NAME

gethostid, sethostid − get or set the unique identifier of the current host

SYNOPSIS

#include <unistd.h>

long gethostid(void);
int sethostid(long *hostid***);**

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

```
gethostid():
    _BSD_SOURCE || _XOPEN_SOURCE >= 500
sethostid():
  Since glibc 2.21:
    _DEFAULT_SOURCE
  In glibc 2.19 and 2.20:
    _DEFAULT_SOURCE || (_XOPEN_SOURCE && _XOPEN_SOURCE < 500)
  Up to and including glibc 2.19:
    _BSD_SOURCE || (_XOPEN_SOURCE && _XOPEN_SOURCE < 500)
```

DESCRIPTION

gethostid() and **sethostid**() respectively get or set a unique 32-bit identifier for the current machine. The 32-bit identifier is intended to be unique among all UNIX systems in existence. This normally resembles the Internet address for the local machine, as returned by **gethostbyname**(3), and thus usually never needs to be set.

The **sethostid**() call is restricted to the superuser.

RETURN VALUE

gethostid() returns the 32-bit identifier for the current host as set by **sethostid**().

On success, **sethostid**() returns 0; on error, −1 is returned, and *errno* is set to indicate the error.

ERRORS

sethostid() can fail with the following errors:

EACCES
The caller did not have permission to write to the file used to store the host ID.

EPERM
The calling process's effective user or group ID is not the same as its corresponding real ID.

ATTRIBUTES

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

Interface	Attribute	Value
gethostid()	Thread safety	MT-Safe hostid env locale
sethostid()	Thread safety	MT-Unsafe const:hostid

CONFORMING TO

4.2BSD; these functions were dropped in 4.4BSD. SVr4 includes **gethostid**() but not **sethostid**().

POSIX.1-2001 and POSIX.1-2008 specify **gethostid**() but not **sethostid**().

NOTES

In the glibc implementation, the *hostid* is stored in the file */etc/hostid*. (In glibc versions before 2.2, the file */var/adm/hostid* was used.)

In the glibc implementation, if **gethostid**() cannot open the file containing the host ID, then it obtains the hostname using **gethostname**(2), passes that hostname to **gethostbyname_r**(3) in order to obtain the host's IPv4 address, and returns a value obtained by bit-twiddling the IPv4 address. (This value may not be unique.)

BUGS

It is impossible to ensure that the identifier is globally unique.

SEE ALSO

hostid(1), **gethostbyname**(3)

COLOPHON

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