

## An introduction to sudo

This tip demonstrates some common uses of sudo which allows normal users to run commands with elevated privileges. This week we look at using sudo to view log files and handle basic user administration.

### Code Listing 1: Getting sudo

```
% emerge app-admin/sudo
or
apt-get install sudo
or ...
```

The first thing to do is set up the `/etc/sudoers` file which controls all the privileges handled by sudo. Instead of editing this file directly, use the `visudo` command. For a full list of configuration options, see the `sudoers` man page (`man 5 sudoers`).

This file is just an example and demonstrates how to create command and user aliases.

### Code Listing 2: `/etc/sudoers`

```
# sudoers file.
#
# This file MUST be edited with the 'visudo' command as root.
#
# See the sudoers man page for the details on how to write a sudoers file.
#

# User alias specification
User_Alias      HELPDESK = jfox, helpdesk
User_Alias      SYSADMINS = david, jc

# Cmnd alias specification
# Create aliases for all commands used in viewing files
Cmnd_Alias      VIEW = /bin/cat, /bin/grep, /bin/more, /usr/bin/head,
                  /usr/bin/tail, /usr/bin/less

# commands for user administration
Cmnd_Alias      USERADMIN = /usr/sbin/useradd, /usr/sbin/userdel,
                  /usr/sbin/usermod

# User privilege specification
# Allow SYSADMINS to run any command as any user
SYSADMINS      ALL = ALL

# Allow users in HELPDESK to use the user administration commands and
# to use the VIEW commands without a password
HELPDESK       ALL = USERADMIN, NOPASSWD:VIEW

# Allow users in the %users group to use the VIEW commands
%users         ALL = VIEW
```

Now that your `/etc/sudoers` file has been created, you can issue commands using `sudo` command.

### Code Listing 3: Examples

```
// Viewing /var/log/critical/current as the helpdesk user
helpdesk@mybox% sudo tail /var/log/critical/current

// Adding a new user as the user jfox
jfox@mybox% sudo useradd marcus
Password: password for jfox
```

While this is no means comprehensive, this should introduce you to some of the many possibilities of sudo. For more examples and options see the man pages or the web page at <http://www.courtesan.com/sudo/>.

From <http://www.gentoo.org/news/en/gwn/20030915-newsletter.xml>