

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():

```
Since glibc 2.12: _BSD_SOURCE || _XOPEN_SOURCE >= 500
|| /* Since glibc 2.12: */ _POSIX_C_SOURCE >= 200112L
```

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).

C library/kernel ABI differences

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, a terminating null byte is not 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

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