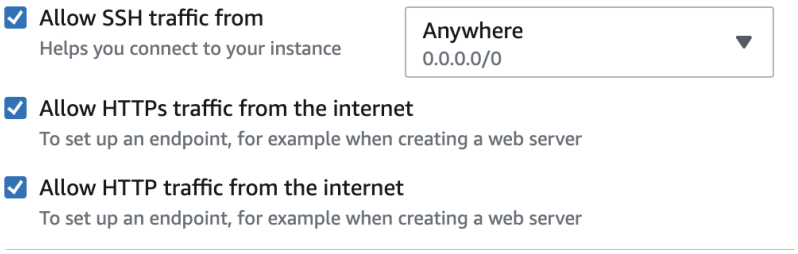
Overview: This runbook will outline the steps required to configure an ubuntu instance on AWS with an NGINX application.

Creating Ubuntu Server in AWS

1. Create a new instance by using the Amazon EC2
    a. Under the AMI, select Ubuntu 20.04 LTS in the Quick Start section
    b. Make sure to create a Key pair
    c. Under Network Settings, find the Firewall section & click “create security group”
        i. Check all three boxes to create rules for SSH, HTTPs & HTTP traffic



    d. Use default settings for everything else and then click “Launch instance”
    e. Connect the Instance to the Ubuntu server by clicking on “Connect” that is located in the Instance summary

Add a New User and Directory in Ubuntu

2. Add a new user
    a. From the Ubuntu user, move to the home directory and add a <USERNAME>

```
sudo adduser <USERNAME>
```

3. Add the new user to the ‘sudoers’ directory
    a. This is needed in order to install nginx in our user directory

```
sudo adduser <USERNAME> sudo
```

4. Switch into the user

```
su - <USERNAME>
```

5. Create a directory in your user directory
    a. This is where we can create our app directory

```
mkdir <DIRECTORY-NAME>
```

Downloading and Configuring NGINX

6. In the new user directory, download NGINX
    a. Run these commands. When complete, type in the command quit

```
sudo -s
nginx=stable # use nginx=development for latest development version
add-apt-repository ppa:nginx/$nginx
apt update
apt install nginx
```

    b. Verify the installation with `nginx -v`
        i. It'll display the software version nginx version: `nginx/1.18.0 (Ubuntu)`
7. Enable and start the NGINX landing page
    a. Start by checking the status where it will display `active (running)`

```
sudo systemctl status nginx
```

        i. If NGINX is not running, run the following `sudo systemctl start nginx`
    b. Load when the system starts

```
sudo systemctl enable nginx
```

    c. Allow NGINX traffic and grant access to the firewall

```
sudo ufw app list
sudo ufw allow 'nginx full'
sudo ufw reload
```

8. Deploying the NGINX Page
    a. Open a new web browser with the IP address from the Connect instance page
    b. It should look like this, where the localhost is the IP address