



Royal University of Bhutan

## LESSON – 8

### WORKING WITH ARCHIVES AND COMPRESSED FILES

## Learning Outcomes

- Use tape archive (tar) to group multiple files into single file
- Create tar archive file
- Compress file into gunzip and bunzip2
- Extract tar and compressed file

## WORKING WITH ARCHIVES AND COMPRESSED FILES

- Managing Archives with tar:
  - The Tape Archiver (tar):
  - tar combine multiple files. gzip/bzip2 compress files
  - tar options are: -c, -t, -x, -f, -v, -j, -Z, -r, -u
  - will be able to perform important tasks such as:
    - create an archive
    - list the contents of an archive (option: -t)
    - Extract an archive (option: -C to specify target)

## WORKING WITH ARCHIVES AND COMPRESSED FILE

- Creating Archives with tar:

- **Example:**

- cst@cst:~\$ mkdir Example; touch Example/{f1,f2,f3,f4}
    - cst@cst:~\$ tar -cf Example.tar Example
    - cst@cst:~\$ tar -cvf Example.tar Example
    - Example/
    - Example/f2
    - Example/f4
    - Example/f3
    - Example/f1

## WORKING WITH ARCHIVES AND COMPRESSED FILE

- Monitoring and Extracting Tar file:
  - Use –t option for verify the content of the file.
  - **Example:**
    - cst@cst:~\$ tar tvf Example.tar
    - If wanted to extract to target directory, then use –C option as:
    - cst@cst:~\$ tar tvf Example.tar –C /tmp

## WORKING WITH ARCHIVES AND COMPRESSED FILES

- **Using Compression (gzip, bzip2):**

- **Creating gzip file:**

- cst@cst:~\$ tar cvzf Example3.tar.gz Example

- Or

- cst@cst:~\$ gzip Example.tar

- This will create a compressed version of Example.tar named Example.tar.gz. To reverse the process type:

- \$ gzip -d filename.gz or % gunzip filename.gz

- **Creating bzip file:**

- cst@cst:~\$ tar cvjf example.tar.bz2 Example

- **Unpacking gzip file:**

- tar -xvzf Example.tar.gz

For gzip use option –z and for bzip2 use option –j or -y

## ACTIVITY I

1. Open a regular shell on your system
2. Create archive file Documents.tar from /home directory
3. Create compress (bzip) file of tar archive file
4. Read the content of file before extracting using –t option
5. Create gunzip file from Documents.tar
6. Decompress the Documents.tar.gz using gunzip (gunzip Documents.tar.gz)
7. Type tar xvf Documents.tar –C /tmp /var

## ACTIVITY I

1. Open a regular shell on your system
2. Create archive file Documents.tar from /home directory
3. Create compress (bzip) file of tar archive file
4. Read the content of file before extracting using –t option
5. Create gunzip file from Documents.tar
6. Decompress the Documents.tar.gz using gunzip (gunzip Documents.tar.gz)
7. Type tar xvf Documents.tar –C /tmp /var