



Placement Empowerment Program
Cloud Computing and DevOps Centre

100 Days of DevOps Challenge

Day 15 : Setup SSL for Nginx

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Setup SSL for Nginx

Objective :

To deploy and configure **Nginx** with SSL on **App Server 1 (stapp01)** using the provided self-signed certificate and key. The server should serve a simple web page (Welcome!) over HTTPS and be accessible from the jump host using curl.

Steps Performed :

❑ Login to App Server 1

- `ssh tony@stapp01`

❑ Install Nginx

- `sudo yum install -y nginx`
-

❑ Move SSL Certificate and Key

- `sudo mkdir -p /etc/nginx/ssl`
- `sudo mv /tmp/nautilus.crt /etc/nginx/ssl/`
- `sudo mv /tmp/nautilus.key /etc/nginx/ssl/`
- `sudo chmod 600 /etc/nginx/ssl/*`

❑ Configure Nginx for SSL

```
sudo bash -c 'cat > /etc/nginx/conf.d/nautilus.conf <<EOF
server {
```

```
    listen 443 ssl;
    server_name stapp01.stratos.xfusioncorp.com;
```

```
    ssl_certificate    /etc/nginx/ssl/nautilus.crt;
    ssl_certificate_key /etc/nginx/ssl/nautilus.key;
```

```
    root /usr/share/nginx/html;
    index index.html;
```

```
}
```

EOF'

❑ Create Web Page

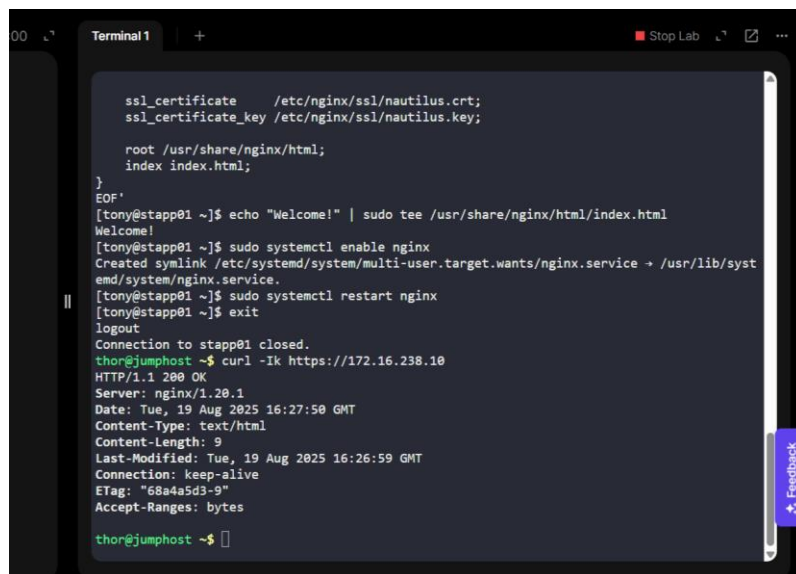
- `echo "Welcome!" | sudo tee /usr/share/nginx/html/index.html`

❑ Start and Enable Nginx

- `sudo systemctl enable nginx`
- `sudo systemctl restart nginx`

❑ Test from Jump Host

- `curl -Ik https://172.16.238.10`

A terminal window titled 'Terminal 1' with a dark background. It shows a series of commands and their outputs. The commands include setting up SSL certificates, creating an index.html file, enabling and restarting Nginx, and finally testing the setup with curl. The output of the curl command shows an HTTP 200 OK response from the Nginx server.

```
ssl_certificate /etc/nginx/ssl/nautilus.crt;
ssl_certificate_key /etc/nginx/ssl/nautilus.key;

root /usr/share/nginx/html;
index index.html;
}
EOF'
[tony@stapp01 ~]$ echo "Welcome!" | sudo tee /usr/share/nginx/html/index.html
Welcome!
[tony@stapp01 ~]$ sudo systemctl enable nginx
Created symlink /etc/systemd/system/multi-user.target.wants/nginx.service → /usr/lib/systemd/system/nginx.service.
[tony@stapp01 ~]$ sudo systemctl restart nginx
[tony@stapp01 ~]$ exit
logout
Connection to stapp01 closed.
thor@jumphost ~$ curl -Ik https://172.16.238.10
HTTP/1.1 200 OK
Server: nginx/1.20.1
Date: Tue, 19 Aug 2025 16:27:50 GMT
Content-Type: text/html
Content-Length: 9
Last-Modified: Tue, 19 Aug 2025 16:26:59 GMT
Connection: keep-alive
ETag: "68a4a5d3-9"
Accept-Ranges: bytes

thor@jumphost ~$
```



Congrats!

You have completed the task successfully.



**100 Days of
DevOps**

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600 

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