

UNIX  
Sucmd  
Command

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## **PURPOSE OF DOCUMENT**

This document provides a readable version of the sucmd documentation.

## 1 SUCMD COMMAND

sucmd\ -\ Substitute user command

### 1.1 SYNOPSIS

```
sucmd [ -ehlpV ] [ -u user ] [ command ]
```

### 1.2 DESCRIPTION

Sucmd is a substitute for the system supplied su command. It does away with the need for the user to be aware of the substitute user's password upon the machine by keeping an internal table of who can use the command. It therefore prevents disclosure of passwords and the passing around of passwords from user to user. In particular the use of this command is advisable in ensuring the root password is known only to a small group. It allows passwords for accounts that are often substituted to, to be changed without the need to broadcast the changed value to the different individuals. This is particularly useful when the support groups are located over a wide area.

It runs a shell with the real and effective user ID, group ID, and supplemental groups of the USER. If no USER is specified, the default user is root, the super user. The shell run is extracted from the USER's password entry, or /bin/sh, if none is specified.

By default sucmd does not change the current directory. It sets the environment variables HOME and SHELL from the password entry for the USER.

If the USER is not the super-user, sucmd sets USER and LOGNAME to USER. By default the shell is not a login shell.

### 1.3 OPTIONS

Given on its own with no parameters the sucmd command places the user at the command prompt as the default user. Any command entered after this point will be executed as the default user. Typing exit will return the user to their previous shell point.

When a command string is entered as a parameter to the sucmd command, the command string itself is executed as the specified or default user, assuming the calling user is known to the internal tables.

Possible options are:

- l  
Make the shell a login shell. This means the following.  
Unset all environment variables except TERM, HOME and SHELL (set as described above), and USER and LOGNAME and set PATH to a compiled in default value. Change to USER's home directory. Prepend - to the shell's name, to make it read its startup file(s).
- e  
For compatibility reasons the same as the -l command described above.
- h  
Prints usage message on standard output and exits.
- p  
Preserve the environment variables HOME, USER, LOGNAME and SHELL. Run the shell in the environment variable SHELL instead of the USER's shell from /etc/passwd, unless the user running sucmd is not the super user and the USER's shell is restricted. A restricted shell is one that is not listed in /etc/shells, or in a compiled in list if that file does not exist.
- V

Print out the version number of sucmd on standard output and exits.

**-u user**  
Become the specified user.

**command**  
Run the given command to the shell with a **-c** option instead of starting and interactive shell. If used with the **-u** option above, runs the command as the specified user.

## **1.4 COMPILATION OPTIONS**

Any successful usage of the sucmd is logged by the syslog daemon in the appropriate log files as defined by the syslog configuration file. It is possible to disable the logging when compiling the program if logging is not required.

There is also an option to check that the invoking user is who it is believed they are by performing a prompt for the user's password to ensure that another person isn't just passing by.

The final option is to define that an external configuration file exists to permit easy adding of names. The internal tables take precedence over the external file. By default it is not possible to assign root access via the external file. There is however an option to allow this if site security policy permits.

## **1.5 FILES**

There are no associated files with this command, other than the log files determined by the syslog configuration if logging is turned on which is the default.

## **1.6 SEE ALSO**

su(1), syslogd(8), sucmd(4)

## **1.7 BUGS**

There are no known reported problems with the use of this command.

## **1.8 AUTHORS**

Originally sucmd was written by Bryan Dongray (Currently Cray Research Inc. btd@cray.com). The syslog options was added by Bill Watson (Sun Microsystems). Further improvements were made by Geoffrey Chapman (Macrotone Consulting Ltd. gsc@macrotone.co.uk).

## FILE Format

### A1 SUCMD FILE

The sucmd configuration file contains the following information for each authorised user:

user name:comma-separated list of hostnames:comma-separated list of all users whose identity can be assumed

This is an ASCII file. Fields are separated by colons, and each entry is separated from the next by a new-line. No spaces should separate the fields or parts of fields on any line.

If the hostname field is an asterisk, all hostname's are valid.

The file `/usr/local/etc/sucmd` exists to supply names for each user, and to support changing userids by means of the sucmd utility (see sucmd (1)).

The real and effective user ID set up by login for each user is defined in `/etc/passwd` (see passwd (4)).

The length of each line in `/usr/local/etc/sucmd` is limited to `LINE_MAX`, as defined in `<limits.h >`

### A1.1 EXAMPLES

Here is a sample `/usr/local/etc/sucmd` file:

```
other*:user1,user2,user3
```

```
other2:host1:user2,user3
```

User `other` can assume the identity of the users `user1`, `user2` and `user3`

on any host. (Specifically the current host.)

The user `other2` can assume the identity of the users, `user2`, and `user3` but only if the current host is `host1`

### A1.2 NOTE

Note that if the host has a fully qualified domain name then the host name has to be specified in full in the configuration file.

### A1.3 FILES

`/usr/local/etc/sucmd`

### A1.4 SEE ALSO

login(1), sucmd(1).