

Cron

- It is used to schedule recurring events
- Use crontab to edit, install and view job schedules

Syntax:

crontab [-u user] file

crontab [-l:-r|-e]

-l lists crontab jobs

-r remove crontab

-e edits crontab jobs using \$EDITOR

Note

- cron jobs are stored in /var/spool/cron
- daemon for crontab: crond

Valid fields

Minute	Hour	Day of Month	Month	Day of week
0-59	0-23	1-31	1-12 or jan, Feb ...	0 or 7 = Sunday, 1=Monday, ...

- Multiple values may be separated by commas □ * indicates all valid values □ For further help:

```
man 5 crontab
```

Controlling access to cron

List of users to be allowed or denied will be listed in following files
/etc/cron.allow and /etc/cron.deny respectively.

Examples

1. Cron job which will run du -h and saves output to /tmp/myoutputfile in every minute.

```
cat > mycronjob
1 * * * * du -h >>/tmp/myoutputfile
crontab mycronjob
```

2. Cron job which will run du -h and saves its output to /tmp/myoutputfile in every 1st minute of hour alternating in 2 hours.

```
cat > mycronjob
1 */2 * * * du -h >>/tmp/myoutputfile
[press Ctrl+d to save and exict form cat mode]
crontab mycronjob
```

3. Cron job to do task in every 1st day of 4th week of the month on time of 5:00 PM

```
crontab -e  
0 17 1 */4 * ls -l >>output1
```

To execute script files in a particular directory called /etc/rc.d/htb

```
vi /etc/crontab  
path=<...path in the file currently>:/etc/rc.d/htb  
0 17 1 * root run-parts /etc/rc.d/htb
```

System logging

- To start system logging
#service syslog start
- Configuration file
/etc/syslog.conf
- Information files
/var/log/messages contains all log information
/var/log/dmesg contains kernel related logs
/var/log/mail contains mail related logs and so on.

Note: use tail command with feeding option to analyze current activities in particular program. For instance, use following command when even you got any error occurs in hosting website in apache:

```
tail -f /var/log/httpd/error.log
```

- Format of log:
Date/time:application [PID] messages

Further study: <http://www.cyberciti.biz/faq/how-do-i-add-jobs-to-cron-under-linux-or-unix-oses/> https://access.redhat.com/documentation/en-US/Red_Hat_Enterprise_Linux/6/html/Deployment_Guide/ch-Automating_System_Tasks.html