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

\$ man sockatmark.3

SOCKATMARK(3)

Linux Programmer's Manual

SOCKATMARK(3)

NAME

sockatmark - determine whether socket is at out-of-band mark

SYNOPSIS

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

```
int sockatmark(int sockfd);
```

Feature Test Macro Requirements for glibc (see `feature_test_macros(7)`):

```
sockatmark(): _POSIX_C_SOURCE >= 200112L
```

DESCRIPTION

`sockatmark()` returns a value indicating whether or not the socket referred to by the file descriptor `sockfd` is at the out-of-band mark. If the socket is at the mark, then 1 is returned; if the socket is not at the mark, 0 is returned. This function does not remove the out-of-band mark.

RETURN VALUE

A successful call to `sockatmark()` returns 1 if the socket is at the out-of-band mark, or 0 if it is not. On error, -1 is returned and `errno` is set to indicate the error.

ERRORS

`EBADF` `sockfd` is not a valid file descriptor.

`EINVAL` `sockfd` is not a file descriptor to which `sockatmark()` can be applied.

VERSIONS

`sockatmark()` was added to glibc in version 2.2.4.

ATTRIBUTES

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

??

?Interface ? Attribute ? Value ?

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?sockatmark() ? Thread safety ? MT-Safe ?

??

CONFORMING TO

POSIX.1-2001, POSIX.1-2008.

NOTES

If `sockatmark()` returns 1, then the out-of-band data can be read using the `MSG_OOB` flag of `recv(2)`.

Out-of-band data is supported only on some stream socket protocols.

`sockatmark()` can safely be called from a handler for the `SIGURG` signal.

`sockatmark()` is implemented using the `SIOCATMARK` `ioctl(2)` operation.

BUGS

Prior to glibc 2.4, `sockatmark()` did not work.

EXAMPLES

The following code can be used after receipt of a `SIGURG` signal to read (and discard) all data up to the mark, and then read the byte of data at the mark:

```
char buf[BUF_LEN];
char oobdata;
int atmark, s;
for (;;) {
    atmark = sockatmark(sockfd);
    if (atmark == -1) {
        perror("sockatmark");
        break;
    }
    if (atmark)
        break;
    s = read(sockfd, buf, BUF_LEN);
    if (s == -1)
        perror("read");
    if (s <= 0)
```

```
        break;  
    }  
  
    if (atmark == 1) {  
        if (recv(sockfd, &oobdata, 1, MSG_OOB) == -1) {  
            perror("recv");  
  
            ...  
        }  
    }  
}
```

SEE ALSO

fcntl(2), recv(2), send(2), tcp(7)

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/>.

Linux

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