

# NGINX Basics

---

## Ubuntu Server 22.04 Installation

```
apt-get update
apt install -y curl gnupg2 ca-certificates lsb-release \
    debian-archive-keyring
```

```
curl https://nginx.org/keys/nginx_signing.key | gpg --dearmor \
    | tee /usr/share/keyrings/nginx-archive-keyring.gpg >/dev/null
```

```
apt-get update
apt-get install -y nginx
nginx
```

## Directories

### /etc/nginx

Default configuration root for the NGINX server. You will find configuration files that instruct NGINX on how to behave.

- `/etc/nginx/nginx.conf`: This file is the default config entry point used by the NGINX service. Sets up global settings for things like worker processes, tuning, logging, loading, etc.
- `/etc/nginx/conf.d/`: This directory contains default HTTP server configuration file.
- `/var/log/nginx/` directory is the default log location for NGINX. `access.log` and `error.log` files.

## Commands

```
nginx -h
nginx -v
nginx -V
nginx -t #tests configuration
nginx -s signal # Sends a signal to the NGINX process such stop, quit,
reload and reopen
```

- You can alter the default config files and test your changes with the `nginx -t` command.
- If your test is successful, reload the configuration using `nginx -s reload` command

## Serving Static Content

Overwrite the default HTTP server configuration located in `/etc/nginx/conf.d/default.conf` with the following nginx configuration example:

```
server {  
    listen 80 default_server;  
    server_name www.example.com;  
  
    location / {  
        root /usr/share/nginx/html;  
        # alias /usr/share/nginx/html;  
        index index.html index.htm;  
    }  
}
```

- This config serves static files over HTTP on port 80 from the directory `/usr/share/nginx/html`.
- The first line in this config defines a NEW SERVER BLOCK. This defines a new context for NGINX to listen for.
  - line two instructs NGINX to listen port 80
  - `server_name` directive defines the hostname
  - The location block defines a configuration based on the path in the URL.