NAME

gethostname, sethostname − get/set hostname

SYNOPSIS

#include <unistd.h>

int gethostname(char *_name_, size_t _len_);
int sethostname(const char *_name_, size_t _len_);

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

gethostname(): _BSD_SOURCE || _XOPEN_SOURCE >= 500
sethostname(): _BSD_SOURCE || (_XOPEN_SOURCE && _XOPEN_SOURCE < 500)

DESCRIPTION

These system calls are used to access or to change the hostname of the current processor.

sethostname() sets the hostname to the value given in the character array *name*. The *len* argument specifies the number of bytes in *name*. (Thus, *name* does not require a terminating null byte.)

gethostname() returns the null-terminated hostname in the character array *name*, which has a length of *len* bytes. If the null-terminated hostname is too large to fit, then the name is truncated, and no error is returned (but see NOTES below). POSIX.1-2001 says that if such truncation occurs, then it is unspecified whether the returned buffer includes a terminating null byte.

RETURN VALUE

On success, zero is returned. On error, −1 is returned, and *errno* is set appropriately.

ERRORS

EFAULT
name is an invalid address.

EINVAL
len is negative or, for **sethostname**(), *len* is larger than the maximum allowed size.

ENAMETOOLONG
(glibc **gethostname**()) *len* is smaller than the actual size. (Before version 2.1, glibc uses **EINVAL** for this case.)

EPERM
For **sethostname**(), the caller did not have the **CAP_SYS_ADMIN** capability.

CONFORMING TO

SVr4, 4.4BSD (these interfaces first appeared in 4.2BSD). POSIX.1-2001 specifies **gethostname**() but not **sethostname**().

NOTES

SUSv2 guarantees that "Host names are limited to 255 bytes". POSIX.1-2001 guarantees that "Host names (not including the terminating null byte) are limited to **HOST_NAME_MAX** bytes". On Linux, **HOST_NAME_MAX** is defined with the value 64, which has been the limit since Linux 1.0 (earlier kernels imposed a limit of 8 bytes).

Glibc Notes

The GNU C library does not employ the **gethostname**() system call; instead, it implements **gethostname**() as a library function that calls **uname**(2) and copies up to *len* bytes from the returned *nodename* field into *name*. Having performed the copy, the function then checks if the length of the *nodename* was greater than or equal to *len*, and if it is, then the function returns −1 with *errno* set to **ENAMETOOLONG**; in this case, no null-terminator is included in the returned *name*.

Versions of glibc before 2.2 handle the case where the length of the *nodename* was greater than or equal to

len differently: nothing is copied into *name* and the function returns −1 with *errno* set to **ENAMETOOLONG**.

SEE ALSO

getdomainname(2), **setdomainname**(2), **uname**(2)

COLOPHON

This page is part of release 3.22 of the Linux *man-pages* project. A description of the project, and information about reporting bugs, can be found at http://www.kernel.org/doc/man-pages/.