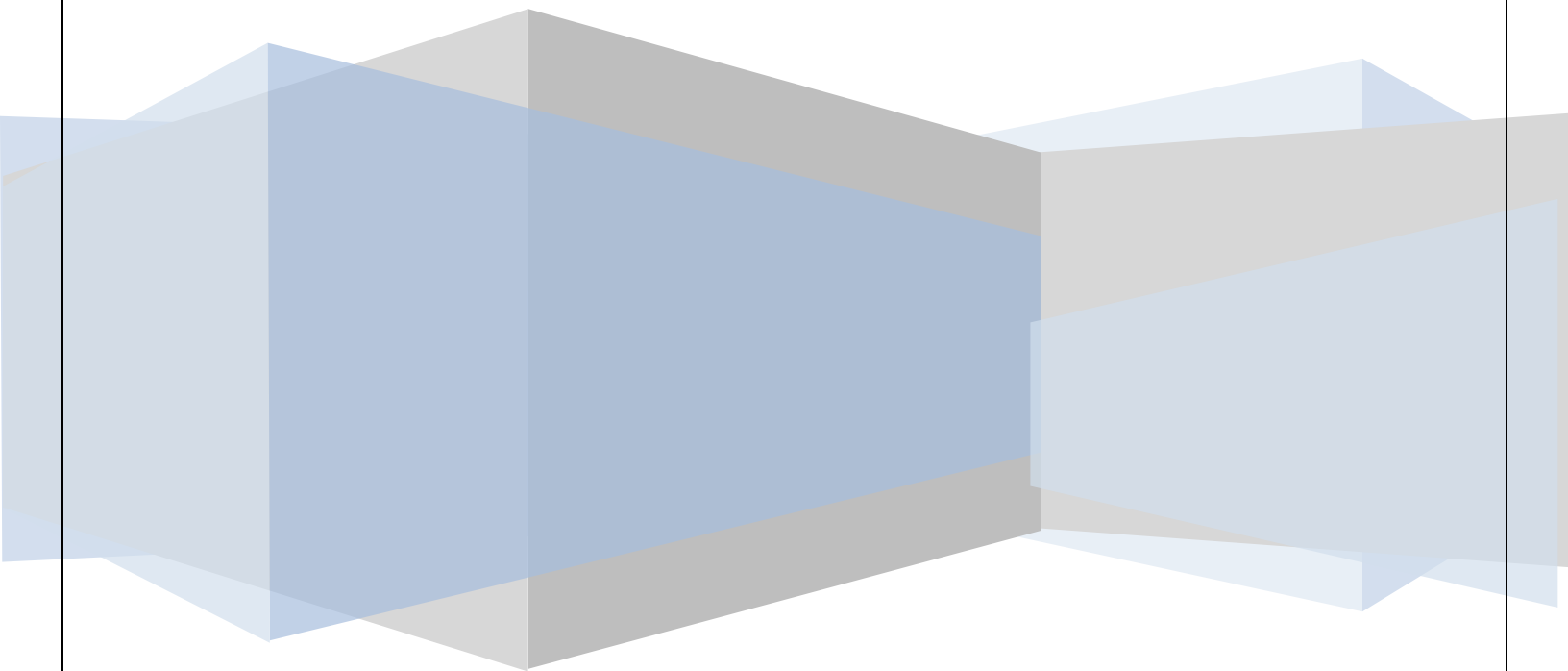
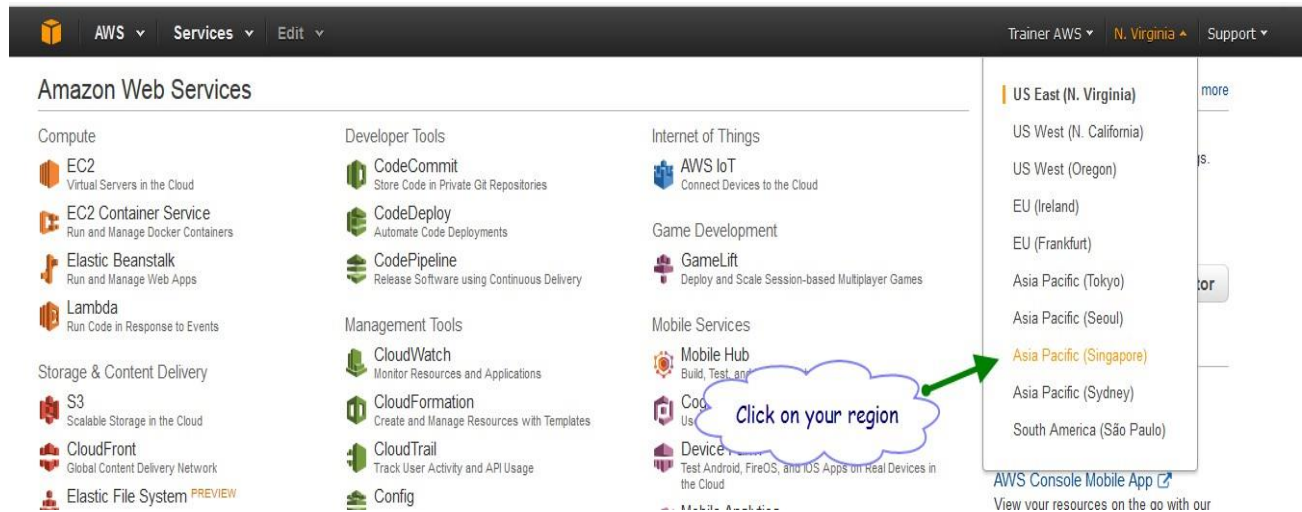


AWS Cloud Training

# Creating an instance in AWS



Select your region from drop down list on the top right side.



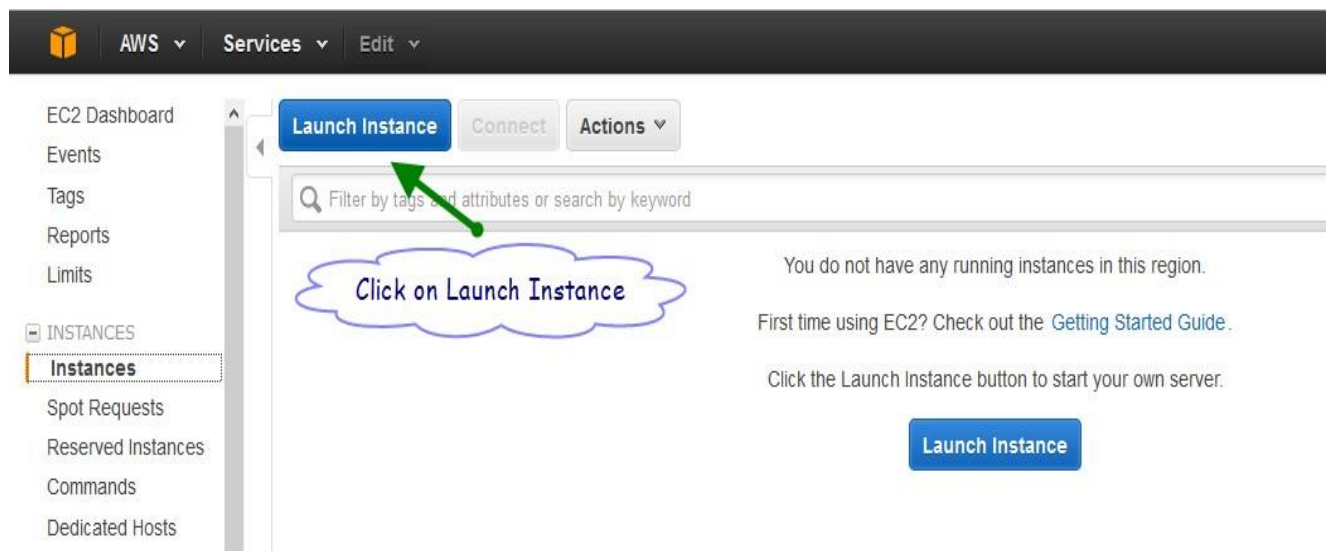
Then Click on EC2 under Compute.



Then click on instances under INSTANCES from left pane.



Click on Launch Instance to create a new instance.



Choose an AMI and click on Select to choose the AMI.

**Step 1: Choose an Amazon Machine Image (AMI)**

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

**Quick Start**

My AMIs

AWS Marketplace

Community AMIs

☐ Free tier only ⓘ

**Amazon Linux AMI 2016.03.0 (HVM), SSD Volume Type** - ami-e90dc68a

The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root device type: ebs Virtualization type: hvm

**Select**

**Red Hat Enterprise Linux 7.2 (HVM), SSD Volume Type** - ami-3f03c55c

Red Hat Enterprise Linux version 7.2 (HVM), EBS General Purpose (SSD) Volume Type

Root device type: ebs Virtualization type: hvm

**Select**

**SUSE Linux Enterprise Server 12 SP 1 (HVM), SSD Volume Type** - ami-2a19da49

SUSE Linux Enterprise Server 12 Service Pack 1 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.

Root device type: ebs Virtualization type: hvm

**Select**

Select an instance type and click on Next: Configure Instance Details to go to next screen.

**Step 2: Choose an Instance Type**

and networking capacity, and give you the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about instance types and how they can meet your computing needs.

Filter by: All instance types Current generation Show/Hide Columns

**Currently selected:** t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

Select an Instance Type

Family	Type	vCPUs ⓘ	Memory (GiB)	Instance Storage (GB) ⓘ	EBS-Optimized Available ⓘ	Network Performance ⓘ
General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate
General purpose	<b>t2.micro</b> Free tier eligible	1	1	EBS only	-	Low to Moderate
General purpose	t2.small	1	2	EBS only	-	Low to Moderate
General purpose	t2.medium	2	4	EBS only	-	Moderate
General purpose	t2.large	2	8	EBS only	-	Moderate
General purpose	m4.large	2	8	EBS only	Yes	Moderate

Click on Configure Instance Details to go to next screen.

**Next: Configure Instance Details**

Do not change any configurations in this menu and click Next to Add Storage.

EC2 Management Console

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 6. Configure Security Group 7. Review

### Step 3: Configure Instance Details

Number of instances: 1 [Launch into Auto Scaling Group](#)

Purchasing option: ☐ Request Spot instances

Network: vpc-af8ea0c8 (172.31.0.0/16) (default) [Create new VPC](#)

Subnet: No preference (default subnet in any Availability Zone) [Create new subnet](#)

Auto-assign Public IP: Use subnet setting (Enable)

IAM role: None [Create new IAM role](#)

Shutdown behavior: Stop

Enable termination protection: ☐ Protect against accidental termination

Monitoring: ☐ Enable CloudWatch detailed monitoring [Additional charges apply.](#)

Tenancy: Shared - Run a shared hardware instance

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Add Storage](#)

[Click here to go to next page](#)

Specify the ROOT volume size in GB's and click on Next.

AWS Services Edit

Trainer AWS Singapore Support

1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Tag Instance 6. Configure Security Group 7. Review

### Step 4: Add Storage

Your instance will be launched with the following storage device settings. You can attach additional EBS volumes and instance store volumes to your instance, or edit the settings of the root volume. You can also attach additional EBS volumes after launching an instance, but not instance store volumes. [Learn more](#) about storage options in Amazon EC2.

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Delete on Termination	Encrypted
Root	/dev/xvda	snap-c0381a21	8	General Purpose SSD (GP2)	24 / 3000	<input checked="" type="checkbox"/>	Not Encrypted

[Add New Volume](#)

[Specify the root volume storage in GB's](#)

[Click here to go to next screen](#)

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Tag Instance](#)

## Specify a tag to your instance and click next.

AWS

Services

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1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Tag Instance6. Configure Security Group7. Review

### Step 5: Tag Instance

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver. [Learn more](#) about tagging your Amazon EC2 resources.

Key(127 characters maximum)

Value(255 characters maximum)

Name

Testing

Create Tag(Up to 10 tags maximum)

⬆️

Name your instance a tag

Click here to go to next screen

CancelPreviousReview and LaunchNext: Configure Security Group

## Click on Create a new security group, add a name and description to the security group and click on Review and launch.

AWS

Services

Edit

Trainer AWSSingaporeSupport

1. Choose AMI2. Choose Instance Type3. Configure Instance4. Add Storage5. Tag Instance6. Configure Security Group7. Review

### Step 6: Configure Security Group

A security group is a set of firewall rules that control the traffic for your instance. On this page, you can add rules to allow specific traffic to reach your instance. For example, if you want to set up a web server and allow Internet traffic to reach your instance, add rules that allow unrestricted access to the HTTP and HTTPS ports. You can create a new security group or select from an existing one below. [Learn more](#) about Amazon EC2 security groups.

Assign a security group:

Create a new security group

Select an existing security group

Click Create a new SG

Specify a name and Description

name:

test

Description:

test

Type

Protocol

Port Range

Source

SSH

TCP

22

Anywhere

0.0.0.0/0

Add Rule

Warning

Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Click here to go to next screen

CancelPreviousReview and Launch



Cross check all your settings for your instance and click on Launch.

**Step 7: Review Instance Launch**  
Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

**Improve your instances' security. Your security group, test, is open to the world.**  
Your instances may be accessible from any IP address. We recommend that you update your security group rules to allow access from known IP addresses only. You can also open additional ports in your security group to facilitate access to the application or service you're running, e.g., HTTP (80) for web servers. [Edit security groups](#)

**AMI Details** [Edit AMI](#)

**Amazon Linux AMI 2016.03.0 (HVM), SSD Volume Type - ami-e90dc68a**  
The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.  
Root Device Type: ebs Virtualization type: hvm

**Instance Type** [Edit instance type](#)

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

[Cancel](#) [Previous](#) [Launch](#)

Select choose an existing key pair from dropdown list to get the existing key pairs. Choose the existing key pair and then click on acknowledgement then click Launch instance.

**Step 7: Review Instance Launch**  
Please review your instance launch details. You can go back to edit changes for each section. Click **Launch** to assign a key pair to your instance and complete the launch process.

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**AMI Details** [Edit AMI](#)

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Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

**Select an existing key pair or create a new key pair**

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about removing existing key pairs from a public AMI.

Choose an existing key pair  
**Select a key pair**  
test

☒ I acknowledge that I have access to the selected private key file (test.pem), and that without this file, I won't be able to log into my instance.

[Cancel](#) [Launch Instances](#)

[Click here to Launch instance](#)

Click on View instances to see the instance which is creating.

**Launch Status**

**Get notified of estimated charges**  
Create billing alerts to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).

**How to connect to your instances**

Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

Click **View Instances** to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. [Find out](#) how to connect to your instances.

▼ **Here are some helpful resources to get you started**

- [How to connect to your Linux instance](#)
- [Amazon EC2: User Guide](#)
- [Learn about AWS Free Usage Tier](#)
- [Amazon EC2: Discussion Forum](#)

While your instances are launching you can also

- [Create status check alarms](#) to be notified when these instances fail status checks. (Additional charges may apply)
- [Create and attach additional EBS volumes](#) (Additional charges may apply)
- [Manage security groups](#)

**Click here to see launched instance**

**View Instances**

You can see the instance which is creating under instances tab.