

Task scheduling

at

- at is used when you want to execute a command or multiple commands once at some future time.
- Input has to be supplied from the standard input.
- Example : print hello on your terminal.
- Step 1
 - \$ date
 - Tue Oct 3 15:33:37 PDT 1995

- Step 2

```
$ tty  
/dev/ttyp2
```

- Example : print hello on your terminal.

- Step 3

```
$ at 15:35  
echo "hello" > /dev/ttyp2  
^D
```

Job 18 will be executed using /bin/sh

\$ at now + 25 minutes

```
echo "HELLO " > /dev/tty4
```

```
^D
```

Job 11 will be executed using /bin/sh

You must tell at your tty location or it won't send output to your terminal window

Listing Job 'atq' command



- To get a list of your pending at jobs, enter:

\$ atq

- If you are superuser, atq shows you the pending at jobs of all users.

Delete a job enter 'atrm' command



- To delete a job, enter:

`$ atrm job_number`

where *job_number* is the job number returned by atq.

- The superuser can also remove other user's jobs.

- cron is a unix utility that allows tasks to be automatically run in the background at regular intervals by the cron daemon.
- These tasks are often termed as cron jobs in unix.
- Crontab (CRON TABLE) is a file which contains the schedule of cron entries to be run and at specified times.

- `export EDITOR=vi` ;to specify a editor to open crontab file.
- `crontab -e` Edit your crontab file, or create one if it doesn't already exist.
- `crontab -l` Display your crontab file.
- `crontab -r` Remove your crontab file.

- A crontab file has five fields for specifying day , date and time followed by the command to be run at that interval.

* * * * * command to be executed

```
- - - - -  
| | | | |  
| | | | +----- day of week (0 - 6) (Sunday=0)  
| | | +----- month (1 - 12)  
| | +----- day of month (1 - 31)  
| +----- hour (0 - 23)  
+----- min (0 - 59)
```

* in the value field above means all legal values as in braces for that column.

- **Crontab example:**
- removes the tmp files from /home/someuser/tmp each day at 6:30 PM.

```
30 18 * * * rm /home/someuser/tmp/*
```

Changing the parameter values as below will cause this command to run at different time schedule below :

min	hour	day/month	month	day/week	Execution time
30	0	1	1,6,12	*	-- 00:30 Hrs on 1st of Jan, June & Dec.
0	20	*	10	###	--8.00 PM every weekday (Mon-Fri) only in Oct.
0	0	1,10,15	*	*	-- midnight on 1st ,10th & 15th of month
5,10	0	10	*	1	-- At 12.05,12.10 every Monday & on 10th of every month