

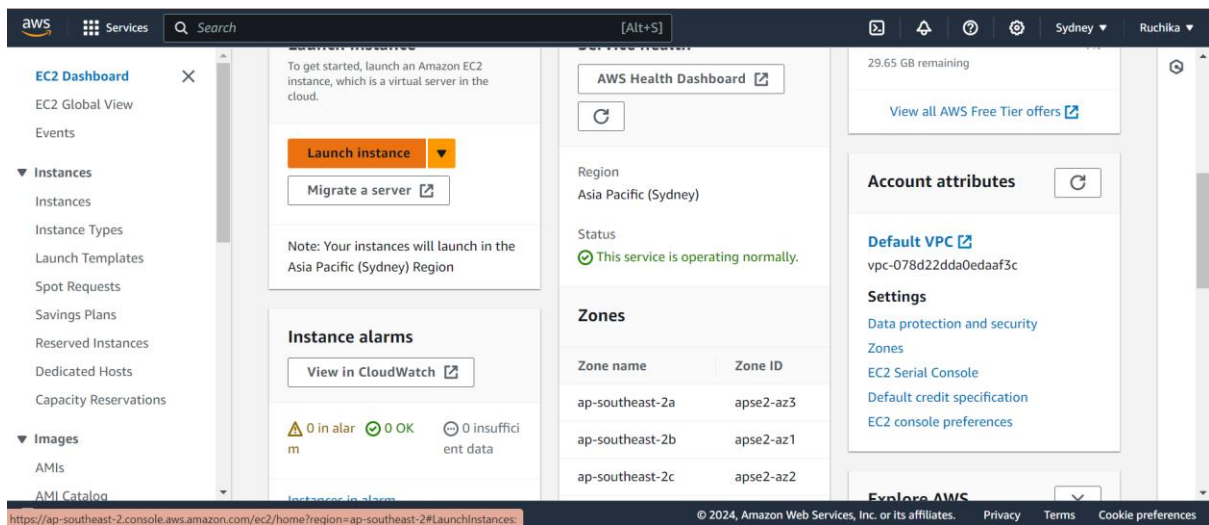
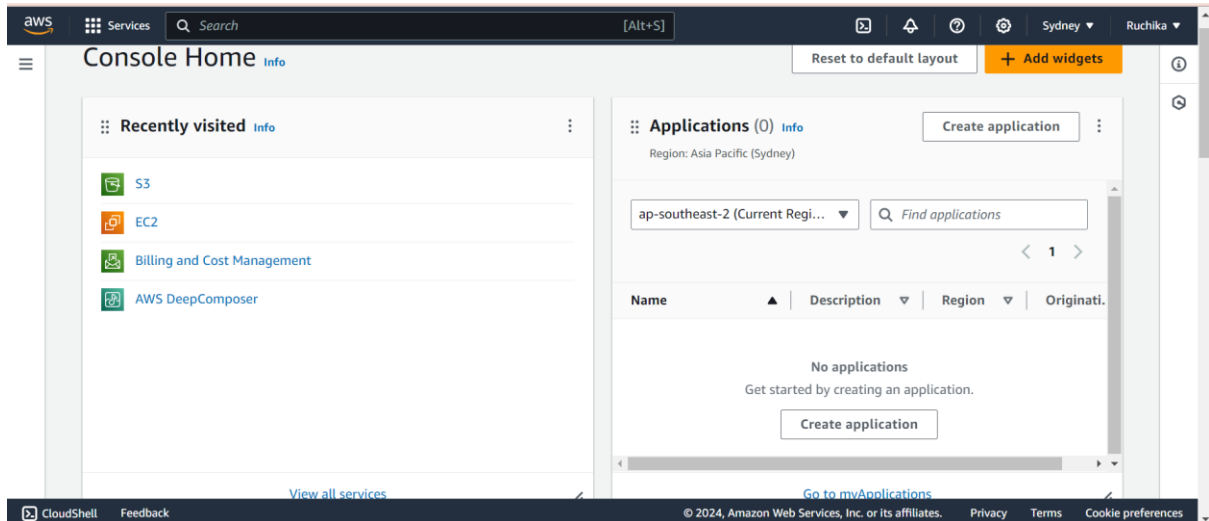
# CLOUD COMPUTING

## PRACTICAL-1

Ruchika (RollNo-19)

86062300062

Msc. Statistics and Data Science



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EC2 > Instances > Launch an instance

## Launch an instance

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

Name

Add additional tags

### Application and OS Images (Amazon Machine Image)

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

### Summary

Number of instances [Info](#)

1

Software Image (AMI)

-

Virtual server type (instance type)

-

Firewall (security group)

-

Storage (volumes)

-

Cancel

Launch instance

[Review commands](#)

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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)

Ubuntu Server 24.04 LTS (HVM), SSD Volume Type

ami-03f0544597f43a91d (64-bit (x86)) / ami-003e57d854eb96910 (64-bit (Arm))

Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

### Summary

Number of instances [Info](#)

1

Software Image (AMI)

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### Quick Start

Amazon Linux

macOS

Ubuntu

Windows

Red Hat

Browse more AMIs

Including AMIs from AWS, Marketplace and the Community

### Amazon Machine Image (AMI)

Ubuntu Server 22.04 LTS (HVM), SSD Volume Type

ami-0375ab65ee943a2a6 (64-bit (x86)) / ami-0e819018662fb53fc (64-bit (Arm))

Virtualization: hvm ENA enabled: true Root device type: ebs

Free tier eligible

### Description

Ubuntu Server 22.04 LTS (HVM),EBS General Purpose (SSD) Volume Type. Support available from Canonical (<http://www.ubuntu.com/cloud/services>).

Architecture

AMI ID

Verified provider

### Summary

Number of instances [Info](#)

1

Software Image (AMI)

Canonical, Ubuntu, 24.04 LTS, ...[read more](#)

ami-03f0544597f43a91d

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Cancel

Launch instance

[Review commands](#)

[Create new key pair](#)

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Key pair (login)

You can use a key pair to securely connect to your instance before you launch the instance.

Key pair name – required

Select

Network settings

Network

Subnet

Auto-assign public IP

Create key pair

Key pair name

Key pairs allow you to connect to your instance securely.

ruchika\_02

The name can include up to 255 ASCII characters. It can't include leading or trailing spaces.

Key pair type

☒ RSA

RSA encrypted private and public key pair

☐ ED25519

ED25519 encrypted private and public key pair

Private key file format

☒ .pem

For use with OpenSSH

☐ .ppk

Cancel

Create key pair

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Auto-assign public IP

Firewall (security groups)

Create security group

Select existing security group

We'll create a new security group called 'launch-wizard-1' with the following rules:

☒ Allow SSH 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.

Summary

Number of instances

1

Software Image (AMI)

Canonical, Ubuntu, 24.04 LTS, ...read more

ami-03f0544597f43a91d

Virtual server type (instance type)

t2.micro

Firewall (security group)

New security group

Cancel

Launch instance

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Number of instances

Info

1

Software Image (AMI)  
Canonical, Ubuntu, 24.04 LTS, ...[read more](#)  
ami-03f0544597f43a91d

Virtual server type (instance type)  
t2.micro

Firewall (security group)  
New security group

Storage (volumes)

Cancel

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Capacity Reservations

Images

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AMI Catalog

EC2 > Instances > Launch an instance

Launching instance

Launch initiation

79%

Details

Please wait while we launch your instance.  
Do not close your browser while this is loading.

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EC2 > Instances > Launch an instance

Success

Successfully initiated launch of instance (i-0cf05295a2496b590)

Launch log

Next Steps

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

Create billing and free tier usage alerts

Connect to your instance

Connect an RDS database

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Instances (1) Info

Find Instance by attribute or tag (case-sensitive)

All states

Launch instances

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status
<input type="checkbox"/>	ruchika_02	i-0cf05295a2496b590	Running	t2.micro	Initializing	View alarms

Select an instance

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EC2 > Instances > i-0cf05295a2496b590

Instance summary for i-0cf05295a2496b590 (ruchika\_02) Info

Updated less than a minute ago

Connect

Instance state

Actions

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0cf05295a2496b590 (ruchika_02)	3.26.165.58   open address	172.31.32.211
IPv6 address	Instance state	Public IPv4 DNS
-	Running	ec2-3-26-165-58.ap-southeast-2.compute.amazonaws.com   open address
Hostname type	Private IP DNS name (IPv4 only)	Elastic IP addresses
IP name: ip-172-31-32-211.ap-southeast-2.compute.internal	ip-172-31-32-211.ap-southeast-2.compute.internal	
Answer private resource DNS name	Instance type	

Waiting for ap-southeast-2.console.aws.amazon.com...

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Connect to instance Info

Connect to your instance i-0cf05295a2496b590 (ruchika\_02) using any of these options

EC2 Instance Connect

Session Manager

SSH client

EC2 serial console

Port 22 (SSH) is open to all IPv4 addresses

Instance ID

Connection Type

Connect using EC2 Instance Connect

Connect using EC2 Instance Connect Endpoint

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i-0cf05295a2496b590 (ruchika\_02)

Connection Type

☒ Connect using EC2 Instance Connect

Connect using the EC2 Instance Connect browser-based client, with a public IPv4 address.

☐ Connect using EC2 Instance Connect Endpoint

Connect using the EC2 Instance Connect browser-based client, with a private IPv4 address and a VPC endpoint.

Public IP address

3.26.165.58

Username

Enter the username defined in the AMI used to launch the instance. If you didn't define a custom username, use the default username, ubuntu.

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

Cancel

Connect

Instance details | EC2 | ap-southeast-2

EC2 Instance Connect | ap-southeast-2

Authentication Portal

ap-southeast-2.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-0cf05295a2496b590&osUser=ubuntu&regi...

Enable ESM Apps to receive additional future security updates.  
See <https://ubuntu.com/esm> or run: `sudo pro status`

The list of available updates is more than a week old.  
To check for new updates run: `sudo apt update`

The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in `/usr/share/doc/*/copyright`.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.

To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo\_root" for details.

ubuntu@ip-172-31-32-211:~\$

i-0cf05295a2496b590 (ruchika\_02)

Public IPs: 3.26.165.58 Private IPs: 172.31.32.211

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Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

	Name	Instance ID	Instance state
<input checked="" type="checkbox"/>	ruchika_02	i-0cf05295a2496b590	Running

Instance state

Stop instance

Start instance

Reboot instance

Hibernate instance

Terminate instance

Actions

Launch instances

Status check

Alarm status

2/2 checks passed

View alarms

i-0cf05295a2496b590 (ruchika\_02)

Details

Status and alarms

Monitoring

Security

Networking

Storage

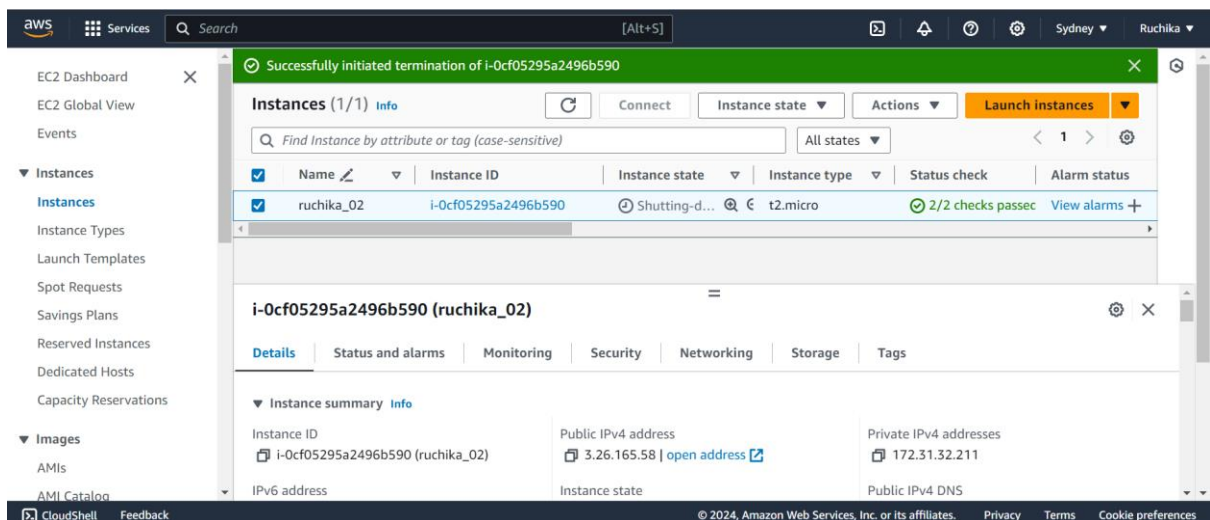
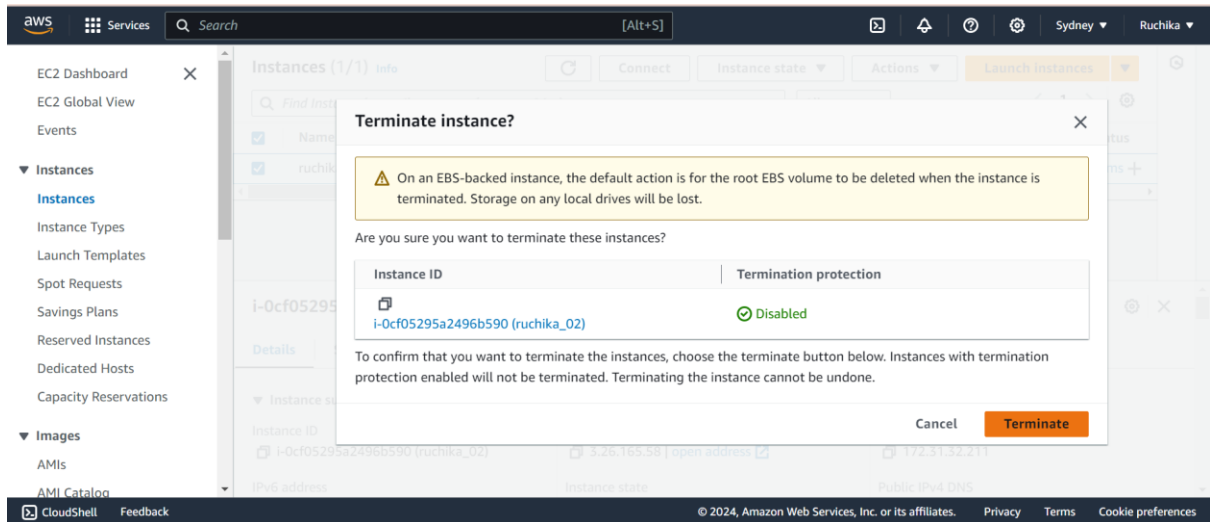
Tags

Instance summary Info

Instance ID	Public IPv4 address	Private IPv4 addresses
i-0cf05295a2496b590 (ruchika_02)	3.26.165.58   <a href="#">open address</a>	172.31.32.211
IPv6 address	Instance state	Public IPv4 DNS

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# USING PUTTY

The image shows two parts of the AWS Management Console. The top part is a 'Create key pair' modal dialog, and the bottom part is the 'Instances' page.

**Create key pair dialog:**

- Key pair name:** A text input field containing 'ruchika ppk'. 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**  
RSA encrypted private and public key pair
  - ☐ **ED25519**  
ED25519 encrypted private and public key pair
- Private key file format:** Two radio button options:
  - ☐ **.pem**  
For use with OpenSSH
  - ☒ **.ppk**  
For use with PuTTY
- Buttons:** 'Cancel' and 'Create key pair' (orange).

**Instances page:**

- Header:** 'Instances (1) Info'. Buttons: 'Connect', 'Instance state', 'Actions', 'Launch instances' (orange).
- Search:** 'Find Instance by attribute or tag (case-sensitive)'. Filter: 'All states'.
- Table:**

	Name	Instance ID	Instance state	Instance type	Status check	Alarm status
<input type="checkbox"/>	ruchikapoochika	i-0393aaadb4b43ae0	Pending	t2.micro	-	<a href="#">View alarms</a>



PuTTY Configuration

Category:

- Session
- Logging
- Terminal
  - Keyboard
  - Bell
  - Features
- Window
  - Appearance
  - Behaviour
  - Translation
  - Selection
  - Colours
- Connection
  - Data
  - Proxy
  - SSH
  - Serial
  - Telnet
  - Rlogin
  - SUPDUP

Basic options for your PuTTY session

Specify the destination you want to connect to

Host Name (or IP address) Port

Connection type:

☒ SSH ☐ Serial ☐ Other: Telnet

Load, save or delete a stored session

Saved Sessions

Default Settings

Load Save Delete

Close window on exit:

☐ Always ☐ Never ☒ Only on clean exit

About Help Open Cancel

PuTTY Configuration

Category:

- Logging
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  - Translation
  - Selection
  - Colours
- Connection
  - Data
  - Proxy
  - SSH
    - Kex
    - Host keys
    - Cipher
    - Auth
      - Credentials
      - GSSAPI
    - TTY
    - X11
    - Tunnels
    - Runs

Credentials to authenticate with

Public-key authentication

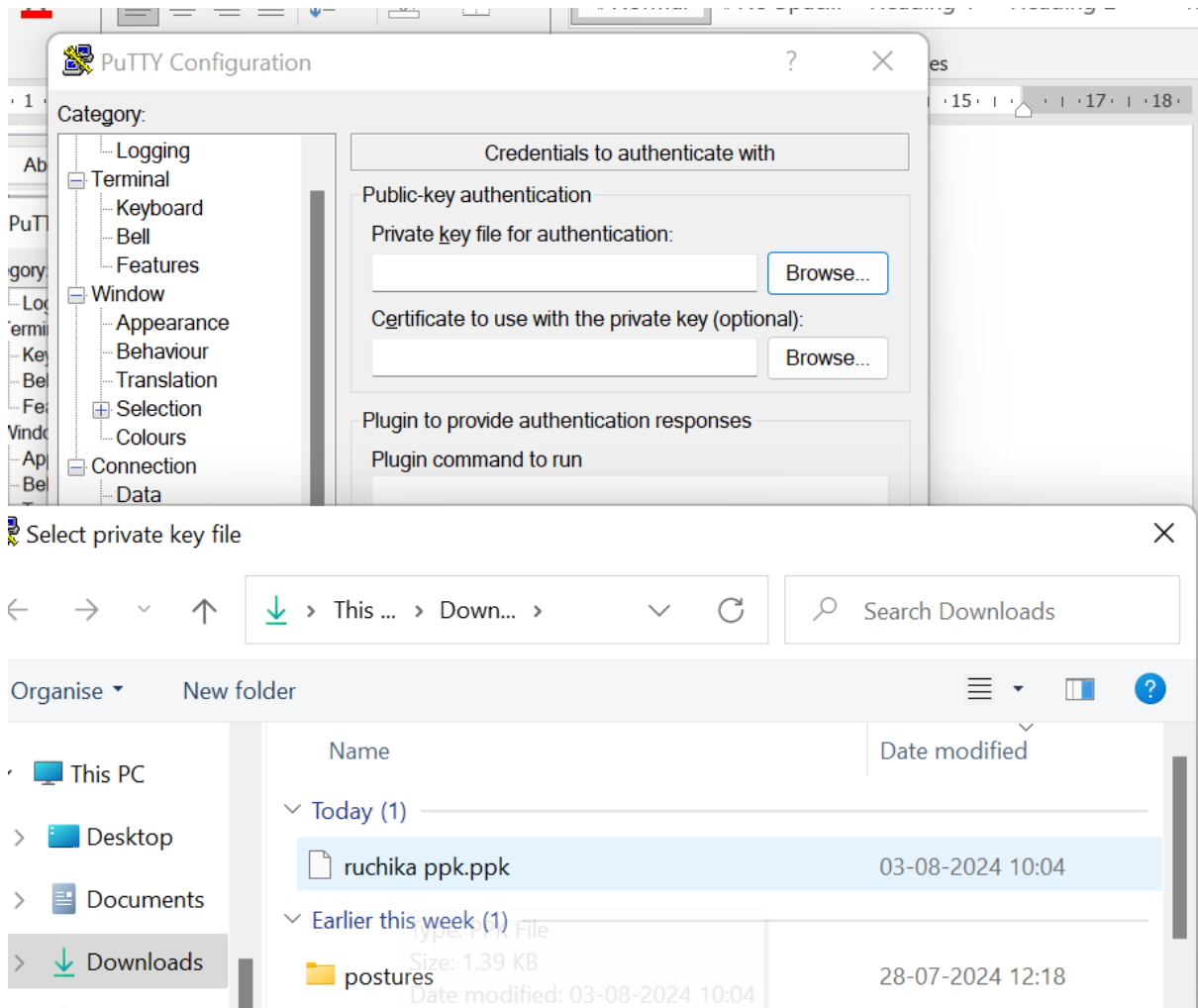
Private key file for authentication: Browse...

Certificate to use with the private key (optional): Browse...

Plugin to provide authentication responses

Plugin command to run

About Help Open Cancel



Then launch it and terminate server later