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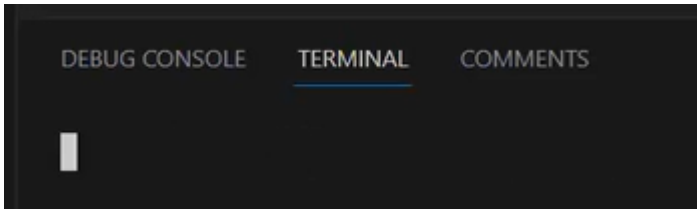
- ▶ sudo Command (recap)
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▶ **sudo Command**

- The sudo (superuser do) command gives some **admin privileges** to non-admin users.
- When you put sudo in front of any command in terminal, that command runs with **elevated privileges**.
- If you're not sure if you're using sudo or su, look at the trailing character on the command line. If it's a pound sign (#), you're logged in as root.

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.

export PS1="\e[1;36m[\u@\h \W]\\$e[0m" ekrandaki yazıyı mavi renk yapma



Böyle boş bir ekran geldi ne yağaacağız?

* **Nerdeyiz diye bakacağımız zaman #pwd komutu kullanmak lazım.**

* **#whoami dediğimiz zaman hangi kullanıcıdayız onu veriyor.**

* **sudo su root a gitti**

* **sudo ec2-user roottan çıktı ec2 user geldi.**

```
[root@ip-172-31-22-51 ec2-user]# sudo su -  
Last login: Thu May 18 11:54:10 UTC 2023 on pts/0
```

* **sudo su -**

```
42 who # open a new shell and retry who command to see the users who logged in.
```

who

```
clarusway@DESKTOP-UN6T2ES:~$ who  
root pts/0 2019-11-10 23:07 (10.104.33.101)  
james pts/1 2019-11-10 23:30 (10.104.33.101)  
john pts/2 2019-11-10 23:34 (10.104.33.96)  
clarusway pts/3 2019-11-10 23:39 (10.104.33.91)  
clarusway@DESKTOP-UN6T2ES:~$
```

*sisteme kimin bağlandığını detaylı bir şekilde görebiliyoruz.

AY

Who is logged on the

```
[root@ip-172-31-22-51 ec2-user]# w  
12:07:28 up 43 min, 1 user, load average: 0.01, 0.02, 0.00  
USER      TTY      LOGIN@  IDLE   JCPU   PCPU   WHAT  
ec2-user  pts/0    11:38   0.00s  0.05s  0.02s  sshd: ec2-user [priv]  
[root@ip-172-31-22-51 ec2-user]#
```

****Whoami, who, w harf azaldıkça detay artıyor.**

```
[ec2-user@ip-172-31-22-51 ~]$ id  
uid=1000(ec2-user) gid=1000(ec2-user) groups=1000(ec2-user),4(adm),10(wheel),190(systemd-journal) context=unconfine  
d_u:unconfined_r:unconfined_t:s0-s0:c0.c1023
```

****İçinde bulunduğum kullanıcının bilgilerini veriyor.**

```
[ec2-user@ip-172-31-22-51 ~]$ id root  
uid=0(root) gid=0(root) groups=0(root)
```

**** root kullanıcının bilgileri. Group user id 0 gördüğünüz gibi.**

```
[ec2-user@ip-172-31-22-51 ~]$sudo su  
[root@ip-172-31-22-51 ec2-user]#
```

```
[root@ip-172-31-22-51 ec2-user]# useradd user1  
[root@ip-172-31-22-51 ec2-user]# id user1  
uid=1001(user1) gid=1001(user1) groups=1001(user1)  
[root@ip-172-31-22-51 ec2-user]#
```

```
[root@ip-172-31-22-51 ec2-user]# su ec2-user  
[ec2-user@ip-172-31-22-51 ~]$
```

```
[ec2-user@ip-172-31-22-51 ~]$useradd user1  
useradd: user 'user1' already exists  
[ec2-user@ip-172-31-22-51 ~]$
```

```
[ec2-user@ip-172-31-22-51 ~]$sudo su user1  
[user1@ip-172-31-22-51 ec2-user]$
```

```
[ec2-user@ip-172-31-18-233 ~]$ sudo su (-) user1  
[user1@ip-172-31-18-233 ~]$
```

- yazdığımız zaman varsa şifre falan istemeden user1 geçiş yapar.

```
[user1@ip-172-31-22-51 ec2-user]$exit  
exit  
[ec2-user@ip-172-31-22-51 ~]$
```

user1 den çıktı.

```
[ec2-user@ip-172-31-22-51 ~]$sudo su  
[root@ip-172-31-22-51 ec2-user]#
```

sudo su ile root oldum.

```
[ec2-user@ip-172-31-22-51 ~]$sudo su  
[root@ip-172-31-22-51 ec2-user]# useradd user2  
[root@ip-172-31-22-51 ec2-user]# whoami  
root  
[root@ip-172-31-22-51 ec2-user]# psswd user2  
bash: psswd: command not found  
[root@ip-172-31-22-51 ec2-user]# passwd user2  
Changing password for user user2.  
New password:  
BAD PASSWORD: The password is shorter than 8 characters  
Retype new password:  
passwd: all authentication tokens updated successfully.  
[root@ip-172-31-22-51 ec2-user]#
```

```
[root@ip-172-31-22-51 ec2-user]# su - user2
[user2@ip-172-31-22-51 ~]$ pwd
/home/user2
[user2@ip-172-31-22-51 ~]$ whoami
user2
[user2@ip-172-31-22-51 ~]$
```

```
[user2@ip-172-31-22-51 ~]$ passwd
Changing password for user user2.
Current password:
New password:
BAD PASSWORD: The password is shorter than 8 characters
New password:
BAD PASSWORD: The password is shorter than 8 characters
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
[user2@ip-172-31-22-51 ~]$
```

User management

3



```
[user2@ip-172-31-22-51 ec2-user]$ exit
exit
[root@ip-172-31-22-51 ec2-user]# whoami
root
[root@ip-172-31-22-51 ec2-user]# su - ec2-user
Last login: Thu May 18 13:18:12 UTC 2023 from 94.54.60.209 on pts/1
Last failed login: Thu May 18 13:36:47 UTC 2023 on pts/1
There was 1 failed login attempt since the last successful login.
[ec2-user@ip-172-31-22-51 ~]$
```

```
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/sbin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:65534:65534:Kernel Overflow User:/:/sbin/nologin
dbus:x:81:81:System message bus:/:/sbin/nologin
systemd-network:x:192:192:systemd Network Management:/:/usr/sbin/nologin
systemd-oom:x:999:999:systemd Userspace OOM Killer:/:/usr/sbin/nologin
systemd-resolve:x:193:193:systemd Resolver:/:/usr/sbin/nologin
sshd:x:74:74:Privilege-separated SSH:/usr/share/empty.sshd:/sbin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin
libstoragemgmt:x:997:997:daemon account for libstoragemgmt:/:/usr/sbin/nologin
systemd-coredump:x:996:996:systemd Core Dumper:/:/usr/sbin/nologin
systemd-timesync:x:995:995:systemd Time Synchronization:/:/usr/sbin/nologin
ec2-instance-connect:x:994:994:/:/home/ec2-instance-connect:/sbin/nologin
rpcuser:x:29:29:RPC Service User:/var/lib/nfs:/sbin/nologin
chrony:x:993:993:chrony system user:/var/lib/chrony:/sbin/nologin
tcpdump:x:72:72:/:/sbin/nologin
ec2-user:x:1000:1000:EC2 Default User:/home/ec2-user:/bin/bash
user1:x:1001:1001:/:/home/user1:/bin/bash
user2:x:1002:1002:/:/home/user2:/bin/bash
[ec2-user@ip-172-31-22-51 ~]$
```

Userların database bilgisi. Cat /etc/passwd önemli bir komut.

```
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/passwd | tail -3
ec2-user:x:1000:1000:EC2 Default User:/home/ec2-user:/bin/bash
user1:x:1001:1001:/:/home/user1:/bin/bash
user2:x:1002:1002:/:/home/user2:/bin/bash
[ec2-user@ip-172-31-22-51 ~]$
```

Kullanıcılar. Neden tail -3 yaptık az önce son 3 satır bu olduğu için.


```
clarusway@DESKTOP-UN6T2ES:~$ tail -5 /etc/passwd
clarusway:x:1000:1000:,,,:/home/clarusway:/bin/bash
john:x:1002:1002:john,room,work,home,other:/home/john:/bin/bash
oliver:x:1003:1003:oliver,room_1,work_1,home_1:/home/oliver:/bin/bash
aaron:x:1001:1001:aaron,,,:/home/aaron:/bin/bash
james:x:1005:1009:james,,,:/home/james:/bin/bash
clarusway@DESKTOP-UN6T2ES:~$
```

Bu tail -5 demiş çünkü 5 tane oluşturmuş.

```
[ec2-user@ip-172-31-22-51 ~]$ sudo useradd user3
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/passwd
```

User3 kullanıcısı ekledik tabii ki sudo komutuyla, daha sonra eklemişmiyiz diye cat /etc/passwd komutuyla baktık.

```
[ec2-user@ip-172-31-22-51 ~]$ cd /
[ec2-user@ip-172-31-22-51 /]$ cd home
[ec2-user@ip-172-31-22-51 home]$ ls
ec2-user  user1  user2  user3
[ec2-user@ip-172-31-22-51 home]$
```

cd etc ile etc dosyalarına gir

```
_/m/
[ec2-user@ip-172-31-22-51 etc]$ cat login.defs
```

Kullanıcılarımızın config dosyalarının olduğu yer.

```
# command-line.
#
CREATE_HOME    yes
```

Bu default olarak yes geldiği için home klasörü

yapabiliyoruz.

```
[ec2-user@ip-172-31-22-51 etc]$ sudo vim login.defs
```

yes olan

kısmı no yaptık.

```
[ec2-user@ip-172-31-22-51 etc]$ sudo useradd user4
[ec2-user@ip-172-31-22-51 etc]$ cat /etc/passwd
```

```
user4:x:1004:1004::/home/user4:/bin/bash
```

user4 de oluşturulmuş görmüş

olduk.

```
[ec2-user@ip-172-31-18-233 ~]$ ls /home
ec2-user user1 user2 user3
[ec2-user@ip-172-31-18-233 ~]$ sudo su - user4
su: warning: cannot change directory to /home/user4: No such file or directory
[user4@ip-172-31-18-233 ec2-user]$ whoami
user4
[user4@ip-172-31-18-233 ec2-user]$
```

User4 geçecek ama kendi ortamı olmayacak. (1. Saat 31. Dakikada anlatmış hoca)

```
sudo useradd -m user5 # force to system to create a home directory for user with -m option.
```

```
[ec2-user@ip-172-31-22-51 ~]$ sudo useradd -m user5
[ec2-user@ip-172-31-22-51 ~]$ ls /home
ec2-user user1 user2 user3 user4 user5
[ec2-user@ip-172-31-22-51 ~]$ sudo useradd -m -d /home/userALTI user6
[ec2-user@ip-172-31-22-51 ~]$ tail -6 /etc/passwd
user1:x:1001:1001::/home/user1:/bin/bash
user2:x:1002:1002::/home/user2:/bin/bash
user3:x:1003:1003::/home/user3:/bin/bash
user4:x:1004:1004::/home/user4:/bin/bash
user5:x:1005:1005::/home/user5:/bin/bash
user6:x:1006:1006::/home/userALTI:/bin/bash
[ec2-user@ip-172-31-22-51 ~]$
```

```
# change the user's home directory name with -d option.
```

```
[ec2-user@ip-172-31-22-51 ~]$ ls /home
ec2-user user1 user2 user3 user4 user5 userALTI
```

-d force olarak oluşturun.

```
sudo useradd -m -c "this guy is developer" user7 # give a description to user with -c option.
```

```
[ec2-user@ip-172-31-22-51 ~]$ sudo useradd -m -c "this guy is cihan's team" user7
[ec2-user@ip-172-31-22-51 ~]$ tail -7 /etc/passwd
user1:x:1001:1001::/home/user1:/bin/bash
user2:x:1002:1002::/home/user2:/bin/bash
user3:x:1003:1003::/home/user3:/bin/bash
user4:x:1004:1004::/home/user4:/bin/bash
user5:x:1005:1005::/home/user5:/bin/bash
user6:x:1006:1006::/home/userALTI:/bin/bash
user7:x:1007:1007:this guy is cihan's team:/home/user7:/bin/bash
[ec2-user@ip-172-31-22-51 ~]$
```

```
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/passwd | grep user7  
user7:x:1007:1007:this guy is cihan's team:/home/user7:/bin/bash  
[ec2-user@ip-172-31-22-51 ~]$
```

```
[ec2-user@ip-172-31-22-51 ~]$ sudo userdel user5  
[ec2-user@ip-172-31-22-51 ~]$ tail -7 /etc/passwd  
ec2-user:x:1000:1000:EC2 Default User:/home/ec2-user:/bin/bash  
user1:x:1001:1001::/home/user1:/bin/bash  
user2:x:1002:1002::/home/user2:/bin/bash  
user3:x:1003:1003::/home/user3:/bin/bash  
user4:x:1004:1004::/home/user4:/bin/bash  
user6:x:1006:1006::/home/userALTI:/bin/bash  
user7:x:1007:1007:this guy is cihan's team:/home/user7:/bin/bash  
[ec2-user@ip-172-31-22-51 ~]$
```

* User5 gitti bu komutla. Altındaki komutla da kontrol ettik gitmiş mi diye.

```
[ec2-user@ip-172-31-22-51 ~]$ ls /home  
ec2-user user1 user2 user3 user4 user5 user7 userALTI  
[ec2-user@ip-172-31-22-51 ~]$ sudo userdel -r user1  
[ec2-user@ip-172-31-22-51 ~]$ ls  
[ec2-user@ip-172-31-22-51 ~]$ ls /home  
ec2-user user2 user3 user4 user5 user7 userALTI  
[ec2-user@ip-172-31-22-51 ~]$
```

* user5 gitti ama home klasörü kaldı bizde. Fakat yukarıdaki komutla user sildiğimiz zaman home klasörü dahil hiçbir şey kalmaz.

```
[ec2-user@ip-172-31-22-51 home]$ ls  
ec2-user user2 user3 user4 user5 user7 userALTI  
[ec2-user@ip-172-31-22-51 home]$ rm -rf user5  
rm: cannot remove 'user5': Permission denied  
[ec2-user@ip-172-31-22-51 home]$ sudo rm -rf user5  
[ec2-user@ip-172-31-22-51 home]$ ls  
ec2-user user2 user3 user4 user7 userALTI  
[ec2-user@ip-172-31-22-51 home]$
```

Ec2-user yetkisi olmadığından izin vermedi, O yüzden sudo kullandık.

```
sudo usermod -l Superuser user2 # change the name of the user2 with -l option.
```



```
[ec2-user@ip-172-31-22-51 ~]$ sudo usermod -c "Ahmet team" user7
[ec2-user@ip-172-31-22-51 ~]$ tail -3 /etc/passwd
user4:x:1004:1004::/home/user4:/bin/bash
user6:x:1006:1006::/home/userALTI:/bin/bash
user7:x:1007:1007:Ahmet team:/home/user7:/bin/bash
[ec2-user@ip-172-31-22-51 ~]$
```

```
sudo usermod -l Superuser user2 # change the name of the user2 with -l option.
```

```
[ec2-user@ip-172-31-22-51 ~]$ sudo usermod -l Superuser user2
[ec2-user@ip-172-31-22-51 ~]$ tail -3 /etc/passwd
user6:x:1006:1006::/home/userALTI:/bin/bash
user7:x:1007:1007:Ahmet team:/home/user7:/bin/bash
Superuser:x:1002:1002::/home/user2:/bin/bash
[ec2-user@ip-172-31-22-51 ~]$ tail -7 /etc/passwd
tcpdump:x:72:72:::/sbin/nologin
ec2-user:x:1000:1000:EC2 Default User:/home/ec2-user:/bin/bash
user3:x:1003:1003::/home/user3:/bin/bash
user4:x:1004:1004::/home/user4:/bin/bash
user6:x:1006:1006::/home/userALTI:/bin/bash
user7:x:1007:1007:Ahmet team:/home/user7:/bin/bash
Superuser:x:1002:1002::/home/user2:/bin/bash
[ec2-user@ip-172-31-22-51 ~]$
```

* Değişiklik yapmak istediğimiz kullanıcının ismi hep en sonda olacak.

```
[ec2-user@ip-172-31-22-51 ~]$ sudo cat /etc/shadow
root:*LOCK*:14600::::::
bin:*:19387:0:99999:7:::
daemon:*:19387:0:99999:7:::
adm:*:19387:0:99999:7:::
lp:*:19387:0:99999:7:::
sync:*:19387:0:99999:7:::
shutdown:*:19387:0:99999:7:::
halt:*:19387:0:99999:7:::
mail:*:19387:0:99999:7:::
operator:*:19387:0:99999:7:::
games:*:19387:0:99999:7:::
systemd-resolve:!:19478::::::
sshd:!:19478::::::
rpc:!:19478:0:99999:7:::
libstoragemgmt:!:19478::::::
systemd-coredump:!:19478::::::
systemd-timesync:!:19478::::::
ec2-instance-connect:!:19478::::::
rpcuser:!:19478::::::
chrony:!:19478::::::
tcpdump:!:19478::::::
ec2-user:!:19495:0:99999:7:::
user3:!:19495:0:99999:7:::
```

```
Superuser:$6$zxntA5D7.ETe.h0Y$zvscOcN0G3Tfkkx1/cx0iiEo6TACMBsA5HKv90q.e/WRGe4PlYcSYBe9ZEp/Iuq.UmVoY9MXzce4FBmjvPaKy
/:19495:0:99999:7:::
[ec2-user@ip-172-31-22-51 ~]$
```

* Bu bizim kullanıcılarımızın şifresinin vs. tutulduğu yer. Ama şu kısım user2 şifre verdiğimiz yer buna denk geliyor. Kriptolanmış hali. Shadow komutu bir tek sudo ile girilebilir.

```
[ec2-user@ip-172-31-22-51 etc]$ groups
ec2-user adm wheel systemd-journal
[ec2-user@ip-172-31-22-51 etc]$
```

Şu an kullandığım kullanıcının dahil

olduğu grupları görebiliyorum.

```
[ec2-user@ip-172-31-22-51 ~]$ sudo groupadd linux
[ec2-user@ip-172-31-22-51 ~]$ sudo groupadd aws
[ec2-user@ip-172-31-22-51 ~]$ sudo groupadd python
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/group
```

```
ec2-user:x:1000:
user2:x:1002:
user3:x:1003:
user4:x:1004:
user6:x:1006:
user7:x:1007:
```

```
linux:x:1008:
aws:x:1009:
python:x:1010:
```

```
[ec2-user@ip-172-31-22-51 ~]$
```

* Gruplar oluştu

* Her kullanıcı oluşturulduğunda kendisi ile birlikte , kendi isminde bir grup oluşturuyor.

```
[ec2-user@ip-172-31-22-51 ~]$ groups user6
user6 : user6
```

User6 dahil olduğu grubu gördük.

```
164 sudo usermod -a -G linux ec2-user # append ec2-user in linux group.
```

```
[ec2-user@ip-172-31-22-51 ~]$ sudo usermod -a -G linux ec2-user
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/group
```

```
screen:x:80:
ec2-user:x:1000:
user2:x:1002:
user3:x:1003:
user4:x:1004:
user6:x:1006:
user7:x:1007:
linux:x:1008:ec2-user
aws:x:1009:
python:x:1010:
[ec2-user@ip-172-31-22-51 ~]$
```

* ec2-user2 kullanıcılarını linux grubuna dahil etti.

```
[ec2-user@ip-172-31-22-51 ~]$ groups ec2-user  
ec2-user : ec2-user adm wheel systemd-journal linux
```

Burada da

görmüş olduk groups komutuyla.

```
[ec2-user@ip-172-31-22-51 ~]$ sudo usermod -G aws user3  
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/group
```

```
ec2-user:x:1000:  
user2:x:1002:  
user3:x:1003:  
user4:x:1004:  
user6:x:1006:  
user7:x:1007:  
linux:x:1008:ec2-user  
aws:x:1009:user3  
python:x:1010:  
[ec2-user@ip-172-31-22-51 ~]$
```

* Eğer append yapmazsak direkt G ile yaparsak o kullanıcının dahil olduğu gruplardan çıkarıyor, sadece o an yapmak istediğiniz gruba alıyor. Eğer user3 başka bir grupta olsaydı oradan alınacak son yaptığımız aws grubunda olacaktı sadece. Append eklemediğimiz için. Append unutmayacağız.

```
sudo usermod -G aws ec2-user # this command deletes all groups that ec2-user in except default group of ec2-user and add ec2-user to aws group.
```

```
sudo groupmod -n my-linux linux # change the name of the linux group.
```

```
[ec2-user@ip-172-31-22-51 ~]$ sudo groupmod -n my-linux linux  
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/group
```

```
ec2-user:x:1000:  
user2:x:1002:  
user3:x:1003:  
user4:x:1004:  
user6:x:1006:  
user7:x:1007:  
aws:x:1009:user3  
python:x:1010:  
my-linux:x:1008:ec2-user  
[ec2-user@ip-172-31-22-51 ~]$
```

* linux kullanıcısının ismi my-linux olarak değişti.

```
sudo gpasswd -a user7 aws # add a user to a group.
```

```
[ec2-user@ip-172-31-22-51 ~]$ sudo gpasswd -a user7 aws
Adding user user7 to group aws
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/group
```

```
ec2-user:x:1000:
user2:x:1002:
user3:x:1003:
user4:x:1004:
user6:x:1006:
user7:x:1007:
aws:x:1009:user3,user7
python:x:1010:
my-linux:x:1008:ec2-user
[ec2-user@ip-172-31-22-51 ~]$
```

* user 7 kullacısını aws grubuna ekledi

```
sudo gpasswd -d user7 aws # delete a user to a group.
```

```
[ec2-user@ip-172-31-22-51 ~]$ sudo gpasswd -d user7 aws
Removing user user7 from group aws
[ec2-user@ip-172-31-22-51 ~]$ cat /etc/group
```

```
ec2-user:x:1000:
user2:x:1002:
user3:x:1003:
user4:x:1004:
user6:x:1006:
user7:x:1007:
aws:x:1009:user3
python:x:1010:
my-linux:x:1008:ec2-user
[ec2-user@ip-172-31-22-51 ~]$
```

*user7 kullacısını aws grubundan çıkarttı.

Package Management



A **package manager** is a collection of software tools that automates the process of **installing**, **upgrading**, **configuring**, and **removing** compute programs for a computer's operating system in a consistent manner.



Package Management



A package manager **deals with packages, distributions of software and data in archive files**. **Packages** contain **metadata**, such as the **software's name, description of its purpose, version number, vendor, checksum**, and a **list of dependencies** necessary for the software to run properly. Upon installation, metadata is stored in a local package database.

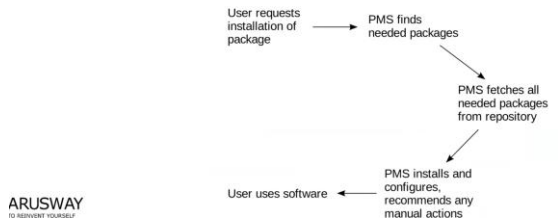


ARUSWAY

Package Management



Package managers are **designed to eliminate the need for manual install and updates**. This can be particularly useful for large enterprises who: operating systems are typically consisting of **hundreds or even tens thousands** of distinct software packages.



ARUSWAY

Package Management



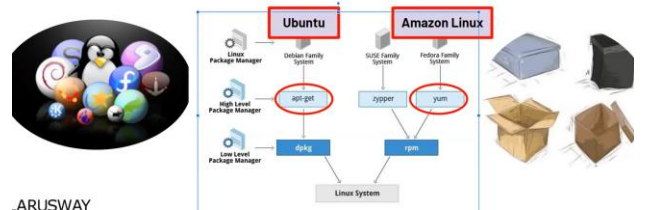
Operating System	Format	Tool(s)
Debian	.deb	apt, apt-cache, apt-get, dpkg
Ubuntu	.deb	apt, apt-cache, apt-get, dpkg
CentOS	.rpm	yum
Fedora	.rpm	dnf
FreeBSD	Ports, .txz	make, pkg

<https://stackoverflow.com/questions/10286459/multiple-package-manager>

Popular Linux System Package Manage



Linux systems use package managers to add or remove the software packages. These **package managers are also a package** so you can install any of them.



ARUSWAY

Popular Linux System Package Manage



Debian Package Managers

dpkg is the **main package management program** for the **Debian Linux** distros. It is used to handle Debian package files with the extension of **.deb**

```
$ dpkg -i [package-name] # Installing a package
$ dpkg -r [package-name] # Removing a package
$ dpkg -l                 # Lists installed packages
```

```
- Update Amazon Linux Instance.
sudo yum update
...
- Update Ubuntu's package list. This command updates the local repo database but do not install any package.
sudo apt update
```

Amazon Linux ve ubuntuda update komutları.

```
Install git on Amazon Linux instance.
sudo yum install git
- Uninstall git on Amazon Linux instance.
sudo yum remove git
```

Linux de install ve remove komutları

```
sudo apt remove git
- Check the version of git installed on Ubuntu instance.(There should be no info, because it's just removed a minute ago)
```

Ubuntu da remove komutu.

```

sudo yum info git
- Check the info for the git package installed on Ubuntu instance.

sudo apt info git
- List all available packages for Amazon Linux instance.

sudo yum list
- List all available packages for Ubuntu instance.

sudo apt list
- List all available git packages for Amazon Linux instance.

sudo yum list git
- List all available git packages for Ubuntu instance.

sudo apt list git
- List all installed packages on Amazon Linux instance.

sudo yum list installed
- List all installed packages on Ubuntu instance.

sudo apt list --installed
- List all available versions of git packages on Amazon Linux instance.

sudo yum --showduplicates list git
- Check the version of git installed on Amazon Linux instance.

git --version
- Uninstall git with dependencies on Amazon Linux instance without any interruption.

sudo yum autoremove git -y
- Install a previous version of git on Amazon Linux instance.

sudo yum --showduplicates list git
sudo yum install git-2.14.5-1.amzn2 -y
- Check the version of git installed on Amazon Linux instance.

git --version
- List all available versions of git packages on Amazon Linux instance.

sudo yum --showduplicates list git
- Check the available version of git with info command.

sudo yum list git
- Update git and check the version.

sudo yum update git -y
git --version

```