# Web servers on Ubuntu 18.04.3

## General Commands:

* systemctl status nginx
* sudo systemctl stop nginx
* sudo systemctl start nginx
* sudo systemctl restart nginx
* sudo systemctl stop nginx
  + If making config changes you can restart without dropping connections
* sudo systemctl disable nginx
  + Stops it from starting on server boot
* sudo systemctl enable nginx

Setting up server block

* sudo mkdir -p /var/www/byrne.computer/html
  + Create the directory for example.com as follows, using the -p flag to create any necessary parent directories:
* sudo chown -R $USER:$USER/var/www/byrne.computer/html
  + assign ownership of the directory with the $USER environment variable:
* sudo chmod -R 755 /var/www/byrne.computer
  + Sets permissions of your web roots
* nano /var/www/byrne.computer/html/index.html
  + creates a sample index.html page

<html>

<head>

<title>Welcome to the page!</title>

</head>

<body>

<h1>Success! The byrne.computer server block is

working!</h1>

</body>

</html>

* sudo nano /etc/nginx/sites-available/byrne.computer
  + In order for Nginx to serve this content, it’s necessary to create a server block with the correct directives. Instead of modifying the default configuration file directly, let’s make a new one at

server {

listen 80;

listen [::]:80;

root /var/www/byrne.computer/html;

index index.html index.htm index.nginx-debian.html;

server\_name byrne.computer www.byrne.computer;

location / {

try\_files $uri $uri/ =404;

}

}

Config file for the server block

* Next we need to enable the file by creating a link from it to the sites-enabled directory, which Nginx reads from during startup:
  + sudo ln -s /etc/nginx/sites-available/byrne.computer /etc/nginx/sites-enabled/

Test for syntax errors across all ngix files:

* sudo nginx -t

Restart ngix if there are no errors

* sudo systemctl restart nginx

### Server Configuration

* /etc/nginx: The Nginx configuration directory. All of the Nginx configuration files reside here.
* /etc/nginx/nginx.conf: The main Nginx configuration file. This can be modified to make changes to the Nginx global configuration.
* /etc/nginx/sites-available/: The directory where per-site server blocks can be stored. Nginx will not use the configuration files found in this directory unless they are linked to the sites-enabled directory. Typically, all server block configuration is done in this directory, and then enabled by linking to the other directory.
* /etc/nginx/sites-enabled/: The directory where enabled per-site server blocks are stored. Typically, these are created by linking to configuration files found in the sites-available directory.
* /etc/nginx/snippets: This directory contains configuration fragments that can be included elsewhere in the Nginx configuration. Potentially repeatable configuration segments are good candidates for refactoring into snippets.

### Server Logs

* /var/log/nginx/access.log: Every request to your web server is recorded in this log file unless Nginx is configured to do otherwise.
* /var/log/nginx/error.log: Any Nginx errors will be recorded in this log.

References:

* https://www.digitalocean.com/community/tutorials/how-to-install-nginx-on-ubuntu-18-04