

## 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](http://docs.aws.amazon.com/AWSEC2/latest/UserGuide/EC2_GetStarted.html)

The screenshot shows the AWS Management Console interface. On the left, the navigation pane includes sections for EC2 Dashboard, INSTANCES, IMAGES, and ELASTIC BLOCK STORE. The 'Instances' section is selected, displaying a table of EC2 instances. One instance, 'HWAssignment1', is shown with details: Instance ID i-056aaedfd78480aa, Instance Type t2.micro, Availability Zone us-east-1a, Instance State running, Status Checks 2/2 checks passed, Alarm Status None, and Public DNS (IPv4) ec2-52-203-41-195.compute-1.amazonaws.com. Below the table, the 'Create Status Check Alarm' section is visible, showing 'System Status Checks' and 'Instance Status Checks' both as passed.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
HWAssignment1	i-056aaedfd78480aa	t2.micro	us-east-1a	running	2/2 checks passed	None	ec2-52-203-41-195.compute-1.amazonaws.com

2) Connect via putty

```
ec2-user@ip-172-31-92-48:~$  
Using username "ec2-user".  
Authenticating with public key "imported-openssh-key"  
  
_ | _ | _ )  
_ | ( _ | /  
_ | \ _ | _ |  
Amazon Linux 2 AMI  
  
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 ~]$  
Using username "ec2-user".  
Authenticating with public key "imported-openssh-key"  
Last login: Mon Jan 14 00:17:05 2019 from c-98-207-65-17.hsd1.ca.comcast.net  
  
_ | _ | _ )  
_ | ( _ | /  
_ | \ _ | _ |  
Amazon Linux 2 AMI  
  
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 ~]$
```

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

```
ec2-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

  _ | _ | _ )
  _ | ( _ | /   Amazon Linux 2 AMI
  _ | \ _ | _ |

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                        Arch      Version                      Repository      Size
=====
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**

```
ec2-user@ip-172-31-92-48:~$ cat /etc/system-release
Amazon Linux release 2 (Karoo)
[ec2-user@ip-172-31-92-48 ~]$ sudo amazon-linux-extras install -y lamp-mariadb10.2-php7.2 php7.2
Installing php-pdo, php-mysqlnd, php-fpm, php-cli, php-json, mariadb
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
Cleaning repos: amzn2-core amzn2extra-docker amzn2extra-lamp-mariadb10.2-php7.2 amzn2extra-php7.2
10 metadata files removed
4 sqlite files removed
0 metadata files removed
Loaded plugins: extras_suggestions, langpacks, priorities, update-motd
amzn2-core
amzn2extra-docker
amzn2extra-lamp-mariadb10.2-php7.2
amzn2extra-php7.2
(1/6): amzn2-core/2/x86_64/updateinfo
(2/6): amzn2-core/2/x86_64/group.gz
(3/6): amzn2extra-docker/2/x86_64/primary.db
(4/6): amzn2extra-php7.2/2/x86_64/primary.db
(5/6): amzn2extra-lamp-mariadb10.2-php7.2/2/x86_64/primary.db
(6/6): amzn2-core/2/x86_64/primary.db
Resolving Dependencies
--> Running transaction check
--> Package mariadb.x86_64 3:10.2.10-2.amzn2.0.3 will be installed
--> Processing Dependency: mariadb-libs(x86-64) = 3:10.2.10-2.amzn2.0.3 for package: 3:mariadb-10.2.10-2.amzn2.0.3.x86_64
--> Processing Dependency: mariadb-common(x86-64) = 3:10.2.10-2.amzn2.0.3 for package: 3:mariadb-10.2.10-2.amzn2.0.3.x86_64
--> Package php-cli.x86_64 0:7.2.11-1.amzn2.0.1 will be installed
--> Processing Dependency: php-common(x86-64) = 7.2.11-1.amzn2.0.1 for package: php-cli-7.2.11-1.amzn2.0.1.x86_64
--> Package php-fpm.x86_64 0:7.2.11-1.amzn2.0.1 will be installed
--> Package php-json.x86_64 0:7.2.11-1.amzn2.0.1 will be installed
--> Package php-mysqlnd.x86_64 0:7.2.11-1.amzn2.0.1 will be installed
--> Package php-pdo.x86_64 0:7.2.11-1.amzn2.0.1 will be installed
--> Running transaction check
--> Package mariadb-common.x86_64 3:10.2.10-2.amzn2.0.3 will be installed
--> Processing Dependency: /etc/my.cnf for package: 3:mariadb-common-10.2.10-2.amzn2.0.3.x86_64
--> Package mariadb-libs.x86_64 1:5.5.60-1.amzn2 will be updated
--> Package mariadb-libs.x86_64 3:10.2.10-2.amzn2.0.3 will be an update
--> Package php-common.x86_64 0:7.2.11-1.amzn2.0.1 will be installed
--> Running transaction check
--> Package mariadb-config.x86_64 3:10.2.10-2.amzn2.0.3 will be installed
--> Package mariadb-libs.x86_64 1:5.5.60-1.amzn2 will be updated
--> Finished Dependency Resolution

Dependencies Resolved

=====================================================================================================================================
Package Arch Version Repository Size
=====================================================================================================================================
Installing:
mariadb x86_64 3:10.2.10-2.amzn2.0.3 amzn2extra-lamp-mariadb10.2-php7.2 6.1 M
php-cli x86_64 0:7.2.11-1.amzn2.0.1 amzn2extra-lamp-mariadb10.2-php7.2 4.5 M
=====================================================================================================================================
```

```
ec2-user@ip-172-31-92-48:~$
Verifying : 3:mariadb-common-10.2.10-2.amzn2.0.3.x86_64 9/11
Verifying : php-common-7.2.11-1.amzn2.0.1.x86_64 10/11
Verifying : 1:mariadb-libs-5.5.60-1.amzn2.x86_64 11/11

Installed:
mariadb.x86_64 3:10.2.10-2.amzn2.0.3 php-cli.x86_64 0:7.2.11-1.amzn2.0.1 php-fpm.x86_64 0:7.2.11-1.amzn2.0.1 php-json.x86_64 0:7.2.11-1.amzn2.0.1 php-mysqlnd.x86_64 0:7.2.11-1.amzn2.0.1
php-pdo.x86_64 0:7.2.11-1.amzn2.0.1

Dependency Installed:
mariadb-common.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-config.x86_64 3:10.2.10-2.amzn2.0.3 php-common.x86_64 0:7.2.11-1.amzn2.0.1

Dependency Updated:
mariadb-libs.x86_64 3:10.2.10-2.amzn2.0.3

Complete!
0 ansible2 available [ =2.4.2 =2.4.6 ]
2 httpd_modules available [ =1.0 ]
3 memcached1.5 available [ =1.5.1 ]
4 nginx1.12 available [ =1.12.2 ]
5 postgresql9.6 available [ =9.6.6 =9.6.8 ]
6 postgresql10 available [ =10 ]
8 redis4.0 available [ =4.0.5 =4.0.10 ]
9 R3.4 available [ =3.4.3 ]
10 rust1 available \
[ =1.22.1 =1.26.0 =1.26.1 =1.27.2 =1.31.0 ]
11 vim available [ =8.0 ]
13 ruby2.4 available [ =2.4.2 =2.4.4 ]
15 php7.2=latest enabled \
[ =7.2.0 =7.2.4 =7.2.5 =7.2.8 =7.2.11 ]
php7.1 available [ =7.1.22 ]
17 lamp-mariadb10.2-php7.2=latest enabled \
[ =10.2.10_7.2.0 =10.2.10_7.2.4 =10.2.10_7.2.5 =10.2.10_7.2.8 =10.2.10_7.2.11 ]
18 libreoffice available \
[ =5.0.6.2_15 =5.3.6.1 ]
19 gimp available [ =2.8.22 ]
20 docker=latest enabled \
[ =17.12.1 =18.03.1 =18.06.1 ]
21 mate-desktop1.x available \
[ =1.19.0 =1.20.0 ]
22 GraphicsMagick1.3 available [ =1.3.29 ]
23 tomcat8.5 available \
[ =8.5.31 =8.5.32 ]
24 epel available [ =7.11 ]
25 testing available [ =1.0 ]
26 ecs available [ =stable ]
27 corretto8 available [ =1.8.0_192 ]
28 firecracker available [ =0.11 ]
29 golang1.11 available [ =1.11.3 ]

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

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

```
ec2-user@ip-172-31-92-48:~$ sudo yum install mariadb-server
Installing : 3mariadb-rocksdb-engine-10.2.10-2.amzn2.0.3.x86_64 24/28
Installing : 3mariadb-cracklib-password-check-10.2.10-2.amzn2.0.3.x86_64 25/28
Installing : 3mariadb-gssapi-server-10.2.10-2.amzn2.0.3.x86_64 26/28
Installing : 3mariadb-server-10.2.10-2.amzn2.0.3.x86_64 27/28
Installing : 3mariadb-server-utils-10.2.10-2.amzn2.0.3.x86_64 28/28
Verifying : mod_http2-1.11.1-1.amzn2.0.x86_64 1/28
Verifying : 1perl-Compress-Raw-Zlib-2.061-4.amzn2.0.2.x86_64 2/28
Verifying : 3mariadb-backup-10.2.10-2.amzn2.0.3.x86_64 3/28
Verifying : apr-1.6.3-5.amzn2.0.2.x86_64 4/28
Verifying : mailcap-2.1.41-2.amzn2.noarch 5/28
Verifying : generic-logos-httpd-18.0.0-4.amzn2.noarch 6/28
Verifying : perl-Compress-Raw-Bzip2-2.061-3.amzn2.0.2.x86_64 7/28
Verifying : perl-DBI-1.627-4.amzn2.0.2.x86_64 8/28
Verifying : perl-PIRPC-0.2020-14.amzn2.noarch 9/28
Verifying : apr-util-1.6.1-5.amzn2.0.2.x86_64 10/28
Verifying : 3mariadb-tokudb-engine-10.2.10-2.amzn2.0.3.x86_64 11/28
Verifying : 3mariadb-rocksdb-engine-10.2.10-2.amzn2.0.3.x86_64 12/28
Verifying : 3mariadb-cracklib-password-check-10.2.10-2.amzn2.0.3.x86_64 13/28
Verifying : 3mariadb-server-utils-10.2.10-2.amzn2.0.3.x86_64 14/28
Verifying : perl-DBD-MySQL-4.023-6.amzn2.x86_64 15/28
Verifying : httpd-filesystem-2.4.34-1.amzn2.1.1.noarch 16/28
Verifying : perl-Data-Dumper-2.145-3.amzn2.0.2.x86_64 17/28
Verifying : 3mariadb-errmsg-10.2.10-2.amzn2.0.3.x86_64 18/28
Verifying : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64 19/28
Verifying : bison-3.0.4-6.amzn2.0.2.x86_64 20/28
Verifying : 3mariadb-gssapi-server-10.2.10-2.amzn2.0.3.x86_64 21/28
Verifying : 3mariadb-server-10.2.10-2.amzn2.0.3.x86_64 22/28
Verifying : perl-IO-Compress-2.061-2.amzn2.noarch 23/28
Verifying : perl-Net-Daemon-0.48-5.amzn2.noarch 24/28
Verifying : m4-1.4.16-10.amzn2.0.2.x86_64 25/28
Verifying : httpd-tools-2.4.34-1.amzn2.1.1.x86_64 26/28
Verifying : httpd-2.4.34-1.amzn2.1.1.x86_64 27/28
Verifying : jemalloc-3.6.0-1.amzn2.0.1.x86_64 28/28

Installed:
httpd.x86_64 0:2.4.34-1.amzn2.1.1 mariadb-server.x86_64 3:10.2.10-2.amzn2.0.3

Dependency Installed:
apr.x86_64 0:1.6.3-5.amzn2.0.2 apr-util.x86_64 0:1.6.1-5.amzn2.0.2 apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
bison.x86_64 0:3.0.4-6.amzn2.0.2 generic-logos-httpd.noarch 0:18.0.0-4.amzn2 httpd-filesystem.noarch 0:2.4.34-1.amzn2.1.1
httpd-tools.x86_64 0:2.4.34-1.amzn2.1.1 jemalloc.x86_64 0:3.6.0-1.amzn2.0.1 m4.x86_64 0:1.4.16-10.amzn2.0.2
mailcap.noarch 0:2.1.41-2.amzn2 mariadb-backup.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-cracklib-password-check.x86_64 3:10.2.10-2.amzn2.0.3
mariadb-errmsg.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-gssapi-server.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-rocksdb-engine.x86_64 3:10.2.10-2.amzn2.0.3
mariadb-server-utils.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-tokudb-engine.x86_64 3:10.2.10-2.amzn2.0.3 mod_http2.x86_64 0:1.11.1-1.amzn2
perl-Compress-Raw-Bzip2.x86_64 0:2.061-3.amzn2.0.2 perl-Compress-Raw-Zlib.x86_64 1:2.061-4.amzn2.0.2 perl-DBD-MySQL.x86_64 0:4.023-6.amzn2
perl-DBI.x86_64 0:1.627-4.amzn2.0.2 perl-Data-Dumper.x86_64 0:2.145-3.amzn2.0.2 perl-IO-Compress.noarch 0:2.061-2.amzn2
perl-Net-Daemon.noarch 0:0.48-5.amzn2 perl-PIRPC.noarch 0:0.2020-14.amzn2

Complete!
[ec2-user@ip-172-31-92-48 ~]$
```

- 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

```
[ec2-user@ip-172-31-92-48 ~]$ sudo systemctl start httpd
Verifying : 3mariadb-errmsg-10.2.10-2.amzn2.0.3.x86_64 18/28
Verifying : apr-util-bdb-1.6.1-5.amzn2.0.2.x86_64 19/28
Verifying : bison-3.0.4-6.amzn2.0.2.x86_64 20/28
Verifying : 3mariadb-gssapi-server-10.2.10-2.amzn2.0.3.x86_64 21/28
Verifying : 3mariadb-server-10.2.10-2.amzn2.0.3.x86_64 22/28
Verifying : perl-IO-Compress-2.061-2.amzn2.noarch 23/28
Verifying : perl-Net-Daemon-0.48-5.amzn2.noarch 24/28
Verifying : m4-1.4.16-10.amzn2.0.2.x86_64 25/28
Verifying : httpd-tools-2.4.34-1.amzn2.1.1.x86_64 26/28
Verifying : httpd-2.4.34-1.amzn2.1.1.x86_64 27/28
Verifying : jemalloc-3.6.0-1.amzn2.0.1.x86_64 28/28

Installed:
httpd.x86_64 0:2.4.34-1.amzn2.1.1 mariadb-server.x86_64 3:10.2.10-2.amzn2.0.3

Dependency Installed:
apr.x86_64 0:1.6.3-5.amzn2.0.2 apr-util.x86_64 0:1.6.1-5.amzn2.0.2 apr-util-bdb.x86_64 0:1.6.1-5.amzn2.0.2
bison.x86_64 0:3.0.4-6.amzn2.0.2 generic-logos-httpd.noarch 0:18.0.0-4.amzn2 httpd-filesystem.noarch 0:2.4.34-1.amzn2.1.1
httpd-tools.x86_64 0:2.4.34-1.amzn2.1.1 jemalloc.x86_64 0:3.6.0-1.amzn2.0.1 m4.x86_64 0:1.4.16-10.amzn2.0.2
mailcap.noarch 0:2.1.41-2.amzn2 mariadb-backup.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-cracklib-password-check.x86_64 3:10.2.10-2.amzn2.0.3
mariadb-errmsg.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-gssapi-server.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-rocksdb-engine.x86_64 3:10.2.10-2.amzn2.0.3
mariadb-server-utils.x86_64 3:10.2.10-2.amzn2.0.3 mariadb-tokudb-engine.x86_64 3:10.2.10-2.amzn2.0.3 mod_http2.x86_64 0:1.11.1-1.amzn2
perl-Compress-Raw-Bzip2.x86_64 0:2.061-3.amzn2.0.2 perl-Compress-Raw-Zlib.x86_64 1:2.061-4.amzn2.0.2 perl-DBD-MySQL.x86_64 0:4.023-6.amzn2
perl-DBI.x86_64 0:1.627-4.amzn2.0.2 perl-Data-Dumper.x86_64 0:2.145-3.amzn2.0.2 perl-IO-Compress.noarch 0:2.061-2.amzn2
perl-Net-Daemon.noarch 0:0.48-5.amzn2 perl-PIRPC.noarch 0:0.2020-14.amzn2

Complete!
[ec2-user@ip-172-31-92-48 ~]$ sudo systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[ec2-user@ip-172-31-92-48 ~]$ sudo systemctl is-enabled httpd
enabled
[ec2-user@ip-172-31-92-48 ~]$
```

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

EC2 Management Console

Services Resource Groups

EC2 Dashboard

Launch Instance Connect Actions

Filter by tags and attributes or search by keyword

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 P
HWAssignment1	i-050aaedfd78480...	t2.micro	us-east-1a	running	2/2 checks ...	None	ec2-52-203-41-195.compute-1.amazonaws.com	52.203

Security Groups associated with i-050aaedfd78480aa

Ports	Protocol	Source	launch-wizard-2
22	tcp	0.0.0.0/0	✓

EC2 Management Console

Services Resource Groups

Create Security Group Actions

Filter by tags and attributes or search by keyword

Name	Group ID	Group Name	VPC ID	Owner	Description
sg-03e862bf955626ba7	launch-wizard-1	vpc-a1f848db	464634171880	launch-wizard-1 created 2019-01-13T09:44:52.117-08:00	

Edit inbound rules

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

NOTE: Any edits made on existing rules will result in the edited rule being deleted and a new rule created with the new details. This will cause traffic that depends on that rule to be dropped for a very brief period of time until the new rule can be created.

Cancel Save

EC2 Management Console

Services Resource Groups

Create Security Group Actions

Filter by tags and attributes or search by keyword

Name	Group ID	Group Name	VPC ID	Owner	Description
	sg-03e862bf55626ba7	launch-wizard-1	vpc-a1f648db	464634171880	launch-wizard-1 created 2019-01-13T09:44:52.117-08:00
	sg-08d8da65320f6ca00	launch-wizard-2	vpc-a1f648db	464634171880	launch-wizard-2 created 2019-01-13T15:29:36.559-08:00
	sg-925712d0	default	vpc-a1f648db	464634171880	default VPC security group

Edit

Type	Protocol	Port Range	Source	Description
HTTP	TCP	80	0.0.0.0/0	
HTTP	TCP	80	:::0	
SSH	TCP	22	0.0.0.0/0	

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

EC2 Management Console

Test Page for the Apache HTTP

Not secure | ec2-52-203-41-195.compute-1.amazonaws.com

## Test Page

This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page, it means that the Apache HTTP server installed at this site is working properly.

**If you are a member of the general public:**

The fact that you are seeing this page indicates that the website you just visited is either experiencing problems, or is undergoing routine maintenance.

If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

For example, if you experienced problems while visiting [www.example.com](http://www.example.com), you should send e-mail to "webmaster@example.com".

**If you are the website administrator:**

You may now add content to the directory `/var/www/html/`. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this page from ever being used, follow the instructions in the file `/etc/httpd/conf.d/welcome.conf`.

You are free to use the image below on web sites powered by the Apache HTTP Server:

Powered by **APACHE** 2.4

## To set file permissions

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

```
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.hsd1.ca.comcast.net

  _|_  _|_  )
 _|_  ( _|_ /   Amazon Linux 2 AMI
__|_ \__|_ __|_

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.hsd1.ca.comcast.net

  _|_  _|_  )
 _|_  ( _|_ /   Amazon Linux 2 AMI
__|_ \__|_ __|_

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 ~]$ find /var/www -type f -exec sudo chmod 0664 {} \;
```

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.

