

Working with ec2 Instance

- Task 1: Create and Launch an ec2 windows instance
- Screenshots Required: Instance list, instance details, launch screen.

Screen 1: Instance list

Instances (1/1) Info

Filter instances

< 1 >

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"/>	-	i-08d5cc516d0388836	Running	t2.micro	2/2 checks pass	No alarms	us-east-2b	ec2-13-58-255-161.us-...	13.58.255.161	-

Instances (1/1) Info

Filter instances

< 1 >

Connect

Instance state

Actions

Launch instances

Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP	IPv6 IPs	Monitoring	Security group name	Key name	Launch time
us-east-2b	ec2-13-58-255-161.us-...	13.58.255.161	-	-	disabled	launch-wizard-1	aws-mohan-ug	2021/02/24 11:00 GMT+5:30

Screen 2: Instance summary

EC2 > Instances > i-08d5cc516d0388836

Instance summary for i-08d5cc516d0388836 Info

Updated less than a minute ago

Refresh

Connect

Instance state ▼

Instance ID i-08d5cc516d0388836	Public IPv4 address 13.58.255.161 open address	Private IPv4 addresses 172.31.22.53
Instance state Running	Public IPv4 DNS ec2-13-58-255-161.us-east-2.compute.amazonaws.com open address	Private IPv4 DNS ip-172-31-22-53.us-east-2.compute.internal
Instance type t2.micro	Elastic IP addresses -	VPC ID vpc-de27a7b5
AWS Compute Optimizer finding Opt-in to AWS Compute Optimizer for recommendations. Learn more	IAM Role -	Subnet ID subnet-1ded0c60

Details

Security

Networking

Storage

Status checks

Monitoring

Tags

▼ Instance details Info

Platform windows	AMI ID ami-00843a337042b9b8b	Monitoring disabled
Platform details Windows	AMI name Windows_Server-2019-English-Full-Base-2021.02.10	Termination protection Disabled

Activate Windows
Go to Settings to activate Windows.

Stop-hibernate behavior disabled	AMI Launch index 0	Key pair name aws-mohan-ug
State transition reason -	Credit specification standard	Kernel ID -
State transition message -	Usage operation RunInstances:0002	RAM disk ID -
Owner 702795289537	Enclaves Support -	

▼ Host and placement group Info

Host ID -	Affinity -	Placement group -
Host resource group name -	Tenancy default	Partition number -
Virtualization type hvm	Reservation r-00c46c91f970a26a7	Number of vCPUs 1

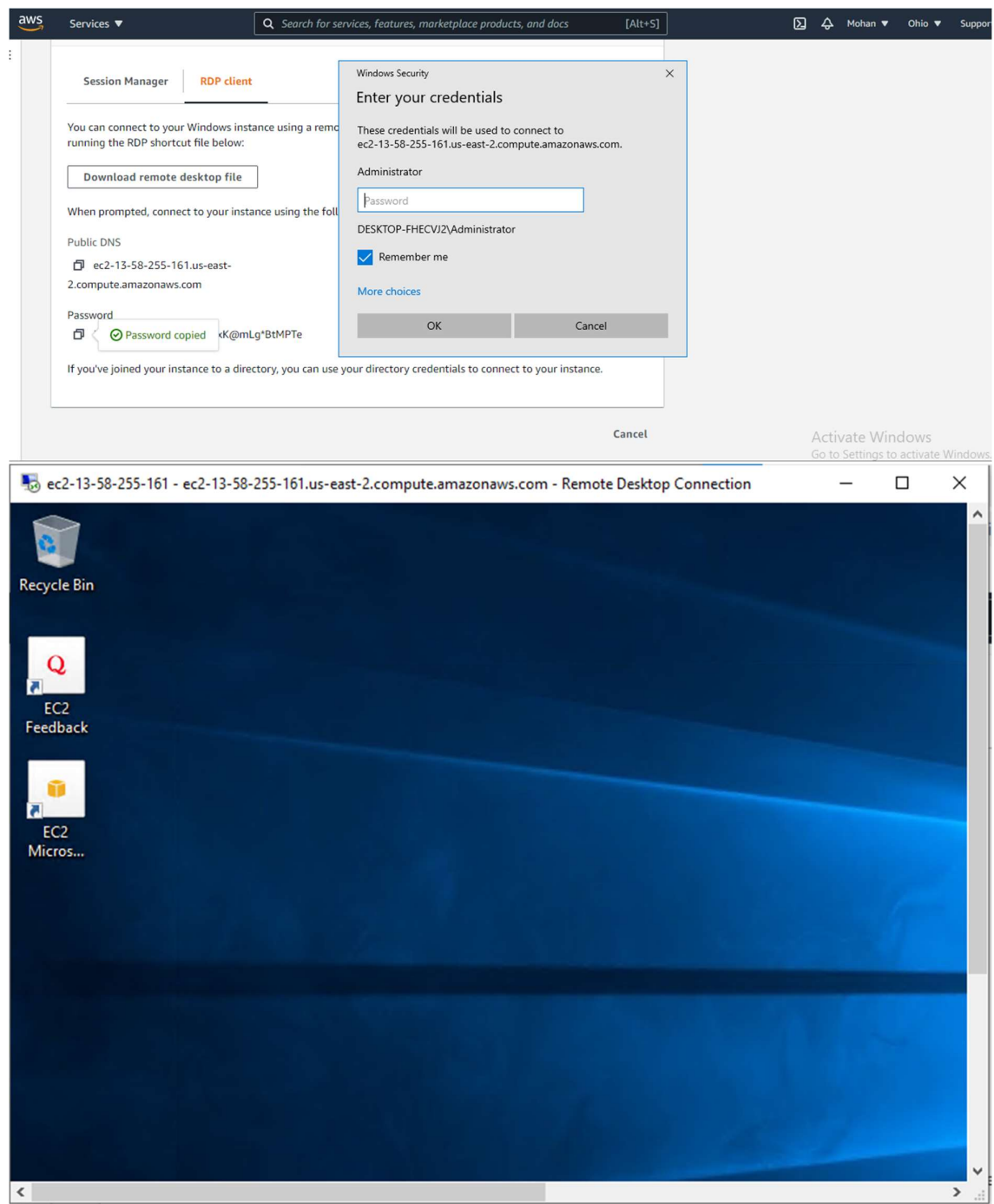
▼ Capacity reservation Info

Capacity Reservation ID -	Capacity Reservation setting open	
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▼ Accelerators Info

Elastic Graphics ID -	Elastic inference accelerator ID -	Activate Go to Settings
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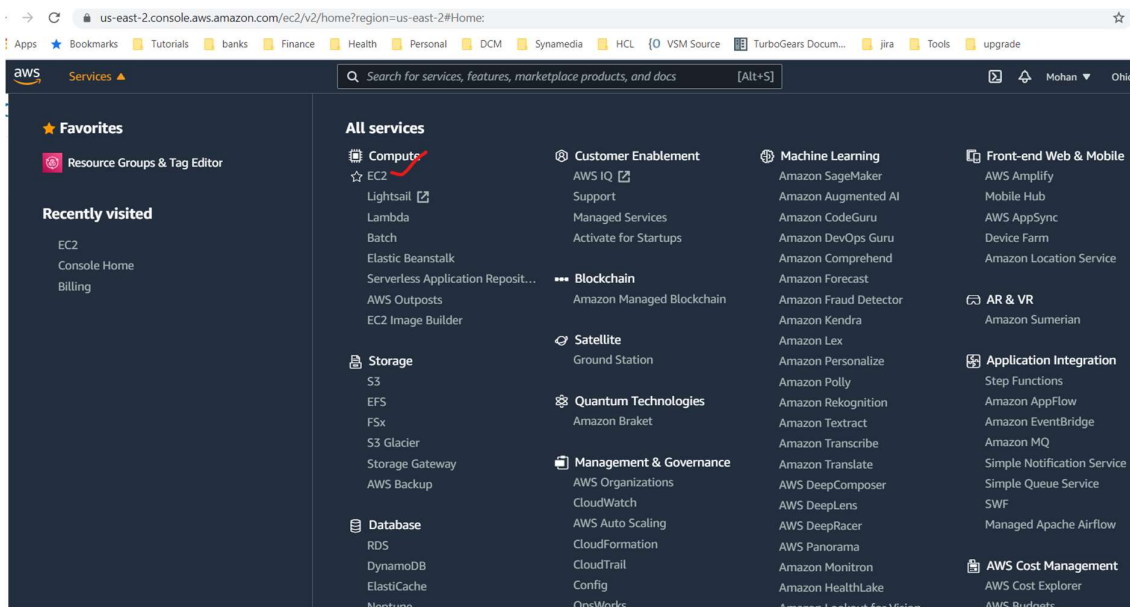
Screen 3: Launch Screen



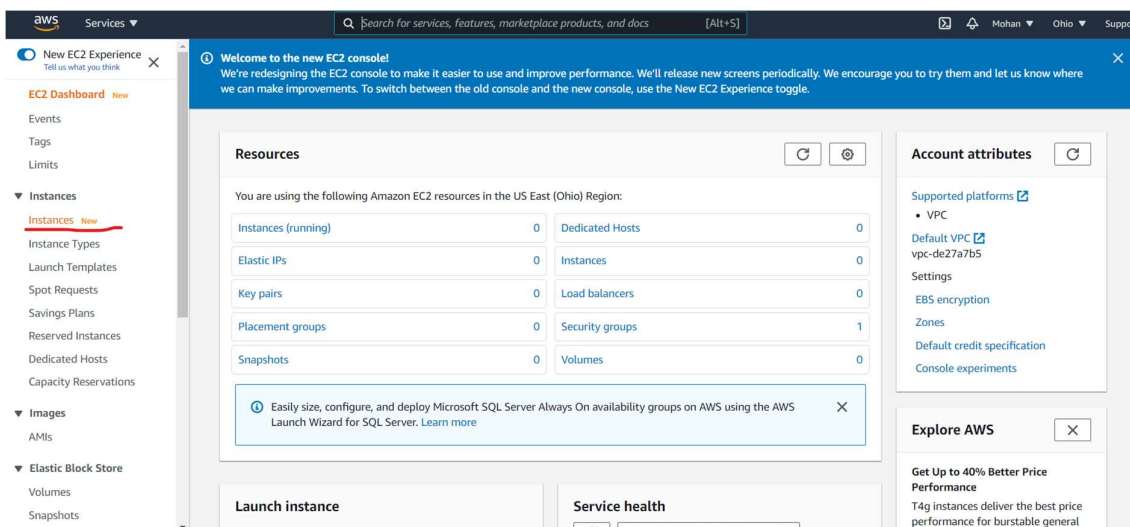
Other Screen shots:

Document of AWS EC2 (MS windows server 2019) Instance creation:

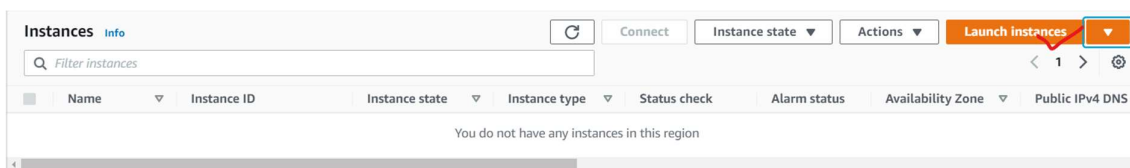
1. Select EC2 from All Services -> Compute



2. Click on Instances in EC2 Dashboard



3. Select Launch instance



4. Select MS Windows Server 2019 AMI to create instance

Step 1: Choose an Amazon Machine Image (AMI)

Cancel and Exit

64-bit (x86)
64-bit (Arm)

Free tier eligible and Ruby 1.8.7 available.

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

Ubuntu Server 20.04 LTS (HVM), SSD Volume Type - ami-0996d3051b72b5b2c (64-bit x86) / ami-0ade3e6d496de298f (64-bit Arm)

Free tier eligible

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

Microsoft Windows Server 2019 Base - ami-00843a337042b9b8b

Free tier eligible

Windows

Microsoft Windows 2019 Datacenter edition. [English]

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

Are you launching a database instance? Try Amazon RDS.

Amazon Relational Database Service (RDS) makes it easy to set up, operate, and scale your database on AWS by automating time-consuming database management tasks. With RDS, you can easily deploy **Amazon Aurora**, **MariaDB**, **MySQL**, **Oracle**, **PostgreSQL**, and **SQL Server** databases on AWS. **Aurora** is a MySQL- and PostgreSQL-compatible, enterprise-class database at 1/10th the cost of commercial databases. [Learn more about RDS](#)

[Launch a database using RDS](#)

Microsoft Windows Server 2019 Base with Containers - ami-0f25be484aba16d89

Free tier eligible

Windows

Microsoft Windows 2019 Datacenter edition with Containers. [English]

64-bit (x86)

5. Choose the (free tier) instance type. Select Configure Instance Details for customized instance configuration

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 (GiB)	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	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"/>	r5	r5.large	2	16	EBS only	Yes	Up to 10 Gbps	Yes

Cancel Previous **Review and Launch** Next: Configure Instance Details

6. Mostly defaults in Instance configuration

Step 3: Configure Instance Details

Configure the instance to suit your requirements. You can launch multiple instances from the same AMI, request Spot instances to take advantage of the lower pricing, assign an access management role to the instance, and more.

Number of instances: 1 Launch into Auto Scaling Group

Purchasing option: ☐ Request Spot Instances

Network: vpc-de27a7b5 (default) Create new VPC

Subnet: No preference (default subnet in any Availability Zone) Create new subnet

Auto-assign Public IP: Enable

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

CPU options: ☐ Specify CPU options

Shutdown behavior: Stop

Cancel Previous **Review and Launch** Next: Add Storage

7. Add Storage – No changes

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

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 ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Throughput (MB/s) ⓘ	Delete on Termination ⓘ	Encryption ⓘ
Root	/dev/sda1	snap-0bfcc22a65369905c	30	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

Add New Volume

8. Add Tags – At present not needed

9. Add Security Groups

- Select Type as 'All traffic' to allow all types of network eg. RDP, ICMP, IGMP etc
- Source – Anywhere (no restriction)

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

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

10. Review and Launch

aws

Services ▾

[Alt+S]

 Mohan ▾ 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 7: Review Instance Launch

Host resource group name

Affinity Off

Enclave false

Metadata accessible Enabled

Metadata version V1 and V2 (token optional)

Metadata token response hop limit 1

User data

Assign Public IP Yes

Assign IPv6 IP Use subnet setting (Enable)

Assign Carrier IP

Storage

Volume Type ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Throughput (MB/s) ⓘ	Delete on Termination ⓘ	Encrypted ⓘ
Root	/dev/sda1	snap-0bfcc22a65369905c	30	gp2	100 / 3000	N/A	Yes	Not Encrypted

Edit storage

Tags

Key	Value	Instances ⓘ	Volumes ⓘ	Network Interfaces ⓘ
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Edit tags

This resource currently has no tags

Cancel

Previous

Launch

11. Select existing or Create new key pair.

- Creating new key pair
- Download keypair .pem file

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.

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](#).

Create a new key pair

Key pair name
aws-mohan-ug

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

12. Launch Instance - running

Instances (1) Info								
<div>Filter instances</div> <div>search: i-08d5cc516d0388836 Clear filters</div>								
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DN
<input type="checkbox"/>	-	i-08d5cc516d0388836	Running	t2.micro	-	No alarms	us-east-2b	ec2-13-58-255

13. Select instance and connect

Instances (1/1) Info								
<div>Filter instances</div> <div>Connect</div>								
<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DN
<input checked="" type="checkbox"/>	-	i-08d5cc516d0388836	Running	t2.micro	2/2 checks passed	No alarms	us-east-2b	ec2-13-58-255

14. Download RDP and Get Password for the keypair generated in step 11

Connect to instance [Info](#)

Connect to your instance i-08d5cc516d0388836 using any of these options

Session Manager


RDP client

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

 ec2-13-58-255-161.us-east-2.compute.amazonaws.com

User name

 Administrator

Password [Get password](#)

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

Get Windows password [Info](#)

Retrieve and decrypt the initial Windows administrator password for this instance.

To decrypt the password, you will need your key pair for this instance.



Key pair associated with this instance
aws-mohan-ug

Browse to your key pair:

 [Browse](#)

Or copy and paste the contents of the key pair below: