



Linux Ubuntu 26.04 Manual Pages on command 'runuser.1'

\$ man runuser.1

RUNUSER(1) User Commands RUNUSER(1)

NAME

runuser - run a command with substitute user and group ID

SYNOPSIS

runuser [options] -u user [--] command [argument...]

runuser [options] [-] [user [argument...]]

DESCRIPTION

runuser can be used to run commands with a substitute user and group ID. If the option -u is not given, runuser falls back to su-compatible semantics and a shell is executed. The difference between the commands runuser and su is that runuser does not ask for a password (because it may be executed by the root user only) and it uses a different PAM configuration. The command runuser does not have to be installed with set-user-ID permissions.

If the PAM session is not required, then the recommended solution is to use the setpriv(1) command.

When called without arguments, runuser defaults to running an interactive shell as root.

For backward compatibility, runuser defaults to not changing the current directory and to setting only the environment variables HOME and SHELL (plus USER and LOGNAME if the target user is not root). This version of runuser uses PAM for session management.

Note that runuser in all cases use PAM (pam_getenvlist()) to do the final environment modification. Command-line options such as --login and --preserve-environment affect the environment before it is modified by PAM.

Since version 2.38 runuser resets process resource limits RLIMIT_NICE, RLIMIT_RTPRIO,

RLIMIT_FSIZE, RLIMIT_AS and RLIMIT_NOFILE.

OPTIONS

-c, --command=command

Pass command to the shell with the -c option.

-f, --fast

Pass -f to the shell, which may or may not be useful, depending on the shell.

-g, --group=group

The primary group to be used. This option is allowed for the root user only.

-G, --supp-group=group

Specify a supplementary group. This option is available to the root user only. The first specified supplementary group is also used as a primary group if the option --group is not specified.

-, -l, --login

Start the shell as a login shell with an environment similar to a real login:

? clears all the environment variables except for TERM and variables specified by

--whitelist-environment

? initializes the environment variables HOME, SHELL, USER, LOGNAME, and PATH

? changes to the target user's home directory

? sets argv[0] of the shell to '-' in order to make the shell a login shell

-m, -p, --preserve-environment

Preserve the entire environment, i.e., do not set HOME, SHELL, USER or LOGNAME. The option is ignored if the option --login is specified.

-P, --pty

Create a pseudo-terminal for the session. The independent terminal provides better security as the user does not share a terminal with the original session. This can be used to avoid TIOCSTI ioctl terminal injection and other security attacks against terminal file descriptors. The entire session can also be moved to the background (e.g., runuser --pty -u user -- command &). If the pseudo-terminal is enabled, then runuser works as a proxy between the sessions (sync stdin and stdout).

This feature is mostly designed for interactive sessions. If the standard input is not a terminal, but for example a pipe (e.g., echo "date" | runuser --pty -u user), then the ECHO flag for the pseudo-terminal is disabled to avoid messy output.

-s, --shell=shell

Run the specified shell instead of the default. The shell to run is selected according to the following rules, in order:

- ? the shell specified with --shell
- ? the shell specified in the environment variable SHELL if the --preserve-environment option is used
- ? the shell listed in the passwd entry of the target user
- ? /bin/sh

If the target user has a restricted shell (i.e., not listed in /etc/shells), then the --shell option and the SHELL environment variables are ignored unless the calling user is root.

--session-command=command

Same as -c, but do not create a new session. (Discouraged.)

-T, --no-pty

Do not create a pseudo-terminal, opposite of --pty and -P. Note that running without a pseudo-terminal opens the security risk of privilege escalation through TIOCSTI/TIOCLINUX ioctl command injection.

-u, --user=user

Run command with the effective user ID and group ID of the user name user.

-w, --whitelist-environment=list

Don't reset the environment variables specified in the comma-separated list when clearing the environment for --login. The whitelist is ignored for the environment variables HOME, SHELL, USER, LOGNAME, and PATH.

-h, --help

Display help text and exit.

-V, --version

Display version and exit.

CONFIG FILES

runuser reads the /etc/default/runuser and /etc/login.defs configuration files. The following configuration items are relevant for runuser:

ENV_PATH (string)

Defines the PATH environment variable for a regular user. The default value is /usr/local/bin:/bin:/usr/bin.

ENV_ROOTPATH (string), ENV_SUPATH (string)

Defines the PATH environment variable for root. ENV_SUPATH takes precedence. The default value is /usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/bin.

ALWAYS_SET_PATH (boolean)

If set to yes and --login and --preserve-environment were not specified runuser initializes PATH.

The environment variable PATH may be different on systems where /bin and /sbin are merged into /usr; this variable is also affected by the --login command-line option and the PAM system setting (e.g., pam_env(8)).

EXIT STATUS

runuser normally returns the exit status of the command it executed. If the command was killed by a signal, runuser returns the number of the signal plus 128.

Exit status generated by runuser itself:

1

Generic error before executing the requested command

126

The requested command could not be executed

127

The requested command was not found

FILES

/etc/pam.d/runuser

default PAM configuration file

/etc/pam.d/runuser-l

PAM configuration file if --login is specified

/etc/default/runuser

runuser specific logindef config file

/etc/login.defs

global logindef config file

HISTORY

This runuser command was derived from coreutils' su, which was based on an implementation by David MacKenzie, and the Fedora runuser command by Dan Walsh.

SEE ALSO

setpriv(1), su(1), login.defs(5), shells(5), pam(8)

REPORTING BUGS

For bug reports, use the issue tracker <<https://github.com/util-linux/util-linux/issues>>.

AVAILABILITY

The runuser command is part of the util-linux package which can be downloaded from Linux

Kernel Archive <<https://www.kernel.org/pub/linux/utils/util-linux/>>.

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