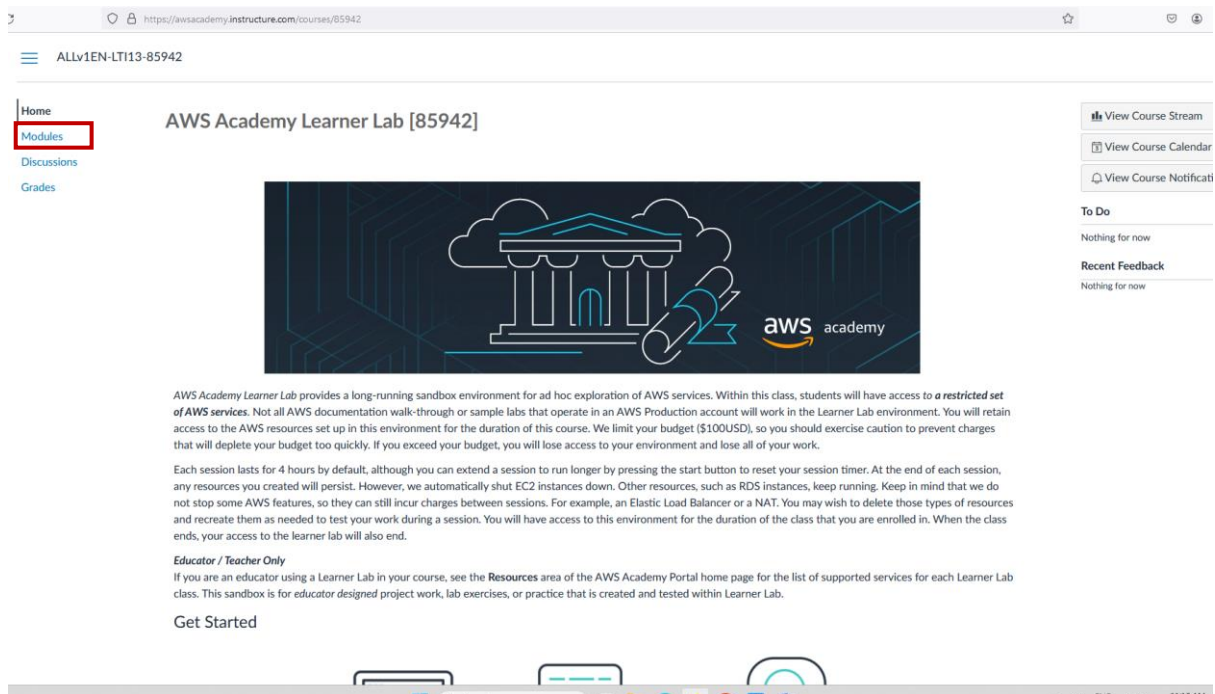


PRACTICAL 1

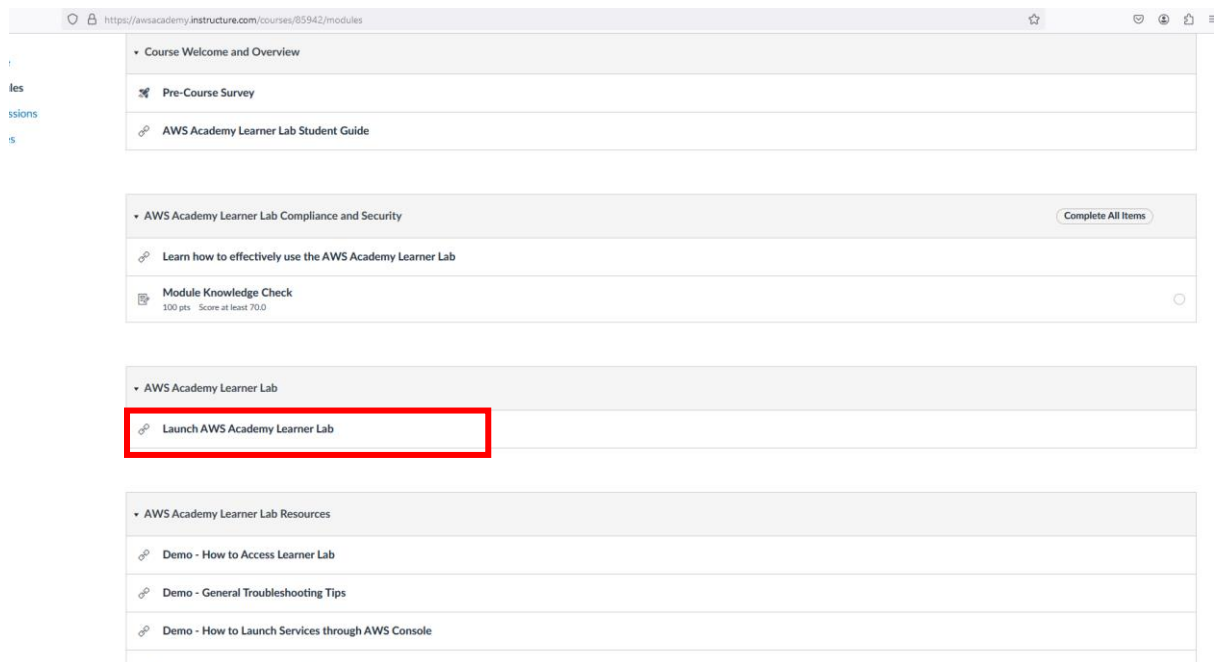
AIM: to Configure EC2 instance for window server using Aws

Step 1: enter your login and password and click on your course

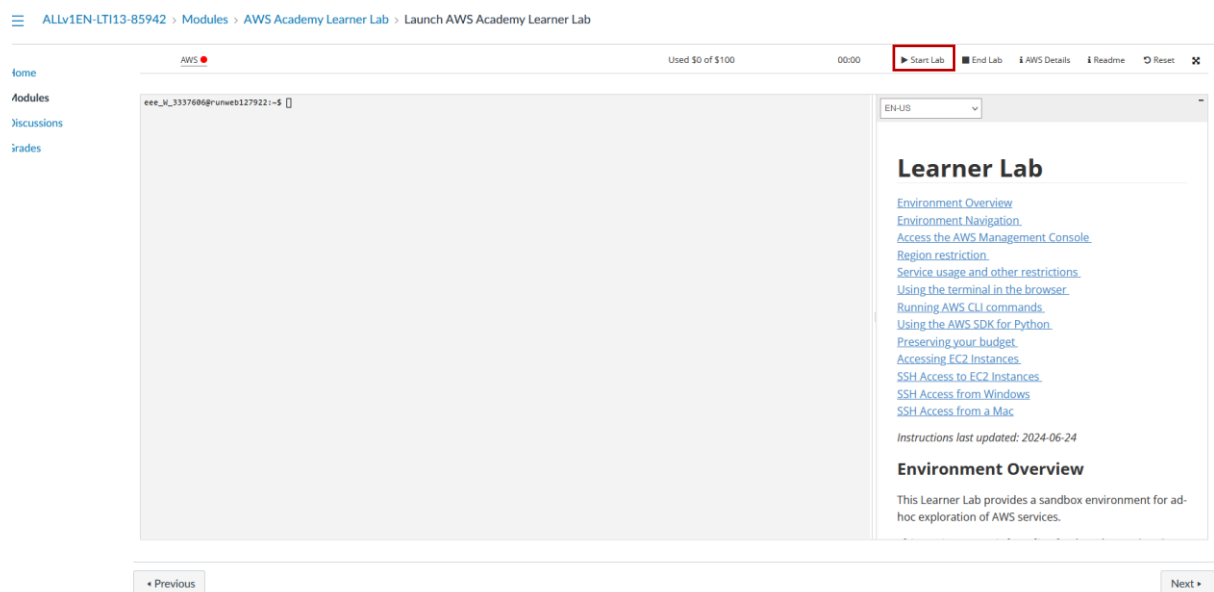
Step 2: after come in home page click on modules option as shown in below



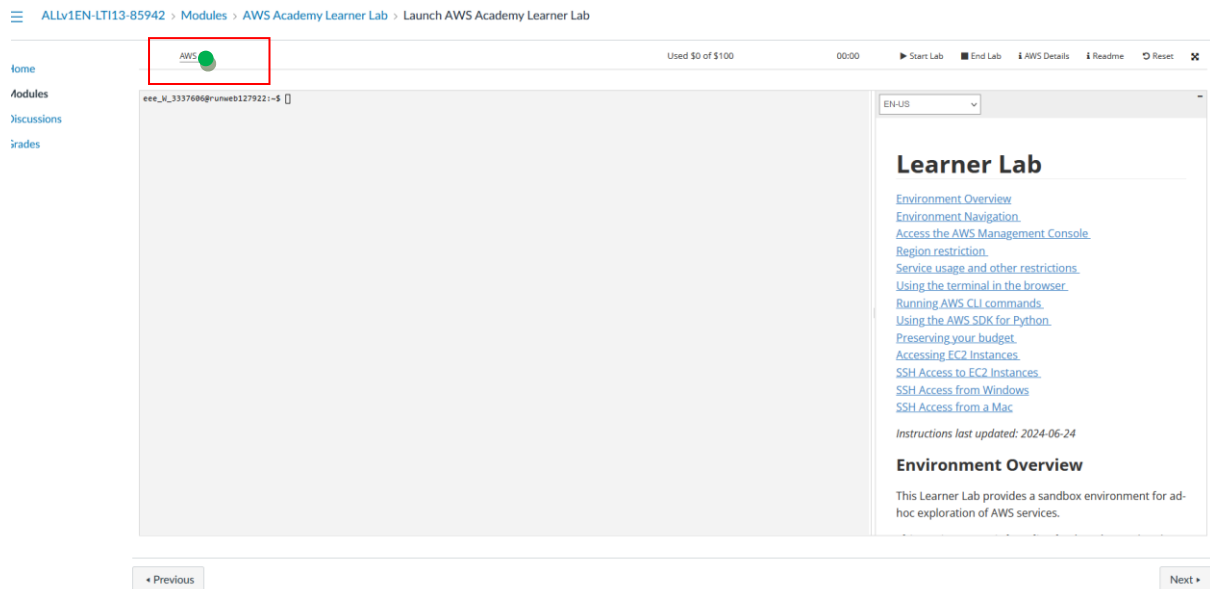
Step 3: click on launch aws academy learner lab



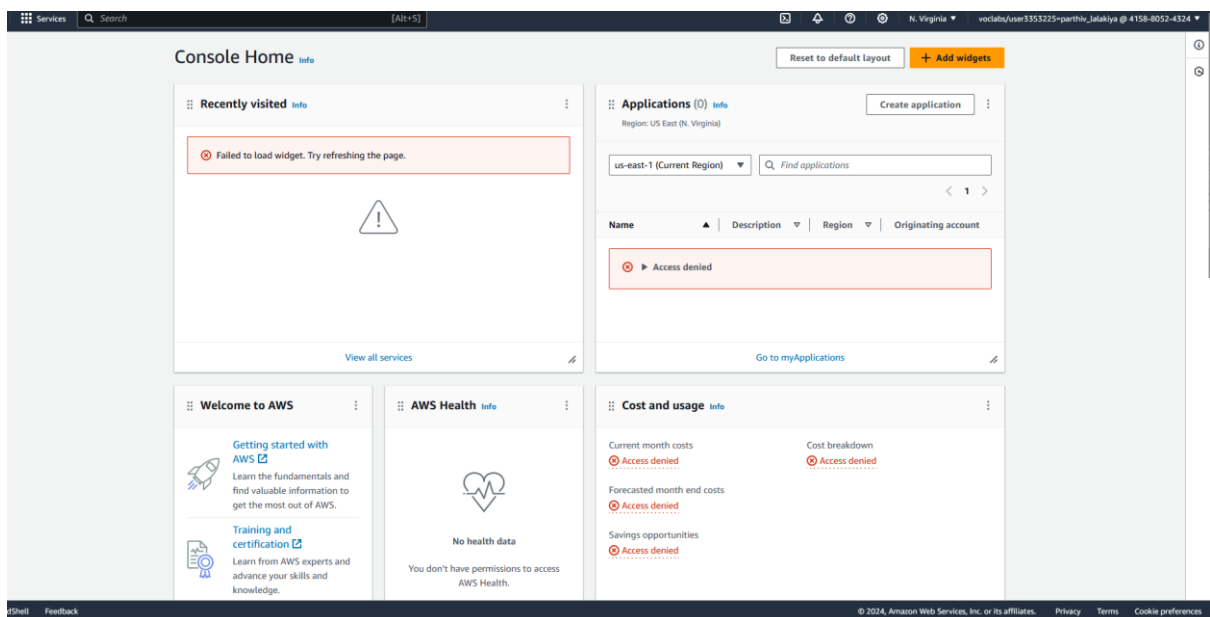
Step 4: as shown in below we click on star lab and wait until aws became green



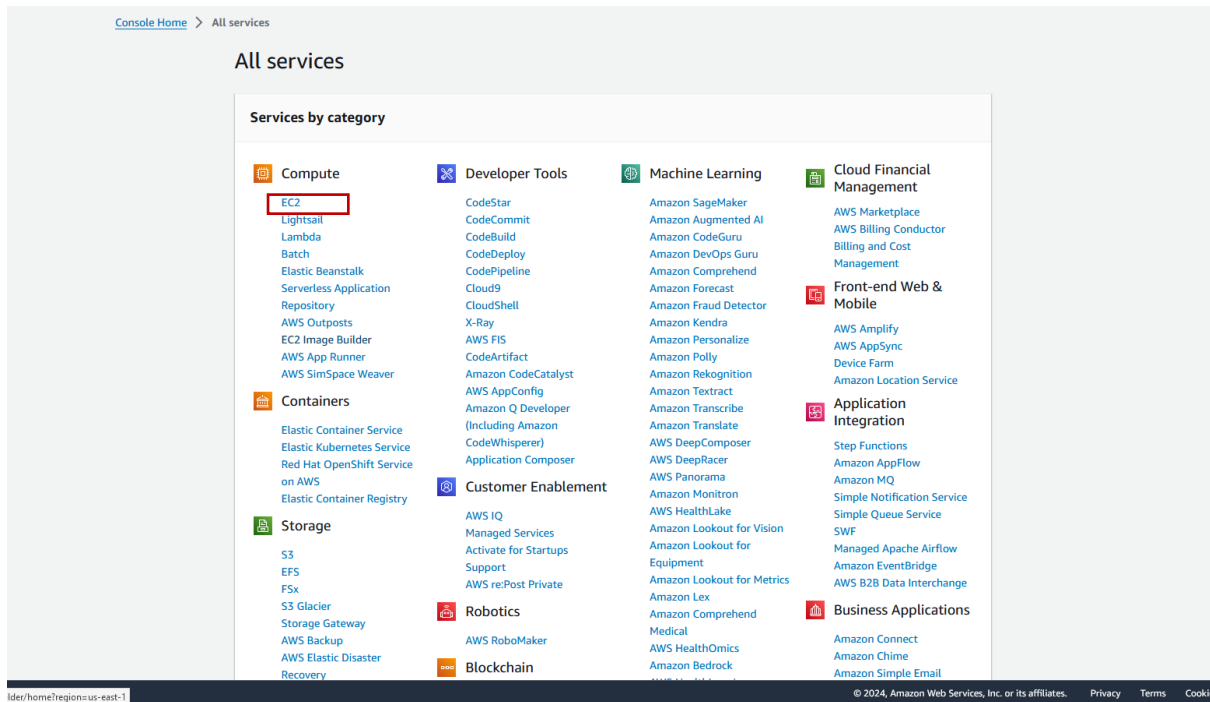
Step 5: after we click on aws bottom



Step 6: next we come in console home page and click on all services



Step 7: now we select EC2



Step 8: here we can see that there are no instances are running, next we click on launch instance

Resources

You are using the following Amazon EC2 resources in the US East (N. Virginia) Region:

| | | | | | |
|---------------------|---|---------------------|---|-----------------|---|
| Instances (running) | 0 | Auto Scaling Groups | 0 | Dedicated Hosts | 0 |
| Elastic IPs | 0 | Instances | 0 | Key pairs | 1 |
| Load balancers | 0 | Placement groups | 0 | Security groups | 1 |
| Snapshots | 0 | Volumes | 0 | | |

Launch instance

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

Launch instance

Migrate a server

Note: Your instances will launch in the US East (N. Virginia) Region

Instance alarms

View in CloudWatch

0 in alarm 0 OK 0 insufficient data

Instances in alarm

Scheduled events

US East (N. Virginia)

No scheduled events

Service health

AWS Health Dashboard

Region: US East (N. Virginia) Status: This service is operating normally.

Zones

| Zone name | Zone ID |
|------------|----------|
| us-east-1a | use1-az2 |
| us-east-1b | use1-az4 |
| us-east-1c | use1-az6 |
| us-east-1d | use1-az1 |
| us-east-1e | use1-az3 |
| us-east-1f | use1-az5 |

Account attributes

Default VPC vpc-05c485f8acf8299d8

Settings

Data protection and security
Zones
EC2 Serial Console
Default credit specification
EC2 console preferences

Explore AWS

Enable Best Price-Performance with AWS Graviton2
AWS Graviton2 powered EC2 instances enable up to 40% better price performance for a broad spectrum of cloud workloads. [Learn more](#)

Save up to 90% on EC2 with Spot Instances
Optimize price-performance by combining EC2 purchase options in a single EC2 ASG. [Learn more](#)

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](#)

Additional information

[Getting started guide](#)
[Documentation](#)

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Step 9: first we enter a name for example: my server

EC2 > Instances > Launch an instance

Launch an instance Info

Amazon EC2 allows you to create virtual machines, or instances, that run on the AWS Cloud. Quickly get started by following the simple steps below.

Name and tags Info

Name

e.g. My Web Server

Add additional tags

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

Quick Start

Amazon Linux

macOS

Ubuntu

Windows

Red Hat

SUSE Linux

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

Amazon Machine Image (AMI)

Amazon Linux 2023 AMI

ami-01b799c439fd5516a (64-bit (x86), uefi-preferred) / ami-0e1ef59154d415994 (64-bit (Arm), uefi)

Free tier eligible

Summary

Number of instances Info

1

Software Image (AMI)

Amazon Linux 2023 AMI 2023.5.2...[read more](#)

ami-01b799c439fd5516a

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

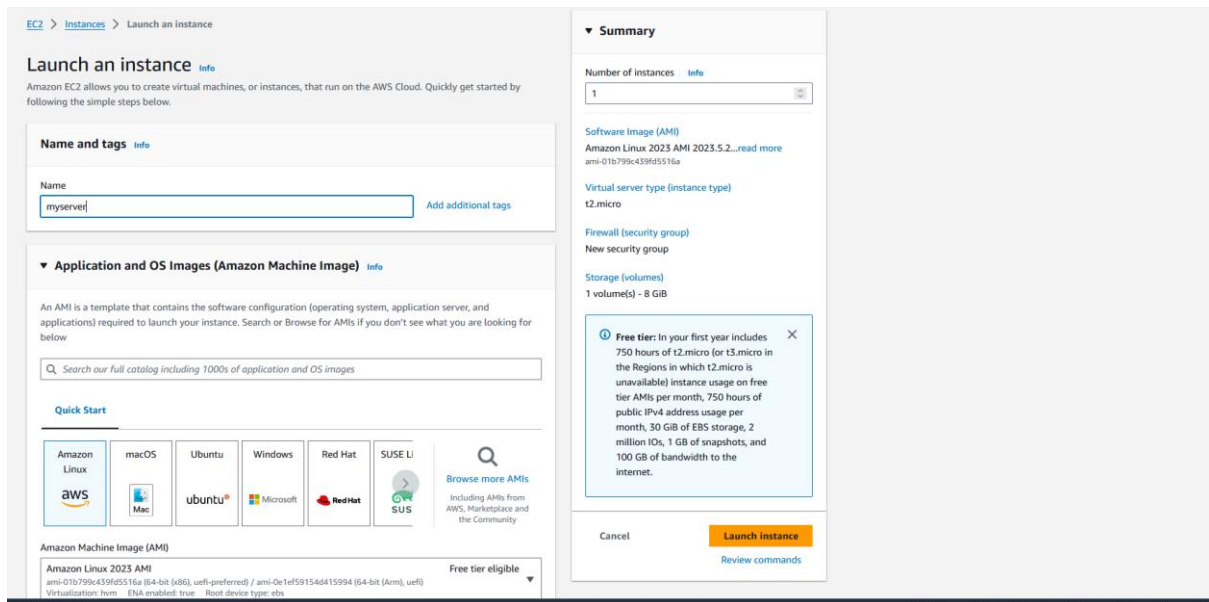
1 volume(s) - 8 GiB

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, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

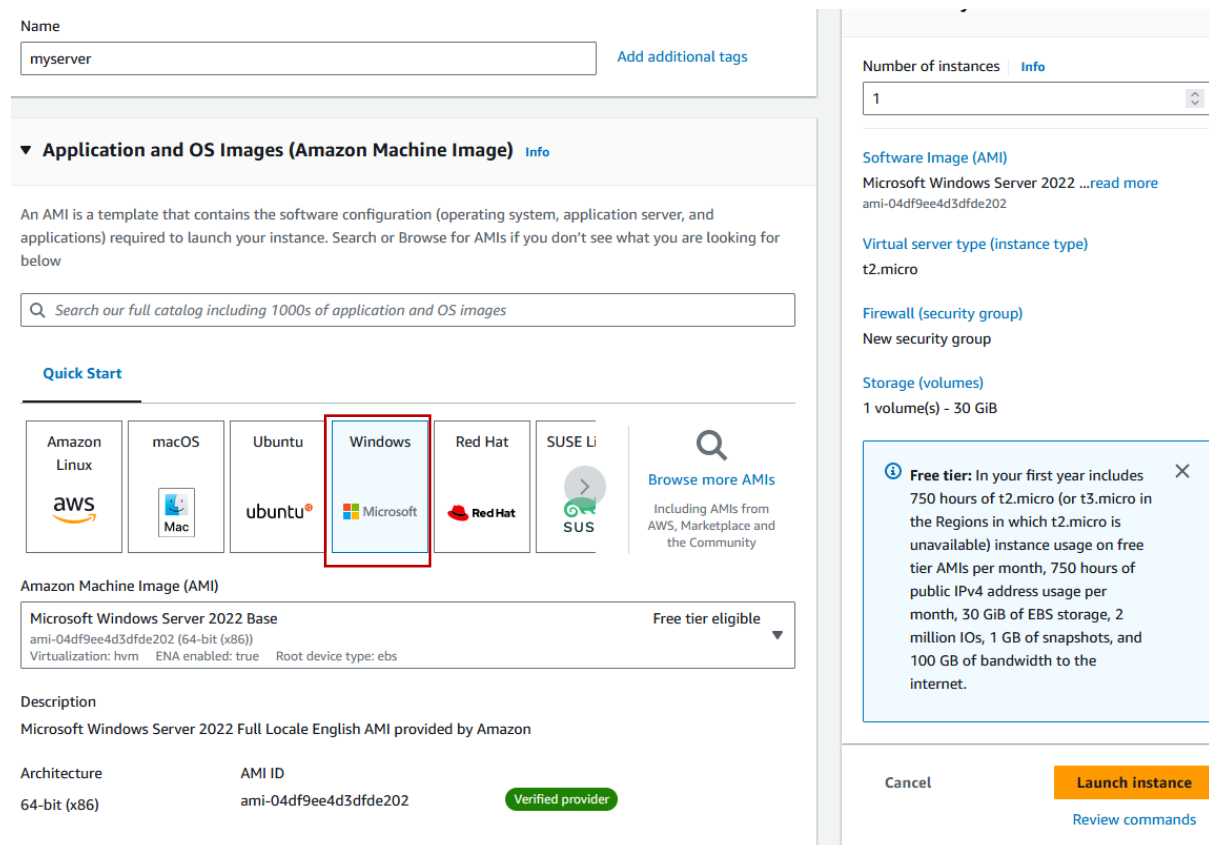
Cancel

Launch instance

[Review command](#)



Step 10: here we make Microsoft windows server so we click on it



Step 11: next we enter a key pair, it is allow you to your instance security

The screenshot shows the 'Create key pair' dialog box in the AWS Management Console. The dialog has a title bar with 'Create key pair' and a close button. It contains the following sections:

- Key pair name:** A text input field with the placeholder 'Enter key pair name'. A red rectangle highlights this field. Below it, a note states: 'The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.'
- Key pair type:** Two radio button options:
 - RSA:** Selected by default. Description: 'RSA encrypted private and public key pair'.
 - ED25519:** Description: 'ED25519 encrypted private and public key pair (Not supported for Windows instances)'.
- Private key file format:** Two radio button options:
 - .pem:** Selected by default. Description: 'For use with OpenSSH'.
 - .ppk:** Description: 'For use with PuTTY'.
- Warning box:** A yellow box with a warning icon and text: 'When prompted, store the private key in a secure and accessible location on your computer. You will need it later to connect to your instance. [Learn more](#)'.
- Buttons:** 'Cancel' and 'Create key pair' (orange) at the bottom right.

Step 12: here we enter 29062014_1 as a key pair

Amazon Machine Image (AMI)

Microsoft Windows Server 2022 Base
ami-04df9ee4d3dfde202 (64-bit (x86))
Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

Description
Microsoft Windows Server 2022 Full Locale English AMI provided by Amazon

Architecture 64-bit (x86) AMI ID ami-04df9ee4d3dfde202 **Verified provider**

► **Instance type** [Info](#) | [Get advice](#)

▼ **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*

29062014_1 [Create new key pair](#)

For Windows instances, you use a key pair to decrypt the administrator password. You then use the decrypted password to connect to your instance.

▼ **Network settings** [Info](#) [Edit](#)

Network [Info](#)

Number of instances [Info](#)

1

Software Image (AMI)
Microsoft Windows Server 2022 ...[read more](#)
ami-04df9ee4d3dfde202

Virtual server type (instance type)
t2.micro

Firewall (security group)
New security group

Storage (volumes)
1 volume(s) - 30 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, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel **Launch instance** [Review commands](#)

Step 13: next we enter launch instance

Services

Search

[Alt+T]

N. Virginia

vocalabs/user353522

☒ Allow RDP traffic from

Helps you connect to your instance

Anywhere

0.0.0.0/0

☐ Allow HTTPS traffic from the internet

To set up an endpoint, for example when creating a web server

☐ Allow HTTP traffic from the internet

To set up an endpoint, for example when creating a web server

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.

▼ Configure storage

Info

Advanced

1x 30 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

The selected AMI contains more instance store volumes than the instance allows. Only the first 0 instance store volumes from the AMI will be accessible from the instance

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

► Advanced details

Info

▼ Summary

Number of instances

Info

1

Software Image (AMI)

Microsoft Windows Server 2022 ...read more

ami-04d9ee4d5dfdc202

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Storage (volumes)

1 volume(s) - 30 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, 750 hours of public IPv4 address usage per month, 30 GiB of EBS storage, 2 million I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Launch instance

Review, compare

budShell

Feedback

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EC2

Instances

Launch an instance

Success

Successfully initiated launch of instance (i-01e9c1aaf02d89132)

► Launch log

Next Steps

What would you like to do next with this instance, for example "create alarm" or "create backup"

< 1 2 3 4 5 6 >

Create billing and free tier usage alerts

To manage costs and avoid surprise bills, set up email notifications for billing and free tier usage thresholds.

Create billing alerts

Connect to your instance

Once your instance is running, log into it from your local computer.

Connect to instance

Learn more

Connect an RDS database

Configure the connection between an EC2 instance and a database to allow traffic flow between them.

Connect an RDS database

Create a new RDS database

Learn more

Create EBS snapshot policy

Create a policy that automates the creation, retention, and deletion of EBS snapshots

Create EBS snapshot policy

Manage detailed monitoring

Enable or disable detailed monitoring for the instance. If you enable detailed monitoring, the Amazon EC2 console displays monitoring graphs with a 1-minute period.

Manage detailed monitoring

Create Load Balancer

Create an application, network gateway or classic Elastic Load Balancer

Create Load Balancer

Create AWS budget

AWS Budgets allows you to create budgets, forecast spend, and take action on your costs and usage from a single location.

Create AWS budget

Manage CloudWatch alarms

Create or update Amazon CloudWatch alarms for the instance.

Manage CloudWatch alarms

Instances (1) [Info](#)

[All states](#)

[Refresh](#) [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

| <input type="checkbox"/> | Name ↗ | Instance ID | Instance state | Instance type | Status check | Alarm status | Availability Zone | Public IPv4 DNS | Public IPv4 ... | Elastic IP |
|--------------------------|------------------------|---------------------|----------------------|---------------|---------------------------|-----------------------------|-------------------|-------------------------|-----------------|------------|
| <input type="checkbox"/> | myserver | i-01e9c1aafe2d89132 | Running | t2.micro | Initializing | View alarms | us-east-1b | ec2-34-228-6-69.comp... | 34.228.6.69 | - |

Select an instance

Step 14: here we wait until status check passed

Instances (1) [Info](#)

[All states](#)

[Refresh](#) [Connect](#) [Instance state](#) [Actions](#) [Launch instances](#)

| <input type="checkbox"/> | Name ↗ | Instance ID | Instance state | Instance type | Status check | Alarm status | Availability Zone | Public IPv4 DNS | Public IPv4 ... | Elastic IP | IF |
|--------------------------|------------------------|---------------------|----------------------|---------------|--------------------------------|-----------------------------|-------------------|-------------------------|-----------------|------------|----|
| <input type="checkbox"/> | myserver | i-01e9c1aafe2d89132 | Running | t2.micro | 2/2 checks passed | View alarms | us-east-1b | ec2-34-228-6-69.comp... | 34.228.6.69 | - | - |

Step 15: now we click on instance id

Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

All states

| Name | Instance ID | Instance state | Instance type | Status check | Alarm status | Availability Zone | Public IPv4 DNS | Public IPv4 ... | Elastic IP |
|----------|---------------------|----------------|---------------|-------------------|--------------|-------------------|-------------------------|-----------------|------------|
| myserver | i-01e9c1aafe2d89132 | Running | t2.micro | 2/2 checks passed | View alarms | us-east-1b | ec2-34-228-6-69.comp... | 34.228.6.69 | - |

Services Search [Alt+S]

EC2 > Instances > i-01e9c1aafe2d89132 > Connect to instance

Connect to instance Info

Connect to your instance i-01e9c1aafe2d89132 (myserver) using any of these options

Session Manager RDP client EC2 serial console

SSM Agent is not online

The SSM Agent was unable to connect to a Systems Manager endpoint to register itself with the service.

Session Manager usage:

- Connect to your instance without SSH keys, a bastion host, or opening any inbound ports.
- Sessions are secured using an AWS Key Management Service key.
- You can log session commands and details in an Amazon S3 bucket or CloudWatch Logs log group.
- Configure sessions on the Session Manager [Preferences](#) page.

Cancel Connect

Step 16: now we click RDP client

[EC2](#) > [Instances](#) > [i-01e9c1aafe2d89132](#) > Connect to instance

Connect to instance [Info](#)


Connect to your instance i-01e9c1aafe2d89132 (myserver) using any of these options

Session Manager

RDP client


EC2 serial console

Instance ID


 i-01e9c1aafe2d89132 (myserver)

Connection Type


☒ **Connect using RDP client**
Download a file to use with your RDP client and retrieve your password.


☐ **Connect using Fleet Manager**
To connect to the instance using Fleet Manager Remote Desktop, the SSM Agent must be installed and running on the instance. For more information, see [Working with SSM Agent](#) 

You can connect to your Windows instance using a remote desktop client of your choice, and by downloading and running the RDP shortcut file below:

 **Download remote desktop file**


When prompted, connect to your instance using the following username and password:

Public DNS
 ec2-34-228-6-69.compute-1.amazonaws.com

Username [Info](#)
 Administrator ▼

Password

[Get password](#)

 If you've joined your instance to a directory, you can use your directory credentials to connect to your instance.

Cancel

Step 17: now we enter a password so we click on upload private key file

Get Windows password [Info](#)

Use your private key to retrieve and decrypt the initial Windows administrator password for this instance.

Instance ID


 [i-01e9c1aafe2d89132](#) (myserver)

Key pair associated with this instance

 29062024_1

Private key

Either upload your private key file or copy and paste its contents into the field below.

 Upload private key file

Private key contents - *optional*

Private key contents

Cancel

Decrypt password

Step 18: now we click on decrypt password

EC2 > Instances > i-01e9c1aafe2d89132 > Get Windows password

Get Windows password [Info](#)

Use your private key to retrieve and decrypt the initial Windows administrator password for this instance.

Instance ID
i-01e9c1aafe2d89132 (myserver)

Key pair associated with this instance
29062024_1

Private key
Either upload your private key file or copy and paste its contents into the field below.

[Upload private key file](#)

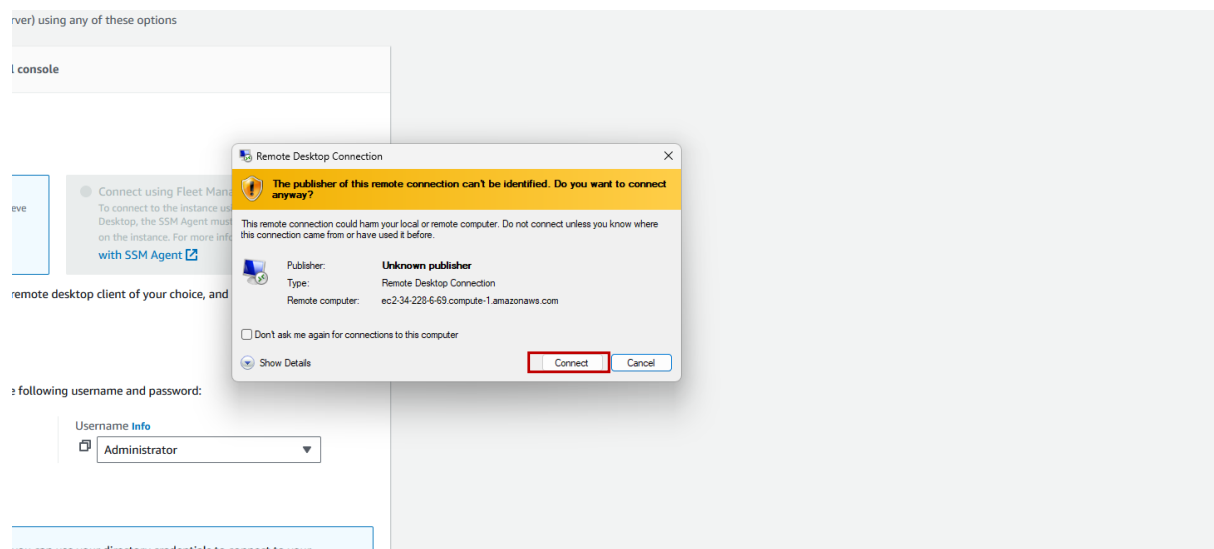
29062024_1.pem
1.678KB

Private key contents - optional

```
HMrf9Fk95DDHZ8m2pUYxk2h5/kZiWEHuP+o+gY9Ebn/F4XlxxXzwHttgxVdUjl2H
JcMvA7y/Cr3h381rjpOddQKBgQDDsbNBxBQK5groYRPQbNYglQC8ObzdN4FKVUhG
Rs2y3omMzCXemn2sZAEcbCnMDnJNO/KIV0ZKd4pU/52iwopNfDmthPjpV3T8hxS
OY/cdwJDBlDhoro6dTAIVFprAznKboqAXnnMTxV3L8gbaHgg7fXa9WNZtkdRkEdQ
GQ9+tQKBgQC2duEbFeJklwhH7AcXrGsvot2LFF2Zth2JOapT+9zkDChk7R8Z6Rj
1lVpyjWxMGYz9atJpn6bPEt52jdcyLIH+xGu7dUB7Hu3Frhgio/8RKRRlLrRHHG
3/jA4EaJTcNj0SdPSXJYm8sO7Nv1EOZWik9z3FgTs4J+epZ2x5j8Pg==
-----END RSA PRIVATE KEY-----
```

[Cancel](#) [Decrypt password](#)

Step 19: here we click on connect button for established connection



Step 20: finally over virtual server is ready

Hostname: EC2AMAZ-QUNBDRV
Instance ID: i-01e9c1aafe2d89132
Private IPv4 address: 172.31.26.241
Public IPv4 address: 34.228.6.69
Instance size: t2.micro
Availability Zone: us-east-1b
Architecture: AMD64
Total memory: 1024
Network: Low to Moderate



Step 21: after we click on instance state to terminate instance

