

RedHat Certified System Administrator (RHEL 9)

SUMMARY

CRON

- The service crond is responsible for managing the cron task-scheduling service; it is enabled by default. You can check it using:
`sudo systemctl status crond.service`
- The cron service runs tasks periodically.
- The syntax for creating a cron task is found in:
`man 5 crontab`
- Create a cron task:
`crontab -e [-u user]`
[PS: Specifying a user requires root access]
[PS: Not Specifying a user will modify the crontab of the current user]
- Example of cron task:
`* * * * * logger "message sent to /var/log/messages"`
`1-59/2 * * * * logger "every 2 minutes starting from minute 1 to minute 59"`
- Interesting Files:
 - `/etc/cron.deny`: black list of users denying of using cron service.
 - `/etc/cron.allow`: White list of users only they are allowed to use cron.

[PS: Priority goes like this:

`cron.allow` is checked first,

If it does not exist `cron.deny` is checked,

If that too does not exist **ONLY THE SUPER USER CAN USE CRON**]

- `/etc/cron.monthly`: scripts in this directory run once each month.
- `/etc/cron.weekly`: scripts in this directory run once each week.
- `/etc/cron.daily`: scripts in this directory run once a day.
- `/etc/cron.hourly`: scripts in this directory run once an hour.
- `/etc/cron.d/`: Files in this directory are cron tasks

[PS: Syntax in these files is: `"* * * * * [USER] [COMMAND]"`]

AT

- Another service to schedule tasks is atd.
- It is enabled by default.
- Check it using:
`systemctl status atd`
- AT Tasks are executed only once on the specified date and time.
- How to schedule a task using at:
`at 22:15`
`> /path/to/script.sh`
`Ctrl+d`
- The at command allows for complex time specifications, you can find more:
`man at`
- Check the queue of the at command:
`atq`
- Remove a task from the queue of the at command:
`atrm [id]`
[PS: To get the id of the task use the “atq” command]
- Relevant files:
 - `/etc/at.allow`
 - `/etc/at.deny`[PS: Same functioning as cron.allow & cron.deny]