Creating AMI's in AWS EC2 Machine

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. (
following the simple steps below.

Name and tags Info

Name

AMI

▼ Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, a
launch your instance. Search or Browse for AMIs if you don't see what you are looking for below

Q Search our full catalog including 1000s of application and OS images

Recents | **Quick Start**

Amazon Linux	macOS	Ubuntu	Windows	Red Hat	S
aws	Mac	ubuntu®	Microsoft	Red Hat	>

Ubuntu Server 22.04 LTS (HVM), SSD Volume Type   Free
ami-062df10d14676e201 (64-bit (x86)) / ami-0c66c4f14d217d16f (64-bit (Arm))
Virtualization: hvm   ENA enabled: true   Root device type: ebs

Description

Canonical, Ubuntu, 22.04 LTS, amd64 jammy image build on 2022-09-12

Architecture   AMI ID

64-bit (x86)   ▼   ami-062df10d14676e201   Verified provider

▼ Instance type   Info

nstance type

t2.micro   Free tier eligible
Family: t2   1 vCPU   1 GiB Memory   ▼   Comp
On-Demand Linux pricing: 0.0124 USD per Hour
On-Demand Windows pricing: 0.017 USD per Hour

▼ 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
the instance.

Key pair name - *required*

cloud   ▼   C

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

Instance ID

⧉
i-06fed8ab586031c9d (AMI)

1. Open an SSH client.

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

3. Run this command, if necessary, to ensure your key is not publicly viewable.

   ⧉
   chmod 400 cloud.pem

4. Connect to your instance using its Public DNS:

   ⧉
   ec2-13-126-236-230.ap-south-1.compute.amazonaws.com

Example:

⧉   ⊘ Command copied

ssh -   2-13-126-236-230.ap-south-1.compute.amazonaws.com

```
ubuntu@ip-172-31-14-225: $ sudo su
root@ip-172-31-14-225:/home/ubuntu# apt update
Hit:1 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy InRelease
Get:2 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates InRelease [114 kB]
Get:3 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports InRelease [99.8 kB]
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [110 kB]
Get:5 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 Packages [14.1 MB]
Get:6 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe Translation-en [5652 kB]
Get:7 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/universe amd64 c-n-f Metadata [286 kB]
Get:8 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 Packages [217 kB]
Get:9 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse Translation-en [112 kB]
Get:10 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy/multiverse amd64 c-n-f Metadata [8372 B]
Get:11 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [662 kB]
Get:12 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main Translation-en [152 kB]
Get:13 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/main amd64 c-n-f Metadata [9404 B]
Get:14 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [399 kB]
Get:15 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted Translation-en [61.3 kB]
Get:16 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 c-n-f Metadata [532 B]
Get:17 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [435 kB]
Get:18 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe Translation-en [110 kB]
Get:19 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/universe amd64 c-n-f Metadata [4404 B]
Get:20 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 Packages [7220 B]
Get:21 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse Translation-en [2360 B]
Get:22 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-updates/multiverse amd64 c-n-f Metadata [420 B]
Get:23 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 Packages [3008 B]
Get:24 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main Translation-en [1432 B]
Get:25 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/main amd64 c-n-f Metadata [272 B]
Get:26 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/restricted amd64 c-n-f Metadata [116 B]
Get:27 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 Packages [6752 B]
Get:28 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe Translation-en [9240 B]
Get:29 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/universe amd64 c-n-f Metadata [352 B]
Get:30 http://ap-south-1.ec2.archive.ubuntu.com/ubuntu jammy-backports/multiverse amd64 c-n-f Metadata [116 B]
Get:31 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [435 kB]
Get:32 http://security.ubuntu.com/ubuntu jammy-security/main Translation-en [96.5 kB]
Get:33 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [363 kB]
Get:34 http://security.ubuntu.com/ubuntu jammy-security/restricted Translation-en [55.8 kB]
Get:35 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [307 kB]
Get:36 http://security.ubuntu.com/ubuntu jammy-security/universe Translation-en [68.7 kB]
Get:37 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 c-n-f Metadata [2408 B]
Get:38 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 Packages [4192 B]
Get:39 http://security.ubuntu.com/ubuntu jammy-security/multiverse Translation-en [900 B]
Get:40 http://security.ubuntu.com/ubuntu jammy-security/multiverse amd64 c-n-f Metadata [228 B]
Fetched 23.9 MB in 5s (5204 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
```

```
root@ip-172-31-14-225:/home/ubuntu# ufw allow ssh
Rules updated
Rules updated (v6)
root@ip-172-31-14-225:/home/ubuntu# ufw allow 80
Rules updated
Rules updated (v6)
root@ip-172-31-14-225:/home/ubuntu# ufw allow 443
Rules updated
Rules updated (v6)
root@ip-172-31-14-225:/home/ubuntu# ufw enable
Command may disrupt existing ssh connections. Proceed with operation (y|n)? yes
```

Inbound rules (3)

	Name	Security group rule...	IP version	Type	Protocol	Port range
☐	–	sgr-05d8a957a5ec201...	IPv4	HTTPS	TCP	443
☐	–	sgr-0ed910dc169eb2d...	IPv4	SSH	TCP	22
☐	–	sgr-013e4076334ce90...	IPv4	HTTP	TCP	80

Apache2 Default Page

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in /usr/share/doc/apache2/README.Debian.gz**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the `apache2-doc` package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
|       `--  ports.conf
|-- mods-enabled
|       |-- *.load
|       `-- *.conf
|-- conf-enabled
|       `-- *.conf
|-- sites-enabled
|       `-- *.conf
```

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-14-225:/home/ubuntu# php --version
Command 'php' not found, but can be installed with:
apt install php8.1-cli  # version 8.1.2-1ubuntu2.5, or
apt install php-cli     # version 2:8.1+92ubuntu1
root@ip-172-31-14-225:/home/ubuntu# apt install php8.1
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libapache2-mod-php8.1 php-common php8.1-cli php8.1-common php8.1-opcache php8.1-readline
Suggested packages:
  php-pear
The following NEW packages will be installed:
  libapache2-mod-php8.1 php-common php8.1 php8.1-cli php8.1-common php8.1-opcache php8.1-readline
0 upgraded, 7 newly installed, 0 to remove and 55 not upgraded.
Need to get 5124 kB of archives.
After this operation, 21.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] yes
```

```
No VM guests are running outdated hypervisor (qemu) binaries on this host.
root@ip-172-31-14-225:/home/ubuntu# systemctl restart apache2
root@ip-172-31-14-225:/home/ubuntu# systemctl start apache2
root@ip-172-31-14-225:/home/ubuntu# echo '<?php phpinfo(); ?>' | sudo tee -a /var/www/html/phpinfo.php > /dev/null
root@ip-172-31-14-225:/home/ubuntu#
```

PHP Version 8.1.2

System	Linux ip-172-31-14-225 5.15.0-1019-aws #23-Ubuntu SMP Wed Aug 17 18:33:13 UTC 2022 x86_64
Build Date	Aug 8 2022 07:28:23
Build System	Linux
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled
Configuration File (php.ini) Path	/etc/php/8.1/apache2
Loaded Configuration File	/etc/php/8.1/apache2/php.ini
Scan this dir for additional .ini files	/etc/php/8.1/apache2/conf.d
Additional .ini files parsed	/etc/php/8.1/apache2/conf.d/10-opcache.ini, /etc/php/8.1/apache2/conf.d/10-pdo.ini, /etc/php/8.1/apache2/conf.d/20-calendar.ini, /etc/php/8.1/apache2/conf.d/20-ctype.ini, /etc/php/8.1/apache2/conf.d/20-exif.ini, /etc/php/8.1/apache2/conf.d/20-ffi.ini, /etc/php/8.1/apache2/conf.d/20-fileinfo.ini, /etc/php/8.1/apache2/conf.d/20-ftp.ini, /etc/php/8.1/apache2/conf.d/20-gettext.ini, /etc/php/8.1/apache2/conf.d/20-iconv.ini, /etc/php/8.1/apache2/conf.d/20-phar.ini, /etc/php/8.1/apache2/conf.d/20-posix.ini, /etc/php/8.1/apache2/conf.d/20-readline.ini, /etc/php/8.1/apache2/conf.d/20-shmop.ini, /etc/php/8.1/apache2/conf.d/20-sockets.ini, /etc/php/8.1/apache2/conf.d/20-sysvmsg.ini, /etc/php/8.1/apache2/conf.d/20-sysvsem.ini, /etc/php/8.1/apache2/conf.d/20-sysvshm.ini, /etc/php/8.1/apache2/conf.d/20-tokenizer.ini
PHP API	20210902
PHP Extension	20210902
Zend Extension	420210902
Zend Extension Build	API420210902,NTS
PHP Extension Build	API20210902,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, phar
Registered Stream Socket Transports	tcp, udp, unix, udg, ssl, tls, tlsv1.0, tlsv1.1, tlsv1.2, tlsv1.3
Registered Stream Filters	zlib.*, string.rot13, string.toupper, string.tolower, convert.*, consumed, dechunk, convert.iconv.*

System	Linux ip-172-31-14-225 5

Instance: i-06fed8ab586031c9d (AMI)

Details	Security	Networking	Storage	Status checks	Monitoring	Tags

▼ Instance summary Info

⊘ Public IPv4 address copied

Instance ID	Public IPv4 address	Private IPv4 addresses
i-06fed8ab586031c9d (AMI)	13.126.236.230 | open address ↗	172.31.14.225

Amazon Machine Images (AMIs) (1) Info

↻ | Recycle Bin | EC2 Image Builder | Actions ▼ | Launch instance from AMI

⟨ 1 ⟩ ⚙

☐	Name ▽	AMI ID ▽	AMI name ▽	Source ▽	Owner ▽	Visibility ▽	Status ▽
☐	–	ami-007e7391466bb394e	APACHEPHP	871984970178/APACHEP...	871984970178	Private	⊘ Available ⊕ ⊖

```
Connection to ec2-13-126-236-230.ap-south-1.compute.amazonaws.com closed.
PS C:\Users\Murty\Downloads\cloud> ssh -i "cloud.pem" ubuntu@ec2-13-126-236-230.ap-south-1.compute.amazonaws.com
Welcome to Ubuntu 22.04.1 LTS (GNU/Linux 5.15.0-1019-aws x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:     https://landscape.canonical.com
 * Support:        https://ubuntu.com/advantage

  System information as of Fri Oct 21 11:01:36 UTC 2022

  System load:  0.0              Processes:             105
  Usage of /:   22.3% of 7.57GB  Users logged in:       0
  Memory usage: 20%              IPv4 address for eth0: 172.31.14.225
  Swap usage:   0%

 * Ubuntu Pro delivers the most comprehensive open source security and
   compliance features.

   https://ubuntu.com/aws/pro

60 updates can be applied immediately.
31 of these updates are standard security updates.
To see these additional updates run: apt list --upgradable


Last login: Fri Oct 21 10:11:36 2022 from 122.175.94.121
ubuntu@ip-172-31-14-225: $
```

```
ubuntu@ip-172-31-14-225: $ sudo su
root@ip-172-31-14-225:/home/ubuntu# systemctl status apache2
● apache2.service - The Apache HTTP Server
     Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
     Active: active (running) since Fri 2022-10-21 10:49:39 UTC; 23min ago
       Docs: https://httpd.apache.org/docs/2.4/
    Process: 490 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Main PID: 598 (apache2)
      Tasks: 6 (limit: 1143)
     Memory: 23.0M
        CPU: 135ms
     CGroup: /system.slice/apache2.service
             ├─598 /usr/sbin/apache2 -k start
             ├─638 /usr/sbin/apache2 -k start
             ├─639 /usr/sbin/apache2 -k start
             ├─644 /usr/sbin/apache2 -k start
             ├─645 /usr/sbin/apache2 -k start
             └─646 /usr/sbin/apache2 -k start

Oct 21 10:49:38 ip-172-31-14-225 systemd[1]: Starting The Apache HTTP Server...
Oct 21 10:49:39 ip-172-31-14-225 systemd[1]: Started The Apache HTTP Server.
root@ip-172-31-14-225:/home/ubuntu#
```

```
root@ip-172-31-14-225:/home/ubuntu# systemctl status php*
● phpsessionclean.timer - Clean PHP session files every 30 mins
     Loaded: loaded (/lib/systemd/system/phpsessionclean.timer; enabled; vendor preset: enabled)
     Active: active (waiting) since Fri 2022-10-21 10:49:39 UTC; 25min ago
    Trigger: Fri 2022-10-21 11:39:00 UTC; 23min left
   Triggers: ● phpsessionclean.service

Oct 21 10:49:39 ip-172-31-14-225 systemd[1]: Started Clean PHP session files every 30 mins.
root@ip-172-31-14-225:/home/ubuntu#
```