

# Internship Project Report

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Task 2: Basic Firewall Configuration with UFW

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Submitted as part of the internship program

## 1. Objective

The objective of this project is to set up a basic firewall using UFW (Uncomplicated Firewall) on a Linux system, configure rules to allow SSH and deny HTTP traffic, and verify the firewall status.

## 2. Tools & Technologies

- Tool: UFW (Uncomplicated Firewall)
- Operating System: Ubuntu / Debian-based Linux system

## 3. Implementation Steps

Step 1: Install UFW on your system

Command:

```
sudo apt update && sudo apt install ufw -y
```

Step 2: Allow SSH Traffic

Command:

```
sudo ufw allow ssh
```

Step 3: Deny HTTP Traffic

Command:

```
sudo ufw deny http
```

Step 4: Enable UFW

Command:

```
sudo ufw enable
```

Step 5: Check UFW Status and Rules

Command:

```
sudo ufw status verbose
```

```
linuxbabe@ubuntu: ~  
linuxbabe@ubuntu:~$ sudo ufw status numbered  
Status: active  
  
      To Action From  
      --  
[ 1] 22/tcp ALLOW IN Anywhere  
[ 2] 80/tcp ALLOW IN Anywhere  
[ 3] 443/tcp ALLOW IN Anywhere  
[ 4] 25/tcp ALLOW IN Anywhere  
[ 5] 587/tcp ALLOW IN Anywhere  
[ 6] 143/tcp ALLOW IN Anywhere  
[ 7] 993/tcp ALLOW IN Anywhere  
[ 8] 110/tcp ALLOW IN Anywhere  
[ 9] 53 ALLOW IN Anywhere  
[10] 22/tcp (v6) ALLOW IN Anywhere (v6)  
[11] 80/tcp (v6) ALLOW IN Anywhere (v6)  
[12] 443/tcp (v6) ALLOW IN Anywhere (v6)  
[13] 25/tcp (v6) ALLOW IN Anywhere (v6)  
[14] 587/tcp (v6) ALLOW IN Anywhere (v6)  
[15] 143/tcp (v6) ALLOW IN Anywhere (v6)  
[16] 993/tcp (v6) ALLOW IN Anywhere (v6)  
[17] 110/tcp (v6) ALLOW IN Anywhere (v6)  
[18] 53 (v6) ALLOW IN Anywhere (v6)
```

## 4. GitHub Deliverables

1. ufw\_configuration.sh – Shell script containing UFW configuration commands.
2. Screenshot of 'ufw status' showing active rules.
3. README.md – Documentation explaining the configuration.

## 5. Demo Video Idea

Create a short video demonstrating the configuration process:

1. Installing UFW
2. Allowing SSH and Denying HTTP
3. Showing 'ufw status' output with active rules

## 6. Conclusion

This project demonstrates how to configure a basic firewall on a Linux system using UFW. The configuration ensures secure remote access via SSH while blocking HTTP traffic, showing the importance of proper firewall rule management.