

Lab 1: User and Group Management

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Objective: Create a new group named `involve` and a new user assigned to this group with a secure password. Configure the user's permissions to allow installing Nginx with elevated privileges using the `sudo` tool (run `sudo` command for installing nginx without password).

1- configuration user,group

- create user
 `Useradd maher`
- create group
 `Groupadd involve`
- make the user a member of the group
 `Usermod -aG involve maher`

```
sudo useradd maher
su - maher
sudo passwd maher
sudo vim /etc/sudoers
su - maher
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su - maher
sudo vim /etc/sudoers
su - maher
sudo vim /etc/sudoers
sudo usermod -aG involve maher
```

2-Modify sudoers file to allow passwordless Nginx installation

- vim /etc/sudoers:

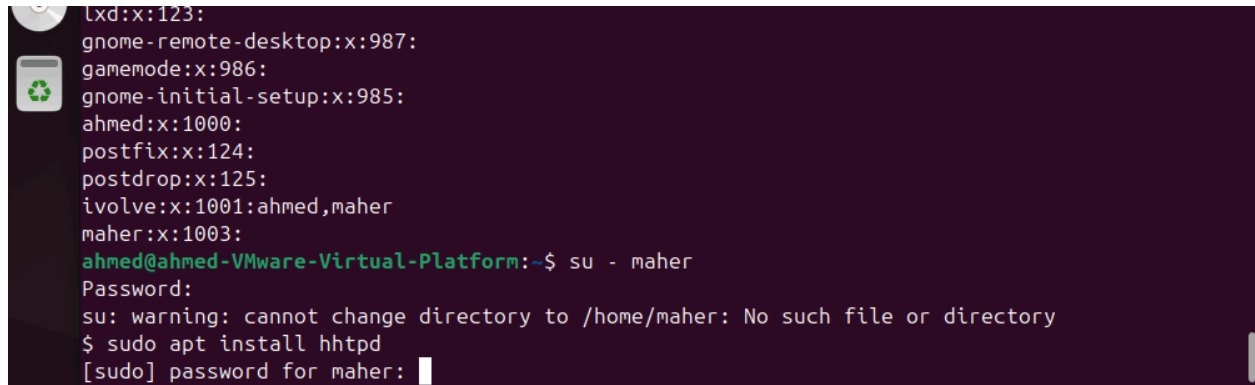
```
ahmed@ahmed-VMware-Virtual-Platform: ~  
# "sudo scp" or "sudo rsync" should be able to use your SSH agent.  
#Defaults:%sudo env_keep += "SSH_AGENT_PID SSH_AUTH_SOCK"  
  
# Ditto for GPG agent  
#Defaults:%sudo env_keep += "GPG_AGENT_INFO"  
  
# Host alias specification  
  
# User alias specification  
  
# Cmnd alias specification  
  
# User privilege specification  
root    ALL=(ALL:ALL) ALL  
maher   ALL=(ALL) NOPASSWD: /usr/bin/apt install nginx  
  
# Members of the admin group may gain root privileges
```

3-run sudo apt install nginx

```
$ sudo apt install nginx  
$ sudo apt install nginx  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
The following additional packages will be installed:  
  nginx-common  
Suggested packages:  
  fcgiwrap nginx-doc  
The following NEW packages will be installed:  
  nginx nginx-common  
0 upgraded, 2 newly installed, 0 to remove and 201 not upgraded.  
Need to get 552 kB of archives.  
After this operation, 1,596 kB of additional disk space will be used.  
Do you want to continue? [Y/n] y  
Get:1 http://eg.archive.ubuntu.com/ubuntu noble-updates/main amd64 nginx-common all 1.24.0-2ubuntu7.1 [31.2 kB]  
Get:2 http://eg.archive.ubuntu.com/ubuntu noble-updates/main amd64 nginx amd64 1.24.0-2ubuntu7.1 [521 kB]  
Fetched 552 kB in 2s (229 kB/s)  
Preconfiguring packages ...  
Selecting previously unselected package nginx-common.  
(Reading database ... 151361 files and directories currently installed.)
```

4- must passwd to sudo apt install *

Such as

A terminal window with a dark purple background. On the left side, there are two circular icons: a grey one with a white person silhouette and a green one with a white recycling symbol. The terminal text shows a list of system users, followed by a command to switch to the 'maher' user. The password prompt is shown, followed by a warning message from 'su' about the directory. Then, the user runs 'sudo apt install hhttpd', and the terminal prompts for the password for 'maher'.

```
lxd:x:123:  
gnome-remote-desktop:x:987:  
gamemode:x:986:  
gnome-initial-setup:x:985:  
ahmed:x:1000:  
postfix:x:124:  
postdrop:x:125:  
ivolve:x:1001:ahmed,maher  
maher:x:1003:  
ahmed@ahmed-VMware-Virtual-Platform:~$ su - maher  
Password:  
su: warning: cannot change directory to /home/maher: No such file or directory  
$ sudo apt install hhttpd  
[sudo] password for maher: 
```