ARCHIVING AND TRANSFERRING FILES

Archiving and compressing files are useful when creating backups and transferring data across a network. Which increase your data **throughput** (***Amount of data can be transferred from one location to another in a time period)***

One of the oldest and most common commands we are using for it

#tar stands for **tape archive**

Using tar we can gather a large number of files into a single file (Archive)

We can extract also

Operational option

-c –create

-x –extract

-t –list

General options

-v verbose

-f file

-p preserve perm

Compression option

-z gzip

-j bzip2

-J xz

Now again we can compress more by using some compressing tools

TRANSFERRING FILES BETWEEN SYSTEMS SECURELY

Secure copy

Scp

Sftp – secure file transfer program

SYNCHRONIZING FILES BETWEEN SYSTEMS SECUREL

rsync -av /var/log /tmp

Options Enabled with `rsync -a` (Archive Mode)

OPTION	DESCRIPTION
`-r, --recursive`	synchronize recursively the whole directory tree
`-l, --links`	synchronize symbolic links
`-p, --perms`	preserve permissions
`-t, --times`	preserve time stamps
`-g, --group`	preserve group ownership
`-o, --owner`	preserve the owner of the files

`-D, --devices`	synchronize device file

Task

1. On **serverb**, synchronize the **/etc** directory tree from **servera** to the **/configsync** directory.

2. Use **gzip** compression to create an archive named **configfile-backupservera.tar.gz** with the contents of the **/configsync** directory.

3. Securely copy the **/root/configfile-backup-servera.tar.gz** archive file from **serverb** to the /home/student directory on workstation as the student user using student as the password.

4. On workstation, extract the contents of the **/home/student/configfile-backupservera.tar.gz** archive to the **/tmp/savedconfig/** directory.

5. On workstation return to the student home directory.