

NGINX

- **NGINX** is pronounced as "engine-ex".
- It is an open-source, fast, lightweight and high-performance web server that can be used to serve static files.
- NGINX has considered as the popular web server behind the Apache web server and Microsoft's IIS

How Does NGINX Work?

- Before knowing the process of NGINX, let's take a look at how a web server works. When we request to open a webpage, the browser contacts the server. Then the server looks for the requested files for the page and sends it to the browser. This is the only simplest kind of work for a request.

Features of NGINX

- Reverse proxy with caching
- IPV6
- Load Balancing
- Web Sockets
- Handling of static files, index files, and auto-indexing
- FastCGI support with caching
- URL rewriting and redirection

Installing Nginx

- **The below commands update the Ubuntu OS and then install Nginx.**
- `sudo apt update -y`
- `sudo apt install nginx -y`

Check the Version of Nginx

- `nginx -v`

Check Nginx is running or not

- `ps -ef | grep nginx`

- **For different operations on Nginx such as start, restart, reload, etc – refer to the below commands.**
- `sudo systemctl status nginx`
- `sudo systemctl start nginx`
- `sudo systemctl stop nginx`
- `sudo systemctl restart nginx`
- `sudo systemctl reload nginx`

Nginx processes

- Nginx works by spawning multiple processes of two kinds i.e. Master process & Worker process.
- The master process is responsible for reading & taking actions according to the configuration file. It also creates & manages the worker processes.
- The worker process is responsible for handling the server requests and replying with responses.

Nginx configurations

- Nginx configuration file can be viewed at `/etc/nginx/nginx.conf` in Ubuntu.
- The most important part of using Nginx is about understanding the different configurations on the Nginx configuration file. The most important ones have been explained below.
- The `access_log` directive specifies the location of the nginx logs

```
http {  
    access_log /var/log/nginx/access.log;  
}
```

- The `error_log` directive specifies the location of the nginx error logs

```
http {  
    error_log /var/log/nginx/error.log;
```

}

Trying out Nginx

- Let's try out Nginx now!
- By default, Nginx listens on port 80 and serves a basic HTML page. Try it out



Verify the changes before reload the configuration

- `sudo nginx -t`
- `sudo systemctl reload nginx`

For more reference

<https://www.whizlabs.com/blog/nginx-tutorial-for-beginners/>

<https://www.javatpoint.com/how-to-install-nginx-on-debian-ubuntu>