HOW TO SYNCHRONIZE TWO LINUX SERVERS OVER THE NETWORK OR VIA INTERNET

1. **Install rsync using yum on CentOS servers**

root@snet[~]# yum -y install rsync

2. **Install rsync using apt-get on Ubuntu server**

root@snet[~]# sudo apt-get update

root@snet[~]# sudo apt-get install rsync

3. **To synchronize a directory from local system with a remote system**

root@snet[~]# rsync -azvr /clouddrive root@172.168.1.103:/home

4. **To synchronize directories securely over SSH**

If you want to transfer files securely to remote system, use **"-e ssh"** option.

root@snet[~]# rsync -azvr /clouddrive -e ssh root@172.168.1.103:/home

5. **Synchronize directories between local system itself:**

If you want to synchronize files/folders within the local system folders

root@snet[~]# rsync -azvr /clouddrive /home/clouddrivebackup

6. **Synchronize a directory from remote system to local system**

root@snet[~]# rsync -azvr root@172.168.1.103:/home /clouddrive

PERMANENTLY SYNCHRONIZE BETWEEN THE TWO SERVERS (LOCAL AND REMOTE SERVERS)

This area shows how to permanently synchronize between local and remote systems. Synchronize the files/folders of **/clouddrive** of local system with **/home** of remote system permanently.

First, make sure that you've installed **rsync** packages on both source and destination servers.

1. **Make some changes in the configuration files. Do the following changes on the destination systems edit file /etc/default/rsync**

root@snet[~]# sudo nano /etc/default/rsync

Find the following line:

RSYNC_ENABLE=false

Change it to look like below

RSYNC_ENABLE=true

Save and close the file.

2. **Create file /etc/rsyncd.conf**,

root@snet[~]# sudo nano /etc/rsyncd.conf

Add the following lines:

[backup]

path = /home/backupfolder

hosts allow = 172.168.1.102

hosts deny = *

list = true

uid = root

gid = root

read only = false

Save and close the file.

Here, **/home/backupfolder** is the destination system synchronization directory. **172.168.1.102** is source system IP address.

Restart rsync service.

root@snet[~]# sudo systemctl start rsync

root@snet[~]# sudo /etc/init.d/rsync restart

Now, go to the source system (local system), and start the synchronization

root@snet[~]# rsync -azvr /clouddrive 172.168.1.103::backup

AUTOMATE INCREMENTAL BACKUP (AUTOMATICAL BACKUP) USING CRON JOBS

Synchronize the files/folders of **/clouddrive** of local system with **/home** of remote system permanently, and schedule the sync process at a particular time. Run the sync process at a particular interval every day, add the following entries in the crontab.

root@snet[~]# crontab -e

Add the following line:

00 05 * * * rsync -azvr /clouddrive/ 172.168.1.103::backup

The cron job file will run every day at 5am, and start the sync process automatically.

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