

**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 a socket descriptor 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 caller did not have superuser privilege (to be precise: the **CAP\_NET\_BIND\_SERVICE** capability is required).

**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****Multithreading (see [pthreads\(7\)](#))**

Before glibc 2.17, the **bindresvport()** function uses a static variable that is not protected, so it is not thread-safe.

Since glibc 2.17, the **bindresvport()** function uses a lock to protect the static variable, so it is thread-safe.

**CONFORMING TO**

Not in POSIX.1-2001. 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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