NAME

bindresvport − bind a socket to a privileged IP port

SYNOPSIS

#include <sys/types.h>
#include <netinet/in.h>

int bindresvport(int *sockfd*, **struct sockaddr_in ****sin*);

DESCRIPTION

bindresvport() is used to bind the socket referred to by the file descriptor *sockfd* to a privileged anonymous IP port, that is, a port number arbitrarily selected from the range 512 to 1023.

If the **bind**(2) performed by **bindresvport**() is successful, and *sin* is not NULL, then *sin−>sin_port* returns the port number actually allocated.

sin can be NULL, in which case *sin−>sin_family* is implicitly taken to be **AF_INET**. However, in this case, **bindresvport**() has no way to return the port number actually allocated. (This information can later be obtained using **getsockname**(2).)

RETURN VALUE

bindresvport() returns 0 on success; otherwise −1 is returned and *errno* set to indicate the cause of the error.

ERRORS

bindresvport() can fail for any of the same reasons as **bind**(2). In addition, the following errors may occur:

EACCES
The calling process was not privileged (on Linux: the calling process did not have the **CAP_NET_BIND_SERVICE** capability in the user namespace governing its network namespace).

EADDRINUSE
All privileged ports are in use.

EAFNOSUPPORT (**EPFNOSUPPORT** in glibc 2.7 and earlier)
sin is not NULL and *sin->sin_family* is not **AF_INET**.

ATTRIBUTES

For an explanation of the terms used in this section, see **attributes**(7).

Interface	Attribute	Value
bindresvport()	Thread safety	glibc >= 2.17: MT-Safe glibc < 2.17: MT-Unsafe

The **bindresvport**() function uses a static variable that was not protected by a lock before glibc 2.17, rendering the function MT-Unsafe.

CONFORMING TO

Not in POSIX.1. Present on the BSDs, Solaris, and many other systems.

NOTES

Unlike some **bindresvport**() implementations, the glibc implementation ignores any value that the caller supplies in *sin−>sin_port*.

SEE ALSO

bind(2), **getsockname**(2)

COLOPHON

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