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LESSON : LINUX
SUBJECT: MANAGING USERS AND
GROUPS
SESSION : 6
BATCH : B 279

AWS-DEVOPS



TECHPRO
EDUCATION



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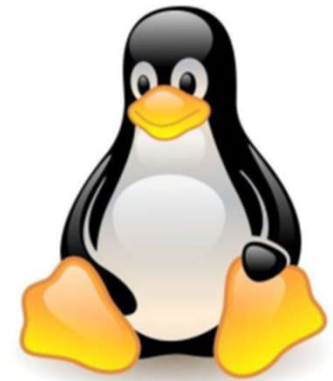
Table of Contents

- ▶ Basic User Commands
- ▶ User Management
- ▶ User Passwords
- ▶ Group Management





Basic User Commands



Basic User Commands

sudo Command



- **Sudo (superuser do) komutu yönetici olmayan kullanıcılara bazı yönetici ayrıcalıkları verir.**
- **Terminalde herhangi bir komutun önüne sudo koyduğunuzda, o komut yükseltilmiş ayrıcalıklarla çalışır.**
- **Sudo mu yoksa su mu kullandığınızdan emin değilseniz, komut satırında sondaki karaktere bakın. Eğer bu bir pound işareti (#) ise, root olarak oturum açmışsınız demektir.**

Basic User Commands

sudo Command



Commands	Meaning
sudo -l	List available commands.
sudo command	Run command as root.
sudo -u root command	Run command as root.
sudo -u user command	Run command as user.
sudo su	Switch to the superuser account.
sudo su -	Switch to the superuser account with root's environment.
sudo su - username	Switch to the username's account with the username's environment.
sudo -s	Start a shell as root
sudo -u root -s	Same as above.
sudo -u user -s	Start a shell as user.

Basic User Commands



whoami	current user
hostname	shows the system hostname
hostname -i	Show the IP address of the system

```
linuxuser@techproeducation: ~$ whoami
linuxuser
linuxuser@techproeducation: ~$ hostname
techproeducation
linuxuser@techproeducation: ~$
```

Basic User Commands



Whatis	display one-line manual page names.
Apropos	search the manual page names and descriptions.

```
linuxuser@techproeducation: ~$ apropos pwd
pwd (1) - print name of current/working directory
pwdx (1) - report current working directory of a process
unix_chkpwd (8) - Helper binary that verifies the password of the current user
linuxuser@techproeducation: ~$ whatis pwd
pwd (1) - print name of current/working directory
linuxuser@techproeducation: ~$
```

Basic User Commands



who provide with details about who is logged on the system.

```
linuxuser@techproeducation: ~$ who
root      pts/1        2023-12-02 22:19
linuxuser@techproeducation: ~$ |
```


Basic User Commands



w inform who is logged on and what they are doing.

```
linuxuser@techproeducation: ~$ w
 23:11:49 up 52 min,  1 user,  load average: 0.00, 0.00, 0.00
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
root      pts/1    -                22:19   51:54  0.02s  0.01s  -bash
linuxuser@techproeducation: ~$ |
```

Basic User Commands



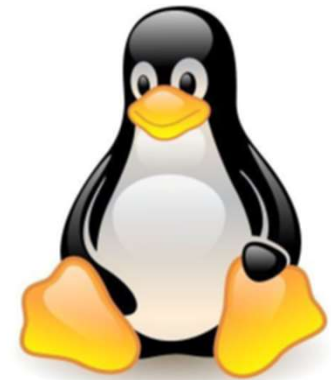
id Display user id, your primary group id, and a list of the groups you belong to.

id [username]

```
linuxuser@techproeducation: ~$ id
uid=1000(linuxuser) gid=1000(linuxuser) groups=1000(linuxuser)
linuxuser@techproeducation: ~$ |
```



User management



User management



etc/passwd On Linux, the local user database is /etc/passwd.

```
linuxuser@techproeducation: ~$ tail -3 /etc/passwd
uidd:x:106:112::/run/uidd:/usr/sbin/nologin
tcpdump:x:107:113::/nonexistent:/usr/sbin/nologin
linuxuser:x:1000:1000::/home/linuxuser:/bin/bash
linuxuser@techproeducation: ~$ |
```

User management



useradd useradd command is used for creating a new user.
useradd [username]

```
root@techproeducation: ~  
root@techproeducation:~# useradd -m -d /home/techpro -c "user techpro" techpro  
root@techproeducation:~# tail -1 /etc/passwd  
techpro:x:1001:1001:user techpro:/home/techpro:/bin/sh  
root@techproeducation:~# |
```

- m home dizininin oluşturulmasını zorlamak için kullanılır
- d home dizininin adını ayarlamak için kullanılır
- c bir açıklama ayarlamak için kullanılır

User management



adduser

adduser is not a standard Linux command. It's basically a Perl script that uses the useradd command in the background. This is more effective at creating new users on Linux.

```
root@techproeducation: ~  
root@techproeducation:~# adduser sam  
Adding user 'sam' ...  
Adding new group 'sam' (1003) ...  
Adding new user 'sam' (1003) with group 'sam' ...  
Creating home directory '/home/sam' ...  
Copying files from '/etc/skel' ...  
New password:  
Retype new password:  
passwd: password updated successfully  
Changing the user information for sam  
Enter the new value, or press ENTER for the default  
Full Name []: sam dai  
Room Number []: 1  
Work Phone []: 1  
Home Phone []: 1  
Other []: 1  
Is the information correct? [Y/n] y  
root@techproeducation:~# tail -1 /etc/passwd  
sam:x:1003:1003:sam dai,1,1,1,1:/home/sam:/bin/bash  
root@techproeducation:~#
```

User management



userdel

Delete a user. `userdel` command will not remove the user's home directory from the file system. If you want to remove the home directory, you need to use the `-r` in the command line.

`userdel [username]`

```
root@techproeducation: ~  
root@techproeducation:~# userdel -r sam  
userdel: sam mail spool (/var/mail/sam) not found  
root@techproeducation:~# tail -1 /etc/passwd  
mauro:x:1002:1002:Mauro,,,:/home/mauro:/bin/bash  
root@techproeducation:~# userdel -r mauro  
userdel: mauro mail spool (/var/mail/mauro) not found  
root@techproeducation:~# tail -1 /etc/passwd  
techpro:x:1001:1001:user techpro:/home/techpro:/bin/sh  
root@techproeducation:~# userdel -r techpro  
userdel: techpro mail spool (/var/mail/techpro) not found  
root@techproeducation:~# tail -1 /etc/passwd  
linuxuser:x:1000:1000::/home/linuxuser:/bin/bash  
root@techproeducation:~# |
```

User management



usermod

Modify a user's properties. The example below modifies the description of the user linuxuser.

usermod -[option] [value] [username]

```
root@techproeducation: ~  
root@techproeducation:~# tail -1 /etc/passwd  
linuxuser:x:1000:1000::/home/linuxuser:/bin/bash  
root@techproeducation:~# usermod -c "linux admin" linuxuser  
root@techproeducation:~# tail -1 /etc/passwd  
linuxuser:x:1000:1000:linux admin:/home/linuxuser:/bin/bash  
root@techproeducation:~# |
```




User Passwords



User Passwords



passwd User passwords can be set with the passwd command.

passwd [username]

```
root@techproeducation: ~  
root@techproeducation:~# passwd linuxuser  
New password:  
Retype new password:  
passwd: password updated successfully  
root@techproeducation:~# |
```

User Passwords



etc/shadow

User passwords are encrypted and stored in /etc/shadow file. The /etc/shadow file is only read and can be accessed by root only.

```
root@techproeducation: ~  
root@techproeducation:~# tail -1 /etc/shadow  
linuxuser:$y$j9T$6F8Sv.qx.yglVHBL0DezJ.$v1vDs5zFHDWdWuJySukN  
Y79MWGd4rEx0UIVsod.FS.D:19693:0:99999:7:::  
root@techproeducation:~# |
```

User Passwords



etc/login.defs

The /etc/login.defs file includes some default user password settings, such as password aging and length settings.

```
root@techproeducation: ~  
root@techproeducation:~# grep "PASS" /etc/login.defs  
# PASS_MAX_DAYS Maximum number of days a password may be used.  
# PASS_MIN_DAYS Minimum number of days allowed between password changes.  
# PASS_WARN_AGE Number of days warning given before a password expires.  
PASS_MAX_DAYS 99999  
PASS_MIN_DAYS 0  
PASS_WARN_AGE 7  
#PASS_CHANGE_TRIES  
#PASS_ALWAYS_WARN  
#PASS_MIN_LEN  
#PASS_MAX_LEN  
# NO_PASSWORD_CONSOLE  
root@techproeducation:~#
```

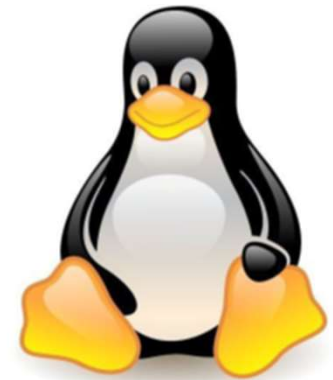
Exercise-1



1. **DevOps** adında bir kullanıcı oluşturun
2. **DevOps** kullanıcı şifresini **TechProEducation** olarak ayarlayın
3. **DevOps** kullanıcı açıklamasını **En İyi Bulut Mühendisi** olarak değiştirin
4. **DevOps** kullanıcısına geç
5. **DevOps** kullanıcısının bilgilerini görüntüle
6. **Önceki** kullanıcıya geri dön
7. **DevOps** kullanıcısını **home** dizini ile Sil



Group Management



Group Management



etc/group

Users can belong to several groups. Group membership is specified via the /etc/group file.

```
root@techproeducation: ~# tail -1 /etc/group
linuxuser:x:1000:
root@techproeducation:~# tail -3 /etc/group
admin:x:115:
netdev:x:116:
linuxuser:x:1000:
root@techproeducation:~# |
```

Group Management



groups

groups command is used to display a list of groups to which the user belongs.

groups [username]

```
root@techproeducation: ~# groups
root
root@techproeducation: ~# groups linuxuser
linuxuser : linuxuser
root@techproeducation: ~# |
```


Group Management



groupadd

groupadd command is used to create a new group.

groupadd [groupname]

```
root@techproeducation: ~# groupadd linux
root@techproeducation: ~# groupadd aws
root@techproeducation: ~# groupadd devops
root@techproeducation: ~# tail -3 /etc/group
linux:x:1001:
aws:x:1002:
devops:x:1003:
root@techproeducation: ~# |
```

Group Management



usermod

You can change group membership with the usermod command.

usermod -a -G [groupname] [username]

- Varsayılan olarak, grup komutta belirtilmezse, Usermod komutu kullanıcıyı herhangi bir gruptan kaldıracaktır!
- -a (ek) seçeneğini kullanmak bu davranışı önler.

Group Management



groupmod

groupmod command can be used to change the group name.

groupmod -n [newname] [oldname]

```
root@techproeducation: ~# tail -3 /etc/group
aws:x:1002:python
devops:x:1003:
python:x:1004:
root@techproeducation:~# groupmod -n java python
root@techproeducation:~# tail -3 /etc/group
aws:x:1002:python
devops:x:1003:
java:x:1004:
root@techproeducation:~# |
```

Group Management



groupdel

groupdel command is used to delete a group.

groupdel [groupname]

```
root@techproeducation: ~# tail -3 /etc/group
aws:x:1002:python
devops:x:1003:
java:x:1004:
root@techproeducation:~# groupdel devops
root@techproeducation:~# tail -3 /etc/group
linux:x:1001:
aws:x:1002:python
java:x:1004:
root@techproeducation:~# |
```

Group Management



gpasswd

gpasswd komutu ile bir gruba kullanıcı ekleyebilir ve bir gruptan kullanıcı çıkarabiliriz. Aşağıdaki örnekte:- gpasswd -a komutu ile john'u aws grubuna ekliyoruz.- gpasswd -d komutu ile walter'ı aws grubundan çıkarıyoruz.

gpasswd -[option] [username] [groupname]

```
root@techproeducation: ~#  
root@techproeducation:~# useradd john  
root@techproeducation:~# useradd walter  
root@techproeducation:~# gpasswd -a john aws  
Adding user john to group aws  
root@techproeducation:~# gpasswd -d walter aws  
Removing user walter from group aws  
gpasswd: user 'walter' is not a member of 'aws'  
root@techproeducation:~# gpasswd -a walter aws  
Adding user walter to group aws  
root@techproeducation:~# gpasswd -d walter aws  
Removing user walter from group aws  
root@techproeducation:~#
```

Exercise-2

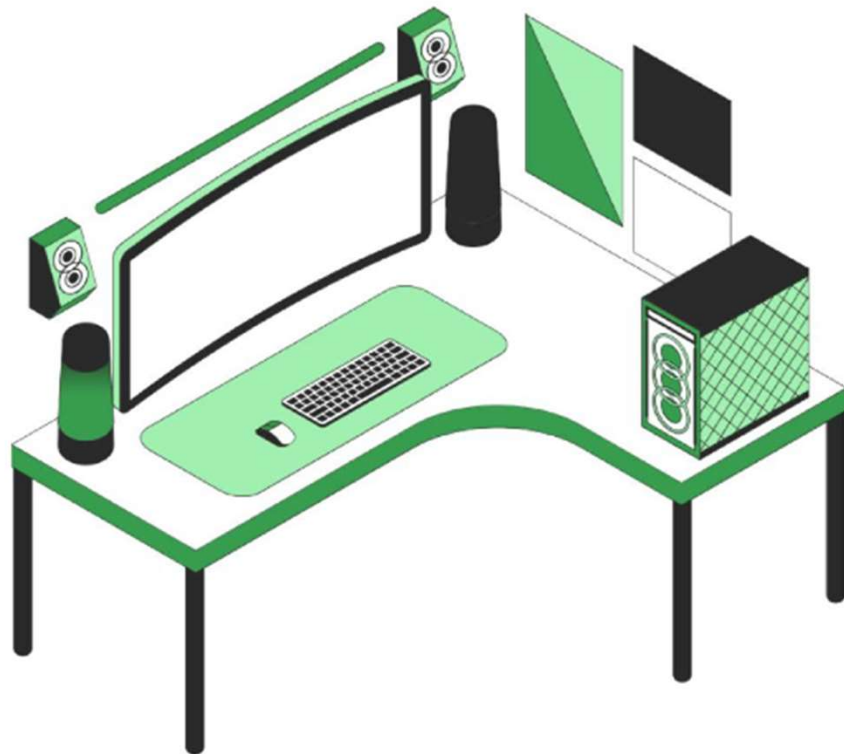


1. **DevOps** adında bir kullanıcı oluşturun
2. **Cloud** ve **AWS** adında iki grup oluşturun
3. **Cloud** grubuna **DevOps** kullanıcısını ekleyin
4. **DevOps** kullanıcısının ait olduğu grupları görüntüleyin
5. **AWS** grubuna **DevOps** kullanıcısı ekleyin
6. **DevOps** Kullanıcısını **Cloud** Grubundan kaldır
7. **Cloud** Grubunu Sil
8. **AWS** Grup Adını **AWS-CLOUD** olarak yeniden adlandırın
9. **DevOps** kullanıcısının ait olduğu grupları görüntüleyin.

Exercise-3



1. Kullanıcılar Oluştur: Jason, Bruce, Victor, Mark, Jack, Tyler, Tomy, Edward, Eric
2. Gruplar Oluştur: Asya, Avrupa, Amerika, Afrika
3. Kullanıcılar ekleyin: Jason, Bruce, Victor Asya Grubuna
4. Kullanıcılar ekleyin: Jason, Mark, Jack, Tyler'a Avrupa Grubuna
5. Kullanıcılar ekleyin: Jason, Tomy, Edward'a Amerika Grubuna
6. Kullanıcılar ekleyin: Jason, Bruce, Mark, Edward, Jack, Tyler, Eric Afrika Grubuna
7. Jason'ın ait olduğu grupları görüntüle;
8. Edward'ın ait olduğu grupları görüntüle
9. Bruce'u Afrika grubundan çıkarın;
10. Jason'ı tüm gruplardan kaldır
11. Avrupa grubunu sil
12. Afrika Grubunu Avustralya olarak yeniden adlandırın



Do you have any questions?

Send it to us! We hope you learned something new.