

**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
  - a. kevin ALL =(ALL) ALL
  - b. Bob ALL =(ALL) ALL
2. User HOST =RunAs NOPASSWD: Path/of/cmds,PASSWD: /path/of/cmds
  - a. kevin ALL= (ALL) NOPASSWD: /usr/sbin/useradd,/usr/sbin/userdel
  - b. kevin ALL=(ALL) PASSWD: /usr/bin/systemctl
  - c. kevin ALL=(ALL) NOPASSWD:/usr/bin/systemctl restart crond.service,  
PASSWD:/usr/bin/systemctl status crond.service
  - d. Dravid ALL=(ALL) !/bin/su !/bin/bash !/reboot
3. User HOST=RunAs(user) NOPASSWD:COMMAND
  - a. Bob ALL=(ALL) ALL
  - b. kevin ALL=(Bob) ALL

**Syntax for individual group**

1. %group HOST=RunAs NOPASSWD:COMMAND
  - a. %admin ALL =(ALL) ALL
2. Add the user to already existing group – wheel
  - a. 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**

- a. sudo -l (OR) sudo --list
- b. sudo -U username -l