

# Implementing NginX as a Web Server

LPIC-2: Linux Engineer (202-450)

## Objectives:

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

1. Describe the NginX web server and differentiate it from Apache.
2. Install and configure a basic web server using NginX.

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

- 
- Implementing NginX as a Web Server
    - Introduction to NginX
    - Installing NginX
    - Configuring NginX as a web server
  - Introduction to NginX
    - Pronounced "Engine X"
    - Written multiple ways
      - nginx
      - NginX
      - NGINX
    - High performance
    - Simple configuration
    - OpenSource NginX
      - <https://nginx.org>
    - Commercial NginX Plus
      - <https://www.nginx.com/>
      - Web Application Firewall
      - Active/Active HA
      - Health Checks
    - Static content
      - Can work with PHP, but not ideal
      - Better used as a cache for static elements
    - Most commonly used as a load balancer or proxy
  - Installing NginX
    - Included with most distros
    - Installing the binary
      - `sudo apt install nginx`
    - Enabling the service
      - `sudo systemctl enable --now nginx`
      - `sudo ufw allow 80/tcp comment "NginX"`
      - `sudo systemctl enable --now nginx`
  - Configuring NginX as a web server
    - Editing the NginX configuration
      - `sudoedit /etc/nginx/sites-available/default`
    - Change root folder
      - `root /usr/share/nginx/html;`
    - Other common changes

- `listen 80 default_server;`
- `index index.html index.htm;`
- `server_name lab.itpro.tv;`

- Testing a configuration

- Check the configuration for errors

- `sudo nginx -t`

- Restarting NginX

- `sudo systemctl restart nginx`

- Reviewing log files

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