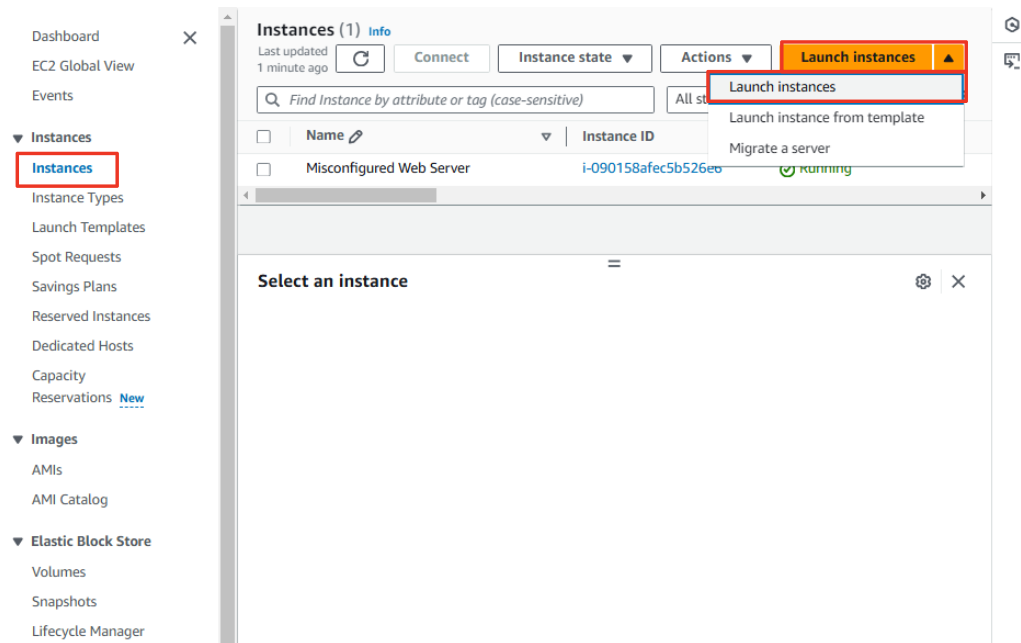


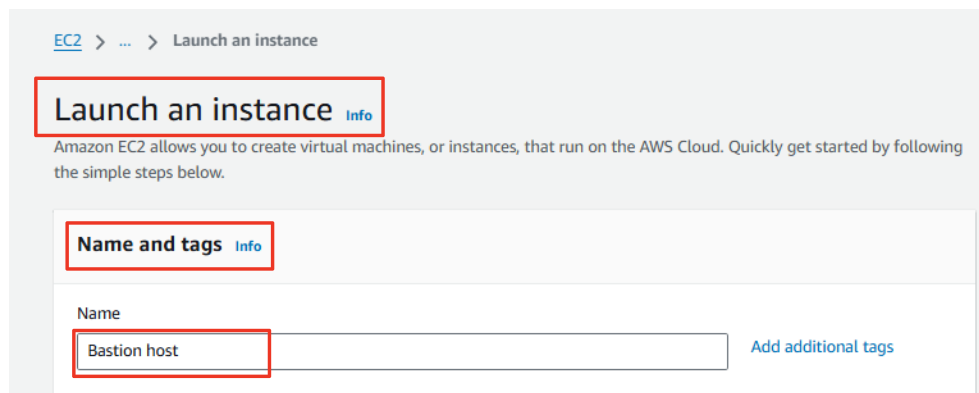
In this task, you launch an EC2 instance by using the AWS Management Console. The instance will be a bastion host from which you can use the AWS CLI.

On the **AWS Management Console**, search **EC2**, choose **instances** and choose **launch instance**:



In the **Launch an instance** menu, choose:

Step 1: choose name and tags:



When you name your instance, AWS creates a key-value pair. The key for this pair is **Name**, and the value is the name that you enter for your EC2 instance, here is **Bastion host**.

## Step 2: choose an AMI:

In this step, you select an AMI, which includes a root volume template, launch permissions, and block device mapping for the instance.

▼ Application and OS Images (Amazon Machine Image) Info

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to 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

SUSE Linux

Browse more AMIs

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type  
ami-04907d7291cd8e06a (64-bit (x86)) / ami-0a91ef37664acaf2f (64-bit (Arm))  
Virtualization: hvm ENA enabled: true Root device type: ebs Free tier eligible

Description

Amazon Linux 2 comes with five years support. It provides Linux kernel 5.10 tuned for optimal performance on Amazon EC2, systemd 219, GCC 7.3, Glibc 2.26, Binutils 2.29.1, and the latest software packages through extras. This AMI is the successor of the Amazon Linux AMI that is now under maintenance only mode and has been removed from this wizard.

Amazon Linux 2 Kernel 5.10 AMI 2.0.20241031.0 x86\_64 HVM gp2

Architecture

AMI ID

Username

64-bit (x86)

ami-04907d7291cd8e06a

ec2-user

Verified provider

## Step 3: choose an instance type:

▼ Instance type Info | Get advice

Instance type

t3.micro  
Family: t3 2 vCPU 1 GiB Memory Current generation: true  
On-Demand SUSE base pricing: 0.0104 USD per Hour  
On-Demand Ubuntu Pro base pricing: 0.0139 USD per Hour  
On-Demand Windows base pricing: 0.0196 USD per Hour  
On-Demand RHEL base pricing: 0.0392 USD per Hour  
On-Demand Linux base pricing: 0.0104 USD per Hour

All generations

Compare instance types

Additional costs apply for AMIs with pre-installed software

In this step, you select an instance type, which defines the resources for the EC2 instance, including CPU, memory, storage, and network. instance types are divided into families, such as compute optimized, memory optimized, etc.

Here you select **t3.micro**, a small instance suitable for development and testing, capable of bursting above baseline performance when needed.

#### Step 4: configure a key pair:

Amazon EC2 uses key pairs for secure login. But here, you will use EC2 instance connect to log in, so a key pair isn't needed.

▼ 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

Proceed without a key pair (Not recommended) Default value ▼

Create new key pair

#### Step 5: configure the network setting:

In the Network setting section, choose Edit:

▼ Network settings Info

VPC - required Info

vpc-0954fb485d7d35873 (Lab VPC)  
10.0.0.0/16

Create new VPC

Subnet Info

subnet-077b95cac6c47fecf Public Subnet  
VPC: vpc-0954fb485d7d35873 Owner: 447602761481 Availability Zone: us-west-2a  
Zone type: Availability Zone IP addresses available: 250 CIDR: 10.0.0.0/24

Create new subnet

Auto-assign public IP Info

Enable

Additional charges apply when outside of free tier allowance

Firewall (security groups) Info

A security group is a set of firewall rules that control the traffic for your instance. Add rules to allow specific traffic to reach your instance.

Create security group

Select existing security group

Security group name - required

Bastion security group

This security group will be added to all network interfaces. The name can't be edited after the security group is created. Max length is 255 characters. Valid characters: a-z, A-Z, 0-9, spaces, and .-:/()#,@[]+=&:{}!\$\*

Description - required Info

Permit SSH connections

The virtual private cloud (**VPC**) indicates which VPC you want to launch the instance into. You can have multiple VPCs, including different ones for development, testing, and production.

You launch the instance in a public subnet within the **lab VPC** network.

The security group acts as a firewall and includes rules to manage traffic for the instances associated with it.

#### Step 6: add storage:

In this step, you can add additional EBS volumes and configure their size and performance. By default, the EC2 instance is launched with an 8 gib root volume. Here, keep the default storage configuration.

▼ **Configure storage** [Info](#) Advanced

1x 8 GiB gp2 Root volume (Not encrypted)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage

Add new volume

Click refresh to view backup information  
The tags that you assign determine whether the instance will be backed up by any Data Lifecycle Manager policies.

0 x File systems [Edit](#)

#### Step 7: configure advanced details:

The bastion-role profile grants permission to applications running on the instance to make requests to the Amazon EC2 service. This association of role is required for the second half of this lab, where you use the AWS CLI to communicate with the Amazon EC2 service.

▼ **Advanced details** [Info](#)

Domain join directory [Info](#)

Select [Create new directory](#)

IAM instance profile [Info](#)

Bastion-Role  
arn:aws:iam::447602761481:instance-profile/Bastion-Role [Create new IAM profile](#)

#### Step 8: launch an EC2 instance:

In the **Summary** section, review the instance configuration details displayed, and then choose:

**Launch instance**

End of Task 1!

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