NAME

su - change user ID or become superuser

SYNOPSIS

su [*options*] [*username*]

DESCRIPTION

The **su** command is used to become another user during a login session. Invoked without a **username**, **su** defaults to becoming the superuser. The optional argument **-** may be used to provide an environment similar to what the user would expect had the user logged in directly.

Additional arguments may be provided after the username, in which case they are supplied to the user's login shell. In particular, an argument of **-c** will cause the next argument to be treated as a command by most command interpreters. The command will be executed by the shell specified in /etc/passwd for the target user.

You can use the **--** argument to separate **su** options from the arguments supplied to the shell.

The user will be prompted for a password, if appropriate. Invalid passwords will produce an error message. All attempts, both valid and invalid, are logged to detect abuse of the system.

The current environment is passed to the new shell. The value of **$PATH** is reset to /bin:/usr/bin for normal users, or /sbin:/bin:/usr/sbin:/usr/bin for the superuser. This may be changed with the **ENV_PATH** and **ENV_SUPATH** definitions in /etc/login.defs.

A subsystem login is indicated by the presence of a "*" as the first character of the login shell. The given home directory will be used as the root of a new file system which the user is actually logged into.

OPTIONS

The options which apply to the **su** command are:

-c, **--command** *COMMAND*
Specify a command that will be invoked by the shell using its **-c**.

The executed command will have no controlling terminal. This option cannot be used to execute interactive programs which need a controlling TTY.

-, **-l**, **--login**
Provide an environment similar to what the user would expect had the user logged in directly.

When **-** is used, it must be specified before any **username**. For portability it is recommended to use it as last option, before any **username**. The other forms (**-l** and **--login**) do not have this restriction.

-s, **--shell** *SHELL*
The shell that will be invoked.

The invoked shell is chosen from (highest priority first):

The shell specified with --shell.

If **--preserve-environment** is used, the shell specified by the **$SHELL** environment variable.

The shell indicated in the /etc/passwd entry for the target user.

/bin/sh if a shell could not be found by any above method.

If the target user has a restricted shell (i.e. the shell field of this user's entry in /etc/passwd is not listed in /etc/shells), then the **--shell** option or the **$SHELL** environment variable won't be taken into account, unless **su** is called by root.

-m, **-p**, **--preserve-environment**
Preserve the current environment, except for:

$PATH
reset according to the /etc/login.defs options **ENV_PATH** or **ENV_SUPATH** (see below);

$IFS

reset to “<space><tab><newline>”, if it was set.

If the target user has a restricted shell, this option has no effect (unless **su** is called by root).

Note that the default behavior for the environment is the following:

The **$HOME**, **$SHELL**, **$USER**, **$LOGNAME**, **$PATH**, and **$IFS** environment variables are reset.

If **--login** is not used, the environment is copied, except for the variables above.

If **--login** is used, the **$TERM**, **$COLORTERM**, **$DISPLAY**, and **$XAUTHORITY** environment variables are copied if they were set.

Other environments might be set by PAM modules.

CAVEATS

This version of **su** has many compilation options, only some of which may be in use at any particular site.

CONFIGURATION

The following configuration variables in /etc/login.defs change the behavior of this tool:

CONSOLE_GROUPS (string)
List of groups to add to the user's supplementary groups set when logging in on the console (as determined by the CONSOLE setting). Default is none.

Use with caution - it is possible for users to gain permanent access to these groups, even when not logged in on the console.

DEFAULT_HOME (boolean)
Indicate if login is allowed if we can't cd to the home directory. Default is no.

If set to *yes*, the user will login in the root (/) directory if it is not possible to cd to her home directory.

ENV_PATH (string)
If set, it will be used to define the PATH environment variable when a regular user login. The value is a colon separated list of paths (for example */bin:/usr/bin*) and can be preceded by *PATH=*. The default value is *PATH=/bin:/usr/bin*.

ENV_SUPATH (string)
If set, it will be used to define the PATH environment variable when the superuser login. The value is a colon separated list of paths (for example */sbin:/bin:/usr/sbin:/usr/bin*) and can be preceded by *PATH=*. The default value is *PATH=/sbin:/bin:/usr/sbin:/usr/bin*.

SULOG_FILE (string)
If defined, all su activity is logged to this file.

SU_NAME (string)
If defined, the command name to display when running "su -". For example, if this is defined as "su" then a "ps" will display the command is "-su". If not defined, then "ps" would display the name of the shell actually being run, e.g. something like "-sh".

SYSLOG_SU_ENAB (boolean)
Enable "syslog" logging of **su** activity - in addition to sulog file logging.

FILES

/etc/passwd
User account information.

/etc/shadow
Secure user account information.

/etc/login.defs
Shadow password suite configuration.

EXIT VALUES

On success, **su** returns the exit value of the command it executed.

If this command was terminated by a signal, **su** returns the number of this signal plus 128.

If su has to kill the command (because it was asked to terminate, and the command did not terminate in time), **su** returns 255.

Some exit values from **su** are independent from the executed command:

0
: success (**--help** only)

1
: System or authentication failure

126
: The requested command was not found

127
: The requested command could not be executed

SEE ALSO

login(1), **login.defs(5)**, **sg(1)**, **sh(1)**.