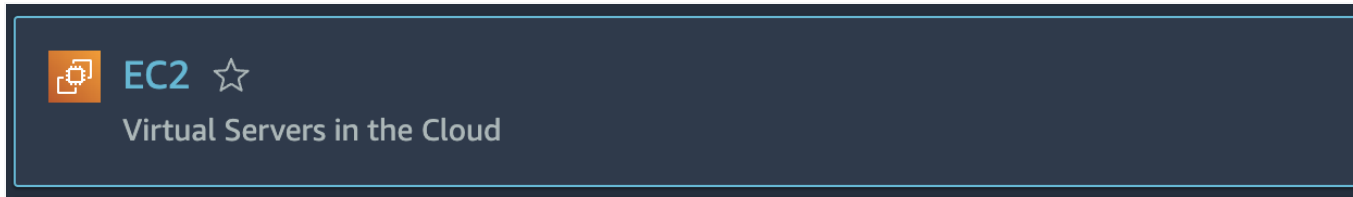
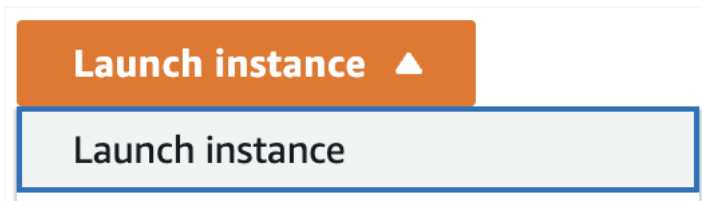


Instructions

1. In the AWS Management Console search bar, enter *EC2*, and click the **EC2** result under **Services**:



2. From the EC2 dashboard, click **Launch instance** > **Launch instance**:




3. Under **Application and OS Images**, select **Amazon Linux 2 AMI (HVM) - Kernel 5.10**:

▼ 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

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

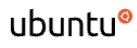
Quick Start




Amazon Linux




macOS




Ubuntu



Windows



Red Hat



[Browse more AMIs](#)

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2 AMI (HVM) - Kernel 5.10, SSD Volume Type
ami-08e2d37b6a0129927 (64-bit (x86)) / ami-0d70650c3afa9cf54 (64-bit (Arm))
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible ▼

Description

Amazon Linux 2 Kernel 5.10 AMI 2.0.20220912.1 x86_64 HVM gp2

Architecture

64-bit (x86) ▼

AMI ID

ami-08e2d37b6a0129927

Verified provider

4. Under **Instance type**, select **t2.micro**:

▼ **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](#)

5. Under **Key pair**, select **Proceed without a key pair**:


▼ **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](#)

6. Click on **Edit** within the **Network settings** section and select the following values:

https://cloudacademy.com/lab/introduction-virtual-private-cloud-vpc/create-an-ec2-instance/?context_id=7446&context_resource=lp

3/10

- **VPC:** Make sure the cloudacademy-labs VPC is selected
- **Subnet:** Select Public-A | US-west-2a
- **Auto-assign Public IP:** Select Enable
- **Inbound security group rules:** Click **Add security group rule**, and select **All traffic** for **Type** and **Anywhere** for **Source type**

▼ Network settings [Info](#)

VPC - required [Info](#)

vpc-0d4c7df81a3ffef03 (cloudacademy-labs)
10.0.0.0/16



Subnet [Info](#)

subnet-0f3ab6a1c5512abf3
VPC: vpc-0d4c7df81a3ffef03 Owner: 201152448000
Availability Zone: us-west-2a IP addresses available: 250 CIDR: 10.0.0.0/24

Public-A



[Create new subnet](#)

Auto-assign public IP [Info](#)

Enable



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**

launch-wizard-1

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](#)

launch-wizard-1 created 2022-10-17T15:08:28.324Z

Inbound security groups rules

▼ Security group rule 1 (TCP, 22, 0.0.0.0/0)

[Remove](#)**Type** [Info](#)

ssh ▼

Protocol [Info](#)

TCP

Port range [Info](#)

22

Source type [Info](#)

Anywhere ▼

Source [Info](#)[Add CIDR, prefix list or security](#)

0.0.0.0/0 ✕

Description - optional [Info](#)

e.g. SSH for admin desktop

▼ Security group rule 2 (All, All, 0.0.0.0/0)

[Remove](#)**Type** [Info](#)**Protocol** [Info](#)**Port range** [Info](#)

All traffic ▼ **All** **All**

7. Under **Summary**, click **Launch instance**. **Source** [Info](#) **Description - optional** [Info](#)

Anywhere ▼ **Q Add CIDR, prefix list or security group** **e.g. SSH for admin desktop**

0.0.0.0/0 ✕

⚠ 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. ✕

Add security group rule

▼ Summary

Number of instances [Info](#)

Software Image (AMI)

Amazon Linux 2 Kernel 5.10 AMI...[read more](#)
ami-08e2d37b6a0129927

Virtual server type (instance type)


t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 8 GiB

 **Free tier:** In your first year includes 750 hours of t2.micro (or t3.micro in the Regions in which t2.micro is unavailable) instance usage on free tier AMIs per month, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.



Cancel

Launch instance

8. Click on the ID of the instance you have created:

**Success**

Successfully initiated launch of instance ([i-0771ff0f342980387](#))

► **Launch log**

9. Select the instance, ensure it is in the **Running** state, and record the **Public IPv4 address** found in the **Details** tab of the EC2 instance: :

Instances (1/1) [Info](#)
Refresh Connect Instance state ▼ Actions ▼ Launch instances ▼

< 1 > ⚙️

Instance ID = i-0771ff0f342980387 ✕ Clear filters

<input checked="" type="checkbox"/>	Name ▼	Instance ID	Instance state ▼	Instance type ▼	Status check	Alarm status	Availability Zone ▼	Public IPv4 DNS
<input checked="" type="checkbox"/>	–	i-0771ff0f342980387	✔️ Running 🔍	t2.micro	🕒 Initializing	❌ User: arn:aws:i	us-west-2a	–

Instance: i-0771ff0f342980387
⚙️ ✕

Details Security Networking Storage Status checks Monitoring Tags

▼ Instance summary [Info](#)

Instance ID 📄 i-0771ff0f342980387	Public IPv4 address 📄 35.91.235.216 open address 🔗	Private IPv4 addresses 📄 10.0.0.219
IPv6 address –	Instance state ✔️ Running	Public IPv4 DNS –
Hostname type IP name: ip-10-0-0-219.us-west-2.compute.internal	Private IP DNS name (IPv4 only) 📄 ip-10-0-0-219.us-west-2.compute.internal	
Answer private resource DNS name IPv4 (A)	Instance type t2.micro	Elastic IP addresses –
Auto-assigned IP address 📄 35.91.235.216 [Public IP]	VPC ID 📄 vpc-0d4c7df81a3ffef03 (cloudacademy-labs) 🔗	AWS Compute Optimizer finding ❌

10. Open a terminal window on your computer (command prompt or PowerShell window on Windows or terminal on mac OSX and Linux) and execute the following command, replacing *<PublicIPAddress>* with the IP address you recorded:



```
ping <PublicIPAddress>
```

```
64 bytes from 52.206.218.22: icmp_seq=1 ttl=236 time=49.3 ms
64 bytes from 52.206.218.22: icmp_seq=2 ttl=236 time=44.0 ms
64 bytes from 52.206.218.22: icmp_seq=3 ttl=236 time=47.0 ms
64 bytes from 52.206.218.22: icmp_seq=4 ttl=236 time=45.3 ms
```

Summary

In this Lab Step, you created an EC2 instance within your AWS VPC and used its public IP address to ping it.

VALIDATION CHECKS

1 Checks

[Check again](#)

✓ Created EC2 Instance

Check if the Amazon EC2 instance has been created

Amazon EC2