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

*$ 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 resembles the Internet address for the local machine, as re?

    turned 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 correspond‐ ing 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 ver‐ sions 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 gethostby‐ name_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/.