NIMRA SIDDIQUI

1. AWS registration: Create a free trial account in Amazon Web Service (aws.amazon.com). If you don't have a credit card, you can use your debit card alternatively.

1. I have created free Amazon web Service account

Creating a free trial account in Amazon Web Service

aws

Sign up for AWS

Create your password

✓ It's you! Your email address has   ✕
been successfully verified.

Your password provides you with sign in access
to AWS, so it's important we get it right.

Root user password

••••••••••••••••

Confirm root user password

••••••••••••••••

Continue (step 1 of 5)

OR

Explore Free Tier products with a new AWS account.

To learn more, visit aws.amazon.com/free.

NIMRA SIDDIQUI

▼ **Summary**

Number of instances **Info**

```
1
```

Software Image (AMI)

Canonical, Ubuntu, 20.04 LTS, ...read more
ami-0149b2da6ceec4bb0

Virtual server type (instance type)
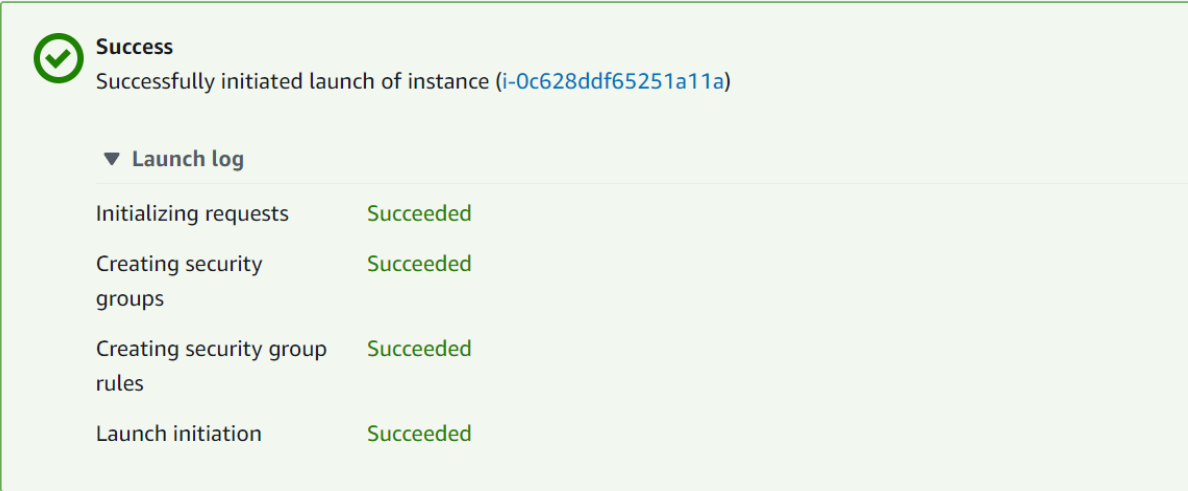
t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

Cancel   **Launch instance**

1. Open the Amazon EC2 console at https://console.aws.amazon.com/ec2/.
2. From the EC2 console dashboard, in the **Launch instance** box, choose **Launch instance**, and then choose **Launch instance** from the options that appear.

Success
Successfully initiated launch of instance (i-0c628ddf65251a11a)

▼ **Launch log**

Initializing requests	Succeeded
Creating security groups	Succeeded
Creating security group rules	Succeeded
Launch initiation	Succeeded

Next Steps - *preview*

1. Under **Name and tags**, for **Name**, enter a descriptive name for your instance.
2. Under **Application and OS Images (Amazon Machine Image)**, do the following:
   a. Choose **Quick Start**, and then choose Windows. This is the operating system (OS) for your instance.
   b. From **Amazon Machine Image (AMI)**, select the AMI for Windows Server 2016 Base or later.. Notice that these AMIs are marked **Free tier eligible**. An *Amazon Machine Image (AMI)* is a basic configuration that serves as a template for your instance.

EC2 > Instances > i-0c628ddf65251a11a > **Connect to instance**

Connect to instance Info

Connect to your instance i-0c628ddf65251a11a (nimra) using any of these options

| EC2 Instance Connect | Session Manager | **SSH client** | EC2 serial console |

Instance ID

📋 i-0c628ddf65251a11a (nimra)

1. Open an SSH client.

2. Locate your private key file. The key used to launch this instance is myNimrakey.pem

3. Run this command, if necessary, to ensure your key is not publicly viewable.
   📋 chmod 400 myNimrakey.pem

4. Connect to your instance using its Public DNS:
   📋 ec2-3-88-248-189.compute-1.amazonaws.com

Example:

📋 ssh -i "myNimrakey.pem" ubuntu@ec2-3-88-248-189.compute-1.amazonaws.com

ⓘ **Note:** In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

    c.

3. Under **Instance type**, from the **Instance type** list, you can select the hardware configuration for your instance. Choose the t2.micro instance type, which is selected by default. The t2.micro instance type is eligible for the free tier. In Regions where t2.micro is unavailable, you can use a t3.micro instance under the free tier. For more information, see <u>AWS Free Tier</u>

3**. SSH connection: AWS requires the private key for SSH. Download the private key used to login the created instance. It's a .pem file. Install SSH server in your instance and create a successful SSH connection to your instance from your local machine using the downloaded private key.**

Amazon Machine Image (AMI)

the Community

Summary

Ubuntu Server 20.04 LTS (HVM), SSD Volume Type
ami-0149b2da6ceec4bb0 (64-bit (x86)) / ami-00266f51b6b22db58 (64-bit (Arm))
Virtualization: hvm   ENA enabled: true   Root device type: ebs

Free tier eligible

Number of instances Info

1

Description

Canonical, Ubuntu, 20.04 LTS, amd64 focal image build on 2022-09-14

Software Image (AMI)

Canonical, Ubuntu, 20.04 LTS, ...read more
ami-0149b2da6ceec4bb0

Architecture

AMI ID

64-bit (x86)

ami-0149b2da6ceec4bb0

Verified provider

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

Instance type Info

Instance type

t2.micro
Family: t2   1 vCPU   1 GiB Memory
On-Demand Linux pricing: 0.0116 USD per Hour
On-Demand Windows pricing: 0.0162 USD per Hour

Free tier eligible

Compare instance types

ⓘ **Free tier:** In your first year includes
750 hours of t2.micro (or t3.micro

Cancel   **Launch instance**

New EC2 Experience
Tell us what you think

EC2 Dashboard
EC2 Global View
Events
Tags
Limits

▼ Instances
  Instances New
  Instance Types
  Launch Templates
  Spot Requests
  Savings Plans
  Reserved Instances New
  Dedicated Hosts
  Scheduled Instances
  Capacity Reservations

▼ Images
  AMIs

Instances (1) Info   Connect   Instance state ▼   Actions ▼   **Launch instances** ▼

Find instance by attribute or tag (case-sensitive)   〈 1 〉

|	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Ava
	nimra	i-0c628ddf65251a11a	⊘ Running	t2.micro	⊕ Initializing	No alarms +	us-e

**Select an instance**

Instance ready to connect

Generate a PuTTY Private Key (*.ppk*) File

1. Download and install PuTTY.

2. Open the folder that PuTTY was installed to (default path is *C: > Program Files > PuTTY*).

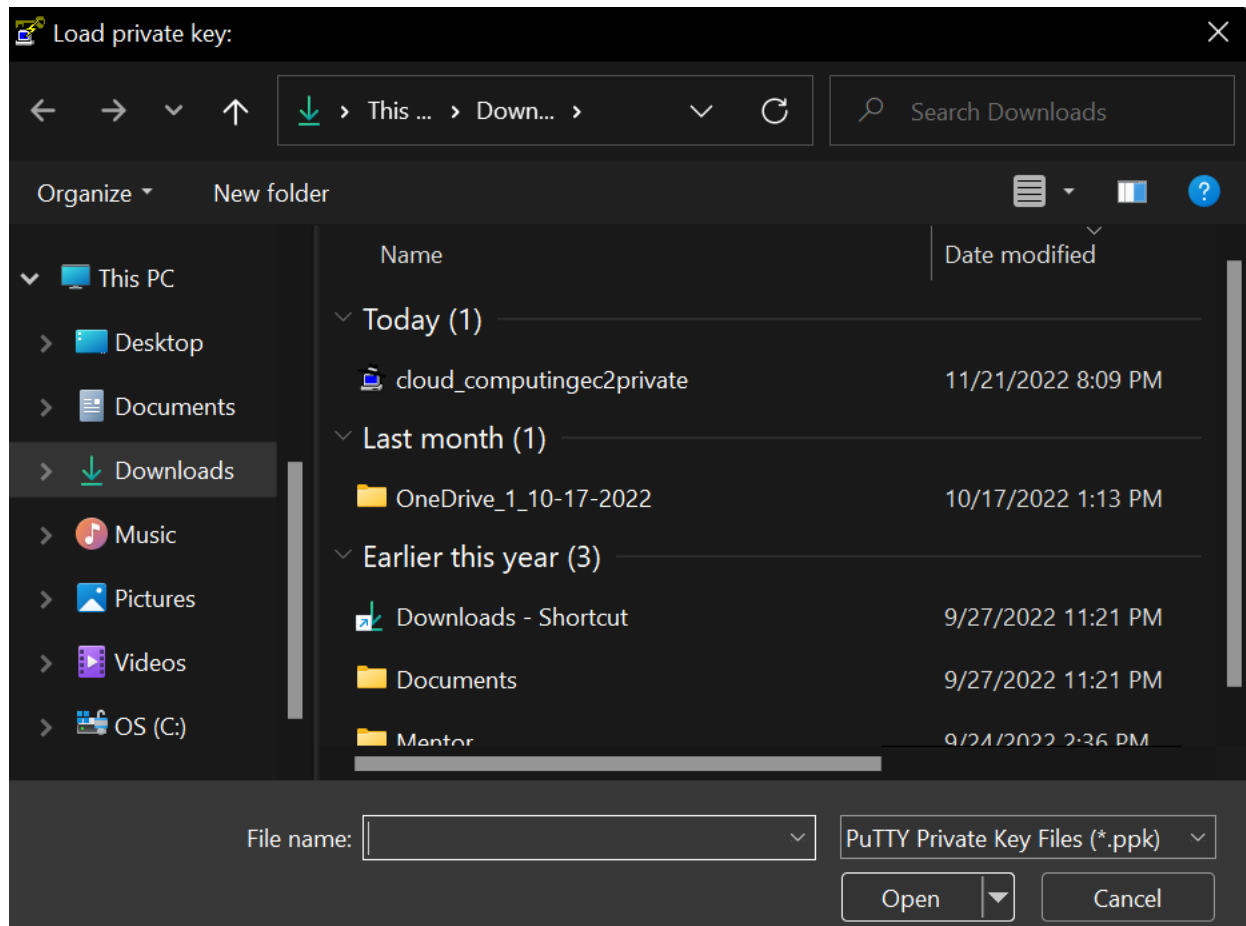3. Double-click on the file **puttygen.exe**.
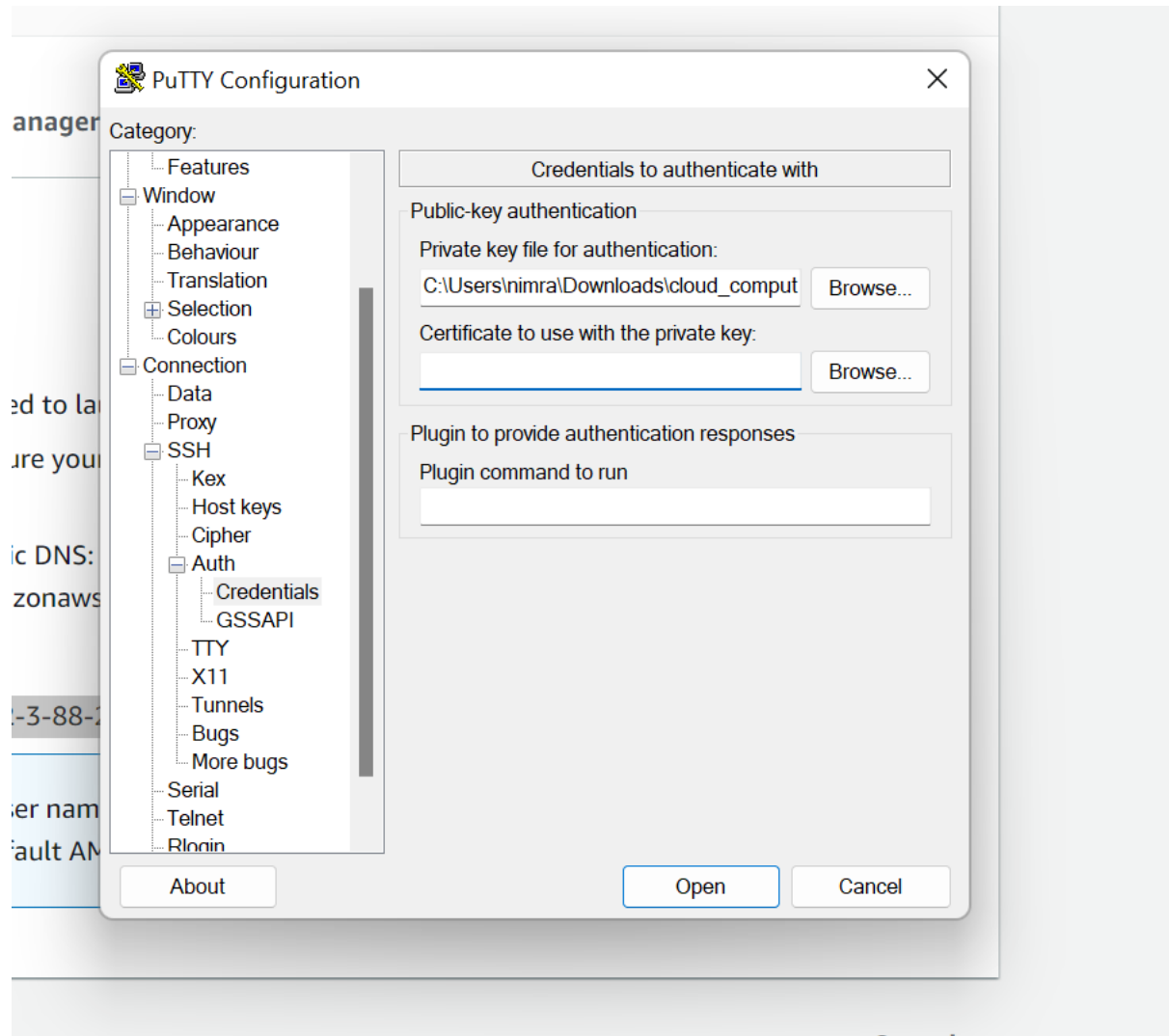
4. In *PuTTY Key Generator*, click the **Load** button and navigate to the folder that contains the private key file (*.pem*) created during the EC2 configuration process.
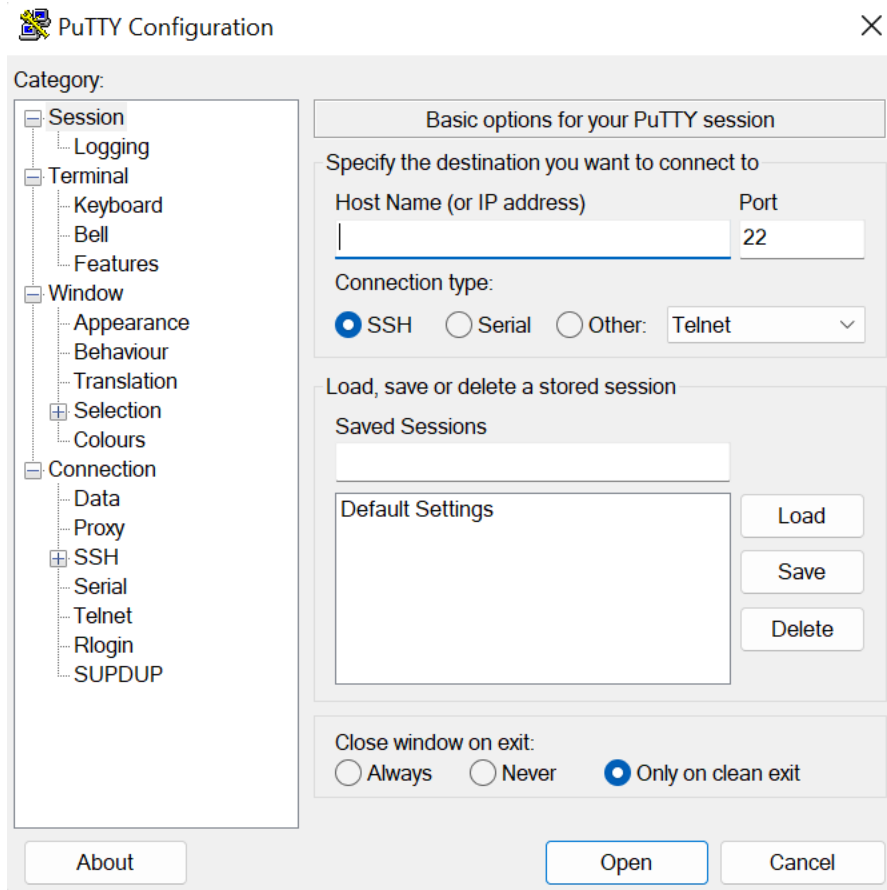
Click Load in the PuTTY Key Generator.

5. Click on the **PuTTY Private Key Files** button in the lower-right corner of the window and select *All Files (*.*).*

Select All Files in PuTTY Private Key Files

   6. Select your private key file (*.pem*) and click **Open**.
Select and open your private key.

   7. Click **OK** to close the *PuTTYgen Notice* pop-up window.
PuTTYgen Notice

   8. In *PuTTY Key Generator*, make sure *Type of key to generate* value is set to **RSA**.

   9. Navigate to the location you want to store your PuTTY Private Key file (*.ppk*) and

       give it a name.

   10. Click **Save.**

   11. Close the *PuTTY Key Generator* window.

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Catalog	Published	Architecture	Virtualization	Root device type	ENA Enabled
Community AMIs	2021-11-17T17:09:24.000Z	x86_64	hvm	ebs	Yes

▼ Instance type Info

Instance type

t2.micro
Family: t2   1 vCPU   1 GiB Memory
On-Demand Linux pricing: 0.0116 USD per Hour
On-Demand Windows pricing: 0.0162 USD per Hour

Free tier eligible

Compare instance types

▼ Key pair (login) Info

You can use a key pair to securely connect to your instance. Ensure that you have access to the selected key pair before you launch the instance.

Key pair name - *required*

▼ Summary

Number of instances Info

1

Software Image (AMI)
bitnami-lampstack-7.4.26-6-r01...read more
ami-07151407f91b6de8b

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 10 GiB

ⓘ **Free tier:** In your first year includes   ✕
750 hours of t2.micro (or t3.micro

Cancel   **Launch instance**

New EC2 Experience   ✕
Tell us what you think

EC2 Dashboard
EC2 Global View
Events
Tags
Limits

Instances
Instances New
Instance Types
Launch Templates
Spot Requests
Savings Plans
Reserved Instances New
Dedicated Hosts
Scheduled Instances
Capacity Reservations

Instances (2) Info   ↻   Connect   Instance state ▼   Actions ▼   **Launch instances**   ▼

🔍 Find instance by attribute or tag (case-sensitive)   ‹ 1 › ⚙

	Name ▽	Instance ID	Instance state ▽	Instance type ▽	Status check	Alarm status	Ava
☐	nimra	i-0c628ddf65251a11a	⊘ Running ⊕⊖	t2.micro	⊘ 2/2 checks passed	No alarms ＋	us-e
☐	LAMP Server	i-03d76adc7ed66496d	⏱ Pending ⊕⊖	t2.micro	–	No alarms ＋	us-e

Select an instance   ⚙ ✕

4. LAMP installation: Install the LAMP (Linux+Apache+MySQL+PHP) stack in your guest Ubuntu Linux, and create a simple PHP webpage using phpinfo().

I follow steps from this link to install Lamp

https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/ec2-lamp-amazon-linux-2.html

Step 1: Prepare the LAMP server

NIMRA SIDDIQUI

1. <u>Connect to your instance.</u>

Connect to instance Info

Connect to your instance i-068bf1e6732dc5af1 (LAMP_SERVER) using any of these options

| **EC2 Instance Connect** | **Session Manager** | **SSH client** | **EC2 serial console** |

Instance ID

📋 i-068bf1e6732dc5af1 (LAMP_SERVER)

Public IP address

📋 54.221.27.143

User name

ec2-user

Connect using a custom user name, or use the default user name ec2-user for the AMI used to launch the instance.

ⓘ **Note:** In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

Cancel   **Connect**

System log   ↻   📋 Copy log   ⬇ Download

Review system log for instance i-03d76adc7ed66496d as of Tue Nov 22 2022 18:04:20 GMT-0500 (Eastern Standard Time)

```
▣[H▣[J▣[1;1HLoading Linux 4.19.0-18-cloud-amd64 ...
Loading initial ramdisk ...
[    0.000000] Linux version 4.19.0-18-cloud-amd64 (debian-kernel@lists.debian.org) (gcc version 8.3.0 (Debian 8.3.0-6)) #1 SMP Debian 4.19
[    0.000000] Command line: BOOT_IMAGE=/boot/vmlinuz-4.19.0-18-cloud-amd64 root=UUID=1ca031f6-4004-4f8d-a861-532a0158c91f ro console=tty0
[    0.000000] x86/fpu: Supporting XSAVE feature 0x001: 'x87 floating point registers'
[    0.000000] x86/fpu: Supporting XSAVE feature 0x002: 'SSE registers'
[    0.000000] x86/fpu: Supporting XSAVE feature 0x004: 'AVX registers'
[    0.000000] x86/fpu: xstate_offset[2]:  576, xstate_sizes[2]:  256
[    0.000000] x86/fpu: Enabled xstate features 0x7, context size is 832 bytes, using 'standard' format.
[    0.000000] BIOS-provided physical RAM map:
[    0.000000] BIOS-e820: [mem 0x0000000000000000-0x000000000009dfff] usable
[    0.000000] BIOS-e820: [mem 0x000000000009e000-0x000000000009ffff] reserved
[    0.000000] BIOS-e820: [mem 0x00000000000e0000-0x00000000000fffff] reserved
[    0.000000] BIOS-e820: [mem 0x0000000000100000-0x000000003fffffff] usable
[    0.000000] BIOS-e820: [mem 0x00000000fc000000-0x00000000ffffffff] reserved
[    0.000000] bootconsole [earlyser0] enabled
```

Congratulations!

You are now running **Bitnami LAMP 7.4.26** in the Cloud.

Useful Links

The following links will help you to understand better how to get started and configure the application you just launched.

Get Started

Connect to phpMyAdmin

Documentation

Support

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

ttps://aws.amazon.com/amazon-linux-2/
 package(s) needed for security, out of 1 available
un "sudo yum update" to apply all updates.
ec2-user@ip-172-31-20-21 ~]$ sudo yum update -y
oaded plugins: extras_suggestions, langpacks, priorities, update-motd
esolving Dependencies
-> Running transaction check
--> Package kernel.x86_64 0:5.10.149-133.644.amzn2 will be installed
-> Finished Dependency Resolution
ependencies Resolved
===================================================================================
Package              Arch           Version                   Repository              Si
===================================================================================
nstalling:
kernel               x86_64         5.10.149-133.644.amzn2    amzn2extra-kernel-5.10  32
```

i-068bf1e6732dc5af1 (LAMP_SERVER)

PublicIPs: 54.221.27.143   PrivateIPs: 172.31.20.21

To set file permissions

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, 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

Step 2: Test the LAMP server

NIMRA SIDDIQUI

PHP Version 7.2.34

System	Linux ip-172-31-20-21.ec2.internal 5.10.147-133.644.amzn2.x86_64 #1 SMP Fri Oct 14 01:16:24 UTC 2022 x86_64
Build Date	Oct 21 2020 18:04:56
Server API	FPM/FastCGI
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc
Loaded Configuration File	/etc/php.ini
Scan this dir for additional .ini files	/etc/php.d
Additional .ini files parsed	/etc/php.d/20-bz2.ini, /etc/php.d/20-calendar.ini, /etc/php.d/20-ctype.ini, /etc/php.d/20-exif.ini, /etc/php.d/20-fileinfo.ini, /etc/php.d/20-ftp.ini, /etc/php.d/20-gettext.ini, /etc/php.d/20-iconv.ini, /etc/php.d/20-json.ini, /etc/php.d/20-mysqlnd.ini, /etc/php.d/20-pdo.ini, /etc/php.d/20-phar.ini, /etc/php.d/20-sockets.ini, /etc/php.d/20-sqlite3.ini, /etc/php.d/20-tokenizer.ini, /etc/php.d/20-zip.ini, /etc/php.d/25-curl.ini, /etc/php.d/30-mysqli.ini, /etc/php.d/30-pdo_mysql.ini, /etc/php.d/30-pdo_sqlite.ini
PHP API	20170718
PHP Extension	20170718
Zend Extension	320170718
Zend Extension Build	API320170718,NTS
PHP Extension Build	API20170718,NTS
Debug Build	no
Thread Safety	disabled
Zend Signal Handling	enabled
Zend Memory Manager	enabled
Zend Multibyte Support	disabled
IPv6 Support	enabled
DTrace Support	available, disabled
Registered PHP Streams	https, ftps, compress.zlib, php, file, glob, data, http, ftp, compress.bzip2, phar, zip
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, sslv3, tls, tlsv1.0, tlsv1.1, tlsv1.2

BZip2 Support	Enabled
Stream Wrapper support	compress.bzip2://
Stream Filter support	bzip2.decompress, bzip2.compress
BZip2 Version	1.0.6, 6-Sept-2010

calendar

Calendar support	enabled

cgi-fcgi

php-fpm	active

Directive	Local Value	Master Value
cgi.discard_path	0	0
cgi.fix_pathinfo	1	1
cgi.force_redirect	1	1
cgi.nph	0	0
cgi.redirect_status_env	no value	no value
cgi.rfc2616_headers	0	0
fastcgi.error_header	no value	no value
fastcgi.logging	1	1
fpm.config	no value	no value

Core

PHP Version	7.2.34

Directive	Local Value	Master Value
allow_url_fopen	On	On
allow_url_include	Off	Off

PHP Version	7.2.34

Directive	Local Value	Master Value
allow_url_fopen	On	On
allow_url_include	Off	Off
arg_separator.input	&	&
arg_separator.output	&	&
auto_append_file	no value	no value
auto_globals_jit	On	On
auto_prepend_file	no value	no value
browscap	no value	no value
default_charset	UTF-8	UTF-8
default_mimetype	text/html	text/html
disable_classes	no value	no value
disable_functions	no value	no value
display_errors	Off	Off
display_startup_errors	Off	Off
doc_root	no value	no value
docref_ext	no value	no value
docref_root	no value	no value
enable_dl	Off	Off
enable_post_data_reading	On	On
error_append_string	no value	no value
error_log	/var/log/php-fpm/www-error.log	/var/log/php-fpm/www-error.log
error_prepend_string	no value	no value
error_reporting	22527	22527
expose_php	On	On

5. Instance snapshot creation: Create a snapshot of your current instance in AWS. A snapshot is an archived file for your instance.

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