Backing Up with tar

LPIC-2: Linux Engineer (201-450)

Objectives:

At the end of this episode, I will be able to:

1. Describe the *tar* utility and the scenarios where it is used.
2. Use *tar* to backup and restore data, including permissions and ownership settings.

> Additional resources used during the episode can be obtained using the download link on the overview episode.

- tar

    - **T**ape **AR**chiver
    - Designed to string multiple files together into one file
    - Data stored serially to be written to tape

- Creating an archive

    - `tar -cf <archive_name> <folder_name>`
    - `tar -cf backup.tar ~/Documents`

- Compression

    - *tar* does not compress by default
    - `tar -czvf backup.tar.gz ~/Documents`

        - `c` Create
        - `z` Compress
        - `v` Verbose
        - `f` File name

- Restoring from a *tar* archive

    - `tar -xzvf backup.tar.gz`

        - `x` Extract
        - `z` Decompress
        - `v` Verbose
        - `f` File name

- Maintaining permissions in an archive

    - Must provide `-p` when creating the archive
    - `tar -czvpf backup.tar.gz ~/Documents`

        - `c` Create
        - `z` Compress
        - `v` Verbose
        - `p` Preserve permissions
        - `f` File name

- Restoring permissions

    - Permissions are restored automatically if they were backed up
    - Ownership is a different story
    - Yes, if you are root

        - `--same-owner`

- Attempts to map the owner to an existing account
- Otherwise assigns the current user

- No, if you are a normal user

  - `--no-same-owner`
  - Makes the current user the owner