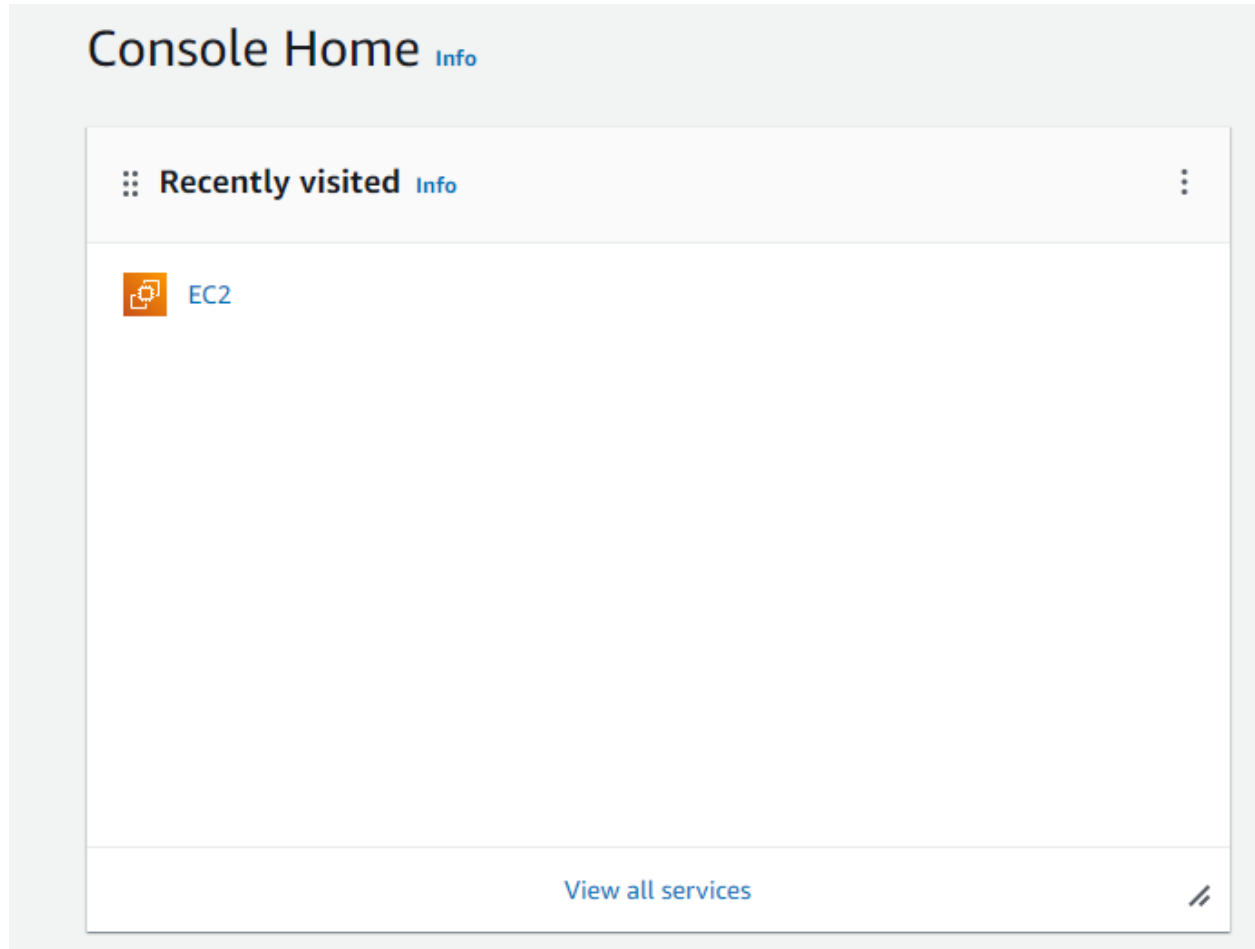


PRACTICAL 1 PART 1

1. Implement the windows machine using AWS ec2.

STEP 1:

- Open AWS Cloud Server
- Complete Sign Up Process
- Open EC2



STEP 2:

- Launch Instance

Resources

EC2 Global view

You are using the following Amazon EC2 resources in the Europe (Stockholm) Region:

Instances (running)	0	Auto Scaling Groups	0	Dedicated Hosts
Elastic IPs	0	Instances	0	Key pairs
Load balancers	0	Placement groups	0	Security groups
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 Europe (Stockholm) Region

Service health

AWS Health Dashb

Region
Europe (Stockholm)

Zones

STEP3:

- Name the Web Server
- Choose the Hardware (Windows)
- Then click on Launch instances

aws

Services

Search

[Alt+S]

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

e.g. My Web Server

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 looking for below

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

Quick Start

Amazon Linux

macOS

Ubuntu

Windows

Red Hat

SUSE Li

Browse more AMIs

Summary

Number of instances 1

Software Image (AMI)
Amazon Linux 2023 AMI 2023.3.2...read more
ami-06478978e5e72679a

Virtual server type (instance type)
t3.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 I/Os, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

[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

[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

▼ Summary

Number of instances Info

Software Image (AMI)

Microsoft Windows Server 2022 ...[read more](#)
ami-099a7b25010174ee4

Virtual server type (instance type)

t3.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, 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 4:

- Create Key_Pair Name
- Launch Instances

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

Instance type

t3.micro

Free tier eligible

Family: t3 2 vCPU 1 GiB Memory Current generation: true
On-Demand RHEL base pricing: 0.0708 USD per Hour
On-Demand SUSE base pricing: 0.0108 USD per Hour
On-Demand Linux base pricing: 0.0108 USD per Hour
On-Demand Windows base pricing: 0.02 USD per Hour

☒ All generations

[Compare instance types](#)

Additional costs apply for AMIs with pre-installed software

▼ **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*

Select

 [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.

Create key pair



Key pair name

Key pairs allow you to connect to your instance securely.

Cookie

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 (Not supported for Windows instances)


Private key file format

☒ .pem

For use with OpenSSH

☐ .ppk

For use with PuTTY

 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](#)

Cancel

Create key pair

Description

Microsoft Windows Server 2022 Full Locale English AMI provided by Amazon

Architecture

AMI ID

64-bit (x86)

ami-099a7b25010174ee4

Verified provider

▼ Instance type

Info | Get advice

Instance type

t3.micro

Family: t3 2 vCPU 1 GiB Memory Current generation: true

On-Demand RHEL base pricing: 0.0708 USD per Hour

On-Demand SUSE base pricing: 0.0108 USD per Hour

On-Demand Linux base pricing: 0.0108 USD per Hour

On-Demand Windows base pricing: 0.02 USD per Hour

Free tier eligible

☐ All generations

Compare instance types

Additional costs apply for AMIs with pre-installed software

▼ 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

Cookie

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

▼ Summary

Number of instances

Info

1

Software Image (AMI)

Microsoft Windows Server 2022 ...read more

ami-099a7b25010174ee4

Virtual server type (instance type)

t3.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, 30 GiB of EBS storage, 2 million IOs, 1 GB of snapshots, and 100 GB of bandwidth to the internet.

Cancel

Launch instance

Review commands

EC2 > Instances > Launch an instance

Success

Successfully initiated launch of instance (i-02e0103b58ee91a2f)

Launch log

Next Steps

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

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

✔ Success

Successfully initiated launch of instance (f-02e0103b58ee91a2f)

▶ Launch log


Next Steps

Q

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


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](#) 

Step 5:


- In RDP Client Copy Password
- Open downloaded Key_pair
- Paste the Password
- Connect/ YES
- A new Cloud Windows will be created

Session Manager


RDP client

EC2 serial console


Instance ID


 i-02e0103b58ee91a2f (Cookie Bytes)

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 details:


Public DNS


 ec2-13-60-17-254.eu-north-
com



 Password

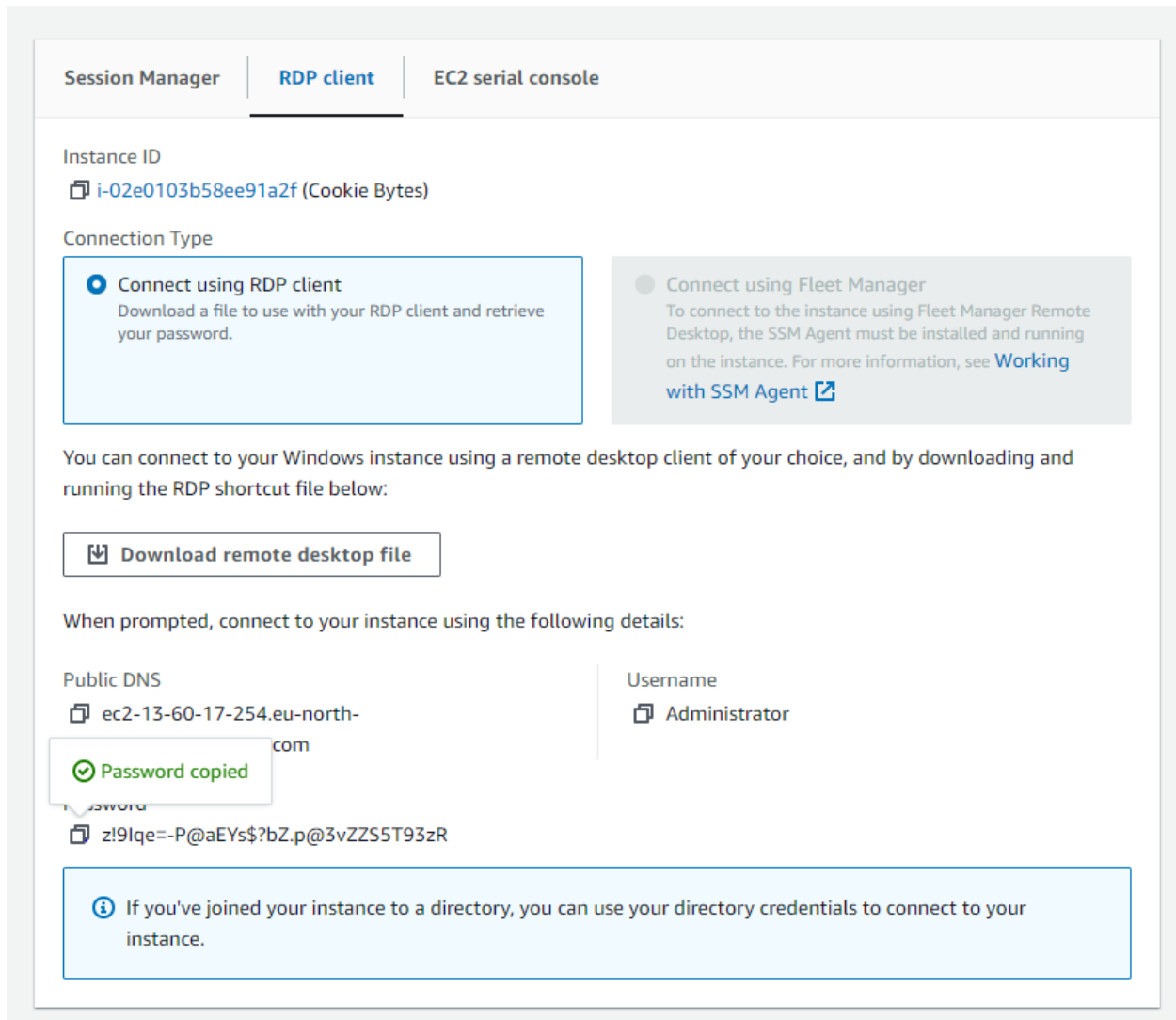
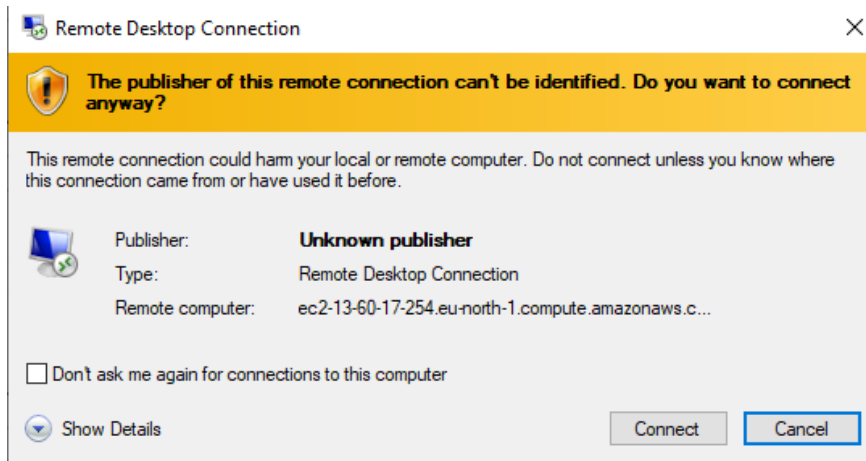
 z!9lqe--P@aEYs\$bZ.p@3vZZS5T93zR

Username

 Administrator

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

Today (4)			
 Cookie Bytes	11-Jan-24 8:45 AM	Remote Desktop ...	1 KB
 Cookie.pem	11-Jan-24 8:41 AM	PEM File	2 KB



Windows Security

Enter your credentials

These credentials will be used to connect to
ec2-13-60-17-254.eu-north-1.compute.amazonaws.com.

Administrator

MUM23422CPU0074\Administrator

☐ Remember me

[More choices](#)

OKCancel

Remote Desktop Connection

**The identity of the remote computer cannot be verified. Do you want to connect anyway?**

The remote computer could not be authenticated due to problems with its security certificate. It may be unsafe to proceed.

Certificate name

 Name in the certificate from the remote computer:
EC2AMAZ-4LTRCBC

Certificate errors

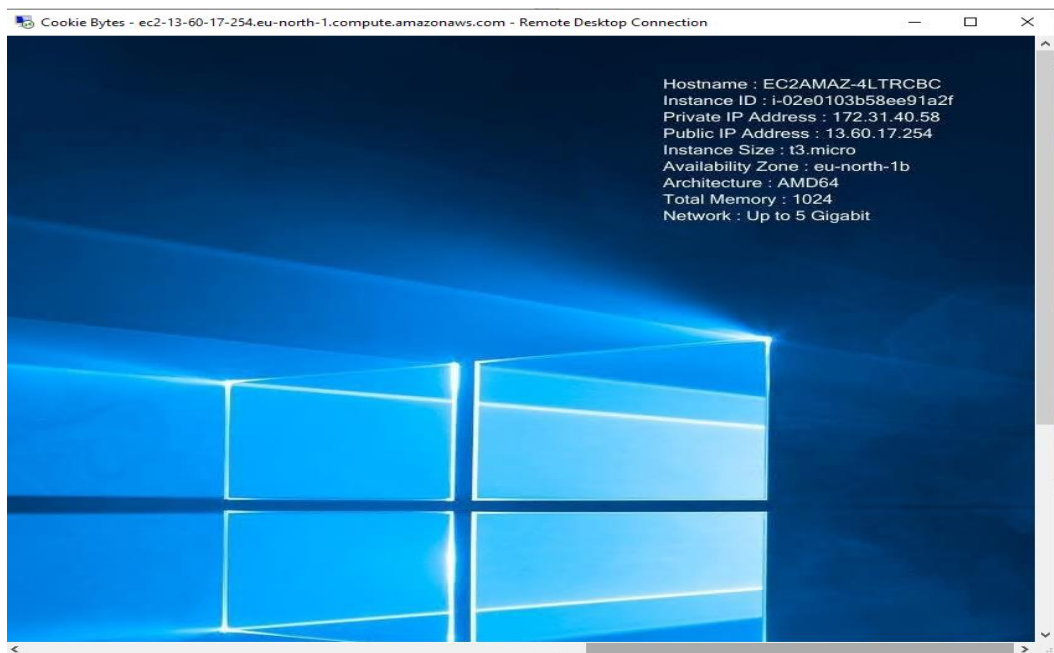
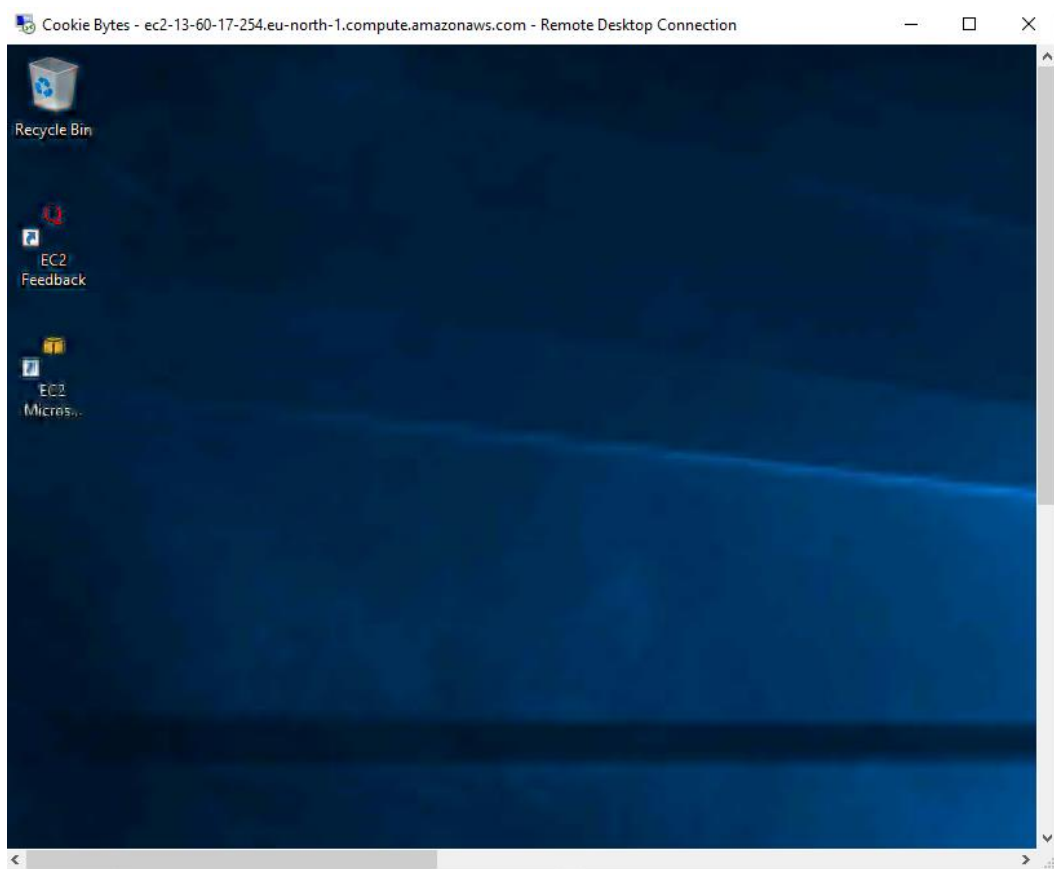
The following errors were encountered while validating the remote computer's certificate:

 The certificate is not from a trusted certifying authority.

Do you want to connect despite these certificate errors?

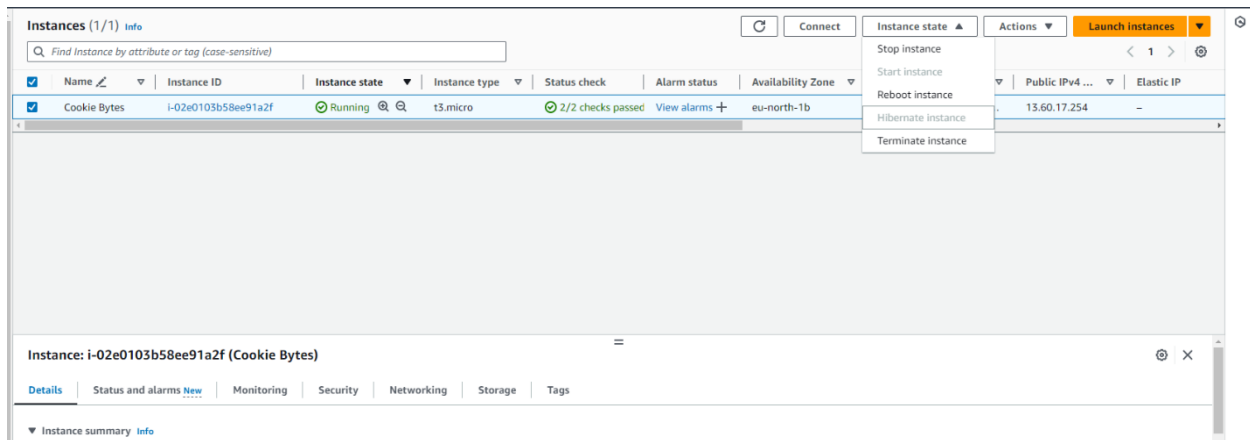
☐ Don't ask me again for connections to this computer

View certificate...YesNo



STEP 6:


- Go back to Cloud Server
- Check the Instance
- Terminate the Instance



The screenshot shows the AWS Management Console 'Instances' page. A table lists one instance: 'Cookie Bytes' with ID 'i-02e0103b58ee91a2f', state 'Running', type 't3.micro', and availability zone 'eu-north-1b'. The 'Actions' dropdown menu is open, showing options: 'Stop instance', 'Start instance', 'Reboot instance', 'Hibernate instance', and 'Terminate instance'.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone
Cookie Bytes	i-02e0103b58ee91a2f	Running	t3.micro	2/2 checks passed		eu-north-1b

Terminate instance?

 On an EBS-backed instance, the default action is for the root EBS volume to be deleted when the instance is terminated. Storage on any local drives will be lost.

Are you sure you want to terminate these instances?

Instance ID	Termination protection
 i-02e0103b58ee91a2f (Cookie Bytes)	 Disabled

To confirm that you want to terminate the instances, choose the terminate button below. Instances with termination protection enabled will not be terminated. Terminating the instance cannot be undone.

Cancel

Terminate

Successfully terminated i-02e0103b58ee91a2f

Instances (1/1) Info

Find Instance by attribute or tag (case-sensitive)

Connect

Instance state

Actions

Launch instances

<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input checked="" type="checkbox"/>	Cookie Bytes	i-02e0103b58ee91a2f	Shutting-d...	t3.micro	2/2 checks passed	View alarms	eu-north-1b	ec2-13-60-17-254.eu-n...	13.60.17.254	-

A screenshot of the AWS Management Console's EC2 Instances page. At the top, a green notification banner states 'Successfully terminated i-02e0103b58ee91a2f'. Below this, the 'Instances (1/1)' section is visible, featuring a search bar and action buttons like 'Connect', 'Instance state', 'Actions', and 'Launch instances'. A table lists the instance details. The instance 'Cookie Bytes' with ID 'i-02e0103b58ee91a2f' is shown in the 'Shutting-down' state. The 'Status check' column indicates '2/2 checks passed'. The instance is located in the 'eu-north-1b' availability zone, has a public IPv4 address of '13.60.17.254', and no Elastic IP is assigned.