

Scheduling Repeated Jobs with Cron

What You Will Learn

- Cron service
- Crontab format
- Crontab command

Cron

- `cron` - A time based job scheduling service.
- `crontab` - A program to create, read, update, and delete your job schedules.
- Use cron to schedule and automate tasks.

Crontab Format

* * * * * command

| | | | |

| | | | +-- Day of the Week (0-6)

| | | +---- Month of the Year (1-12)

| | +----- Day of the Month (1-31)

| +----- Hour (0-23)

+----- Minute (0-59)

Example Crontab Entry

```
# Run every Monday at 07:00.
```

```
0 7 * * 1 /opt/sales/bin/weekly-report
```

Example Crontab Entry

```
# Run every Monday at 07:00.
```

```
0 7 * * 1 /opt/sales/bin/weekly-report
```

```
| | | | |
```

```
| | | | +-- Day of the Week (0-6)
```

```
| | | +---- Month of the Year (1-12)
```

```
| | +----- Day of the Month (1-31)
```

```
| +----- Hour (0-23)
```

```
+----- Minute (0-59)
```

Redirecting Output

```
# Run at 02:00 every day and  
# send output to a log file.  
0 2 * * * /root/backupdb > /tmp/db.log 2>&1
```

Example Crontab Entries

```
# Run every 30 minutes.
```

```
0,30 * * * * /opt/acme/bin/half-hour-check
```

```
# Another way to do the same thing.
```

```
*/2 * * * * /opt/acme/bin/half-hour-check
```

```
# Run for the first 5 minutes of the hour
```

```
0-4 * * * * /opt/acme/bin/first-five-mins
```


Crontab Shortcuts

@yearly	0	0	1	1	*
---------	---	---	---	---	---

@annually	0	0	1	1	*
-----------	---	---	---	---	---

@monthly	0	0	1	*	*
----------	---	---	---	---	---

@weekly	0	0	*	*	0
---------	---	---	---	---	---

@daily	0	0	*	*	*
--------	---	---	---	---	---

@midnight	0	0	*	*	*
-----------	---	---	---	---	---

@hourly	0	*	*	*	*
---------	---	---	---	---	---

Using the Crontab Command

<code>crontab file</code>	Install a new crontab from file.
<code>crontab -l</code>	List your cron jobs.
<code>crontab -e</code>	Edit your cron jobs.
<code>crontab -r</code>	Remove all of your cron jobs.

Demo - crontab

Summary

- The cron service runs scheduled jobs
- Use the crontab command to schedule jobs