



## ***Linux Ubuntu 22.4.5 Manual Pages on command 'gethostid.2'***

### ***\$ man gethostid.2***

GETHOSTID(3)                      Linux Programmer's Manual                      GETHOSTID(3)

#### 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)`.

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?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

This page is part of release 5.05 of the Linux man-pages project. A description of the project, information about reporting bugs, and the latest version of this page, can be found at <https://www.kernel.org/doc/man-pages/>.

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