

# 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

---

- `crontab file` Install a new crontab from file.
- `crontab -l` List your cron jobs.
- `crontab -e` Edit your cron jobs.
- `crontab -r` Remove all of your cron jobs.

# Summary

---

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