systemd Mount Units

LPIC-2: Linux Engineer (201-450)

Objectives:

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

1. Describe the structure of a systemd mount unit configuration file.
2. Differentiate between systemd mount units and the fstab file.
3. Configure a volume or partition to persistently mount by creating a systemd mount unit.

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

- systemd Units
  - Simple text files
  - Can define a service, port, timer, mount, etc.
  - Similar to `/etc/fstab`
  - Differences
    - One file for each mount
    - Vertical option format
- Benefits of using systemd units
  - Dependancy heirarchy
    - No more waiting on a disk to mount
    - Easier mount/unmount using `systemctl`
- Required information
  - Desired mount point location
    - Folder must exist prior to mounting
  - File system type
    - ext4, xfs, etc
  - Drive identifier
    - Device Name (e.g. /dev/sda1)
    - Device Label (e.g. Storage)
    - Device UUID (e.g. 7e131497-d38d-4606-8fec-2c8bb9f2e26b)
  - Obtaining drive data
    - `lsblk -f`
    - `blkid`
- Mount Unit File Format
  - Options
    - What - the device name
    - Where - the mount point
    - Type - the file system
    - Options - Mount options
      - defaults
      - ro - Read only

        - user - Allow users to mount
        - nofail - Do not stop if device is missing
    - TimeOutSec - time to wait before failing

- Testing mount units
    - Have *systemd* reparce unit files
        - `systemctl daemon-reload`
    - Trigger the mount operation
        - `systemctl start storage.mount`
    - Verify the mount
        - `systemctl status storage.mount`
        - `lsblk`
    - Enable mounting at boot time
        - `systemctl enable storage.mount`