr,  
                socklen_t *restrict addrlen);
```

DESCRIPTION

getpeername() returns the address of the peer connected to the socket sockfd, in the buffer pointed to by addr. The addrlen argument should be initialized to indicate the amount of space pointed to by addr. On return it contains the actual size of the name returned (in bytes). The name is truncated if the buffer provided is too small.

The returned address is truncated if the buffer provided is too small; in this case, addrlen will return a value greater than was supplied to the call.

RETURN VALUE

On success, zero is returned. On error, -1 is returned, and errno is set to indicate the error.

ERRORS

EBADF The argument sockfd is not a valid file descriptor.

EFAULT The addr argument points to memory not in a valid part of the process address space.

EINVAL addrlen is invalid (e.g., is negative).

ENOBUFS

Insufficient resources were available in the system to perform the operation.

ENOTCONN

The socket is not connected.

ENOTSOCK

The file descriptor sockfd does not refer to a socket.

STANDARDS

POSIX.1-2024.

HISTORY

POSIX.1-2001, SVr4, 4.4BSD (first appeared in 4.2BSD).

NOTES

For stream sockets, once a `connect(2)` has been performed, either socket can call `getpeer?name()` to obtain the address of the peer socket. On the other hand, datagram sockets are connectionless. Calling `connect(2)` on a datagram socket merely sets the peer address for outgoing datagrams sent with `write(2)` or `recv(2)`. The caller of `connect(2)` can use `getpeer?name()` to obtain the peer address that it earlier set for the socket. However, the peer socket is unaware of this information, and calling `getpeername()` on the peer socket will return no useful information (unless a `connect(2)` call was also executed on the peer). Note also that the receiver of a datagram can obtain the address of the sender when using `recvfrom(2)`.

SEE ALSO

`accept(2)`, `bind(2)`, `getsockname(2)`, `ip(7)`, `socket(7)`, `unix(7)`

Linux man-pages 6.17

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`getpeername(2)`