

HOST A WEBSITE ON NGINX LAB

- Create Public Linux Ec2 Instance
- Edit security Group inbound rules and add HTTP and HTTPS traffic

The screenshot shows the AWS Management Console interface for a security group. The breadcrumb navigation at the top reads: EC2 > Security Groups > sg-0859906793a0d7b9f - launch-wizard-2. The main title is 'sg-0859906793a0d7b9f - launch-wizard-2' with an 'Actions' dropdown menu to its right. Below the title is a 'Details' section containing a table with the following information:

Security group name launch-wizard-2	Security group ID sg-0859906793a0d7b9f	Description launch-wizard-2 created 2023-02-20T15:52:31.195Z	VPC ID vpc-020b0b5a7b71fa445
Owner 436117849909	Inbound rules count 3 Permission entries	Outbound rules count 1 Permission entry	

Below the details section are tabs for 'Inbound rules' (selected), 'Outbound rules', and 'Tags'. The 'Inbound rules (3)' section includes a search bar with the placeholder 'Filter security group rules', a refresh button, and buttons for 'Manage tags' and 'Edit inbound rules'. Below this is a table listing the inbound rules:

	Name	Security group r...	IP versi...	Type	Protocol	Port ra...	Source
	-	sgr-07c4bb36f88b...	IPv4	HTTPS	TCP	443	0.0.0.0/0
	-	sgr-0403e264977b...	IPv4	SSH	TCP	22	0.0.0.0/0
	-	sgr-0a0686bab2cd...	IPv4	HTTP	TCP	80	0.0.0.0/0

- open it using Putty
- Switch to root user using the command "sudo su -"

```
login as: ec2-user
Authenticating with public key "imported-openssh-key"

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https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-53-144 ~]$ sudo su -
\[root@ip-172-31-53-144 ~]#
```

Follow the below commands to Install the Nginx in the Instance using Amazon Linux

- “sudo amazon-linux-extras list | grep epel ” it will check whether the epel repo is available ,The below output in the image depicts that you should install the epel before installing Nginx.

```
[root@ip-172-31-53-144 ~]# sudo amazon-linux-extras list | grep epel
24 epel available [ =7.11 =stable ]
```

- sudo amazon-linux-extras enable epel this command will enable epel
- now you should be able to install the EPEL repo using the following command to install the epel repo
- “sudo yum install epel-release” after successful download you will see the output shown in the image below.

```
[root@ip-172-31-53-144 ~]# sudo yum install epel-release
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core | 3.7 kB 00:00
amzn2extra-docker | 3.0 kB 00:00
amzn2extra-epel | 3.0 kB 00:00
amzn2extra-kernel-5.10 | 3.0 kB 00:00
(1/2): amzn2extra-epel/2/x86_64/updateinfo | 76 B 00:00
(2/2): amzn2extra-epel/2/x86_64/primary_db | 1.8 kB 00:00
Resolving Dependencies
--> Running transaction check
---> Package epel-release.noarch 0:7-11 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====
Package Arch Version Repository Size
=====
Installing:
epel-release noarch 7-11 amzn2extra-epel 15 k
Transaction Summary
=====
Install 1 Package

Total download size: 15 k
Installed size: 24 k
Is this ok [y/d/N]: y
Downloading packages:
epel-release-7-11.noarch.rpm | 15 kB 00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
Installing : epel-release-7-11.noarch 1/1
Verifying : epel-release-7-11.noarch 1/1

Installed:
epel-release.noarch 0:7-11

Complete!
```

- Now install Nginx using the command “sudo yum install nginx”
- You can check the version of your nginx using “nginx-v” command

Host Website on Nginx

- Use the following commands
- “sudo systemctl start nginx” (to start the nginx)
- “sudo systemctl enable nginx” (to enable nginx)
- “sudo systemctl is-enabled nginx” (to check the status whether enabled)

```
[root@ip-172-31-53-144 ~]# sudo systemctl start nginx
[root@ip-172-31-53-144 ~]# sudo systemctl enable nginx
Created symlink from /etc/systemd/system/multi-user.target.wants/nginx.service to /usr/lib/systemd/system/nginx.service.
[root@ip-172-31-53-144 ~]# sudo systemctl is-enabled nginx
enabled
```

- check whether your test page of website is available by putting your instance public IP in the browser.



Thank you for using [Amazon Linux 2](#).

Now that you have it installed, find announcements and discussion in [the AWS Discussion Forums](#). Also try [AWS documentation](#).

- Now Go to the html folder in nginx repository using “cd /usr/share/nginx/html” you will see you are now into html repository

```
[root@ip-172-31-53-144 ~]# cd /usr/share/nginx/html
[root@ip-172-31-53-144 html]#
```

- Now edit the index.html file using “vi”.

```
[root@ip-172-31-53-144 html]# vi index.html
[root@ip-172-31-53-144 html]#
```

- Edit the file like in the image below

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN">
<html>
<head>
<title>Welcome to Amazon Linux 2</title>
<style rel="stylesheet" type="text/css">
html { background-color: white; font-family: "DejaVu Sans", "Liberation Sans", sans-serif; margin: 10% 20%; }
body { margin:0; padding:0; background: white; }
a { color: #007eb9; }
</style>
</head>

<body>

<p>Hosted Website on Nginx<p>
<p>Welcome to the Website.<p>

</body>
</html>
~
~
~
~
~
~
```

- Reload the browser with your public IP searched on it you will see that your website is hosted on Nginx with changes made in the html file.

