

TASK SCHEDULER CONFIGURATION (CRON)

- A Task Scheduler is a system utility or service that allows you to automatically run tasks (commands, scripts, or programs) at specific times or under specific conditions without manual intervention.
- It helps automate repetitive or time-based operations on a system.
- For example: If the admin wants to back-up the server for every 3 hrs, the admin can schedule the task to backs-up the server every 3hrs using the TASK SCHEDULER (CRON)

What is Task Scheduler Used For?

Task Scheduler is used for **automation** in both personal and enterprise environments. Common use cases include:

- **Running tasks at a specific time**
(daily, weekly, monthly, or at system startup)
- **Automating repetitive jobs**
(log cleanup, backups, updates)
- **System maintenance tasks**
(disk cleanup, health checks, service restarts)
- **Monitoring & reporting**
(running scripts to collect logs or metrics)
- **Security tasks**
(rotating logs, scanning files, enforcing policies)

CONFIGURATIONS

Step 1: Install the Cron Package

Install the cron service using the following command:

- `dnf install cronie`

The cronie package provides the cron daemon, which is responsible for executing scheduled tasks in Linux systems.

Step 2: Enable and Start the Cron Service

Enable the cron service to start automatically at boot and start it immediately:

- `systemctl --now enable crond`

This ensures that scheduled jobs will continue to run even after a system reboot.

Step 3: Edit the Cron Configuration File

Open the system-wide cron configuration file:

- `vi /etc/crontab`

This file is used to define scheduled tasks that run automatically at specified times.

Cron Job Syntax (Schedule Format)

A cron job follows the structure shown below:

Minute | Hour | Day of Month | Month | Day of Week

Field Description

- Minute – Specifies the minute (0–59) when the task should run
- Hour – Specifies the hour (0–23) when the task should run
- Day of Month – Specifies the day of the month (1–31)
- Month – Specifies the month (1–12)
- Day of Week – Specifies the day of the week (0–7, where 0 and 7 represent Sunday)

An asterisk (*) means any value and allows the task to run for all possible values of that field.

Example Cron Entry

15 10 23 12 *

Explanation

This cron schedule means the task will run at 10:15 AM on the 23rd day of December, regardless of the day of the week.

In simple terms: The task will execute every year on December 23rd at 10:15 AM.