Technical Standard

Austin/89

The Open Group
The Institute of Electrical and Electronics Engineers, Inc.
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Proposed corrections for addition of sockatmark() into the Austin Group specifications.

1.1 General Changes
Add the following function to the table in the System Interfaces volume of IEEE Std 1003.1-200x, Section 2.4.3, Signal Actions (the set of functions that shall either be reentrant or non-interruptible by signals and shall be async-signal-safe):

sockatmark()

1.2 Header Changes
The following header file reference pages will need the listed interfaces added to them.
Add the prototype for sockatmark() to the <sys/socket.h> header:

int sockatmark(int);

1.3 Reference Page Changes
The following new reference pages are introduced.
NAME
sockatmark — determine whether a socket is at the out-of-band mark

SYNOPSIS
#include <sys/socket.h>
int sockatmark(int s);

DESCRIPTION
The sockatmark() function shall determine whether the socket specified by the descriptor s is at
the out-of-band data mark (see the System Interfaces volume of IEEE Std 1003.1-200x, Section
2.10.12, Socket Out-of-Band Data State). If the protocol for the socket supports out-of-band data
by marking the stream with an out-of-band data mark, the sockatmark() function shall return 1
when all data preceding the mark has been read and the out-of-band data mark is the first
element in the receive queue. The sockatmark() function shall not remove the mark from the
stream. The use of this function between receive operations allows an application to determine
which received data precedes the out-of-band data and which follows the out-of-band data.

RETURN VALUE
Upon successful completion, the sockatmark() function shall return a value indicating whether
the socket is at an out-of-band data mark. If the protocol has marked the data stream and all data
preceding the mark has been read, the return value shall be 1; if there is no mark, or if data
precedes the mark in the receive queue, the sockatmark() function shall return 0. Otherwise, it
shall return a value of −1 and set errno to indicate the error.

ERRORS
The sockatmark() function shall fail if:
[EBADF] The s argument is not a valid file descriptor.
[ENOTTY] The s argument does not specify a descriptor for a socket.

EXAMPLES
None.

APPLICATION USAGE
None.

RATIONALE
None.

FUTURE DIRECTIONS
None.

SEE ALSO
recv(), recvmsg()

CHANGE HISTORY
Introduced in Issue 6.