

### 1. How do you edit the current user's crontab?

```
[moe404@localhost ~]$ crontab -e
no crontab for moe404 - using an empty one
crontab: installing new crontab
```

### 2. How do you list scheduled cron jobs for the current user?

```
[moe404@localhost ~]$ crontab -l
0 0 1 1 0 0 ~/script.sh
[moe404@localhost ~]$
```

### 3. How do you delete all cron jobs for the current user?

```
[moe404@localhost ~]$ crontab -r
[moe404@localhost ~]$ crontab -l
no crontab for moe404
```

### 4. Cron Syntax Questions

- Schedule a job to run every day at 3:30 AM `30 3 * * * /script.sh`
- Run a script every Monday at 5:15 PM `15 17 * * 1 /script.sh`
- Execute a command every 10 minutes `*/10 * * * * /script.sh`
- Schedule a task to run every weekday (Mon-Fri) at 6:30 PM `30 18 * * 1-5 /script.sh`
- Run a job on the 1st and 15th of each month at 8:00 AM `0 8 1,15 * * /script.sh`

### 5. How do you restrict users from using cron?

Add the username to `/etc/cron.deny` | `echo "username" >> /etc/cron.deny`

### 6. Set UserID

- Create File and Set Execution and setuid permission
- Check if setuid is enabled on File

```
[moe404@localhost ~]$ touch test.sh
[moe404@localhost ~]$ chmod u+s test.sh
[moe404@localhost ~]$ ls -l test.sh
-rwSr--r--. 1 moe404 moe404 0 Mar 28 17:55 test.sh
```

### 7. SetGroupID

- Create directory testdir and set setgid
- Check if setgid is enabled on directory
- Logout and login as root
- Create testfile in testdir and verify ownership

```
[moe404@localhost ~]$ mkdir dirtest
[moe404@localhost ~]$ chmod g+s dirtest/
[moe404@localhost ~]$ ls -ld dirtest/
drwxr-sr-x. 2 moe404 moe404 6 Mar 28 17:58 dirtest/
[moe404@localhost ~]$ su root
Password:
[root@localhost moe404]# ls
dead.letter  dirtest  Downloads  Pictures  script.sh  testdir  Videos
Desktop      Documents  Music      Public    Templates  test.sh
[root@localhost moe404]# touch testdir/testfile
[root@localhost moe404]# ls -l testdir/testfile
-rw-r--r--. 1 root moe404 0 Mar 28 17:59 testdir/testfile
```

## 8. Stick bit

- Create public directory dir1 with sticky bit
- Check if sticky bit is enabled on directory
- Logout and login as user1
- Create userfile1 in dir1

```
[moe404@localhost ~]$ sudo mkdir dir1
[moe404@localhost ~]$ sudo chmod +t dir1
[moe404@localhost ~]$ sudo ls -ld dir1/
drwxr-xr-t. 2 root root 6 Mar 28 23:02 dir1/
[moe404@localhost ~]$ sudo touch dir1/userfile1
[moe404@localhost ~]$
```

- Login as user2 and attempt to remove userfile1

```
[test@localhost ~]$ rm dir1/userfile1
rm: remove write-protected regular empty file 'dir1/userfile1'? y
rm: cannot remove 'dir1/userfile1': Permission denied
[test@localhost ~]$
```

## 9. Give user john read and write permissions on myfile.txt

```
[moe404@localhost ~]$ setfacl -m u:test:rw script.sh
```

## 10. How to view the ACL of a file named myfile.txt?

```
[moe404@localhost ~]$ getfacl script.sh
# file: script.sh
# owner: moe404
# group: moe404
user::rwx
user:test:rw-
group::r--
mask::rw-
other::r--
```

## 11. How do you give the group developers execute permissions on the directory /home/user/documents

```
[moe404@localhost ~]$ setfacl -m g:developers:x /home/moe404/Documents
```

## 12. How to remove the ACL entry for the user john on the file file1.txt?

```
[moe404@localhost ~]$ setfacl -x u:test script.sh
```

## 13. How do you set a default ACL for a directory so that all new files and directories created inside it inherit the same permissions?

```
[moe404@localhost ~]$ sudo setfacl -d -m u:test:rwx /dir1/
[sudo] password for moe404:
[moe404@localhost ~]$
```

## 14. Allow group developers to read all files in ~/Music recursively

```
[moe404@localhost ~]$ setfacl -R -m g:developers:r ~/Music
```

## 15. How to remove all ACLs from the file file1.txt and revert to the standard Unix permissions?

```
[moe404@localhost ~]$ setfacl -b script.sh
```

16. Set a mask on myfile.txt to limit all non-owners to r--.

```
[moe404@localhost ~]$ setfacl -m m::r-- script.sh
```

17. How would you allow user 'alice' to run only the 'yum' command as root?

```
[moe404@localhost ~]$ su root
Password:
[root@localhost moe404]# echo "alice ALL=(ALL) NOPASSWD: /usr/bin/yum" >> /etc/sudoers
[root@localhost moe404]#
```

18. How would you allow a group 'developers' to run any command as root without a password?

```
[root@localhost moe404]# echo "%developers ALL=(ALL) NOPASSWD: ALL" >> /etc/sudoers
[root@localhost moe404]#
```