

**NAME**

**bindresvport**, **bindresvport\_sa** - bind a socket to a privileged IP port

**LIBRARY**

Standard C Library (libc, -lc)

**SYNOPSIS**

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

```
#include <rpc/rpc.h>
```

*int*

```
bindresvport(int sd, struct sockaddr_in *sin);
```

*int*

```
bindresvport_sa(int sd, struct sockaddr *sa);
```

**DESCRIPTION**

The **bindresvport()** and **bindresvport\_sa()** functions are used to bind a socket descriptor to a privileged IP port, that is, a port number in the range 0-1023.

If *sin* is a pointer to a *struct sockaddr\_in* then the appropriate fields in the structure should be defined. Note that *sin->sin\_family* must be initialized to the address family of the socket, passed by *sd*. If *sin->sin\_port* is '0' then an anonymous port (in the range 600-1023) will be chosen, and if **bind(2)** is successful, the *sin->sin\_port* will be updated to contain the allocated port.

If *sin* is the NULL pointer, an anonymous port will be allocated (as above). However, there is no way for **bindresvport()** to return the allocated port in this case.

Only root can bind to a privileged port; this call will fail for any other users.

Function prototype of **bindresvport()** is biased to AF\_INET socket. The **bindresvport\_sa()** function acts exactly the same, with more neutral function prototype. Note that both functions behave exactly the same, and both support AF\_INET6 sockets as well as AF\_INET sockets.

**RETURN VALUES**

The **bindresvport()** function returns the value 0 if successful; otherwise the value -1 is returned and the global variable *errno* is set to indicate the error.

**ERRORS**

[EPFNOSUPPORT] If second argument was supplied, and address family did not match between

arguments.

The **bindresvport()** function may also fail and set *errno* for any of the errors specified for the calls `bind(2)`, `getsockopt(2)`, or `setsockopt(2)`.

**SEE ALSO**

`bind(2)`, `getsockopt(2)`, `setsockopt(2)`, `ip(4)`