



Rocky Enterprise Linux 9.2 Manual Pages on command 'bindresvport.3'

\$ man bindresvport.3

BINDRESVPORT(3) Linux Programmer's Manual BINDRESVPORT(3)

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	?
------------	------------	--------	---

??

? <code>bindresvport()</code>	? Thread safety	? glibc \geq 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

This page is part of release 5.10 of the Linux man-pages project. A

description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

2017-09-15

BINDRESVPORT(3)