

✓ 1. Check if cron is installed and running

First, ensure the `cronie` package (cron daemon) is installed

```
sudo yum install cronie
```

Start and enable the cron service:

```
sudo systemctl start crond
sudo systemctl enable crond
```

Check status:

```
systemctl status crond
```

✓ 2. Edit your crontab

To edit the current user's crontab:

```
crontab -e
```

This opens the crontab file in your default editor (usually `vi` or `nano`).

✓ 3. Crontab syntax

Each line in the crontab represents a job and follows this format

```
* * * * * /path/to/command
- - - - -
| | | | |
| | | | +----- Day of week (0 - 7) (Sunday = 0 or 7)
| | | +----- Month (1 - 12)
| | +----- Day of month (1 - 31)
| +----- Hour (0 - 23)
+----- Minute (0 - 59)
```

✓ 4. Examples

Run a script every day at 2:30 AM:

```
30 2 * * * /home/user/backup.sh
```

Run a job every Monday at 5 PM:

```
0 17 * * 1 /home/user/script.sh
```

Run a command every 15 minutes:

```
*/15 * * * * /usr/bin/some_command
```

✓ 5. List and remove crontab entries

List current user's crontab:

```
crontab -l
```

Remove current user's crontab:

```
crontab -r
```

✓ 6. System-wide crontabs (for root/admin)

Edit system-wide cron jobs:

- `/etc/crontab`
- `/etc/cron.d/`
- `/etc/cron.daily/`, `/etc/cron.hourly/`, etc.

Example entry in `/etc/crontab` (note the user field):

```
30 3 * * * root /usr/local/bin/system_task.sh
```

✅ 7. Logging and troubleshooting

Cron logs to:

```
/var/log/cron
```

To check logs:

```
sudo tail -f /var/log/cron
```

Ensure the script is executable and has full paths to all commands (cron uses a limited environment).

✅ Step-by-step Example:

1. Create a test script

Create a file named `test_cron.sh` in your home directory:

```
nano ~/test_cron.sh
```

Add this to the file:

```
#!/bin/bash
echo "Cron ran at $(date)" >> ~/cron_test_output.txt
```

Make it executable:

```
chmod +x ~/test_cron.sh
```

2. Edit your crontab

Open your crontab:

```
crontab -e
```

Add this line to run the script every minute (just for testing):

```
* * * * * /home/yourusername/test_cron.sh
```

Replace `/home/yourusername/` with your actual username path.

3. Check the output

Wait a minute or two, then check:

```
cat ~/cron_test_output.txt
```

You should see lines like:

```
Cron ran at Sat Jun  8 15:12:01 UTC 2025  
Cron ran at Sat Jun  8 15:13:01 UTC 2025
```

This confirms the script was triggered by cron at the scheduled times.