

Assignment # 2

Objective:

- Working with the EC2 Instances
- Create an EC2 Instance
- Connect to the Instance

aws

Services

Q

Search for services, features, marketplace products, and docs

[Alt+S]

Maazkhan

Ohio

Support

New EC2 Experience

Tell us what you think

EC2 Dashboard

Events

Tags

Limits

Instances

Instances New

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances New

Dedicated Hosts

Capacity Reservations

Images

AMIs

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager New

Resources

You are using the following Amazon EC2 resources in the US East (Ohio) Region:

Instances (running)	0	Dedicated Hosts	0
Elastic IPs	0	Instances	0
Key pairs	0	Load balancers	0
Placement groups	0	Security groups	1
Snapshots	0	Volumes	0

Easily size, configure, and deploy Microsoft SQL Server Always On availability groups on AWS using the AWS Launch Wizard for SQL Server. [Learn more](#)

Launch instance

To get started, launch an Amazon EC2 instance, which is a virtual server in the cloud.

Launch instance

Note: Your instances will launch in the US East (Ohio) Region

Account attributes

Supported platforms

VPC

Default VPC

vpc-b7b6dddc

Settings

EBS encryption

Zones

EC2 Serial Console

Default credit specification

Console experiments

Explore AWS

10 Things You Can Do Today to Reduce AWS Costs

Explore how to effectively manage your AWS costs without compromising on performance or capacity. [Learn more](#)

https://us-east-2.console.aws.amazon.com/ec2/v2/home?region=us-east-2#SecurityGroups:

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

Privacy Policy

Terms of Use

Cookie preferences

aws

Services ▾

🔍

Search for services, features, marketplace products, and docs

[Alt+S]

Maazkhan ▾

Ohio ▾

Support ▾

New EC2 Experience

Tell us what you think

EC2 Dashboard

Events

Tags

Limits

▼ Instances

Instances

New

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

New

Dedicated Hosts

Capacity Reservations

▼ Images

AMIs

▼ Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

New

Instances

Info

↺

Connect

Instance state ▾

Actions ▾

Launch instances

▼

🔍

Filter instances

< 1 > ⚙️

<input type="checkbox"/>	Name ▾	Instance ID	Instance state ▾	Instance type ▾	Status check	Alarm status	Availability Zone
You do not have any instances in this region							

Select an instance above

=

×

Feedback

English (US) ▾

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

Privacy Policy

Terms of Use

Cookie preferences



Step 1: Choose an Amazon Machine Image (AMI)

[Cancel and Exit](#)

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.

[Search by Systems Manager parameter](#)

Quick Start

1 to 17 of 17 AMIs

My AMIs

AWS Marketplace

Community AMIs

☒ Free tier only ⓘ**Amazon Linux**
Free tier eligible**Amazon Linux 2 AMI (HVM), SSD Volume Type** - ami-00dfe2c7ce89a450b (64-bit x86) / ami-031dea1a744251b51 (64-bit Arm)[Select](#)

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 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 approaching end of life on December 31, 2020 and has been removed from this wizard.

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

☒ 64-bit (x86)
☐ 64-bit (Arm)**Red Hat**
Free tier eligible**Red Hat Enterprise Linux 8 (HVM), SSD Volume Type** - ami-0ba62214afa52bec7 (64-bit x86) / ami-09f8674883d0ad6b8 (64-bit Arm)[Select](#)

Red Hat Enterprise Linux version 8 (HVM), EBS General Purpose (SSD) Volume Type

Root device type: ebs Virtualization type: hvm ENA Enabled: Yes

☒ 64-bit (x86)
☐ 64-bit (Arm)**SUSE Linux**
Free tier eligible**SUSE Linux Enterprise Server 15 SP2 (HVM), SSD Volume Type** - ami-0f052119b3c7e61d1 (64-bit x86) / ami-0b99ca359a84941ee (64-bit Arm)[Select](#)

SUSE Linux Enterprise Server 15 Service Pack 2 (HVM), EBS General Purpose (SSD) Volume Type. Amazon EC2 AMI Tools preinstalled;

☒ 64-bit (x86)
☐ 64-bit (Arm)



Services ▼

[Alt+S]



Maazkhan ▼

Ohio ▼

Support ▼

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

Step 2: Choose an Instance Type

Amazon EC2 provides a wide selection of instance types optimized to fit different use cases. Instances are virtual servers that can run applications. They have varying combinations of CPU, memory, storage, 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 families ▼ Current generation ▼ Show/Hide Columns

Currently selected: t2.micro (- ECUs, 1 vCPUs, 2.5 GHz, -, 1 GiB memory, EBS only)

	Family ▼	Type ▼	vCPUs ⓘ ▼	Memory (GiB) ▼	Instance Storage (GB) ⓘ ▼	EBS-Optimized Available ⓘ ▼	Network Performance ⓘ ▼	IPv6 Support ⓘ ▼
<input type="checkbox"/>	t2	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	t2	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.large	2	8	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	t2	t2.xlarge	4	16	EBS only	-	Moderate	Yes
<input type="checkbox"/>	t2	t2.2xlarge	8	32	EBS only	-	Moderate	Yes
<input type="checkbox"/>	t3	t3.nano	2	0.5	EBS only	Yes	Up to 5 Gigabit	Yes

Cancel

Previous

Review and Launch

Next: Configure Instance Details

Feedback English (US) ▼

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

Privacy Policy

Terms of Use

Cookie preferences



Services ▾

Q Search for services, features, marketplace products, and docs

[Alt+S]



Maazkhan ▾

Ohio ▾

Support ▾

1. Choose AMI

2. Choose Instance Type

3. Configure Instance

4. Add Storage

5. Add Tags

6. Configure Security Group

7. Review

Step 3: Configure Instance Details

Placement group ⓘ

☐ Add instance to placement group

Capacity Reservation ⓘ

Open

Domain join directory ⓘ

No directory



Create new directory

IAM role ⓘ

None



Create new IAM role

Shutdown behavior ⓘ

Stop

Stop - Hibernate behavior ⓘ

☐ Enable hibernation as an additional stop behavior

Enable termination protection ⓘ

☒ Protect against accidental termination

Monitoring ⓘ

☐ Enable CloudWatch detailed monitoring

Additional charges apply.

Tenancy ⓘ

Shared - Run a shared hardware instance

Additional charges will apply for dedicated tenancy.

Elastic Inference ⓘ

☐ Add an Elastic Inference accelerator

Additional charges apply.

Credit specification ⓘ

☐ Unlimited

Additional charges may apply

File systems ⓘ

Add file system



Create new file system

Cancel

Previous

Review and Launch

Next: Add Storage

Feedback English (US) ▾

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

Privacy Policy

Terms of Use

Cookie preferences



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 <small>i</small>	Device <small>i</small>	Snapshot <small>i</small>	Size (GiB) <small>i</small>	Volume Type <small>i</small>	IOPS <small>i</small>	Throughput (MB/s) <small>i</small>	Delete on Termination <small>i</small>	Encryption <small>i</small>
Root	/dev/xvda	snap-0350fa19a1ac7579d	<input type="text" value="8"/>	General Purpose SSD (gp2) ▼	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypt <small>▼</small>

[Add New Volume](#)

Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

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



Step 5: Add Tags

A tag consists of a case-sensitive key-value pair. For example, you could define a tag with key = Name and value = Webserver.

A copy of a tag can be applied to volumes, instances or both.

Tags will be applied to all instances and volumes. [Learn more](#) about tagging your Amazon EC2 resources.

Key (128 characters maximum)

Value (256 characters maximum)

Instances ⓘ

Volumes ⓘ

Network
Interfaces ⓘ

Name

Maazserver



Add another tag

(Up to 50 tags maximum)

Cancel

Previous

Review and Launch

Next: Configure Security Group



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

Security group name:

Description:

Type ⓘ

Protocol ⓘ

Port Range ⓘ

Source ⓘ

Description ⓘ

All traffic ▼

All

0 - 65535

Anywhere ▼

0.0.0.0/0, ::/0

e.g. SSH for Admin Desktop



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.

Cancel

Previous

Review and Launch

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

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, `maaznewsecuritygroup`, 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

Free tier eligible

Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-00dfe2c7ce89a450b

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 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 a...

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	-	1	1	EBS only	-	Low to Moderate

▼ Security Groups

Edit security groups

Security group name

maaznewsecuritygroup

Description

to decide what type of traffic can have my instance access

Type ⓘ	Protocol ⓘ	Port Range ⓘ	Source ⓘ	Description ⓘ
All traffic	All	All	0.0.0.0/0	
All traffic	All	All	:::0	

▶ Instance Details

Edit instance details

▶ Storage

Edit storage

▶ Tags

Edit tags

Cancel

Previous

Launch



Services ▾

[Alt+S]



Maazkhan ▾

Ohio ▾

Support ▾

**Improve your instances' security.** Your security group, `maaznewsecuritygroup`, 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

Free tier
eligible**Amazon Linux 2 AMI (HVM), SSD Volume Type - ami-00dfe2c7ce**

Amazon Linux 2 comes with five years support. It provides Linux kernel 4.14 through extras. This AMI is the successor of the Amazon Linux AMI that is a...

Root Device Type: ebs Virtualization type: hvm

▼ Instance Type

Instance Type	ECUs	vCPUs	Memory (GiB)
t2.micro	-	1	1

▼ Security Groups

Security group name	maaznewsecuritygroup
Description	to decide what type of traffic can have my instance

[Edit AMI](#)[packages](#)[Edit instance type](#)[Edit security groups](#)[Cancel](#)[Previous](#)[Launch](#)

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. Amazon EC2 supports ED25519 and RSA key pair types.

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.](#)

Key pair type☒ RSA ☐ ED25519**Key pair name**[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 Instances](#)[Feedback](#) [English \(US\)](#) ▾

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

[Privacy Policy](#)[Terms of Use](#)[Cookie preferences](#)

newkey.pem

[Show all](#)



Services ▼

[Alt+S]



Maazkhan ▼

Ohio ▼

Support ▼

Launch Status



Your instances are now launching

The following instance launches have been initiated: [i-0173ee5b2a851ad01](#) [View launch log](#)



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](#)

[View Instances](#)[Feedback](#) [English \(US\)](#) ▼

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

[Privacy Policy](#)[Terms of Use](#)[Cookie preferences](#)

newkey.pem

[Show all](#)

aws

Services

Search for services, features, marketplace products, and docs

[Alt+S]

Maazkhan

Ohio

Support

New EC2 Experience

Tell us what you think

EC2 Dashboard

Events

Tags

Limits

Instances

Instances

New

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

New

Dedicated Hosts

Capacity Reservations

Images

AMIs

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

New

Network & Security

Instances (1)

Info

Connect

Instance state

Actions

Launch instances

Filter instances

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 D
<input type="checkbox"/>	Maazserver	i-0173ee5b2a851ad01	<div>Running</div>	t2.micro	<div>Initializing</div>	No alarms	us-east-2a	ec2-18-116-1

Select an instance above

Feedback

English (US)

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

Privacy Policy

Terms of Use

Cookie preferences

newkey.pem

Show all

aws

Services

Search for services, features, marketplace products, and docs

[Alt+S]

Maazkhan

Ohio

Support

New EC2 Experience

EC2 Dashboard

Events

Tags

Limits

Instances

Instances

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

Dedicated Hosts

Capacity Reservations

Images

AMIs

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

Network & Security

Instances (1/1)

Filter instances

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 D
<input checked="" type="checkbox"/>	Maazserver	i-0173ee5b2a851ad01	Running	t2.micro	2/2 checks passed	No alarms	us-east-2a	ec2-18-116-1

Instance: i-0173ee5b2a851ad01 (Maazserver)

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

Instance summary

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0173ee5b2a851ad01 (Maazserver)	18.116.13.247 open address	172.31.10.56
IPv6 address	Instance state	Public IPv4 DNS
-	Running	ec2-18-116-13-247.us-east-2.compute.amazonaws.com open address
Private IPv4 DNS	Instance type	Elastic IP addresses
ip-172-31-10-56.us-east-2.compute.internal	t2.micro	-
VPC ID	AWS Compute Optimizer finding	IAM Role
vpc-b7b6dddc	Opt-in to AWS Compute Optimizer for	-

Feedback

English (US)

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

Privacy Policy

Terms of Use

Cookie preferences

newkey.pem

Show all

aws

Services

Search for services, features, marketplace products, and docs

[Alt+S]

Maazkhan

Ohio

Support

New EC2 Experience

Tell us what you think

EC2 Dashboard

Events

Tags

Limits

Instances

Instances

New

Instance Types

Launch Templates

Spot Requests

Savings Plans

Reserved Instances

New

Dedicated Hosts

Capacity Reservations

Images

AMIs

Elastic Block Store

Volumes

Snapshots

Lifecycle Manager

New

Network & Security

Instances (1/1)

Info

Filter instances

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 D
<input checked="" type="checkbox"/>	Maazserver	i-0173ee5b2a851ad01	Running	t2.micro	2/2 checks passed	No alarms	us-east-2a	ec2-18-116-1

Instance: i-0173ee5b2a851ad01 (Maazserver)

Instance summary

Info

Instance ID

i-0173ee5b2a851ad01 (Maazserver)

IPv6 address

-

Private IPv4 DNS

ip-172-31-10-56.us-east-2.compute.internal

VPC ID

vpc-b7b6dddc

Subnet ID

subnet-d47ae9bf

Public IPv4 address

18.116.13.247 | open address

Instance state

Running

Instance type

t2.micro

AWS Compute Optimizer finding

Opt-in to AWS Compute Optimizer for recommendations. | Learn more

Private IPv4 addresses

172.31.10.56

Public IPv4 DNS

ec2-18-116-13-247.us-east-2.compute.amazonaws.com | open address

Elastic IP addresses

-

IAM Role

-

Feedback

English (US)

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

Privacy Policy

Terms of Use

Cookie preferences

newkey.pem

Show all



Services ▾

🔍 Search for services, features, marketplace products, and docs

[Alt+S]



Maazkhan ▾

Ohio ▾

Support ▾

EC2 > Instances > i-0173ee5b2a851ad01 > Connect to instance

Connect to instance [Info](#)

Connect to your instance i-0173ee5b2a851ad01 (Maazserver) using any of these options

EC2 Instance Connect

Session Manager

SSH client

EC2 Serial Console

Instance ID

📄 i-0173ee5b2a851ad01 (Maazserver)

Public IP address

📄 18.116.13.247

User name

ec2-user

Connect using a custom user name, or use the default user name ec2-user for the AMI used to launch the instance.



Note: In most cases, the guessed user name is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI user name.

Cancel

Connect

https://us-east-2.console.aws.amazon.com/ec2/v2/connect/ec2-user/i-0173ee5b2a851ad01

© 2008 - 2021, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.

[Privacy Policy](#)

[Terms of Use](#)

[Cookie preferences](#)



newkey.pem



Show all




```
 _| _|_ )  
 _| ( _| /  
 _|\ _| _|  
 Amazon Linux 2 AMI
```

```
https://aws.amazon.com/amazon-linux-2/  
[ec2-user@ip-172-31-10-56 ~]$ █
```

i-0173ee5b2a851ad01 (Maazserver)

Public IPs: 18.116.13.247 Private IPs: 172.31.10.56
