Lab 3.1 Create a new conf file

Use the credentials: root/training when accessing the server’s command line.

1. Navigate to /etc/nginx/conf.d/
2. Backup the default.conf file

   ```
   mv default.conf default.conf.bak
   ```

3. Create a new configuration file: server_test.conf

   ```
   vim /etc/nginx/conf.d/server_test.conf
   ```

4. Create the first of two server blocks in server_test.conf

   ```
   server {
           listen 80;
           return 200 "this server listens on 0.0.0.0:80\n";
     }
   ```

5. Create the second of two server blocks in server_test.conf

   ```
   server {
           listen 127.0.0.1:80;
           return 200 "this server listens on 127.0.0.1:80\n";
     }
   ```

6. Save and exit the server_test.conf.
7. Reload NGINX

   ```
   nginx -s reload
   ```

8. Use curl to see which server responds

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

   The server listening on 127.0.0.1:80 responds because it's a match on the IP, and IP takes precedence over Port.

Lab 3.2 The server_name directive

1. Open the hosts file on your training environment

   ```
   vim /etc/hosts
   ```

2. Remove the existing CentOS7 default entry (localhost …) for 127.0.0.1 and replace it with the following:

   ```
   127.0.0.1 www.example.com
   ```

```
127.0.0.1 example.com
```

3. Save and exit the hosts file
4. curl www.example.com
5. curl example.com
6. Open server_test.conf

```
vim /etc/nginx/conf.d/server_test.conf
```

7. Remove the listen directives and return directives entirely from both server contexts.
8. Complete the first server context as follows:

```
server {
         server_name example.com;
         return 200 "This is server1\n";
  }
```

9. Complete the second server context as follows:

```
server {
         server_name www.example.com;
         return 200 "This is server2\n";
  }
```

10. Save and exit server_test.conf
11. Reload nginx

```
nginx -s reload
```

12. curl www.example.com and example.com. What were the results?

When you curl example.com the server should respond with "This is server1". When you curl www.example.com the server should respond "this is server2".

Lab 3.3 Prefix with a leading or trailing wildcard

1. Open server_test.conf

```
vim /etc/nginx/conf.d/server_test.conf
```

2. Change the server_name in the second server from www.example.com to *.example.com
3. Save and exit server_test.conf
4. Reload NGINX

```
nginx -s reload
```

5. Test your configuration by using curl

```
curl www.example.com
```

The server should respond with "This is server2".

6. Open server_test.conf again.

```
vim  /etc/nginx/conf.d/server_test.conf
```

7. Change the server_name in the second server from *.example.com to www.example.*
8. Save and exit server_test.conf
9. Reload NGINX

```
nginx -s reload
```

10. Test your configuration using curl

```
curl www.example.com
```

The server should respond with "This is server2"

Lab 3.4 Use server_name with regular expressions

Lab Under Development: Lab may not generate expected results.

1. Open server_test.conf

```
vim /etc/nginx/conf.d/server_test.conf
```

2. Replace the server_name in the first server with the following regular expression:

```
server_name ~^(www|host1).*\.example\.com$;
```

3. Replace the server_name in the second server with the following regular expression:

```
server_name ~^(subdomain|set|www|host1).*\.example\.com$;
```

4. Save and exit server_test.conf
5. Reload NGINX

```
nginx -s reload
```

6. Test your configuration using curl

```
curl www.example.com
```

The server should respond with "This is server1"

Lab 3.5 Default server

1. Open server_test.conf
2. Add a third server block at the top of the file as follows:

   ```
   server {
            listen 127.0.0.1 default_server;
            return 200 "This is the default server";
     }
   ```

3. Save and exit server_test.conf
4. Reload NGINX

   ```
   nginx -s reload
   ```

5. Test your configuration using curl

   ```
   curl www.example.com
   ```

   The server should respond with "this is the default server".

Each lab uses a fresh environment so remember to shut down the environment when done.