



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

\$ man socketmark.3

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

NAME

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

SYNOPSIS

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

```
int socketmark(int sockfd);
```

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

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

DESCRIPTION

socketmark() 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 socketmark() 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

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("socketatmark");
    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

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