

**NAME**

**su** - substitute user identity

**SYNOPSIS**

**su** [-] [-c *class*] [-f*lms*] [*login* [*args*]]

**DESCRIPTION**

The **su** utility requests appropriate user credentials via PAM and switches to that user ID (the default user is the superuser). A shell is then executed.

PAM is used to set the policy **su**(1) will use. In particular, by default only users in the "wheel" group can switch to UID 0 ("root"). This group requirement may be changed by modifying the "pam\_group" section of */etc/pam.d/su*. See **pam\_group**(8) for details on how to modify this setting.

By default, the environment is unmodified with the exception of **USER**, **HOME**, and **SHELL**. **HOME** and **SHELL** are set to the target login's default values. **USER** is set to the target login, unless the target login has a user ID of 0, in which case it is unmodified. The invoked shell is the one belonging to the target login. This is the traditional behavior of **su**. Resource limits and session priority applicable to the original user's login class (see **login.conf**(5)) are also normally retained unless the target login has a user ID of 0.

The options are as follows:

- c class** Use the settings of the specified login class. The login class must be defined in **login.conf**(5). Only allowed for the super-user.
- f** If the invoked shell is **csh**(1), this option prevents it from reading the ".*shrc*" file.
- l** Simulate a full login. The environment is discarded except for **HOME**, **SHELL**, **PATH**, **TERM**, and **USER**. **HOME** and **SHELL** are modified as above. **USER** is set to the target login. **PATH** is set to *"/bin:/usr/bin"*. **TERM** is imported from your current environment. Environment variables may be set or overridden from the login class capabilities database according to the class of the target login. The invoked shell is the target login's, and **su** will change directory to the target login's home directory. Resource limits and session priority are modified to that for the target account's login class.
- (no letter) The same as **-l**.
- m** Leave the environment unmodified. The invoked shell is your login shell, and no directory changes are made. As a security precaution, if the target user's shell is a non-standard shell (as

defined by `getusershell(3)`) and the caller's real uid is non-zero, **su** will fail.

- s** Set the MAC label to the user's default label as part of the user credential setup. Setting the MAC label may fail if the MAC label of the invoking process is not sufficient to transition to the user's default MAC label. If the label cannot be set, **su** will fail.

The **-l** (or **-**) and **-m** options are mutually exclusive; the last one specified overrides any previous ones.

If the optional *args* are provided on the command line, they are passed to the login shell of the target login. Note that all command line arguments before the target login name are processed by **su** itself, everything after the target login name gets passed to the login shell.

By default (unless the prompt is reset by a startup file) the super-user prompt is set to `"#"` to remind one of its awesome power.

## ENVIRONMENT

Environment variables used by **su**:

**HOME** Default home directory of real user ID unless modified as specified above.

**PATH** Default search path of real user ID unless modified as specified above.

**TERM** Provides terminal type which may be retained for the substituted user ID.

**USER** The user ID is always the effective ID (the target user ID) after an **su** unless the user ID is 0 (root).

## FILES

*/etc/pam.d/su* PAM configuration for **su**.

## EXAMPLES

```
su -m operator -c poweroff
```

Starts a shell as user `operator`, and runs the command `poweroff`. You will be asked for `operator`'s password unless your real UID is 0. Note that the **-m** option is required since user `"operator"` does not have a valid shell by default. In this example, **-c** is passed to the shell of the user `"operator"`, and is not interpreted as an argument to **su**.

```
su -m operator -c 'shutdown -p now'
```

Same as above, but the target command consists of more than a single word and hence is quoted for use with the **-c** option being passed to the shell. (Most shells expect the argument to **-c** to be a single word).

`su -m -c staff operator -c 'shutdown -p now'`

Same as above, but the target command is run with the resource limits of the login class "staff".

Note: in this example, the first `-c` option applies to `su` while the second is an argument to the shell being invoked.

`su -l foo`

Simulate a login for user foo.

`su - foo`

Same as above.

`su -` Simulate a login for root.

## SEE ALSO

`csh(1)`, `sh(1)`, `group(5)`, `login.conf(5)`, `passwd(5)`, `environ(7)`, `pam_group(8)`

## HISTORY

A `su` command appeared in Version 1 AT&T UNIX.