

* Interactive keys with top

→ Besides reporting information, top can be utilized interactively for monitoring and controlling process.

→ while top is running in terminal window, you can enter single-letter command to change its behavior.

Command	output
h or ?	Display available interactive keys and their function
t	Display or hide summary information (row 2 and 3)
m	Display or hide memory information (row 4 and 5)
l	Show information for each CPU and not just totals
d	change display update interval
A	Sort the Process list by top resource customers, consumers.
r	Renice (change priority of) a specific process
k	Kill the specific Process
f	Enter the top configuration screen
o	Interactively select a new sort order in the process list

→ Most of these interactive keys are actually toggles: hitting them a second time reverts to the original display.

→ There are many more interactive options see the man page for top for a comprehensive list.

→ There are a number of alternatives to top with both prettier display and additional capabilities including atop, btop, htop each program has its fans.

* Scheduling Future Process using at.

→ Suppose you need to perform a task on a specific day sometime in the future.

→ However you know you will be away from the machine on that day.

→ How will you perform the task?

→ you can use the at utility program to execute any non-interactive command at a specified time.

* Cron

- Cron is time-based scheduling utility Program.
- It can launch routine background jobs at specific times and/or days on ongoing basis.
- cron is driven by configuration file called `/etc/crontab` (cron table) which contains the various shell command that need to run at the properly scheduled times.
- Each line of crontab file represents a job, and is composed of so called CRON expression
- Typing `crontab -e` will open the crontab editor to edit existing jobs or to create new jobs. Each line of crontab file will contain 6 fields

Field	Description	values
MIN	minutes	0 to 59
HOUR	Hour field	0 to 23
Dom	Day or month	1-31
mon	month field	1-12
Dow	Day or week	0-6 (0 = Sunday)
cmd	Command	Any Command to be executed

* Examples

- The entry `* * * * *`
`/usr/local/bin/execute | this | scr | 1pt.sh`
will schedule a job to execute
script.sh every minute of every hour
of every day of the month, every
month and every day in the week.
- The entry `30 08 10 06 *`
`/home/sysadmin/full-backup` will schedule
a full back up at 8:30 AM, 10-June,
irrespective of the day of the
week.

* anacron

- while cron has been used in UNIX-like
operating system for decade, modern
Linux distribution have moved over to
newer facility : anacron.
- This was because cron implicitly assumed
the machine was always running.
- However if the machine was powered
off, scheduled job would not
run.

→ anacron will run necessary jobs in a controlled and staggered manner when the the system is up and running.

→ The key configuration file is

`/etc/anacrontab`

→ Note that anacron still makes use of the cron infrastructure for submitting jobs on a daily, weekly, monthly basis but it defers running them until opportune times when the system is actively alive

* sleep

→ sleep suspends execution for at least the specified period of time, which can be given as number of second (default), minuts, hours, or days.

→ After that time has passed execution will resume

`sleep number [suffix] ...`

→ where suffix may be

- s for second
- m for minutes
- h for hours
- d for days.
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