

# Securium fox Technologies Pvt Ltd

## Internship Day-6

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### 1. ping

ping tool is used to test whether a host is dead or alive.

Here -c represents count and 5 represents value of count

```
└─(root@kali)-[~]
└─# ping google.com -c 5
PING google.com (142.250.182.14) 56(84) bytes of data.
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=1 ttl=128
time=15.3 ms
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=2 ttl=128
time=15.7 ms
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=3 ttl=128
time=25.9 ms
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=4 ttl=128
time=20.8 ms
64 bytes from maa05s18-in-f14.1e100.net (142.250.182.14): icmp_seq=5 ttl=128
time=15.4 ms

--- google.com ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4032ms
rtt min/avg/max/mdev = 15.271/18.625/25.899/4.179 ms
```

### 2. su: switch user

Change the effective user ID and group ID to that of user

```
└─(root@kali)-[~]
└─# su kali
└─(kali@kali)-[/root]
└─$ exit
```

### 3. less /etc/passwd

```
—(root@kali)-[~]  
└─# less /etc/passwd  
  
root:x:0:0:root:/root:/bin/bash  
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin  
bin:x:2:2:bin:/bin:/usr/sbin/nologin  
sys:x:3:3:sys:/dev:/usr/sbin/nologin  
sync:x:4:65534:sync:/bin:/bin/sync
```

```
kali      : x      :1000   :1000   :Kali,,,:/home/kali   :/usr/bin/zsh  
  
username:passwd:userid:groupid:grpname:homedirectory:shell
```

### 4. less /etc/group

group directory contains all the groups in the system.

```
—(root@kali)-[~]  
└─# less /etc/group  
  
root:x:0:  
daemon:x:1:  
bin:x:2:  
sys:x:3:  
adm:x:4:  
tty:x:5:  
disk:x:6:
```

```
root      : x      : 0      :  
groupname : password: groupid : relevant users in grp
```

## USER MANAGEMENT

### 1. USERADD

```
—(root@kali)-[~]  
└─# useradd vardhan  
  
—(root@kali)-[~]
```

```

└─# less /etc/passwd
vardhan:x:1002:1002::/home/vardhan:/bin/sh

└─(root@kali)-[~]
└─# cd /home
└─(root@kali)-[/home]
└─# ls -l
total 12
drwxr-xr-x 14 kali kali 4096 Jun  6 07:18 kali
-rw-r--r--  1 root root   5 Jun  6 01:11 output.txt
drwxr-xr-x 14 teja teja 4096 Jun  6 07:36 teja

└─(root@kali)-[/home]
└─# mkdir vardhan
└─(root@kali)-[/home]
└─# ls -l
total 16
drwxr-xr-x 14 kali kali 4096 Jun  6 07:18 kali
-rw-r--r--  1 root root   5 Jun  6 01:11 output.txt
drwxr-xr-x 14 teja teja 4096 Jun  6 07:36 teja
drwxr-xr-x  2 root root 4096 Jun  6 07:40 vardhan

```

2. **chown**: We can change the owner and group of new user.

```

└─(root@kali)-[/home]
└─# chown vardhan: vardhan vardhan
└─(root@kali)-[/home]
└─# ls -l
total 16
drwxr-xr-x 14 kali    kali    4096 Jun  6 07:18 kali
-rw-r--r--  1 root    root     5 Jun  6 01:11 output.txt
drwxr-xr-x 14 teja    teja    4096 Jun  6 07:36 teja
drwxr-xr-x  2 vardhan vardhan 4096 Jun  6 07:40 vardhan

```

3. **usermod**

```

└─(root@kali)-[/home]
└─# passwd vardhan
New password:
Retype new password:

```

```
passwd: password updated successfully
```

```
└─(root@kali)-[/home]
```

```
└─# usermod --unlock vardhan
```

```
└─(root@kali)-[/home]
```

```
└─# usermod -s /usr/bin/zsh vardhan
```

Now we can login to new user vardhan which has z shell as main shell

## Group Management

### 1. addgroup

```
└─(root@kali)-[~]
```

```
└─# addgroup rvr
```

```
Adding group `rvr' (GID 1003) ...
```

```
Done.
```

```
└─(root@kali)-[~]
```

```
└─# cd /home
```

```
└─(root@kali)-[/home]
```

```
└─# ls -l
```

```
total 16
```

```
drwxr-xr-x 14 kali    kali    4096 Jun  6 07:18 kali
```

```
-rw-r--r--  1 root    root      5 Jun  6 01:11 output.txt
```

```
drwxr-xr-x 14 teja    teja    4096 Jun  6 07:36 teja
```

```
drwxr-xr-x 14 vardhan vardhan 4096 Jun  6 07:48 vardhan
```

```
└─(root@kali)-[/home]
```

```
└─# usermod -g 1003 vardhan
```

```
└─(root@kali)-[/home]
```

```
└─# id vardhan
```

```
uid=1002(vardhan) gid=1003(rvr) groups=1003(rvr)
```

### 2. ps

List all processes for current user

```
└─(root@kali)-[~]
```

```
└─# ps
```

PID	TTY	TIME	CMD
4982	pts/0	00:00:00	bash
5065	pts/0	00:00:00	ps

### 3. **ps aux | head**

First 10 processes running in the system

```
—(root@kali)-[~]
└─# ps aux | head
USER          PID %CPU %MEM    VSZ   RSS TTY      STAT START   TIME COMMAND
root           1  0.0  0.5 164048 10464 ?        Ss   01:32   0:04 /sbin/init splash
root           2  0.0  0.0      0     0 ?        S    01:32   0:00 [kthreadd]
root           3  0.0  0.0      0     0 ?        I<   01:32   0:00 [rcu_gp]
root           4  0.0  0.0      0     0 ?        I<   01:32   0:00 [rcu_par_gp]
root           6  0.0  0.0      0     0 ?        I<   01:32   0:00 [kworker/0:0H-events_highpri]
root           8  0.0  0.0      0     0 ?        I<   01:32   0:00 [mm_percpu_wq]
root           9  0.0  0.0      0     0 ?        S    01:32   0:00 [rcu_tasks_rude_]
root          10  0.0  0.0      0     0 ?        S    01:32   0:00 [rcu_tasks_trace]
root          11  0.0  0.0      0     0 ?        S    01:32   0:00 [ksoftirqd/0]
```

## Linux File Permissions

	4	2	1	
0	-	-	-	no permissions
1	-	-	x	only execute
2	-	w	-	only write
3	-	w	x	write and execute
4	r	-	-	only read
5	r	-	x	read and execute
6	r	w	-	read and write
7	r	w	x	read, write and execute

chmod is used to change permissions of a file.

```

—(root@kali)-[~]
└─# ls -l skype.txt
-rw-r--r-- 1 root root 103 Jun  5 13:58 skype.txt
└─(root@kali)-[~]
└─# chmod 755 skype.txt
└─(root@kali)-[~]
└─# ls -l skype.txt
-rwxr-xr-x 1 root root 103 Jun  5 13:58 skype.txt

rwx : r-x : r-x
user:group:others

```