## **NGNIX** - The fastest web server

**NGINX** is open source software for web serving, reverse proxying, caching, load balancing, media streaming, and more. It started out as a web server designed for maximum performance and stability. In addition to its HTTP server capabilities, NGINX can also function as a proxy server for email (IMAP, POP3, and SMTP) and a reverse proxy and load balancer for HTTP, TCP, and UDP servers.

Used by many websites such as Dropbox, Netflix, Gitlab and Zynga

As a software-only all-in-one load balancer, web server, API gateway, and reverse proxy that is designed for cloud-native architectures, NGINX helps accelerate IT infrastructure and application modernization efforts

Nginx is built to offer **low memory usage** and high concurrency. Rather than creating new processes for each web request, Nginx uses an asynchronous, event-driven approach where requests are handled in a single thread.

#### Some common features seen in Nginx:

- · Reverse proxy with caching
- IPv6
- Load balancing
- FastCGI support with caching
- WebSockets
- Handling of static files, index files, and auto-indexing
- TLS/SSL with SNI

### Installing ngnix on ubuntu18

- 1. sudo apt update
- 2. sudo apt install ngnix
- 3. sudo ufw allow 'Ngnix HTTP'
- 4. Check status of ngnix
  - a. sudo systemctl status ngnix
- 5. In Browser access below URL
  - a. http://<AWS VM HOST Public IP>

You should see the default Nginx landing page as below:

# Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to <a href="nginx.org">nginx.org</a>. Commercial support is available at <a href="nginx.com">nginx.com</a>.

Thank you for using nginx.

### Managing the NGNIX processes:

- To stop the web server:
  - sudo systemctl stop nginx
- To start the web server:
  - o sudo systemctl start nginx
- To stop and start the service again:
  - o sudo systemctl restart nginx
- Nginx can be made to reload configuration changes without dropping the connections with:
  - o sudo systemctl reload nginx
- By default, Nginx is configured to start automatically when the server boots. This can be disabled with:
  - sudo systemctl disable nginx
- To re-enable the service to start up at boot, you can type:
  - o sudo systemctl enable nginx

### Setup "file browser" mode on freshly installed nginx server:

```
1. Edit default config for nginx:
```

sudo vim /etc/nginx/sites-available/default
2. Add following to config section:

```
location /logs {
   alias /home/ubuntu/logs/;
   autoindex on;
}
```

3. Create folder and sample file there:

```
mkdir -p /home/ubuntu/logs/release_2021_1.0_20211003
cp -r <log files of build> /home/ubuntu/logs/ [Ex: from Jenkins]
```

4. Restart nginx

sudo systemctl restart nginx

5. Check result from browser:

http://<AWS VMHOST PUBLIC IP>/logs/

## Copying test logs to a folder in this AWS Ngnix host using SCP: [ Ex: from Jenkins]

```
ssh -i ~/<your_aws_key>.pem ubuntu@<AWS_vmhost_PublicIp> "mkdir -p
/home/ubuntu/logs/release_2021_1.0_20211003"

scp -i ~/<your_aws_key>.pem <src_files>
ubuntu@<AWS vmhost PublicIp>:/home/ubuntu/logs/release 2021 1.0 10032021
```