

# Periodic Execution

*“You Have To Learn To Be Lazy!”*

## Introduction

Unix allows tasks to be scheduled for execution at a later date or for periodic execution. This session will explore this.

## See Also

cron (8), crontab (5), crontab (1), chmod (1), cat (1), ls (1), su (1)

Scripting The Shell exercise

*p. 386, Frisch*

## The Task

You will configure the cron facility to allow you to schedule the regular execution of the ckusage shell script that you created in the earlier shell script session.

You will need to be root to perform this exercise.

## Configuring Cron

Cron is one of the standard RedHat packages so you do not need to install it yourself.

For this exercise, you will restrict cron to a designated user only.

As root, create the file /etc/cron.allow (replace *your\_normal\_username* with your usual non-root username):

```
# echo your_normal_username > /etc/cron.allow
# chmod 640 /etc/cron.allow
```

## Scheduling A Script With Cron

As your regular user, you should now create a crontab to schedule execution of the ckusage script at regular intervals:

```
% crontab -e
```

Since this is the first time you have run the crontab command, you will be placed into an editor with a new, empty file. Add the following lines to the file:

```
SHELL=/bin/bash
*/5 * * * * $HOME/ckusage/ckusage 20
```

This schedules your ckusage shell script to run every 5 minutes.

When you exit the editor the crontab command will install this file into /var/spool/cron/*your\_normal\_username*. As root, try these commands:

```
# ls -l /var/spool/cron
# cat /var/spool/cron/your_normal_username
```

As *your\_normal\_username*, try:

```
# crontab -l
```

Notice the protection on the crontab file. Also notice that the output from the cat and crontab -l commands are the same.

# Periodic Execution

After 5 minutes or so, check your mail...you should have the output from the ckusage script in your mailbox.

## ***Cleaning Up***

As your regular user, you should remove your crontab (with `crontab -r`), so that it is not performing tasks uselessly.