



**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

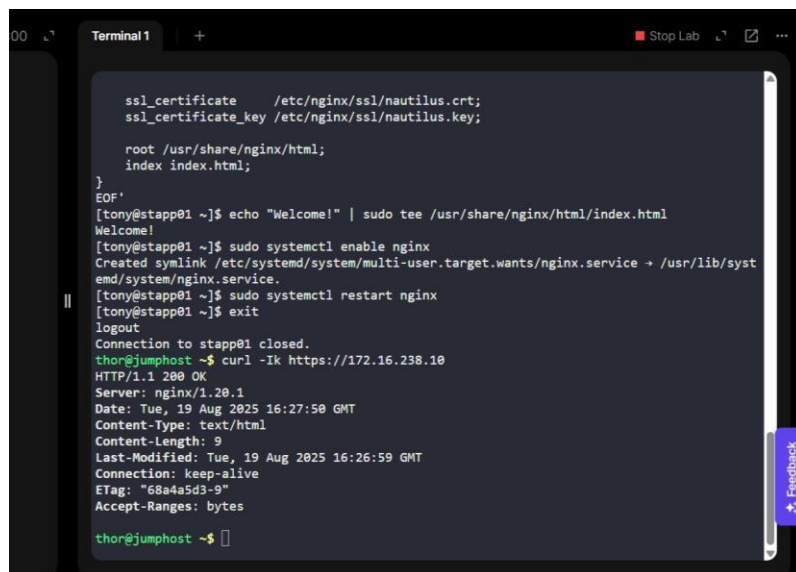
- `echo "Welcome!" | sudo tee /usr/share/nginx/html/index.html`

### ❑ 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 the configuration of Nginx, enabling the service, and testing it from a jump host. The output of the curl command shows a successful 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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