



Red Hat Enterprise Linux Release 9.2 Manual Pages on 'id.1p' command

\$ man id.1p

ID(1P) POSIX Programmer's Manual ID(1P)

PROLOG

This manual page is part of the POSIX Programmer's Manual. The Linux implementation of this interface may differ (consult the corresponding Linux manual page for details of Linux behavior), or the interface may not be implemented on Linux.

NAME

id ? return user identity

SYNOPSIS

id [user]
id -G [-n] [user]
id -g [-nr] [user]
id -u [-nr] [user]

DESCRIPTION

If no user operand is provided, the id utility shall write the user and group IDs and the corresponding user and group names of the invoking process to standard output. If the effective and real IDs do not match, both shall be written. If multiple groups are supported by the underlying system (see the description of {NGROUPS_MAX} in the System Interfaces volume of POSIX.1?2017), the supplementary group affiliations of the invoking process shall also be written.

If a user operand is provided and the process has appropriate privileges, the user and group IDs of the selected user shall be written. In

this case, effective IDs shall be assumed to be identical to real IDs.

If the selected user has more than one allowable group membership listed in the group database, these shall be written in the same manner as the supplementary groups described in the preceding paragraph.

OPTIONS

The `id` utility shall conform to the Base Definitions volume of POSIX.1?2017, Section 12.2, Utility Syntax Guidelines.

The following options shall be supported:

- G Output all different group IDs (effective, real, and supplementary) only, using the format "%u\n". If there is more than one distinct group affiliation, output each such affiliation, using the format "%u", before the <newline> is output.
- g Output only the effective group ID, using the format "%u\n".
- n Output the name in the format "%s" instead of the numeric ID using the format "%u".
- r Output the real ID instead of the effective ID.
- u Output only the effective user ID, using the format "%u\n".

OPERANDS

The following operand shall be supported:

`user` The login name for which information is to be written.

STDIN

Not used.

INPUT FILES

None.

ENVIRONMENT VARIABLES

The following environment variables shall affect the execution of `id`:

`LANG` Provide a default value for the internationalization variables that are unset or null. (See the Base Definitions volume of POSIX.1?2017, Section 8.2, Internationalization Variables for the precedence of internationalization variables used to determine the values of locale categories.)

`LC_ALL` If set to a non-empty string value, override the values of

all the other internationalization variables.

LC_CTYPE Determine the locale for the interpretation of sequences of bytes of text data as characters (for example, single-byte as opposed to multi-byte characters in arguments).

LC_MESSAGES

Determine the locale that should be used to affect the format and contents of diagnostic messages written to standard error and informative messages written to standard output.

NLSPATH Determine the location of message catalogs for the processing of **LC_MESSAGES**.

ASYNCHRONOUS EVENTS

Default.

STDOUT

The following formats shall be used when the **LC_MESSAGES** locale category specifies the POSIX locale. In other locales, the strings `uid`, `gid`, `euid`, `egid`, and `groups` may be replaced with more appropriate strings corresponding to the locale.

```
"uid=%u(%s) gid=%u(%s)\n", <real user ID>, <user-name>,\n    <real group ID>, <group-name>
```

If the effective and real user IDs do not match, the following shall be inserted immediately before the `\n` character in the previous format:

```
" euid=%u(%s)"
```

with the following arguments added at the end of the argument list:

```
<effective user ID>, <effective user-name>
```

If the effective and real group IDs do not match, the following shall be inserted directly before the `\n` character in the format string (and after any addition resulting from the effective and real user IDs not matching):

```
" egid=%u(%s)"
```

with the following arguments added at the end of the argument list:

```
<effective group-ID>, <effective group name>
```

If the process has supplementary group affiliations or the selected user is allowed to belong to multiple groups, the first shall be added

directly before the <newline> in the format string:

```
" groups=%u(%s)"
```

with the following arguments added at the end of the argument list:

```
<supplementary group ID>, <supplementary group name>
```

and the necessary number of the following added after that for any re?

maining supplementary group IDs:

```
",%u(%s)"
```

and the necessary number of the following arguments added at the end of the argument list:

```
<supplementary group ID>, <supplementary group name>
```

If any of the user ID, group ID, effective user ID, effective group ID, or supplementary/multiple group IDs cannot be mapped by the system into printable user or group names, the corresponding "(%s)" and name argu? ment shall be omitted from the corresponding format string.

When any of the options are specified, the output format shall be as described in the OPTIONS section.

STDERR

The standard error shall be used only for diagnostic messages.

OUTPUT FILES

None.

EXTENDED DESCRIPTION

None.

EXIT STATUS

The following exit values shall be returned:

0 Successful completion.

>0 An error occurred.

CONSEQUENCES OF ERRORS

Default.

The following sections are informative.

APPLICATION USAGE

Output produced by the -G option and by the default case could poten? tially produce very long lines on systems that support large numbers of supplementary groups. (On systems with user and group IDs that are

32-bit integers and with group names with a maximum of 8 bytes per name, 93 supplementary groups plus distinct effective and real group and user IDs could theoretically overflow the 2048-byte {LINE_MAX} text file line limit on the default output case. It would take about 186 supplementary groups to overflow the 2048-byte barrier using id -G). This is not expected to be a problem in practice, but in cases where it is a concern, applications should consider using fold -s before post-processing the output of id.

EXAMPLES

None.

RATIONALE

The functionality provided by the 4 BSD groups utility can be simulated using:

```
id -Gn [ user ]
```

The 4 BSD command groups was considered, but it was not included because it did not provide the functionality of the id utility of the SVID. Also, it was thought that it would be easier to modify id to provide the additional functionality necessary to systems with multiple groups than to invent another command.

The options -u, -g, -n, and -r were added to ease the use of id with shell commands substitution. Without these options it is necessary to use some preprocessor such as sed to select the desired piece of information. Since output such as that produced by:

```
id -u -n
```

is frequently wanted, it seemed desirable to add the options.

FUTURE DIRECTIONS

None.

SEE ALSO

fold, logname, who

The Base Definitions volume of POSIX.1?2017, Chapter 8, Environment Variables, Section 12.2, Utility Syntax Guidelines

The System Interfaces volume of POSIX.1?2017, getgid(), getgroups(), getuid()

COPYRIGHT

Portions of this text are reprinted and reproduced in electronic form from IEEE Std 1003.1-2017, Standard for Information Technology -- Portable Operating System Interface (POSIX), The Open Group Base Specifications Issue 7, 2018 Edition, Copyright (C) 2018 by the Institute of Electrical and Electronics Engineers, Inc and The Open Group. In the event of any discrepancy between this version and the original IEEE and The Open Group Standard, the original IEEE and The Open Group Standard is the referee document. The original Standard can be obtained online at <http://www.opengroup.org/unix/online.html> .

Any typographical or formatting errors that appear in this page are most likely to have been introduced during the conversion of the source files to man page format. To report such errors, see https://www.kernel.org/doc/man-pages/reporting_bugs.html .

IEEE/The Open Group

2017

ID(1P)