

# Installing the Squid Proxy Server

LPIC-2: Linux Engineer (202-450)

## 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