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# AWS Quick Start Guide

## Launch a Linux Virtual Machine

### Version



## **AWS Quick Start Guide: Launch a Linux Virtual Machine**

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# AWS Quick Start Guide: Launch a Linux Virtual Machine

Welcome to the AWS Quick Start Guide: Launch a Linux Virtual Machine. Amazon Elastic Compute Cloud is the service you use to create and run virtual machines (VM), also known as instances. By completing the steps in this quick start guide, you will successfully launch a Linux VM on Amazon EC2 within the [AWS Free Tier](#). You will also connect to the instance that you launch and then terminate the instance.

## Note

To launch a Windows VM, see [Getting Started with Amazon EC2 Windows Instances](#).

To complete this quick start guide, you must have an Amazon Web Services (AWS) account. When you sign up for AWS, your AWS account is automatically signed up for all services in AWS, including Amazon EC2. If you don't have an AWS account, use the following procedure to create one.

## To sign up for AWS

1. Open <https://aws.amazon.com/>, and then choose **Create an AWS Account**.

## Note

This might be unavailable in your browser if you previously signed into the AWS Management Console. In that case, choose **Sign In to the Console**, and then choose **Create a new AWS account**.

2. Follow the online instructions.

Part of the sign-up procedure involves receiving a phone call and entering a PIN using the phone keypad.

This quick start guide includes the following topics:

- [Step 1: Launch an Amazon EC2 Instance](#) (p. 1)
- [Step 2: Connect to Your Amazon EC2 Instance](#) (p. 9)
- [Step 3: Clean Up Your Amazon EC2 Instance](#) (p. 13)

For more information about Amazon EC2, see the [Amazon Elastic Compute Cloud](#) documentation.

## Step 1: Launch an Amazon EC2 Instance

This topic describes the steps of launching a new Linux EC2 instance. To launch a Windows instance, see [Getting Started with Amazon EC2 Windows Instances](#).

Because this guide is intended to help you launch your first instance quickly, it does not describe all the available configuration options for EC2 instances. For more information about advanced options, see [Launching an Instance](#).

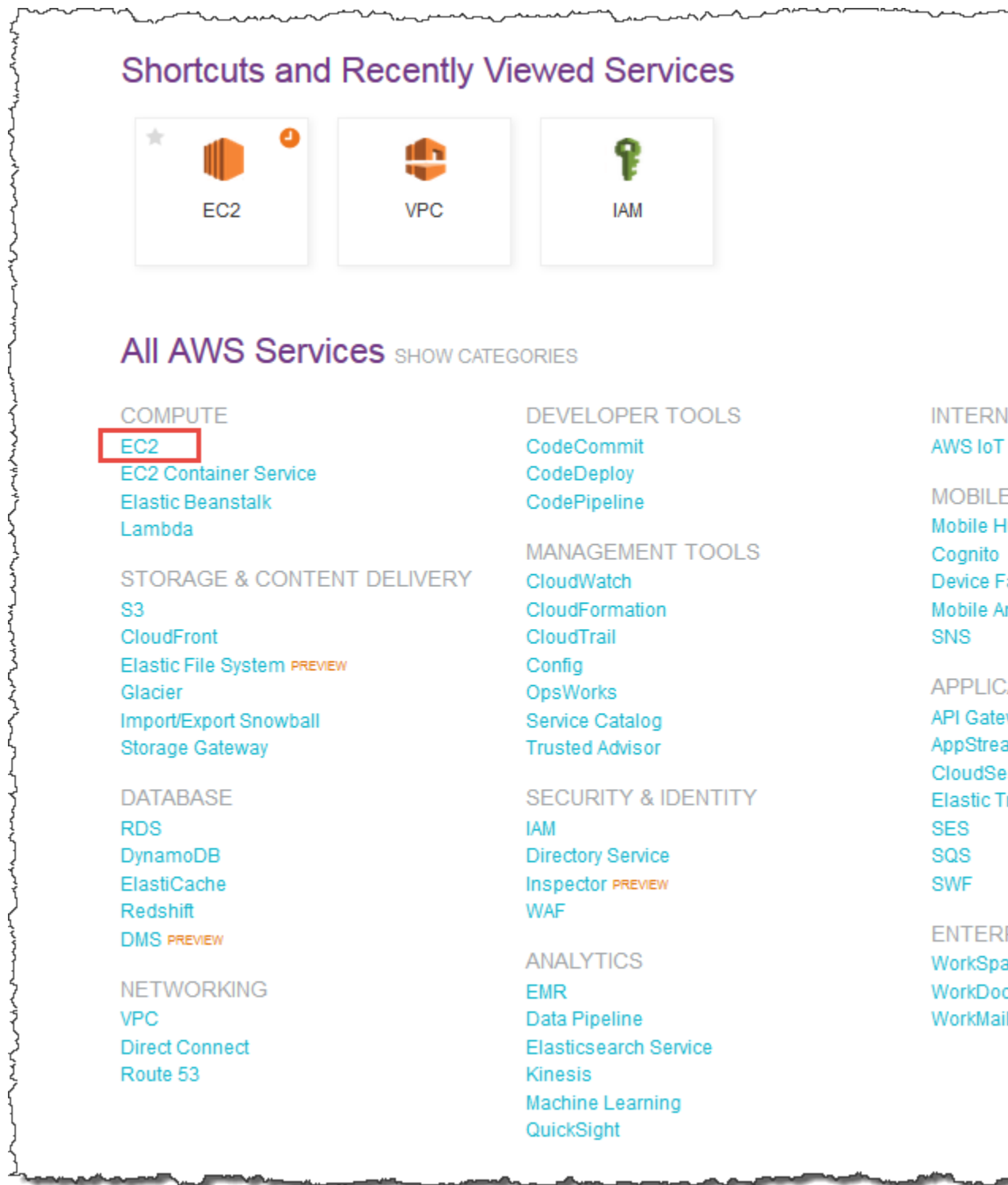
## Important

This quick start guide uses a new version of the [AWS Management Console](#) that is currently in preview release and is subject to change.

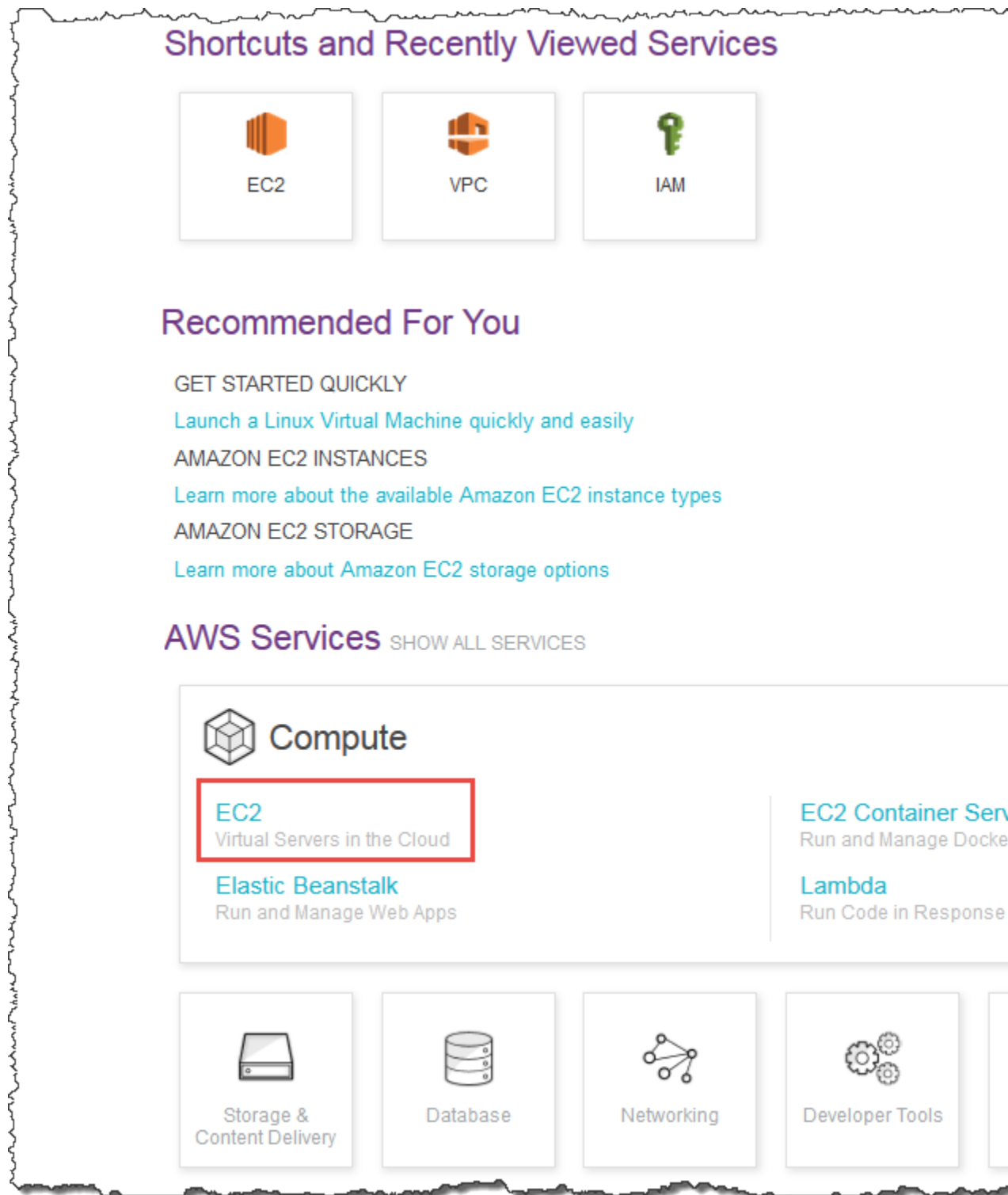
**To launch an EC2 instance**

1. Sign in to the preview version of the [AWS Management Console](#).
2. Open the Amazon EC2 console by choosing **EC2** under **Compute**.

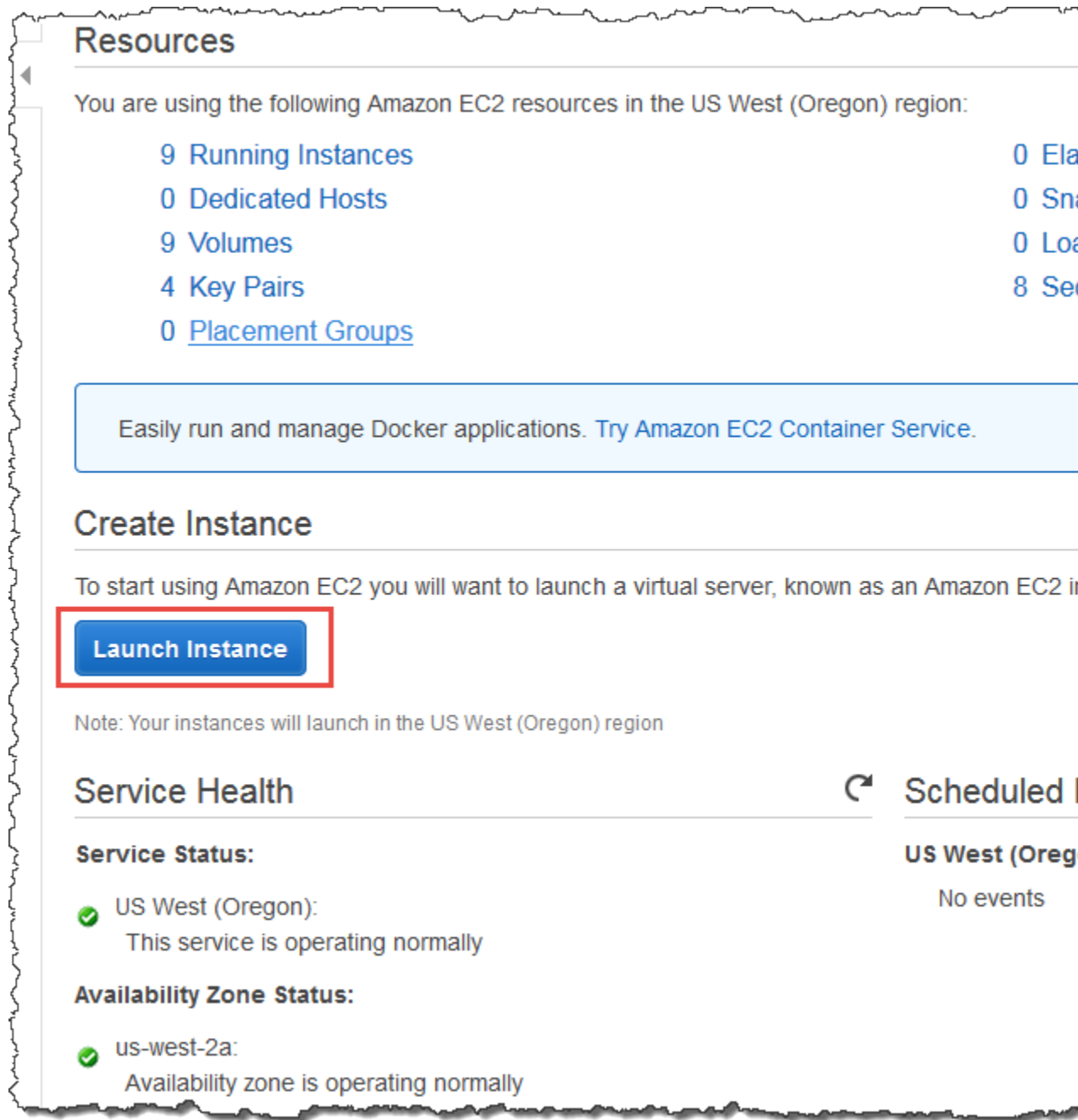
If you are using the **Show All Services** view, your screen looks like this:



If you are using the **Show Categories** view, your screen looks like this with **Compute** expanded:



3. From the Amazon EC2 dashboard, choose **Launch Instance**.



## Resources

You are using the following Amazon EC2 resources in the US West (Oregon) region:

- 9 Running Instances
- 0 Dedicated Hosts
- 9 Volumes
- 4 Key Pairs
- 0 [Placement Groups](#)

Easily run and manage Docker applications. [Try Amazon EC2 Container Service.](#)

## Create Instance

To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.

[Launch Instance](#)

Note: Your instances will launch in the US West (Oregon) region

## Service Health

[Refresh](#) [Scheduled Events](#)

**Service Status:** **US West (Oregon)**

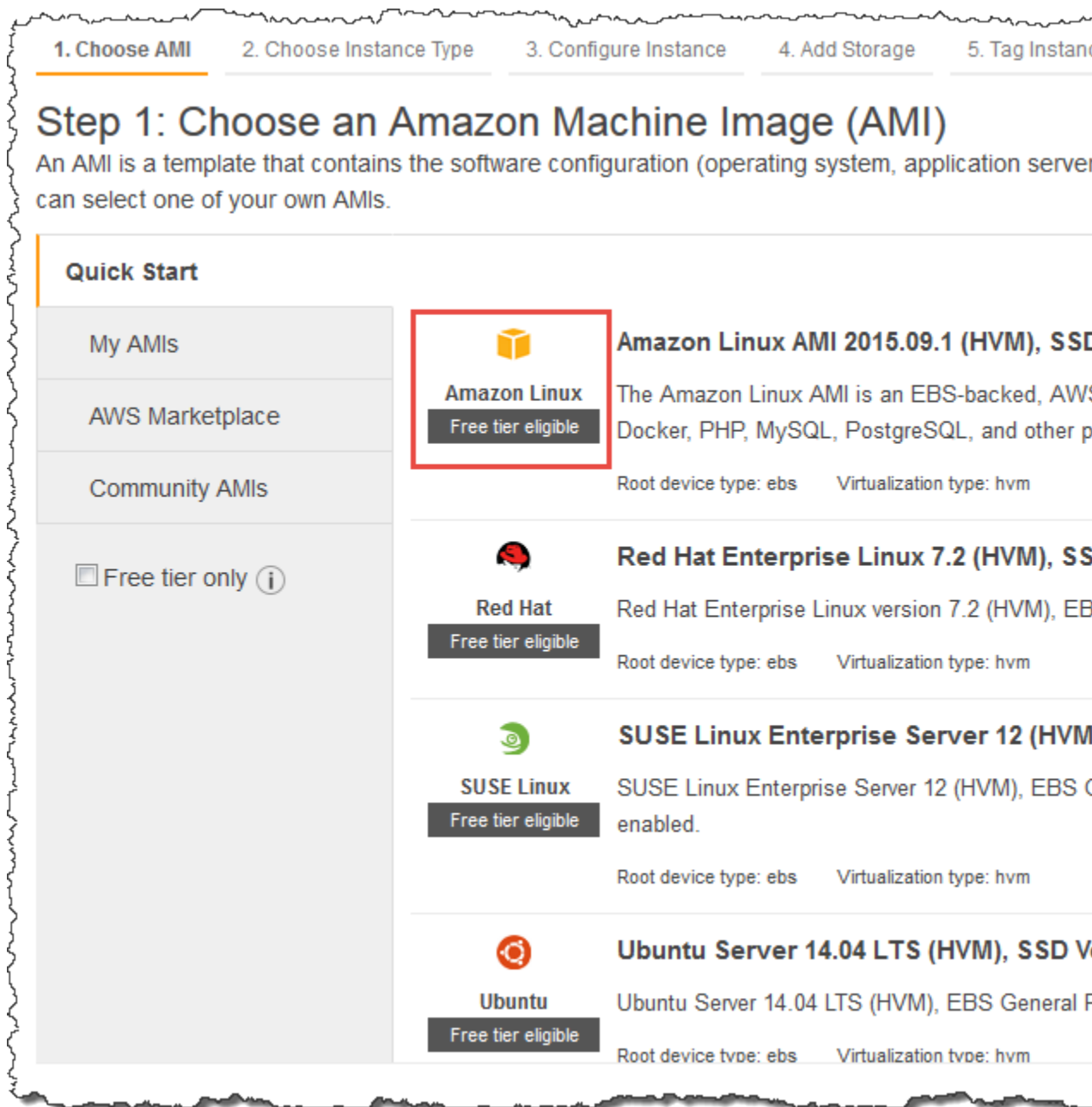
- US West (Oregon):  
This service is operating normally

**Availability Zone Status:**

- us-west-2a:  
Availability zone is operating normally

- The **Choose an Amazon Machine Image (AMI)** page displays a list of basic configurations called Amazon Machine Images (AMIs) that serve as templates for your instance. Select the HVM edition of the **Amazon Linux AMI**. Notice that this configuration is marked **Free tier eligible**.





- On the **Choose an Instance Type** page, choose **t.2micro** as the hardware configuration of your instance and **Review and Launch**.

**Note**

T2 instances, such as **t2.micro**, must be launched into a virtual private cloud (VPC). If you don't have a VPC, you can let the wizard create one for you. For more information, see step 6 in [Launching an Instance](#).

## Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. You can choose from a variety of instance types to get the flexibility to choose the appropriate mix of resources for your applications. [Learn more](#) about

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 mem)

	Family ▾	Type ▾	vCPUs ⓘ
<input checked="" type="checkbox"/>	General purpose	t2.micro Free tier eligible	1
<input type="checkbox"/>	General purpose	t2.small	1
<input type="checkbox"/>	General purpose	t2.medium	2
<input type="checkbox"/>	General purpose	t2.large	2
<input type="checkbox"/>	General purpose	m4.large	2
<input type="checkbox"/>	General purpose	m4.xlarge	4
<input type="checkbox"/>	General purpose	m4.2xlarge	8
<input type="checkbox"/>	General purpose	m4.4xlarge	16

- On the **Review Instance Launch** page, choose **Launch**.

### Note

On the **Review Instance Launch** page, under **Security Groups**, you see that the wizard created and selected a security group for you. For the purposes of this quick start, no further action than what is described in step 6 above is necessary. For more information about how to create or configure a security group and define firewall rules for your instance, see step 9 in [Launching an Instance](#).

## Step 7: Review Instance Launch

Please review your instance launch details. You can go back to edit changes for each section. Click



**Improve your instances' security.** Your security group, launch-wizard-6

Your instances may be accessible from any IP address. We recommend that you update

You can also open additional ports in your security group to facilitate access to the app

### ▼ AMI Details



**Amazon Linux AMI 2015.09.1 (HVM), SSD Volume Type - ami-f0091d91**

Free tier  
eligible

The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes the latest stable release of the Amazon Linux operating system and the latest stable release of the Amazon Linux packages.

Root Device Type: ebs    Virtualization type: hvm

### ▼ Instance Type

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Profile
t2.micro	Variable	1	1	EBS only

### ▼ Security Groups

Security group name	launch-wizard-6
Description	launch-wizard-6 created 2015-12-09T13:46:16.433-08:00

7. In the **Select an existing key pair or create a new key pair** dialog box, choose **Create a new key pair**, enter a name for the key pair, and then choose **Download Key Pair**. This is the only chance for you to save the private key file, so be sure to download it. Save the private key file in a safe place. You can use `C:\user\yourusername\.ssh\myfirstkey.pem` if you are on a Windows machine, and `~/.ssh/myfirstkey.pem` if you are on a Mac or Linux machine. You need to provide the name of your key pair when you launch an instance, and the corresponding private key each time you connect to the instance.

#### Note

A key pair enables you to connect to a Linux instance through SSH. If you launch your instance without a key pair, then you can't connect to it. We recommend against choosing the **Proceed without a key pair** option.

When you are ready, select the acknowledgment check box, and then choose **Launch Instances**.

**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](#).

Create a new key pair

**Key pair name**

quickstartkeypair

**Download Key Pair**

You have to download the **private key file** (\*.pem file) before you can continue. **Store it in a secure and accessible location.** You will not be able to download the file again after it's created.

**Cancel** **Launch Instance**

8. A confirmation page lets you know that your instance is launching. Choose **View Instances** to close the confirmation page and return to the console.

On the **Instances** page, you can view the status of your instance. It takes a short time for an instance to launch. When you launch an instance, its initial state is pending. After the instance starts, its state changes to running, and it receives a public DNS name. (If the **Public DNS** column is hidden, choose the **Show/Hide** icon.)

## Step 2: Connect to Your Amazon EC2 Instance

Now that you have launched your EC2 instance, you can connect to it and use it the way that you'd use a computer sitting in front of you.

This topic describes the following ways of connecting to a Linux instance:

- [Connect from Windows using PuTTY](#) (p. 10)
- [Connect from Mac or Linux Using an SSH Client](#) (p. 11)

- [Connect Using Your Browser \(p. 12\)](#)

## Connect from Windows using PuTTY

PuTTY uses .ppk files instead of .pem files. If you haven't already generated a .ppk file, do so now. For more information, see [To prepare to connect to a Linux instance from Windows using PuTTY](#).

### To connect using PuTTY

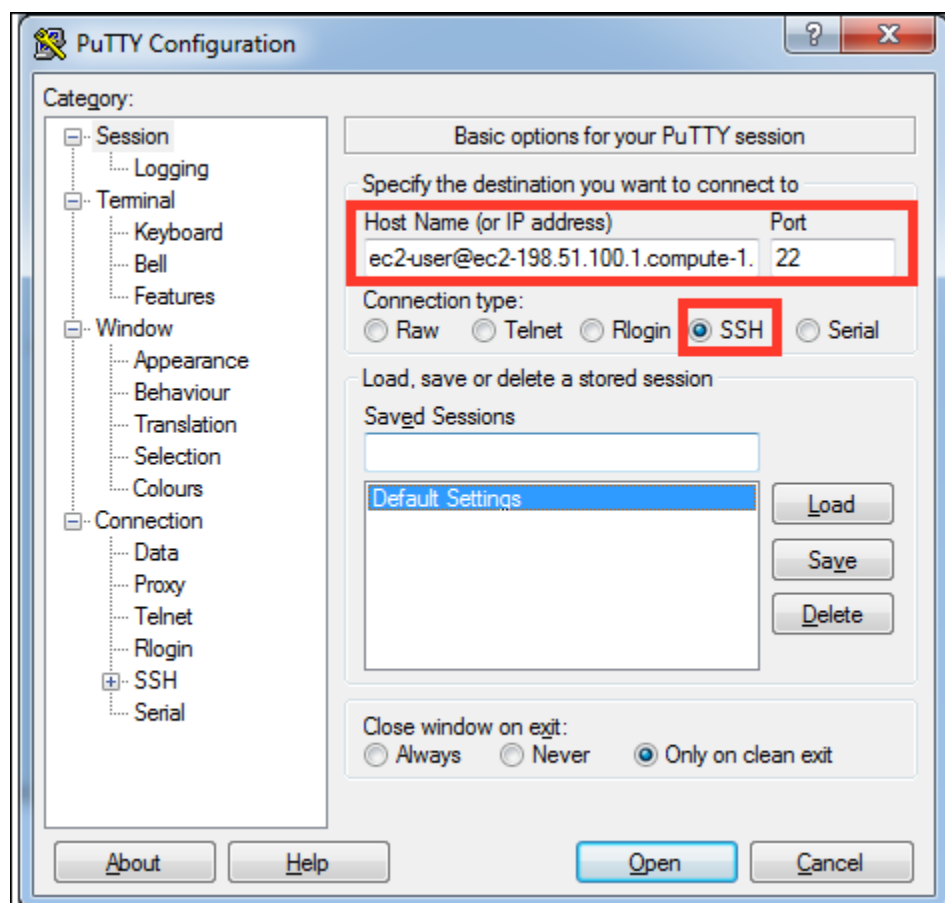
1. On the **Start** menu, choose **All Programs, PuTTY, PuTTY**.
2. In the **Category** pane, choose **Session** and complete the following fields:

- For **Host Name**, enter `ec2-user@public_dns_name`.

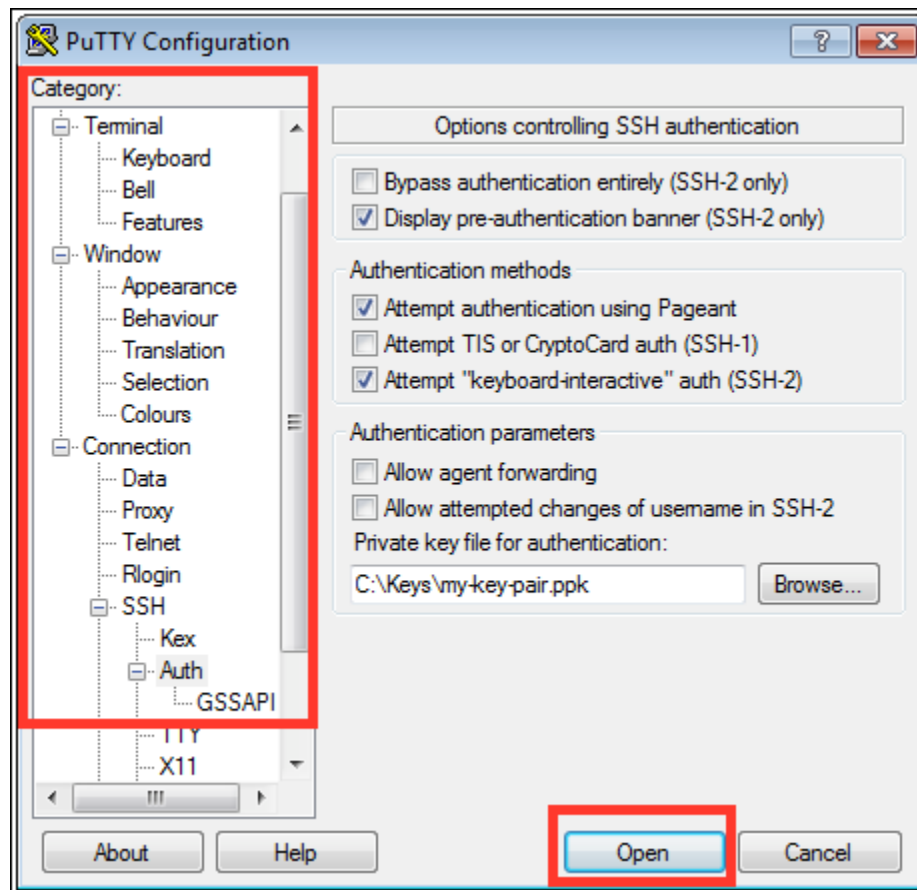
#### Note

You can get the public DNS for your instance using the Amazon EC2 console. (If the **Public DNS** column is hidden, choose the **Show/Hide** icon.)

- For **Connection type**, choose **SSH**.
- For **Port**, ensure that the value is **22**.



3. In the **Category** pane, choose **Connection, SSH, and Auth**. Complete the following:
  - Choose **Browse**, select the .ppk file that you generated for your key pair, and then choose **Open**.
  - Choose **Open** to start the PuTTY session.



4. If this is the first time you have connected to this instance, PuTTY displays a security alert dialog box that asks whether you trust the host you are connecting to. Choose **Yes**. A window opens and you are connected to your instance.

## Connect from Mac or Linux Using an SSH Client

Your Mac or Linux computer most likely includes an SSH client by default. You can check for an SSH client by typing **ssh** at the command line. If your computer doesn't recognize the command, the OpenSSH project provides a free implementation of the full suite of SSH tools. For more information, go to <http://www.openssh.org>.

### To connect using SSH

1. Open your command line shell and change the directory to the location of the private key file that you created when you launched the instance.

Use the **chmod** command to make sure your private key file isn't publicly viewable. For example, if the name of your private key file is `my-key-pair.pem`, use the following command:

```
chmod 400 my-key-pair.pem
```

2. Use the following SSH command to connect to the instance:

```
ssh -i /path/my-key-pair.pem ec2-user@public_dns_name
```

**Note**

For this quick start, you used the Amazon Linux AMI for your instance, so the user name is `ec2-user`.

**Note**

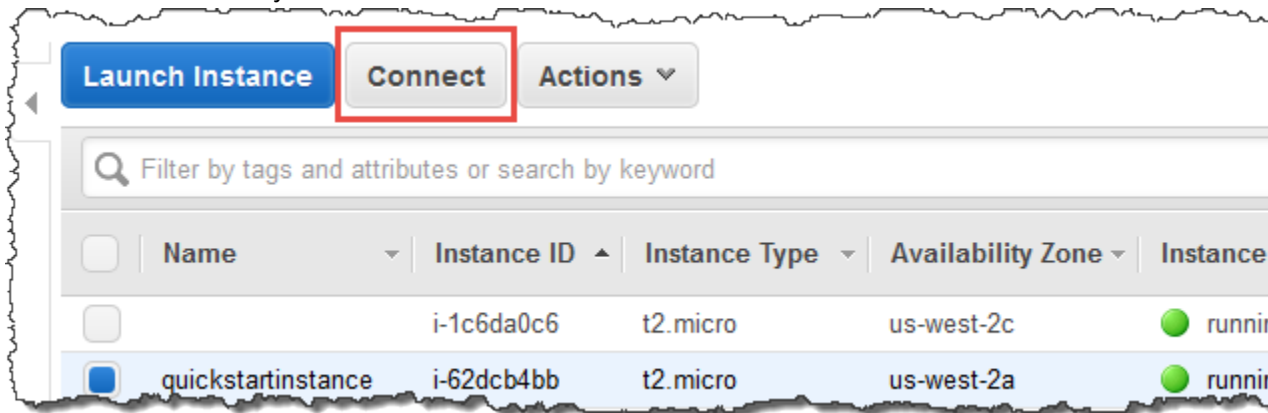
You can get the public DNS for your instance using the Amazon EC2 console. (If the **Public DNS** column is hidden, choose the **Show/Hide** icon.)

## Connect Using Your Browser

Using a browser is the fastest way to connect to your instance. It is recommended you use Firefox or Safari to complete the procedure below since Java is disabled in Chrome. If you don't have Java already, you can contact your system administrator to get it installed, or follow the steps outlined in the following pages: [Install Java](#) and [Enable Java](#) in your web browser.

**To connect using a browser**

1. On the Amazon EC2 console, in the navigation pane, choose **Instances**.
2. Select the instance that you launched and choose **Connect**.



3. Choose **A Java SSH client directly from my browser (Java required)**.
4. Amazon EC2 automatically detects the public DNS name of your instance and populates **Public DNS** for you. It also detects the key pair that you specified when you launched the instance. Complete the following, and then choose **Launch SSH Client**.
  - For **User name**, enter `ec2-user`.
  - For **Private key path**, enter the fully qualified path to your private key (.pem) file, including the key pair name, for example, `C:\KeyPairs\my-key-pair.pem`.
  - (Optional) Choose **Store in browser cache** to store the location of the private key in your browser cache. This enables Amazon EC2 to detect the location of the private key in subsequent browser sessions, until you clear your browser's cache.

**Connect To Your Instance**

I would like to connect with ☐ A standalone SSH client ☒ A Java SSH Client directly from my browser (Java required)

Enter the required information in the fields below to connect to your instance. AWS automatically detects the key pair name, and Public IP for your instance. You need to enter the location and name of the .pem file containing your private key.

Public IP 52.32.56.127

User name

Key name quickstartkeypair.pem

Private key path

Save key location ☒ Store in browser cache

**Launch SSH Client**

**Close**

5. If necessary, choose **Yes** to trust the certificate and **Run** to run the MindTerm client.
6. If this is your first time running MindTerm, a series of dialog boxes asks you to accept the license agreement, to confirm setup for your home directory, and to confirm setup of the known hosts directory.
7. A dialog box prompts you to add the host to your set of known hosts. If you do not want to store the host key information on your local computer, choose **No**.
8. A window opens and you are connected to your instance.

**Note**

If you chose **No** in the previous step, you see the following message, which is expected:  
"Verification of server key disabled in this session."

## Step 3: Clean Up Your Amazon EC2 Instance

After you are finished with the instance that you created for this quick start, you can clean up by terminating the instance.

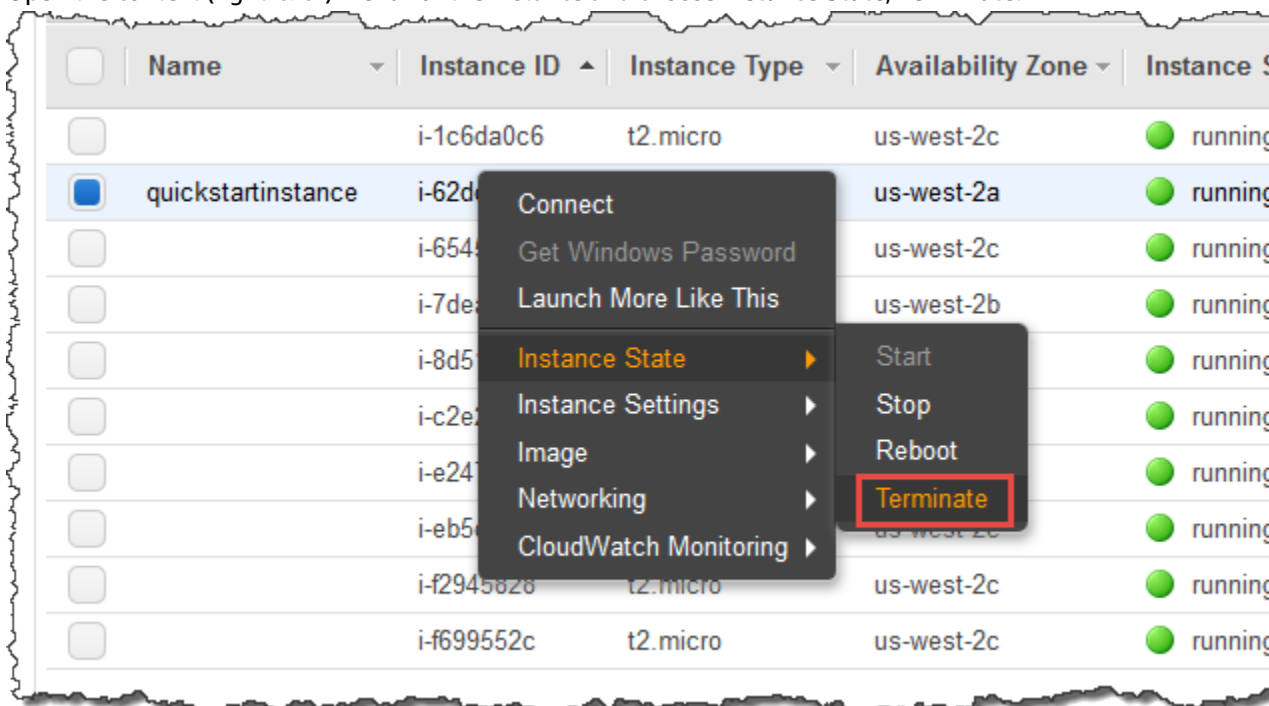
Terminating an instance effectively deletes it because you can't reconnect to an instance after you've terminated it. This differs from stopping the instance; when you stop an instance, it is shut down and you are not billed for hourly usage or data transfer (but you are billed for any Amazon EBS volume storage).



Also, you can restart a stopped instance at any time. For more information about the differences between stopping and terminating an instance, see [Stopping Instances](#).

### To terminate an instance

1. In the Amazon EC2 console, on the **Instances** page, locate your instance.
2. Open the context (right-click) menu for the instance and choose **Instance State, Terminate**.



3. Choose **Yes, Terminate** when prompted for confirmation.

Amazon EC2 shuts down and terminates your instance. After your instance is terminated, it remains visible on the console for a short while, and then the entry is deleted.