

**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)**):

```
sethostid(): _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.

**CONFORMING TO**

4.2BSD; these functions were dropped in 4.4BSD. SVr4 includes **gethostid**() but not **sethostid**(). POSIX.1-2001 specifies **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**

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/>.