

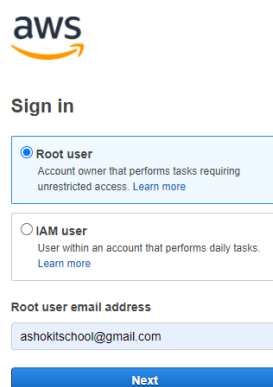
What IS EC2

- **EC2** stands for **Amazon Elastic Compute Cloud**
- Amazon EC2 is most well-known services, offers businesses the ability to run applications on the public cloud
- EC2 provides resizable computing capacity in the cloud so developers can enjoy great scalability for building applications
- Instead of purchasing your own hardware and connecting it to a network, Amazon gives you nearly unlimited virtual machines to run your applications while they take care of the hardware.
- AWS supports multiple operating systems from Windows to many flavors of Linux etc. As a customer, you are also able to bring your own custom OS and run it on their platform.

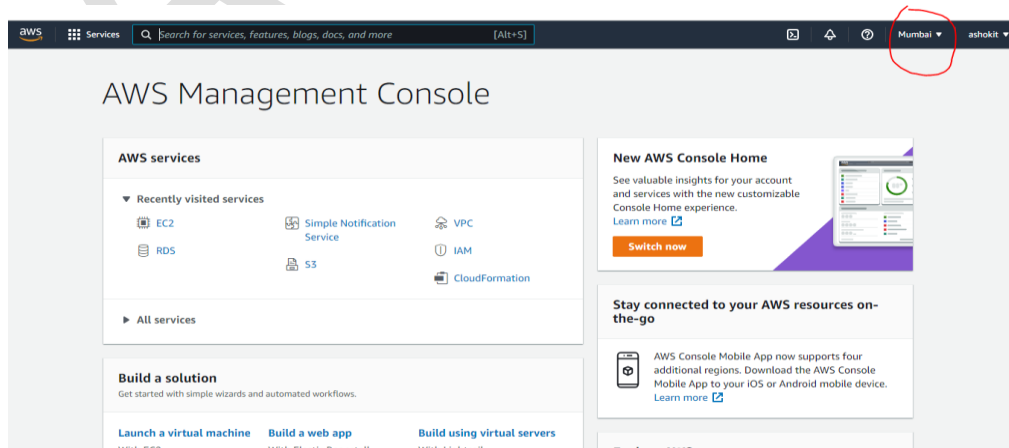
IN OTHER WORDS, A custom rubber band that can stretch for building applications.

Launching Windows Machine Using AWS EC2

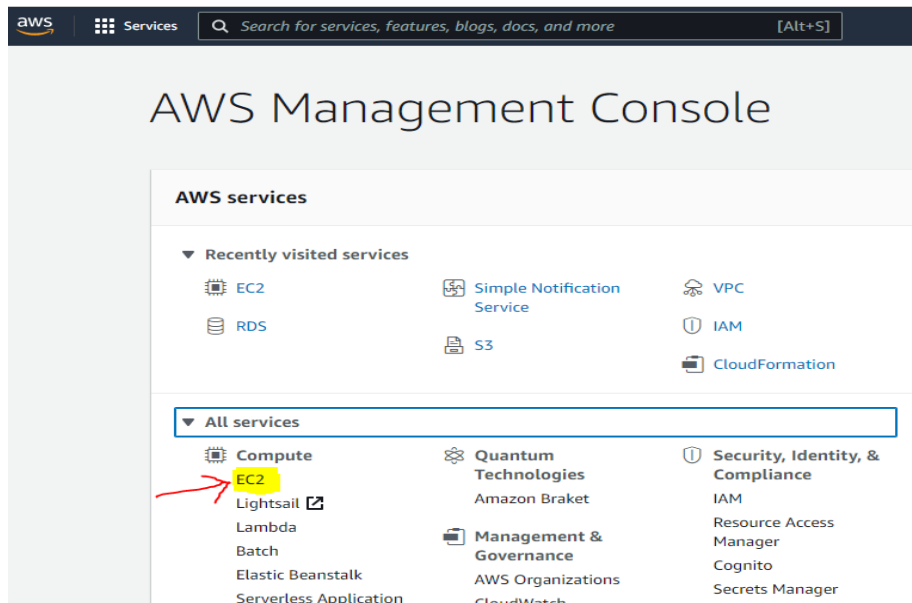
- 1) **Create Account in AWS** (URL: <https://portal.aws.amazon.com/billing/signup#/start>)
- 2) **Login into AWS Account using your credentials**



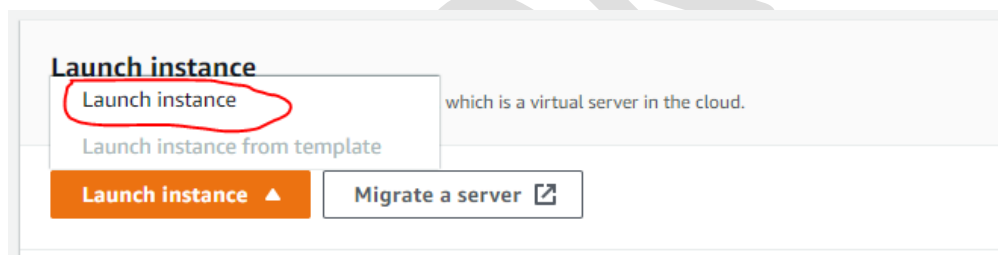
- 3) **Choose region which is near to you (For Me Asia Pacific - Mumbai)**



4) Go to services and Select EC2 and Click on Launch Instance



5) Click on Launch Instance



6) Choose an Amazon Machine Image (AMI) (Note: select free tier eligible)
Ex: Select Windows Image (Ex: Microsoft Windows Server 2022 Base)



7) Select Instance Type (t2.micro and click on Next)

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 <small>Free tier eligible</small>	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

[Cancel](#) [Previous](#) [Review and Launch](#) [Next: Configure Instance Details](#)

8) Configure Instance Details and Click on Next (Default value 1 instance)

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 [Launch into Auto Scaling Group](#)

Purchasing option ☐ Request Spot instances

Network [Create new VPC](#)

Subnet [Create new subnet](#)

Auto-assign Public IP

Hostname type

DNS Hostname ☒ Enable IP name IPv4 (A record) DNS requests
☒ Enable resource-based IPv4 (A record) DNS requests
☐ Enable resource-based IPv6 (AAAA record) DNS requests

Placement group ☐ Add instance to placement group

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

9) Add Storage and click on Next (Default 30)

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	snp-02aa5939b324601be	<input type="text" value="30"/>	General Purpose SSD (gp2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypt

[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.

Shared file systems

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

10) Add Tag and click on Next

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	Value	Instances	Volumes	Network Interfaces
Name	WindowsVM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Add another tag (Up to 50 tags maximum)

11) Configure Security Group and Click on 'Review and Launch'

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
RDP	TCP	3389	Custom 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](#)


12) Review Instance Launch and click on Launch

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.

Warning
 Improve your instances' security. Your security group, launch-wizard-2, 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](#)

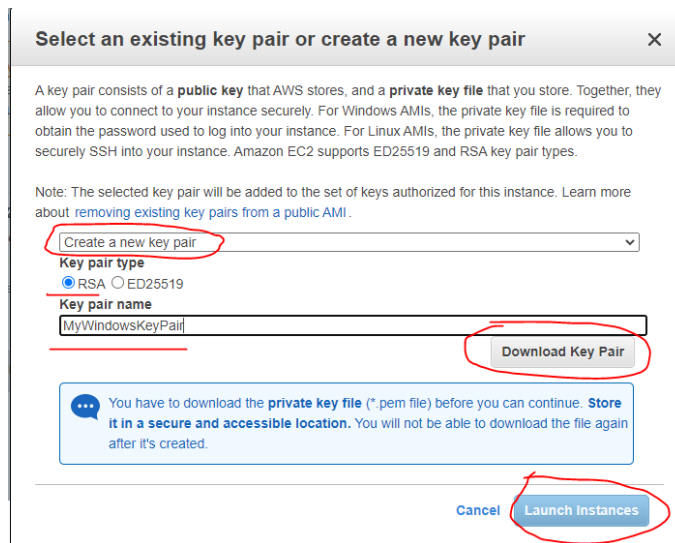
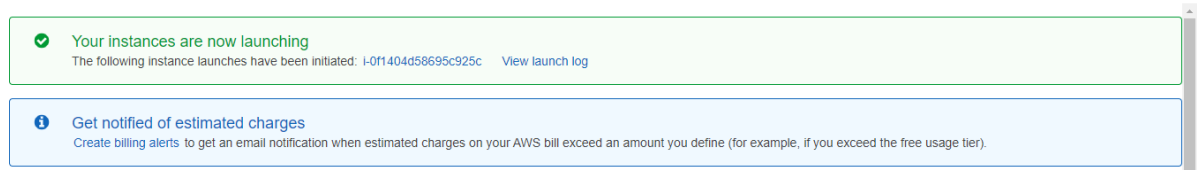
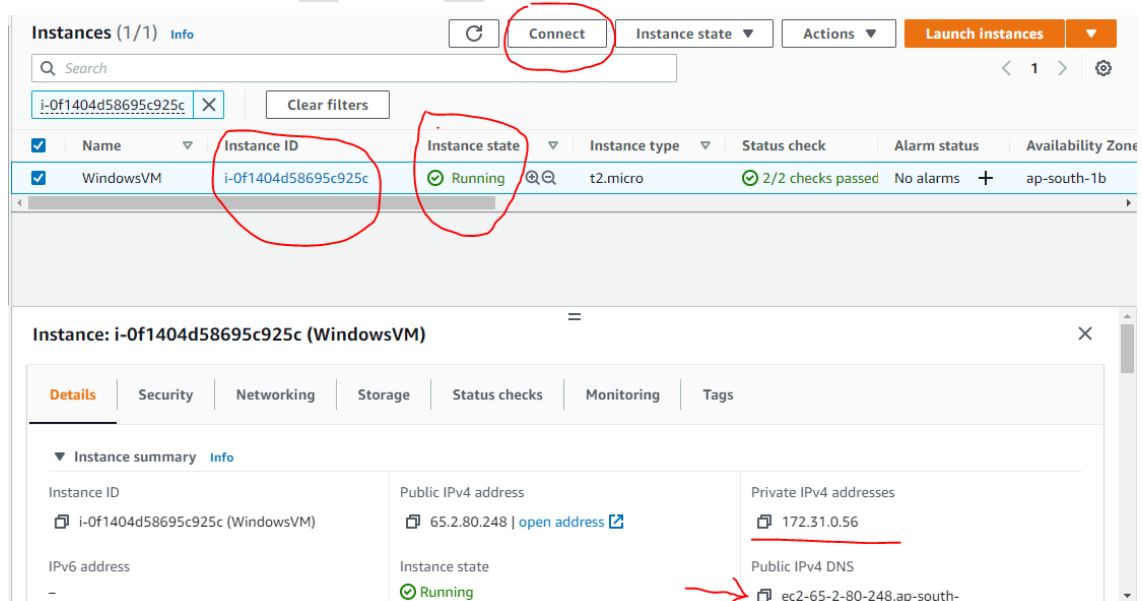
▼ **AMI Details** [Edit AMI](#)

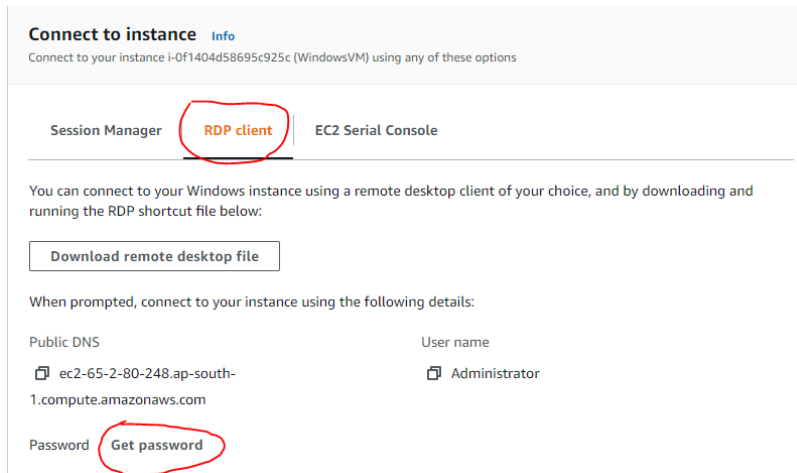
 **Microsoft Windows Server 2022 Base - ami-0849220f77f98ecbd**
 Free tier eligible
 Microsoft Windows 2022 Datacenter edition, [English]
 Root Device Type: ebs Virtualization type: hvm
 If you plan to use this AMI for an application that benefits from Microsoft License Mobility, fill out the [License Mobility Form](#). Don't show me this again

▼ **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

[Cancel](#) [Previous](#) [Launch](#)

13) Select New Key Pair --> Choose Name --> Download Key Pair**(Store that key-pair file because we need that file to connect to VM)****14) Once Instance launched you can see below message****Launch Status****15) Go to EC2 Dashboard and see Instance Status**

16) Select Instance and Click on Connect -> Go To RDP Client -> Click on 'Get Password'

Connect to instance [Info](#)

Connect to your instance i-Of1404d58695c925c (WindowsVM) using any of these options

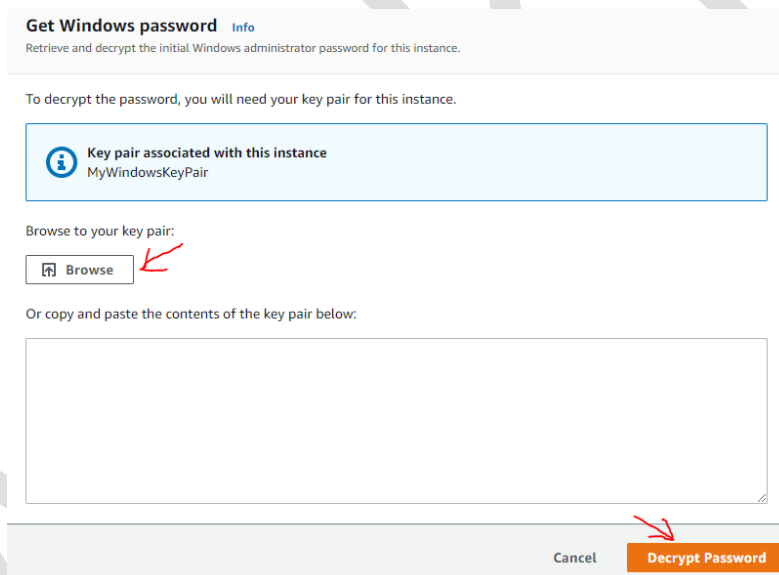
Session Manager **RDP client** EC2 Serial Console

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	User name
ec2-65-2-80-248.ap-south-1.compute.amazonaws.com	Administrator
Password	Get password

17) Click on Browse and Upload Key-Pair file which we have downloaded and Click on 'Decrypt Password'

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.

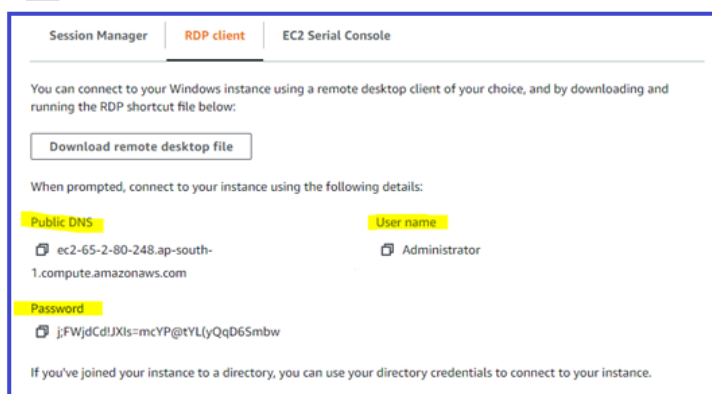
Key pair associated with this instance
MyWindowsKeyPair

Browse to your key pair:

[Browse](#)

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

[Cancel](#) [Decrypt Password](#)

18) You can see Password like below (Copy Username, Password From this Screen)

Session Manager **RDP client** EC2 Serial Console

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:

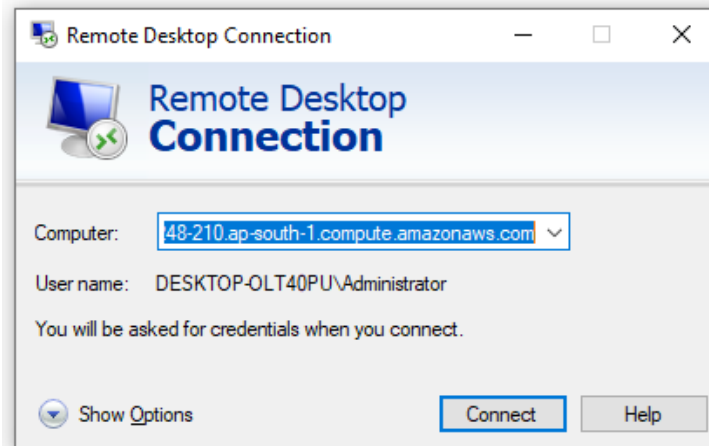
[Download remote desktop file](#)

When prompted, connect to your instance using the following details:

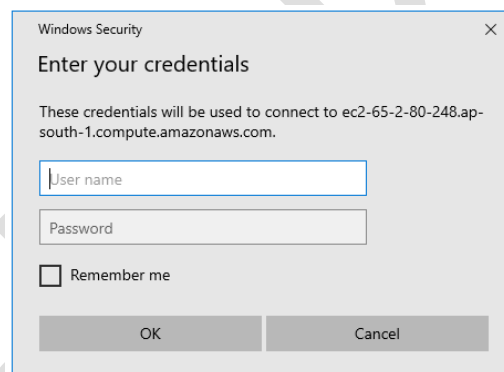
Public DNS	User name
ec2-65-2-80-248.ap-south-1.compute.amazonaws.com	Administrator
Password	
jFWjdCdJXIs=mcYP@tYLYqQd6Smbw	

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

19) Open Remote Desktop Connection From your machine (From Start Menu) and Enter EC2 Instance DNS name like below and click on 'Connect' button



20) Enter EC2 instance Credentials in below screen and Click on 'OK'



21) If you enter correct credentials then you can see below Windows Machine which is launched in AWS



22) You can copy some files from your local machine and paste in EC2 Machine (That's all)

23) Once you have practiced, you can terminate instance from EC2 Dashboard to avoid billing

=== Learn Here.. Lead Anywhere..!! ===