**Sudo** (super user do)sudo runs a command as root, whereas **su** makes you root user.

**sudo** - Allows a permitted user to execute a command as a super user as specified in the SUDOER's file.

**SUDO** runs a single command with root privilege. SUDO it doesn’t switch to the root user or require a separate root user password.

**File** - /etc/sudoers

- cat /var/log/secure (log file)

To edit the file – **visudo**

**Syntax for individual user**

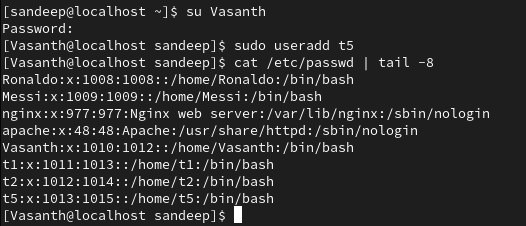
1. User HOST=RunAs NOPASSWD:COMMAND
   * 1. vasanth ALL =(ALL) ALL

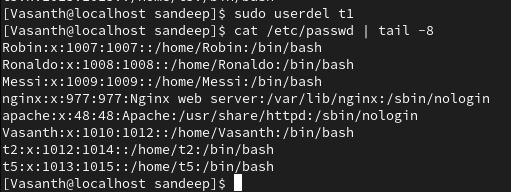


* + 1. Ronaldo ALL =(ALL) ALL

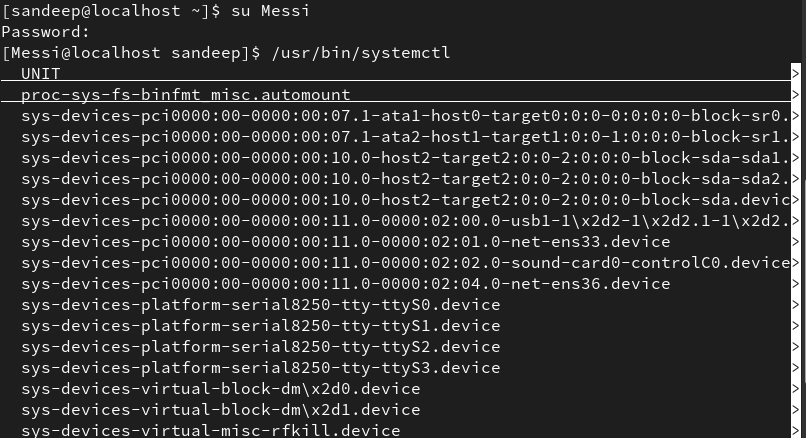


1. User HOST =RunAs NOPASSWD: Path/of/cmds,PASSWD: /path/of/cmds
   * 1. vasanth ALL= (ALL) NOPASSWD: /usr/sbin/useradd,/usr/sbin/userdel





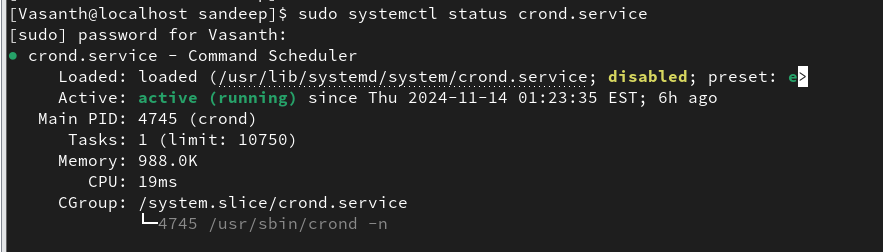
* + 1. Messi ALL=(ALL) PASSWD: /usr/bin/systemctl



* + 1. vasanth ALL=(ALL) NOPASSWD:/usr/bin/systemctl restart crond.service,



PASSWD:/usr/bin/systemctl status crond.service



* + 1. messi ALL=(ALL) !/bin/su !/bin/bash !/reboot



1. User HOST=RunAs(user) NOPASSWD:COMMAND
   * 1. Bob ALL=(ALL) ALL
     2. kevin ALL=(Bob) ALL



**Syntax for individual group**

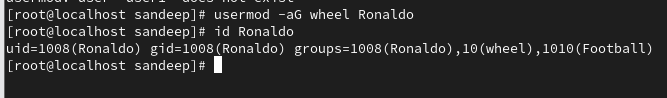
* 1. %group HOST=RunAs NOPASSWD:COMMAND

a. %admin ALL =(ALL) ALL



* 1. Add the user to already existing group – wheel

1. usermod -aG wheel user1



**Aliases in sudoers file**

* + - User\_Alias
    - Host\_Alias
    - Cmnd\_Alias **Syntax for User\_Alias**:

1. ALIAS\_VARIABLE HOST=RunAs NOPASSWD:COMMAND

a. Create a User alias with ALIAS\_VARIABLE

* User\_Alias ADMINS = kevin,dravid,Sourav
* ADMINS ALL = (ALL) ALL

**Syntax for CMD\_Alias :**

1. USER HOST = (RunAs) CMNDALIAS\_VARIABLE

a. Create a User alias with CMNDALIAS\_VARIABLE

* Cmnd\_Alias DELEGATING = /usr/sbin/visudo, /bin/chown, /bin/chmod, /bin/chgrp
* Cmnd\_Alias ALLOW\_CMD = /usr/sbin/fdisk ,/usr/sbin/useradd
* Cmnd\_Alias DENY\_CMD=!/bin/su,!/usr/sbin/reboot,!/usr/bin/passwd
* ADMINS ALL=(ALL) ALLOW\_CMD,DENY\_CMD
* ADMINS ALL=(ALL) NOPASSWD: PROCESSES ,DELEGATING
* User1 ALL=(ALL) NOPASSWD: ALLOW\_CMD ,DELEGATING
* User1 ALL=(ADMINS) NOPASSWD: DENY\_CMD ,DELEGATING

**Syntax for HOST\_Alias**

1. Host\_Alias MAILSERVERS = smtp, smtp2

a. User1 MAILSERVERS = (ALL) ALL

**Change Your Interactive Shell**

a. sudo -i

**List User Privileges**

* 1. sudo -l (OR) sudo --list
  2. sudo -U username -l