

## Lab 3: Serving Pages

Estimated time for completion: **20 minutes**

### Requirements

The following tasks must be completed before beginning this lab:

- Getting Started with NGINX, (the Getting Started Guide in LearnF5)
- Log into Hosted Environment, your lab initialization instructions are located in the LearnF5 course

### Scenario

In this exercise, find and replace the included default configuration file.

### Objectives

At the end of this lab you will be able to:

- Create a backup to the `default.conf` file
- Create and test a new configuration file

### Lab Contents

#### Exercise 1: Update a configuration file



#### IMPORTANT

You can copy and paste the commands and text from the examples to your terminal or editor, (just make sure you don't copy and paste the \$ prompt!)

## Exercise 1: Update a configuration file

### 1. View the `default.conf` file

- a. Change the directory:

```
$ cd /etc/nginx/conf.d
```

- b. List the contents of the default configuration file:

```
$ less default.conf
```

- c. Look for the `listen` directive, see what port it's listening on?



#### IMPORTANT

When in `less`, type `/listen` and then hit **ENTER** to highlight that phrase throughout the file.

```

server {
    listen      80 default_server;
    server_name localhost;

    #access_log  /var/log/nginx/host.access.log  main;

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

    #error_page  404              /404.html;

    # redirect server error pages to the static page
/50x.html
    #
    error_page   500 502 503 504  /50x.html;
    location = /50x.html {
        root    /usr/share/nginx/html;
    }

    # proxy the PHP scripts to Apache listening on
127.0.0.1:80
    #

```

- d. What is the path NGINX is using for the root location for html files?



#### IMPORTANT

When in **less**, use **/root** and then hit **ENTER** to highlight that phrase. If you don't see all of the file, type **gg** to go to top of the file.

```
server {
    listen      80 default_server;
    server_name localhost;

    #access_log /var/log/nginx/host.access.log  main;

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

    #error_page 404              /404.html;

    # redirect server error pages to the static page /50x.html
    #
    error_page   500 502 503 504  /50x.html;
    location = /50x.html {
        root    /usr/share/nginx/html;
    }
}
```

e. Exit the `less` command by pressing the `q` key.

2. Back up the `default.conf` file

```
$ sudo mv default.conf default.conf.bak
```



#### IMPORTANT

You could also use this command:

```
$ sudo mv default.{conf,bak}
```

3. Use the Vim editor to create a new configuration file called `mywebserver.conf`:

```
$ sudo vim mywebserver.conf
```

4. Type `i` to enter editing mode.

5. Add the following to your (empty) file:

```
server {  
    listen 80;  
    root /home/ubuntu/public_html;  
}
```

6. Save and exit the file by pressing the **ESC** key and then typing:

```
$ :wq
```

Alternatively, you can press the **ESC** key, then type:

```
$ Shift-z z (or zz)
```



#### NOTE

To save and exit a file without changes, use the **ESC** key and then **:q!**

7. Reload NGINX with:

```
$ sudo nginx -s reload  
(or $ sudo nginx -t && sudo nginx -s reload)
```



#### NOTE

There will be no visible output from the reload of NGINX unless there is a problem.

8. Test your host using curl:

```
$ curl http://localhost
```

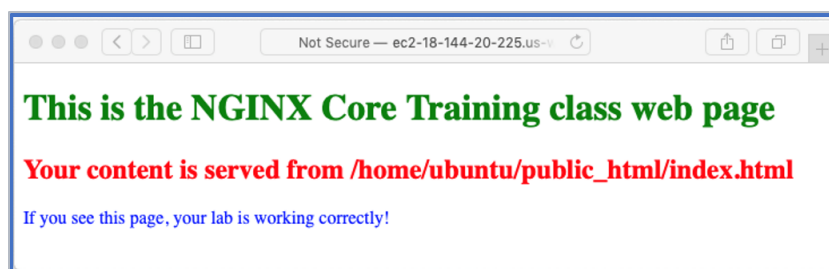
```

<!DOCTYPE html>
<html>
<head>
<style>
body {
    color: red;
}
h1 {
    color: green;
}
p {
    color: blue;
}
</style>
</head>
<body>
<h1>This is the NGINX Core Training class web page</h1>
<h2>Your content is served from
/home/ubuntu/public_html/index.html</h2>
<p>If you see this page, your lab is working correctly!</p>
</body>
</html>

```

9. Test your host in a browser:

`http://localhost`



10. Look at the list of files in the `/home/ubuntu/public_html` directory:

`$ ls -l /home/ubuntu/public_html`

```
total 16
drwxr-xr-x 2 root root 4096 Apr 8 2019 application1
drwxr-xr-x 2 root root 4096 Apr 8 2019 application2
-rw-r--r-- 1 root root 331 Oct 14 2019 index.html
drwxr-xr-x 4 root root 4096 Apr 8 2019 shop
```

11. View the contents of the index.html file:

```
$ cat /home/ubuntu/public_html/index.html
```

12. This is the page you just saw in your browser and on the console. How does NGINX know to serve this Web page?

The NGINX root directive specifies the pathname for the file served. You set the root directive earlier in this lab to:

```
root /home/ubuntu/public_html;
```

The file served is `index.html` unless specified by another NGINX directive.

## Expected Results

In these exercises, you were able to find and replace the included default configuration file.

