UFW Setup and Configuration Guide (With APT)

Hello, as you might recall, we touched on UFW and firewall security briefly in the Common Cybersecurity Guide. Today we will elaborate on the subject and how to further secure your systems and get some applications through blocked ports.



Prerequisites: You will need a root account and/or an account with sudo access. You also will need a machine using the apt package manager (Ubuntu, Debian.)

Installing UFW

For most machines UFW is insalled by default, however if this is not the case. You can install with

```
Unset sudo apt install ufw
```

Allowing IPV6 Configuration

In most versions, IPV6 is enabled by default. If it is not however, you can edit the UFW config file to enable it.

```
Unset sudo nano /etc/default/ufw
```

And change the value

```
Unset ipv6=yes
```

Setting Default Policies

By default UFW blocks all incoming traffic and allows all outgoing. To set custom policies for applications. For this tutorial we will mostly just deny all traffic to begin with.

```
Unset
sudo ufw deny incoming
sudo ufw deny outgoing
```

Allowing SSH Connections *Optional

If you want some applications to network, or you use SSH you can enable the OpenSSH profile through UFW by typing

```
Unset
sudo ufw allow openssh

or
sudo ufw allow ssh
```

Turning on UFW

You can now start the UFW service by typing the following command

```
Unset sudo ufw enable
```

The firewall is now enabled and following our instructions.

Opening/Allowing Applications and Ports Through Firewall

If you want to use a browser like firefox or need to use a certain port you can use this syntax

```
Unset
sudo ufw allow http
sudo ufw allow https
sudo ufw allow [port number]
```

Allowing Specific IP Addresses

If you have a specific computer that you want to connect to, you can let it through the firewall through

```
Unset
sudo ufw allow from [IP address]

or for a certain port

sudo ufw allow from [IP address]/[port]
```

Denying connections

You can deny certain services or users with

```
Unset sudo ufw deny [service]
```

Deleting Rules

If you want to remove one of your previous rules you can do that with

```
Unset
sudo ufw status numbered

to display all rules
sudo ufw delete [rule number]
```

Conclusion

I hope that you enjoyed this more detailed guide of UFW. If you want to learn more or want more commands to use you can go to the link below. Thank you for reading!

<u>DigitalOcean -UFW</u>

-CKjones