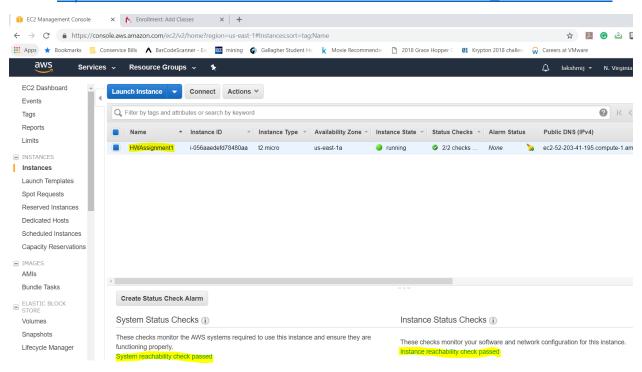
B. Install a LAMPs web server

Steps:

1) Create an instance as explained in

http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EC2 GetStarted.html

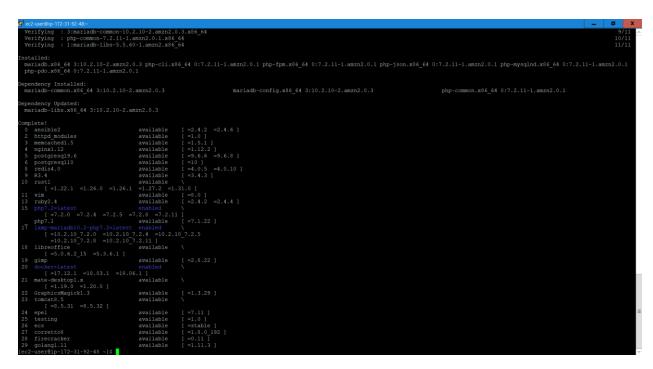


2) Connect via putty

3) Perform a quick software update on your instance using sudo yum update -y

```
dec2-user@ip-172-31-92-48:~
Using username "ec2-user".
Authenticating with public key "imported-openssh-key"
Last login: Mon Jan 14 01:27:21 2019 from c-98-207-65-17.hsd1.ca.comcast.net
              https://aws.amazon.com/amazon-linux-2/
No packages needed for security; 1 packages available
Run "sudo yum update" to apply all updates.
[ec2-user@ip-172-31-92-48 ~]$ sudo yum update -y
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core
                                                              | 2.4 kB 00:00:00
Resolving Dependencies
--> Running transaction check
 ---> Package amazon-ssm-agent.x86 64 0:2.3.274.0-1.amzn2 will be updated
---> Package amazon-ssm-agent.x86 64 0:2.3.372.0-1.amzn2 will be an update
--> Finished Dependency Resolution
Dependencies Resolved
 Package
                                                              Repositorv
Updating:
 amazon-ssm-agent
                     x86 64 2.3.372.0-1.amzn2
                                                             amzn2-core
                                                                                15 M
Transaction Summary
Upgrade 1 Package
Total download size: 15 M
Downloading packages:
Delta RPMs disabled because /usr/bin/applydeltarpm not installed.
amazon-ssm-agent-2.3.372.0-1.amzn2.x86_64.rpm | 15 MB 00:00:00
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
 Updating : amazon-ssm-agent-2.3.372.0-1.amzn2.x86 64
 Cleanup : amazon-ssm-agent-2.3.274.0-1.amzn2.x86 64
 Verifying : amazon-ssm-agent-2.3.372.0-1.amzn2.x86_64
Verifying : amazon-ssm-agent-2.3.274.0-1.amzn2.x86_64
Updated:
  amazon-ssm-agent.x86 64 0:2.3.372.0-1.amzn2
Complete!
[ec2-user@ip-172-31-92-48 ~]$
```

4) Install the lamp-mariadb10.2-php7.2 and php7.2 Amazon Linux Extras repositories to get the latest versions of the LAMP MariaDB and PHP packages for Amazon Linux 2 using the command sudo amazon-linux-extras install -y lamp-mariadb10.2-php7.2 php7.2

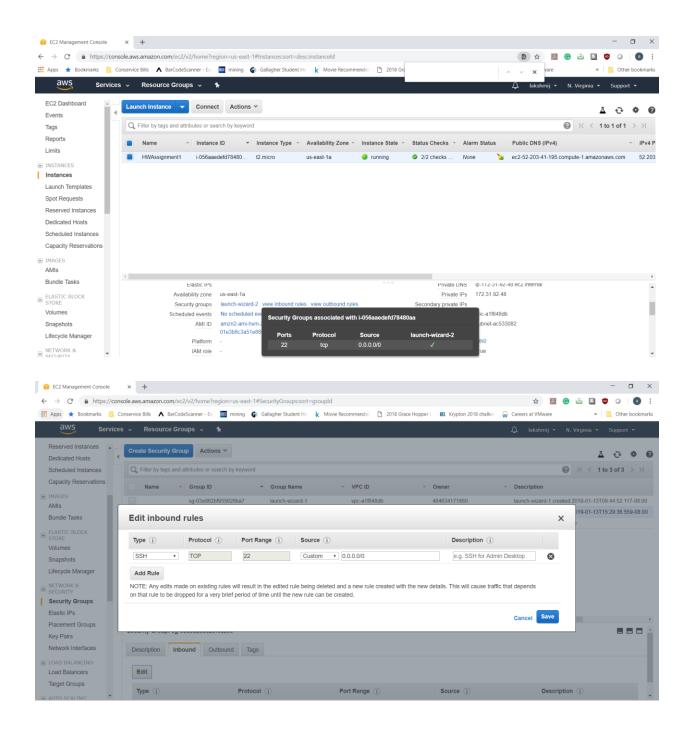


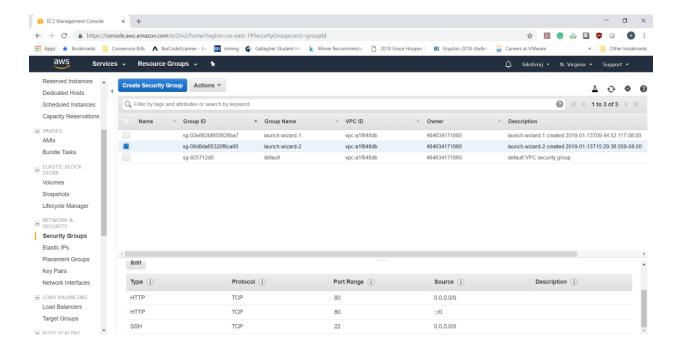
5) Install the Apache web server, MariaDB, and PHP software packages using the command sudo yum install -y httpd mariadb-server

```
| Cambring 17(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 18(1) 1
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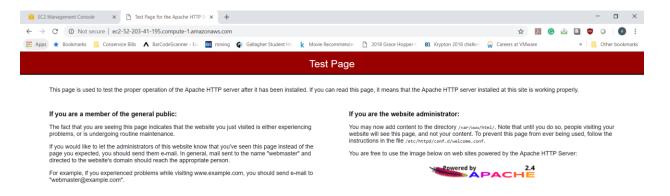
- 6) Start the Apache web server using the command sudo systemctl start httpd
- 7) Use the **sudo systemctl enable httpd** command to configure the Apache web server to start at each system boot.
- 8) Verify that httpd is on by running using the **sudo systemctl is-enabled httpd** command

9) Add a security rule to allow inbound HTTP (port 80) connections to your instance





10) Test your web server. In a web browser, type the public DNS address (or the public IP address) of your instance.



To set file permissions

1. Add your user (in this case, ec2-user) to the apache group.

_

Using username "ec2-user".

Authenticating with public key "imported-openssh-key"

Last login: Mon Jan 14 02:46:49 2019 from c-98-207-65-17.hsd1.ca.comcast.net

https://aws.amazon.com/amazon-linux-2/
[ec2-user@ip-172-31-92-48 ~]\$ groups
ec2-user adm wheel apache systemd-journal
[ec2-user@ip-172-31-92-48 ~]\$

ec2-user@ip-172-31-92-48:~

Using username "ec2-user".

Authenticating with public key "imported-openssh-key"

Last login: Mon Jan 14 02:46:49 2019 from c-98-207-65-17.hsdl.ca.comcast.net

https://aws.amazon.com/amazon-linux-2/

[ec2-user@ip-172-31-92-48 ~]\$ groups

ec2-user adm wheel apache systemd-journal

[ec2-user@ip-172-31-92-48 ~]\$ sudo chown -R ec2-user:apache /var/www

[ec2-user@ip-172-31-92-48 ~]\$ sudo chmod 2775 /var/www && find /var/www -type d

-exec sudo chmod 2775 {} \;

[ec2-user@ip-172-31-92-48 \sim]\$ find /var/www -type f -exec sudo chmod 0664 {} \setminus ;

2. Now, ec2-user (and any future members of the apache group) can add, delete, and edit files in the Apache document root, enabling you to add content, such as a static website or a PHP application.

