Installing the Squid Proxy Server

Objectives:

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

1. Describe the purpose and function of a proxy server.
2. Install and configure the squid proxy server in Linux.

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

- Installing the Squid Proxy Server

    - Introduction to squid
    - Installing squid
    - Enabling caching
    - Verify squid is functioning

- Introduction to squid

    - http://www.squid-cache.org/
    - Open source proxy server
    - Features

        - Caching
        - Filtering
        - Authentication

- Installing squid

    - `sudo apt install squid`
    - `sudo systemctl enable --now squid`
    - `sudo systemctl status squid`

- Initial configuration

    - Default configuration

        - `/etc/squid/squid.conf`

    - Edit the configuration

        - `sudoedit /etc/squid/conf.d/local.conf`

    - Changing the listening port

        - Defaults to 3128
        - `http_port 8080`

    - Firewall configuration

        - `sudo ufw allow 8080 comment "Squid Proxy"`

- Enabling caching

    - Define cache directory

        - `cache_dir <filesystem> <path> <max-size-mb> <max-folders> <max-subfolders>`

    - Default values

        - `cache_dir ufs /var/spool/squid 100 16 256`

- Verify squid is functioning

    - Log files

        - `sudo systemctl status squid`
        - `journalctl -xe -u squid.service`

    - Network listeners

- - `sudo ss -natp`
  - Connect a client (FireFox)
    - - Won't work until an ACL is configured
      - `Settings -> Network Settings -> Proxy`