Red Hat Enterprise Linux Release 9.2 Manual Pages on 'gethostid.3' command

$ 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 was intended

    to be unique among all UNIX systems in existence. This normally resem?

    bles the Internet address for the local machine, as returned by geth?

ostbyname(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 at?

tributes(7).

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?Interface   ? Attribute   ? Value   ?

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?gethostid() ? Thread safety ? MT-Safe hostid env locale ?

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?sethostid() ? Thread safety ? MT-Unsafe const:hostid   ?

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CONFORMING TO

4.2BSD; these functions were dropped in 4.4BSD. SVr4 includes geth?

ostid() 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 con?

taining 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 5.10 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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