



Rocky Enterprise Linux 9.2 Manual Pages on command 'gethostid.3'

C:\>man gethostid.3

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)`.

??

?Interface ? Attribute ? Value ?

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?`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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