

Practical 11 Exercise

Name:	Admin No:	Group:
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Instructions:

- 1) Do the tasks and paste the screen shots using Windows snipping tool in the boxes provided Copy the commands and output. Enlarge the box or resize the image if necessary.

Task 1

Create a shared directory (/home/contracts) with the following conditions:

- (a) A Service department has 3 users - svc1, svc2, svc3. Create them and show proof.

```
[root@server ~]# grep svc /etc/passwd
svc1:x:808:808::/home/svc1:/bin/bash
svc2:x:809:809::/home/svc2:/bin/bash
svc3:x:810:810::/home/svc3:/bin/bash
[root@server ~]# grep svc /etc/shadow
svc1:$1$8PU9rcBS$JfDty3ZT.HFQnY3Wb0J6B/:18455:0:99999:7:::
svc2:$1$srZV0GAg$/JqKKA/wi8Q8wiUqIC7b80:18455:0:99999:7:::
svc3:$1$PlwEbQCI$jPgzMdSfg2t01CUZzEk700:18455:0:99999:7:::
```

- (b) They are in a group called **servicedept**. Create the group and add the users as its members. Display the group and the members.

```
[root@server ~]# grep servicedept /etc/group
servicedept:x:904:svc1,svc2,svc3
[root@server ~]# _
```

- (c) Create the directory /home/contracts. Display the command and a listing of the directory.

```
[root@server ~]# ls -ld /home/contracts
drwxr-xr-x. 2 root root 4096 Jul 11 22:49 /home/contracts
```

- (d) Configure /home/contracts to be shared by servicedept group such that

members can Read and Write to the shared directory. Display the commands and directory permission after configuration.

```
[root@server /]# ls -ld /home/contracts
drwxrwsr-x. 2 root servicedept 4096 Jul 11 22:49 /home/contracts
```

(e) Switch to svc1 user and show they he can create a file in the shared directory.

```
[svc1@server contracts]$ ls -la
total 12
drwxrwsr-x. 2 root servicedept 4096 Jul 11 23:02 .
drwxr-xr-x. 37 root root      4096 Jul 11 22:49 ..
-rw-rw-r--. 1 svc1 servicedept 14 Jul 11 23:02 svc1.out
```

(f) Configure such that other users cannot see the directory or its contents (except root). After configuration, display the directory permission here.

```
[root@server contracts]# ls -ld /home/contracts
drwxrws---. 2 root servicedept 4096 Jul 11 23:03 /home/contracts
```

(g) Configure such that members cannot delete other members files. They can only delete their own files. Display your commands and list the shared directory permission after configuration.

```
[root@server contracts]# ls -ld /home/contracts
drwxrws--T. 2 root servicedept 4096 Jul 11 23:14 /home/contracts
```

(h) Use ACL to enable a user alex (create the user if necessary) to have Read, Write and Execute permission to the shared directory. Display the command here.

```
[root@server contracts]# setfacl -m u:alex:rwx /home/contracts
[root@server contracts]# _
```

(i) Display the ACL permission of the shared directory here.

```
[root@server contracts]# getfacl /home/contracts
getfacl: Removing leading '/' from absolute path names
# file: home/contracts
# owner: root
# group: servicedept
# flags: -st
user::rwx
user:alex:rwx
group::rwx
mask::rwx
other::---
```

[root@server contracts]# _

(j) Configure such that members can ONLY READ other members files. Members can edit or delete their own files but not other member files. Display your commands and some test results here. You may need to google this.

Task 2

Pre-requisite: In one of the practical, sales1 user was created. If you did not do it, create the user sales1 first before proceeding.

- (a) Backup /home/sales1 directory to **/tmp/sales1.tar**
Display the command and a listing to show the archive file.

```
[root@server ~]# tar -cvpzf /tmp/sales1.tar /home/sales1
tar: Removing leading '/' from member names
/home/sales1/
/home/sales1/.gnome2/
/home/sales1/.bash_logout
/home/sales1/.bash_profile
/home/sales1/sales1.out
/home/sales1/.mozilla/
/home/sales1/.mozilla/plugins/
/home/sales1/.mozilla/extensions/
/home/sales1/.bashrc
/home/sales1/.bash_history
[root@server ~]# ls -l /tmp/sales1
ls: cannot access /tmp/sales1: No such file or directory
[root@server ~]# ls -l /tmp/sales1.tar
-rw-r--r--. 1 root root 747 Jul 11 22:18 /tmp/sales1.tar
[root@server ~]# █
```

- (b) Delete /home/sales1 completely. Display the command and show that /home/sales1 does not exist anymore.

```
[root@server ~]# rm -rf /home/sales1
[root@server ~]# ls -ld /home/sales1
ls: cannot access /home/sales1: No such file or directory
[root@server ~]# █
```

- (c) Restore /home/sales1 from the archive /tmp/sales1.tar
Display the command and output.

```
[root@server home]# cd /  
[root@server /]# tar -xvf /tmp/sales1.tar  
home/sales1/  
home/sales1/.gnome2/  
home/sales1/.bash_logout  
home/sales1/.bash_profile  
home/sales1/sales1.out  
home/sales1/.mozilla/  
home/sales1/.mozilla/plugins/  
home/sales1/.mozilla/extensions/  
home/sales1/.bashrc  
home/sales1/.bash_history
```

- (d) Check that /home/sales1 has been restored. Show that sales1 has been restored.

```
[root@server /]# ls -ld /home/sales1  
drwxr-x---. 4 sales1 groupsales 4096 Jul 10 01:56 /home/sales1
```

- (e) Use rsync to backup the /home directory to /tmp/homebackup. Display the command below.

```
# rsync -av /home /tmp/homebackup
```

Save the file in PDF format and submit in Blackboard.

[The End]