## Using NGINX as a Web Server



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### Objectives



Installing NGINX

NGINX Web Server Configuration

Using NGINX as a Reverse Proxy Server



# pacman -S nginx

### Installing NGINX

The NGINX Web Server is part of the core Arch repositories. Likewise with Ubuntu but CentOS will require you to add the EPEL repository



# Nginx.Conf

The configuration files can be found in /etc/nginx/ when using Arch. The main configuration is the nginx.conf



## Installing NGINX



```
http {
    server {
       location / {
          root /usr/share/nginx/html;
          index index.html index.htm;
       } }
}
```

### Configuration Format

Configuration is modular underneath the http parent and we can create server entries. Location entries can be found within server blocks. A single server entry is sufficient but more than one server entry is equivalent to creating VirtualHosts in Apache.



```
location / {
          root /usr/share/nginx/html;
          index index.html index.htm;
         allow 127.0.0.1;
         allow 192.168.56.0/24;
         deny all;
```

#### Restrict Access

Access to locations can be managed using the allow or deny directive. Note that all directive lines in the file will end in a semi-colon.



## Investigating the Configuration



## Reverse Proxy

NGINX is fast at delivering static content but not PHP pages. We might pass PHP to Apache Servers or in our case, we can make use of the Apache Load Balancer to demonstrate Reverse Proxy.



```
http {
    server {
       location /balancer/ {
          proxy_pass http://192.168.56.10/;
    }
```

### Reverse Proxy

Where we use proxy\_pass in a location block we can redirect the URL to the reverse proxied location. Please note that the end of the location URL and the ProxyPass URL must be a forward slash when referring to directories rather than pages.



## Implementing Reverse Proxy



### Summary



#### **NGINX** Web Server

/etc/nginx/nginx.conf

#### **Default Location**

/usr/share/nginx/html

#### **Code Blocks**

http

server

location

#### **Reverse Proxy**

location

proxy\_pass



# Next up: Linux: Managing File Sharing (LPIC-2)

