



Beneficial Backups

Introduction and/or Background

rsync and grsync are a utility for efficiently transferring and synchronizing files between a computer and an folder, external hard drive and across networked computers by comparing the modification times and sizes of files.

Objectives

In this project/lab the student will:

- Gain familiarity with backup operations in Linux

Equipment/Supplies Needed

- As specified in Lab 0.0.1.

Procedure

Perform the steps in this lab in the order they are presented to you. Answer all questions and record the requested information. Use the Linux Virtual Machine to perform lab activities as directed. Unless otherwise stated, all tasks done as a non-root user. If root access is needed use the su - command.

Assignment

Research

- 1.a File compression: tar - <https://www.cyberciti.biz/faq/creating-a-tar-file-linux-command-line/>
- 1.b Backup scheduling: <https://www.tecmint.com/create-and-manage-cron-jobs-on-linux/>
- 1.c man cron

Promote to root user and install,

- 2 `apt-get install rsync`
- 3 `apt-get install grsync`

Now exit root and execute,

- 4 `cd Documents`
- 5 `touch file{1..50}`

Open terminal and start grsync,

6 `grsync &`

For your source enter,

7 `/home/<account>/Documents`

For your destination enter,

8 `/home/<account>/backup`

Click the lightbulb icon. This preforms a dry run. Make any corrections till the process returns a exit status of 0.

Now, select `Extra options` tab.

Enable `execute this command after rsync`

Add in the space,

9 `tar -czf backup.tar.gz <Destination Directory>`

Click the gear symbol. The tool will copy all files in source to destination.

The tool finished with statistics of the job. **Take a snapshot of the result.**

Create a daily backup. Open Terminal, promote to root user, and enter,

10 `crontab -e`

In your snap shot above the rsync command is provided. Add that command to your crontab file such that the command is executed everyday at 12:00PM.

In the same crontab enter tar command as is in Step 9 and set it to execute at 12:05PM.

Take a screenshot showing both cron jobs.

Save the crontab file.

Rubric

Checklist/Single Point Mastery

<u>Concerns</u> Working Towards Proficiency	<u>Criteria</u> Standards for This Competency	<u>Accomplished</u> Evidence of Mastering Competency
	Criteria #1: Screenshot showing successful rsync backup (50 points)	
	Criteria #2: Screenshot showing successful cron job (50 points)	