

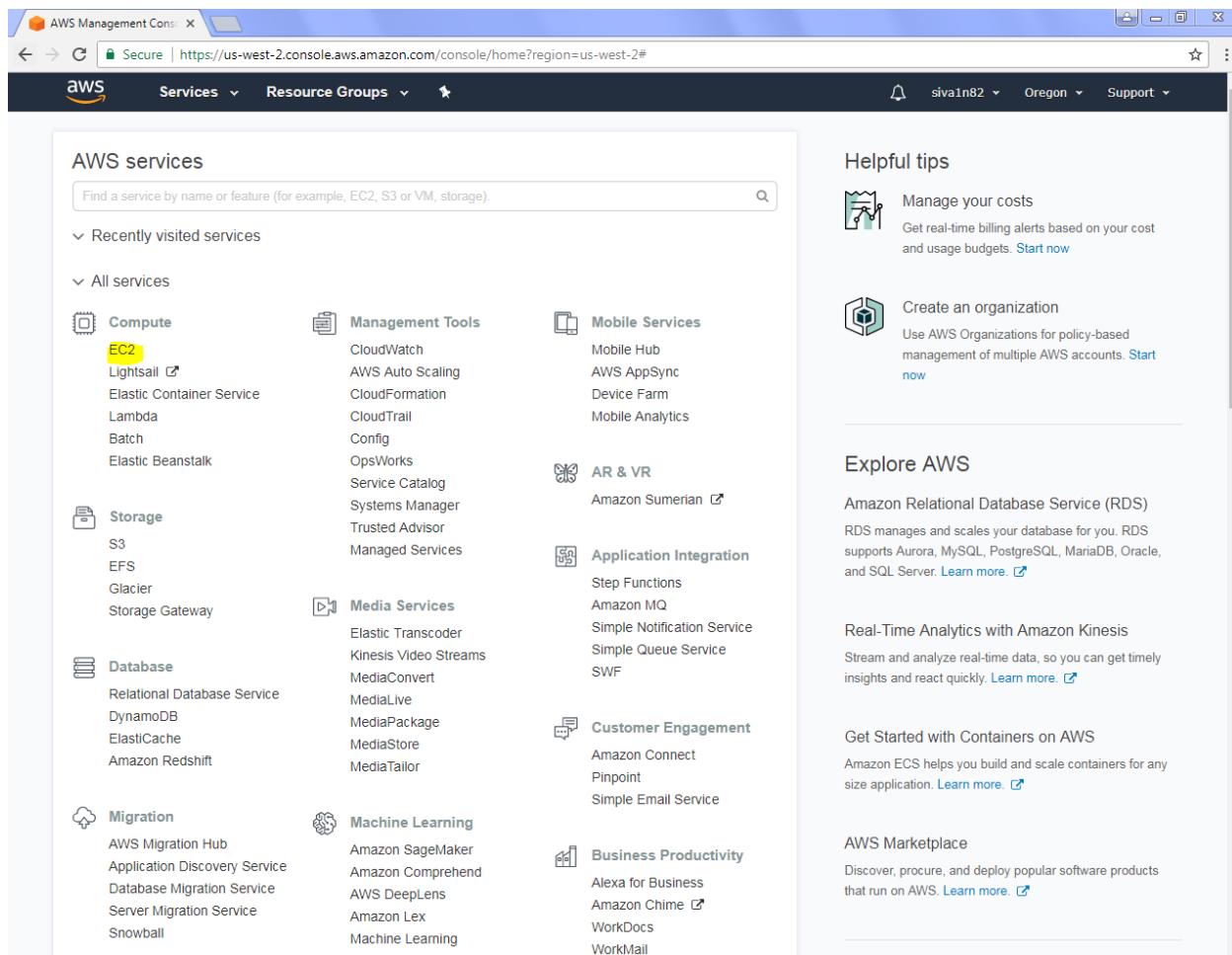
Lab6

Configure EBS Volumes, Snapshot and creating AMI

PLEASE READ THE BELOW NOTE BEFORE PRACTICE THIS LAB

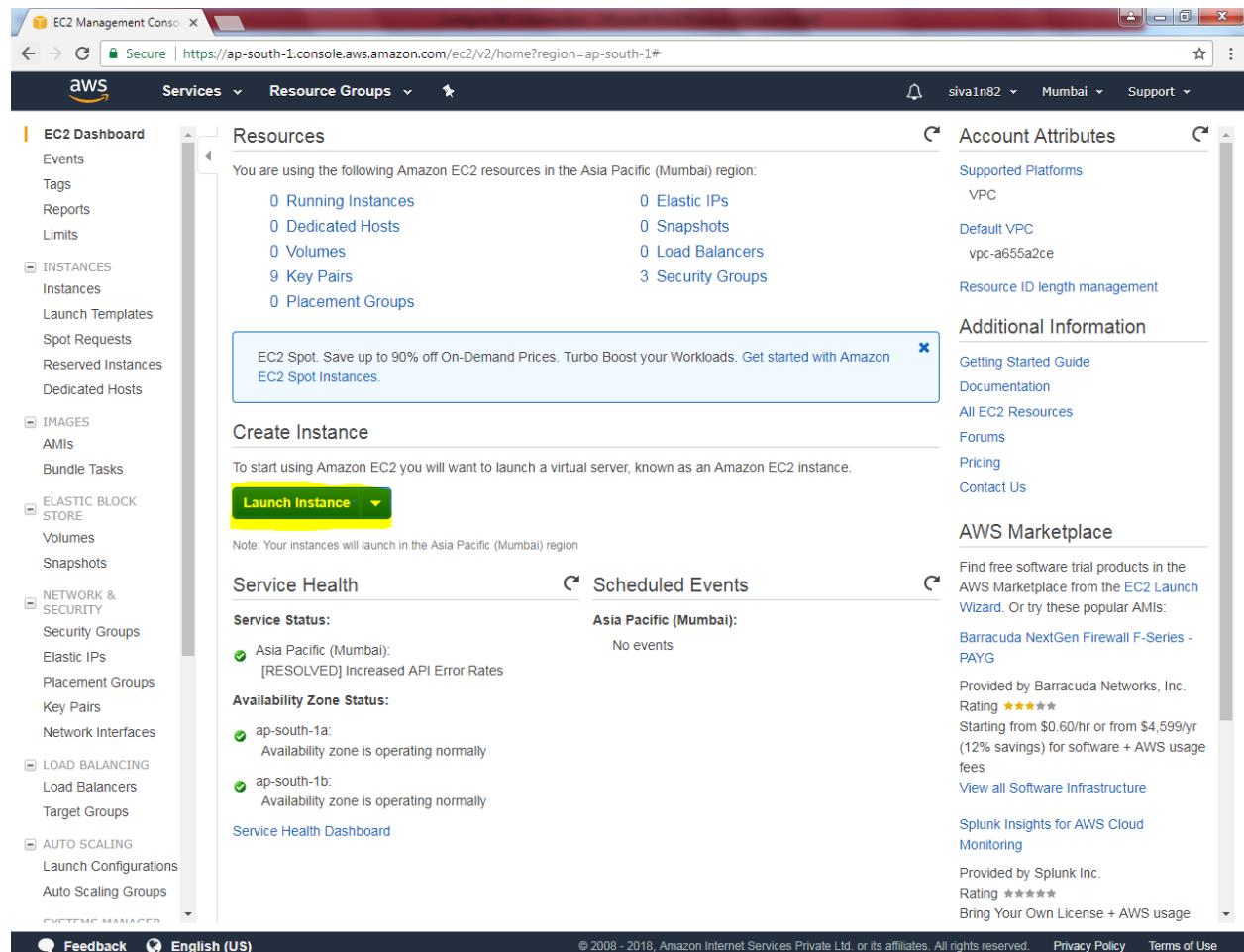
Below lab is COST BASED lab, we need to pay some amount to amazon for resizing the partition and resized portioned snapshot. If you are interested to do the lab please resize the volume as 1 GB and try this scenario. The below mentioned scenario is partially success because we have created the windows image and use the AMI for with an instance. But we are unable to launch the instance in this case. Sir will teach creating AMI session by using the instance image in this class later with Auto scaling concept.

Click “EC2”.



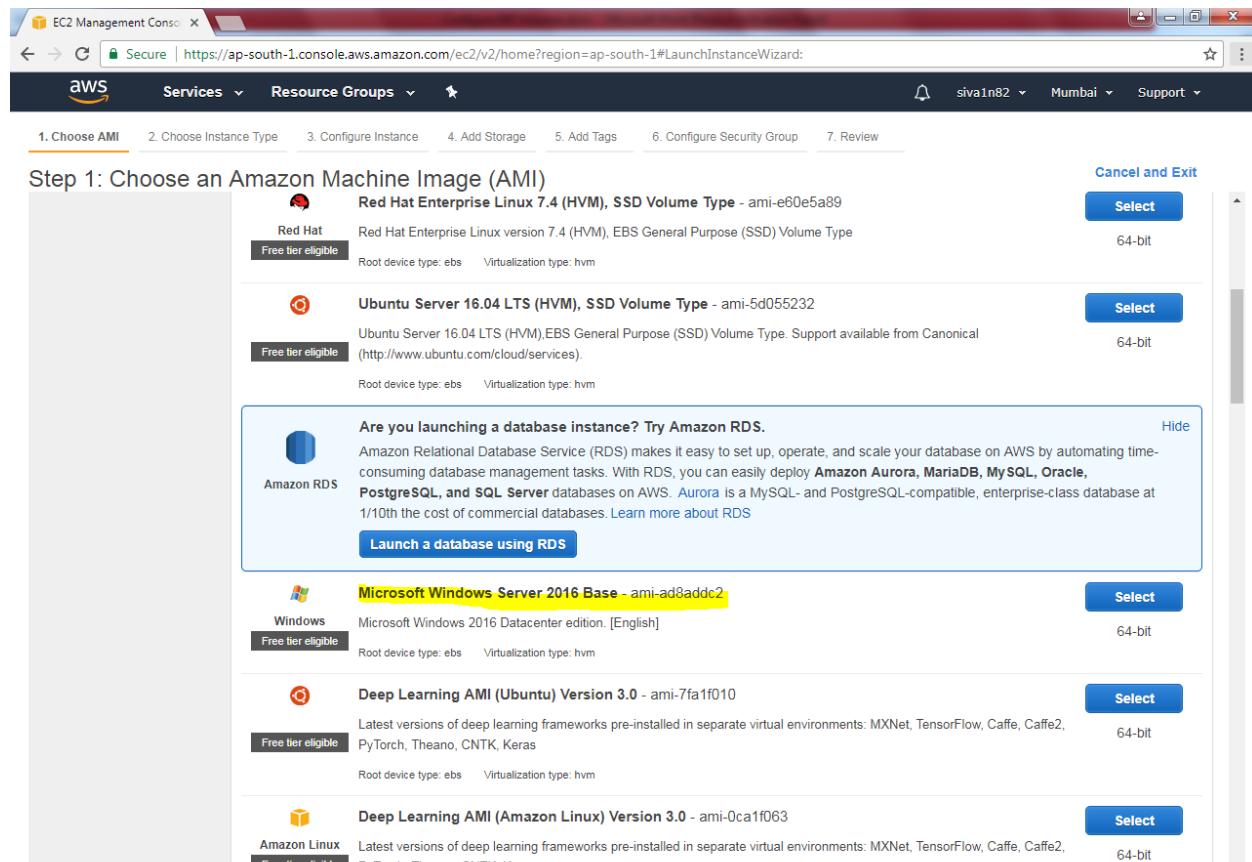
The screenshot shows the AWS Management Console homepage. At the top, there's a navigation bar with the AWS logo, a "Services" dropdown, a "Resource Groups" dropdown, and links for "Oregon" and "Support". Below the navigation is a search bar with placeholder text "Find a service by name or feature (example, EC2, S3 or VM, storage)." To the right of the search bar is a "Helpful tips" section with two items: "Manage your costs" (with a cost monitoring icon) and "Create an organization" (with a hexagonal icon). Further down is an "Explore AWS" section with links to "Amazon Relational Database Service (RDS)", "Real-Time Analytics with Amazon Kinesis", "Get Started with Containers on AWS", and "AWS Marketplace". The main content area is titled "AWS services" and contains a sidebar with "Recently visited services" and "All services" sections. The "Compute" section is expanded, showing "EC2" (which is highlighted with a yellow box), "Lightsail", "Elastic Container Service", "Lambda", "Batch", and "Elastic Beanstalk". Other collapsed sections include "Storage" (S3, EFS, Glacier, Storage Gateway), "Database" (Relational Database Service, DynamoDB, ElastiCache, Amazon Redshift), "Migration" (AWS Migration Hub, Application Discovery Service, Database Migration Service, Server Migration Service, Snowball), "Management Tools" (CloudWatch, AWS Auto Scaling, CloudFormation, CloudTrail, Config, OpsWorks, Service Catalog, Systems Manager, Trusted Advisor, Managed Services), "Mobile Services" (Mobile Hub, AWS AppSync, Device Farm, Mobile Analytics), "AR & VR" (Amazon Sumerian), "Application Integration" (Step Functions, Amazon MQ, Simple Notification Service, Simple Queue Service, SWF), "Media Services" (Elastic Transcoder, Kinesis Video Streams, MediaConvert, MediaLive, MediaPackage, MediaStore, MediaTailor), "Customer Engagement" (Amazon Connect, Pinpoint, Simple Email Service), "Machine Learning" (Amazon SageMaker, Amazon Comprehend, AWS DeepLens, Amazon Lex, Machine Learning), and "Business Productivity" (Alexa for Business, Amazon Chime, WorkDocs, WorkMail).

Click “Launch Instance”.



The screenshot shows the AWS EC2 Management Console interface. The top navigation bar includes the AWS logo, Services dropdown, Resource Groups dropdown, and user information (siva1n82, Mumbai, Support). The left sidebar contains a tree view of AWS services: EC2 Dashboard, Instances, Images, Elastic Block Store, Network & Security, Load Balancing, and Auto Scaling. The main content area displays the 'Resources' section, which lists Amazon EC2 resources in the Asia Pacific (Mumbai) region. It shows 0 Running Instances, 0 Dedicated Hosts, 0 Volumes, 9 Key Pairs, 0 Placement Groups, 0 Elastic IPs, 0 Snapshots, 0 Load Balancers, and 3 Security Groups. A callout box highlights the 'EC2 Spot' section, which encourages saving up to 90% off On-Demand Prices by Turbo Boosting workloads. Below this is the 'Create Instance' section, featuring a prominent yellow 'Launch Instance' button. To the right of the main content are several panels: 'Account Attributes' (Supported Platforms: VPC, Default VPC: vpc-a655a2ce, Resource ID length management), 'Additional Information' (Getting Started Guide, Documentation, All EC2 Resources, Forums, Pricing, Contact Us), and 'AWS Marketplace' (Find free software trial products, Barracuda NextGen Firewall F-Series - PAYG, provided by Barracuda Networks, Inc., rating 4.5 stars, starting from \$0.60/hr or \$4,599/yr, 12% savings for software + AWS usage fees, View all Software Infrastructure). At the bottom, there are links for Feedback, English (US), and footer text: © 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use.

Select “Windows Server 2016 Base”.



The screenshot shows the AWS EC2 Management Console interface for launching a new instance. The top navigation bar includes 'Services' (selected), 'Resource Groups', and 'Support'. The main menu has tabs: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage, 5. Add Tags, 6. Configure Security Group, and 7. Review.

Step 1: Choose an Amazon Machine Image (AMI)

The 'Red Hat' section is currently selected, showing:

- Red Hat Enterprise Linux 7.4 (HVM), SSD Volume Type - ami-e60e5a89** (Free tier eligible)
- Ubuntu Server 16.04 LTS (HVM), SSD Volume Type - ami-5d05523d** (Free tier eligible)

A callout box for **Amazon RDS** suggests trying it for database instances, mentioning services like Aurora, MariaDB, MySQL, Oracle, PostgreSQL, and SQL Server.

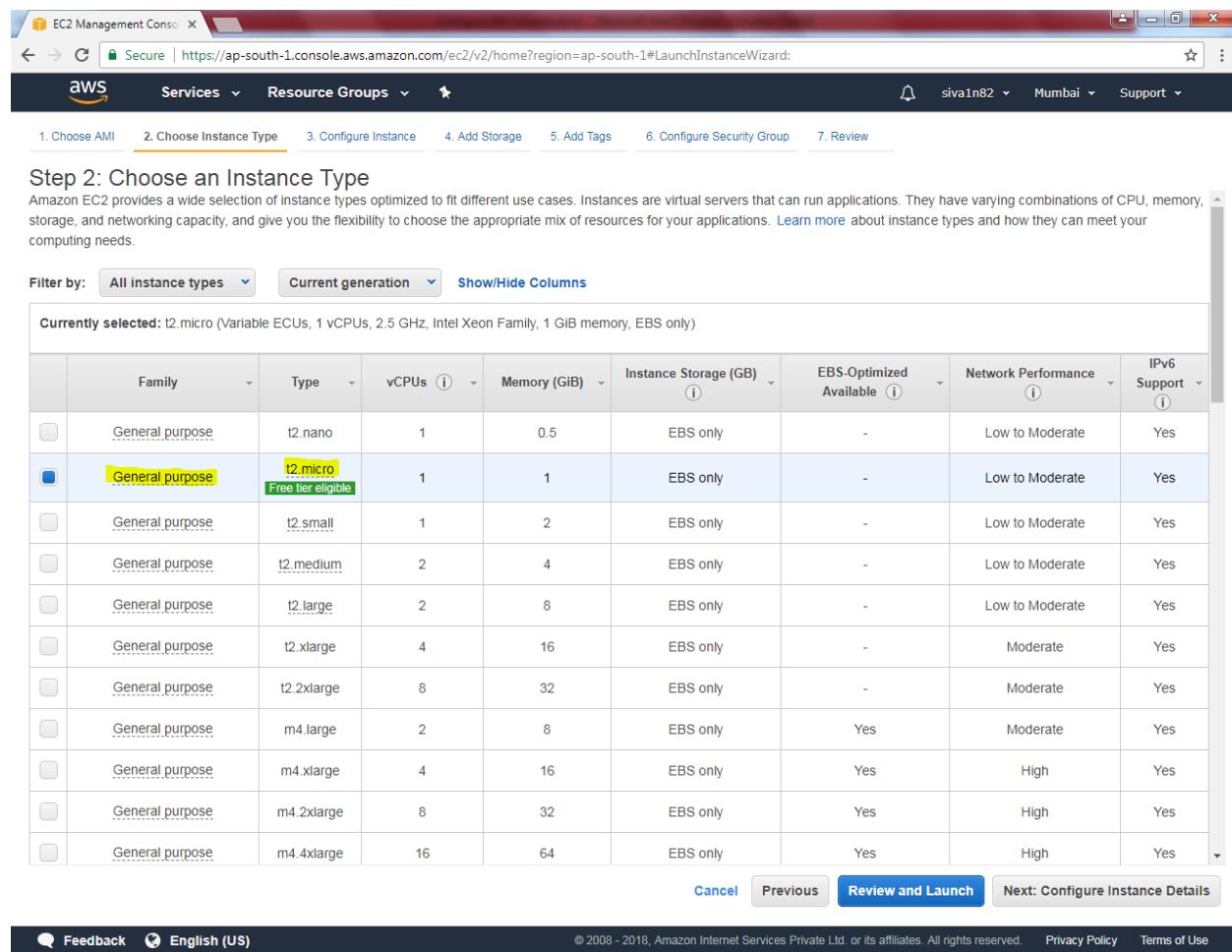
The 'Windows' section shows:

- Microsoft Windows Server 2016 Base - ami-ad8addc2** (Free tier eligible)
- Deep Learning AMI (Ubuntu) Version 3.0 - ami-7fa1f010** (Free tier eligible)
- Deep Learning AMI (Amazon Linux) Version 3.0 - ami-0ca1f063** (Free tier eligible)

Each AMI entry includes details like volume type, root device type, and virtualization type, along with a 'Select' button and '64-bit' link.

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Select “t2.micro”.



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.

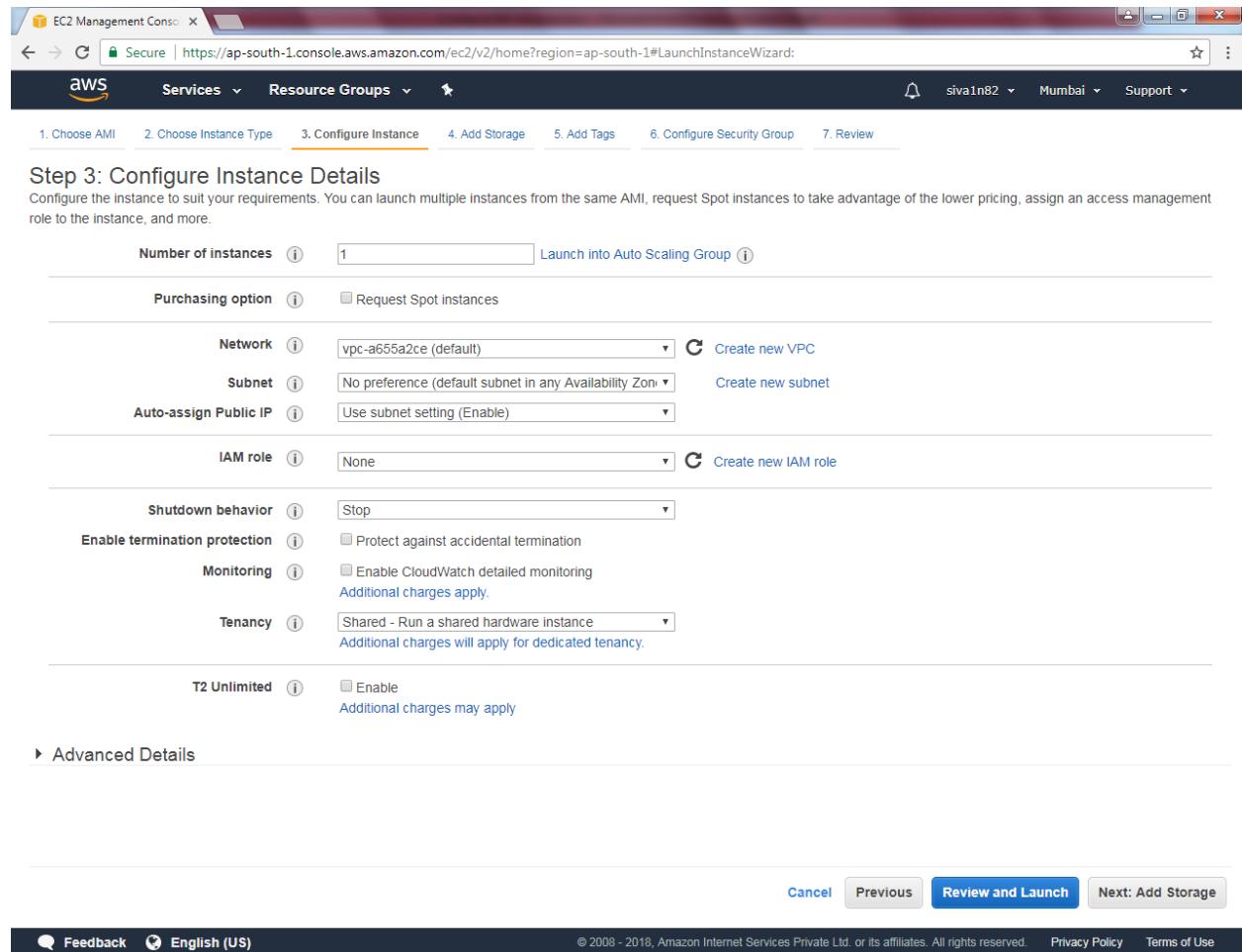
Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
General purpose	t2.micro <small>Free tier eligible</small>	1	1	EBS only	-	Low to Moderate	Yes
General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes
General purpose	t2.xlarge	4	16	EBS only	-	Moderate	Yes
General purpose	t2.2xlarge	8	32	EBS only	-	Moderate	Yes
General purpose	m4.large	2	8	EBS only	Yes	Moderate	Yes
General purpose	m4.xlarge	4	16	EBS only	Yes	High	Yes
General purpose	m4.2xlarge	8	32	EBS only	Yes	High	Yes
General purpose	m4.4xlarge	16	64	EBS only	Yes	High	Yes

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

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Click “Next”.

Leave default settings and click “Next”.

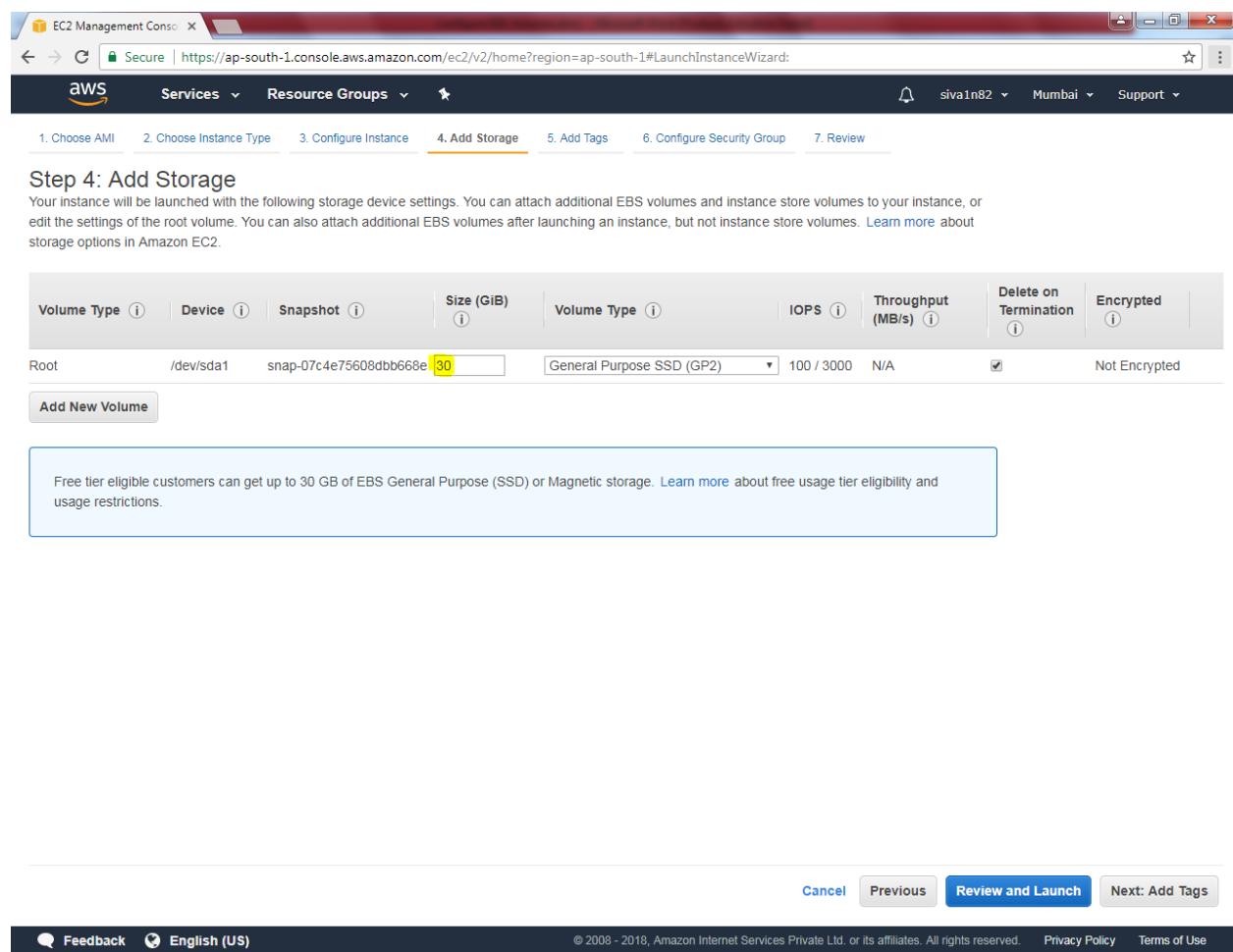


The screenshot shows the AWS EC2 Management Console Launch Instance Wizard, Step 3: Configure Instance Details. The page displays several configuration fields:

- Number of instances:** 1 (Launch into Auto Scaling Group)
- Purchasing option:** Request Spot instances
- Network:** vpc-a655a2ce (default) (Create new VPC)
- Subnet:** No preference (default subnet in any Availability Zone) (Create new subnet)
- Auto-assign Public IP:** Use subnet setting (Enable)
- IAM role:** None (Create new IAM role)
- Shutdown behavior:** Stop
- Enable termination protection:** Protect against accidental termination
- Monitoring:** Enable CloudWatch detailed monitoring (Additional charges apply)
- Tenancy:** Shared - Run a shared hardware instance (Additional charges will apply for dedicated tenancy)
- T2 Unlimited:** Enable (Additional charges may apply)

At the bottom, there are navigation buttons: Cancel, Previous, **Review and Launch**, and Next: Add Storage.

Leave default settings and click “Next”.



The screenshot shows the AWS EC2 Management Console interface for launching an instance. The top navigation bar includes the AWS logo, Services dropdown, Resource Groups dropdown, and user information (siva1n82, Mumbai, Support). Below the navigation is a breadcrumb trail: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage (which is highlighted), 5. Add Tags, 6. Configure Security Group, and 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.

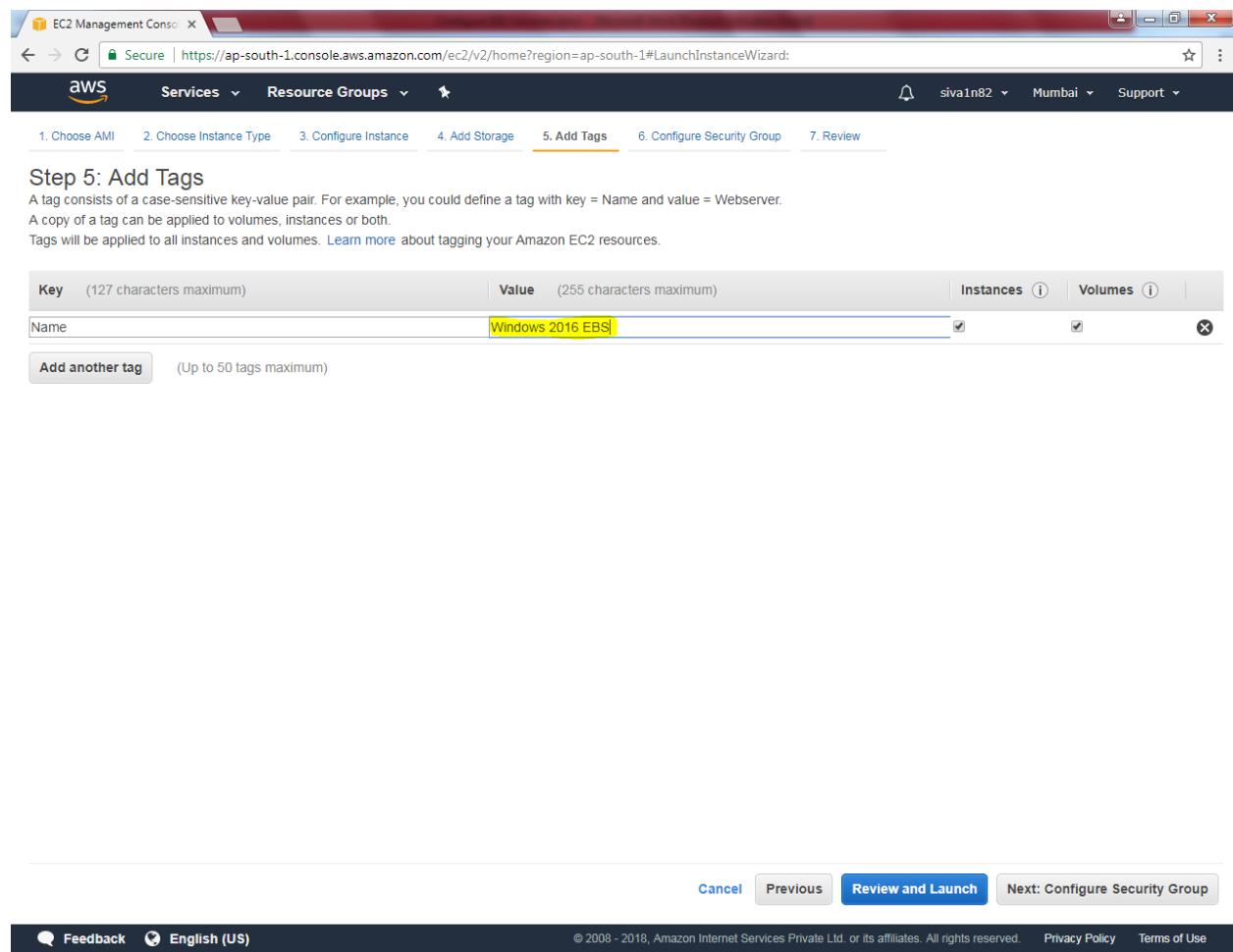
Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
Root	/dev/sda1	snap-07c4e75608dbb668e	30	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

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.

At the bottom of the page are buttons for Cancel, Previous, **Review and Launch** (which is highlighted in blue), and Next: Add Tags.

Key as “Name” and Value as “Windows 2016 EBS”.



EC2 Management Console x

Secure | https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard:

AWS Services Resource Groups

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

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	(127 characters maximum)	Value	(255 characters maximum)	Instances	Volumes
Name		Windows 2016 EBS		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

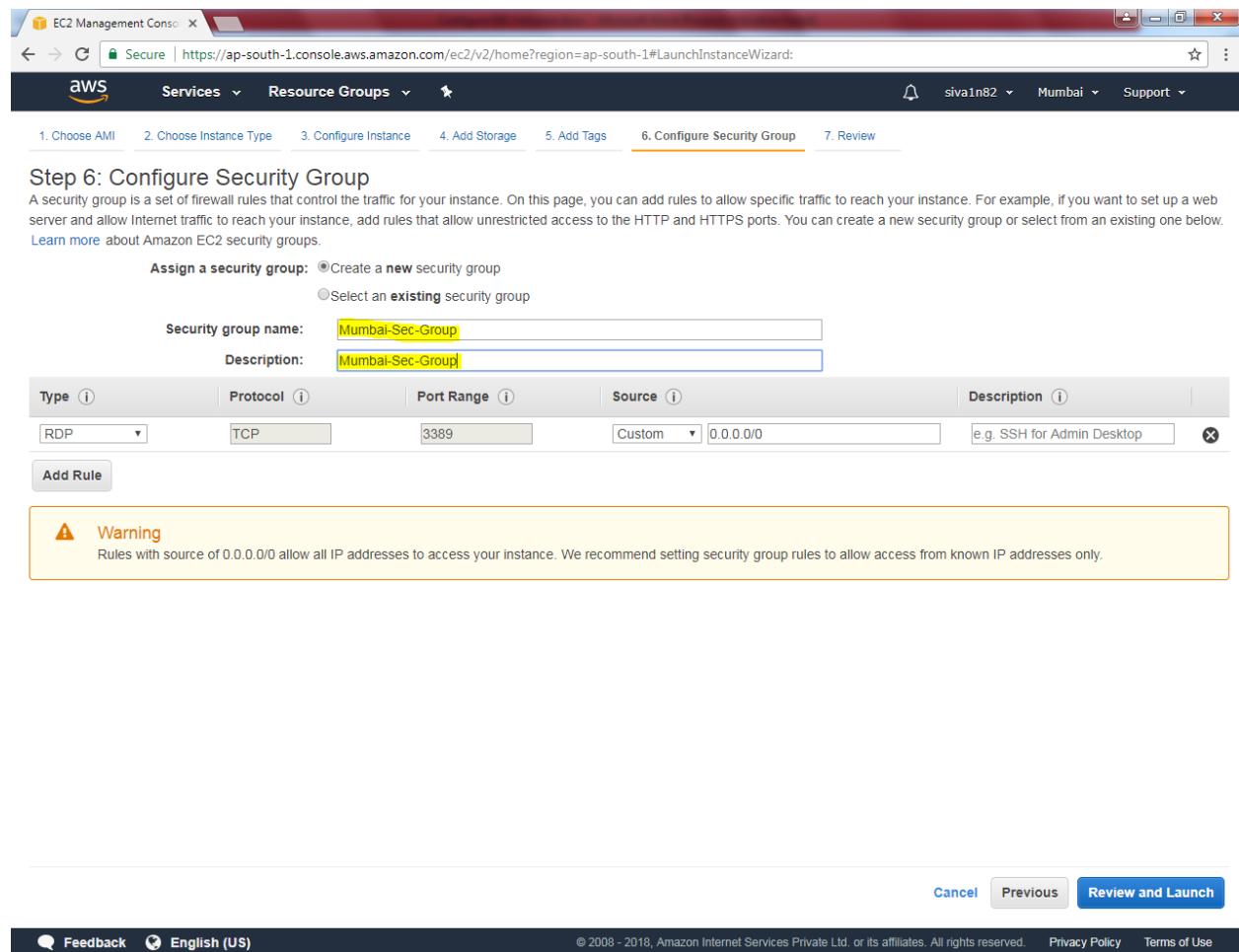
Add another tag (Up to 50 tags maximum)

Cancel Previous **Review and Launch** Next: Configure Security Group

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Click “Next”.

Create a new security called “Mumbai Sec Group”.



EC2 Management Console x

Secure | https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard:

aws Services Resource Groups sivaIn82 Mumbai Support

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
RDP	TCP	3389	Custom	0.0.0.0/0 e.g. SSH for Admin Desktop

Add Rule

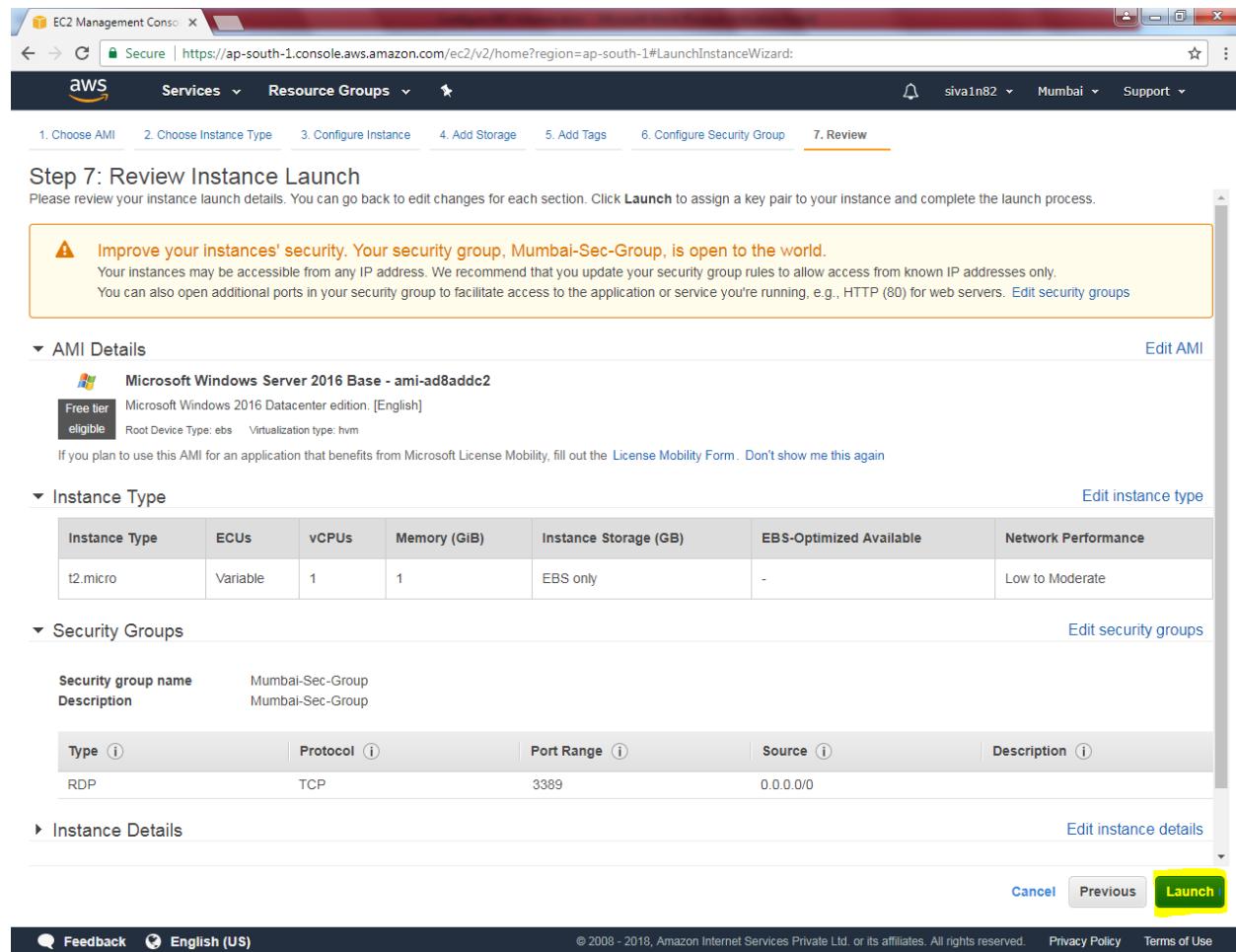
Warning
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

Cancel **Previous** **Review and Launch**

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Click “Review and Launch”.

Leave default settings and click “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.

AMI Details

Microsoft Windows Server 2016 Base - ami-ad8addc2

Free tier eligible Microsoft Windows 2016 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

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

Security Groups

Mumbai-Sec-Group

Type	Protocol	Port Range	Source	Description
RDP	TCP	3389	0.0.0.0/0	

Instance Details

Launch

If you have existing key choose an existing key pair and select the Key pair. Other wise you need to create an new key pair. Click “ I acknowledge”.

Select an existing key pair or create a new key pair X

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](#).

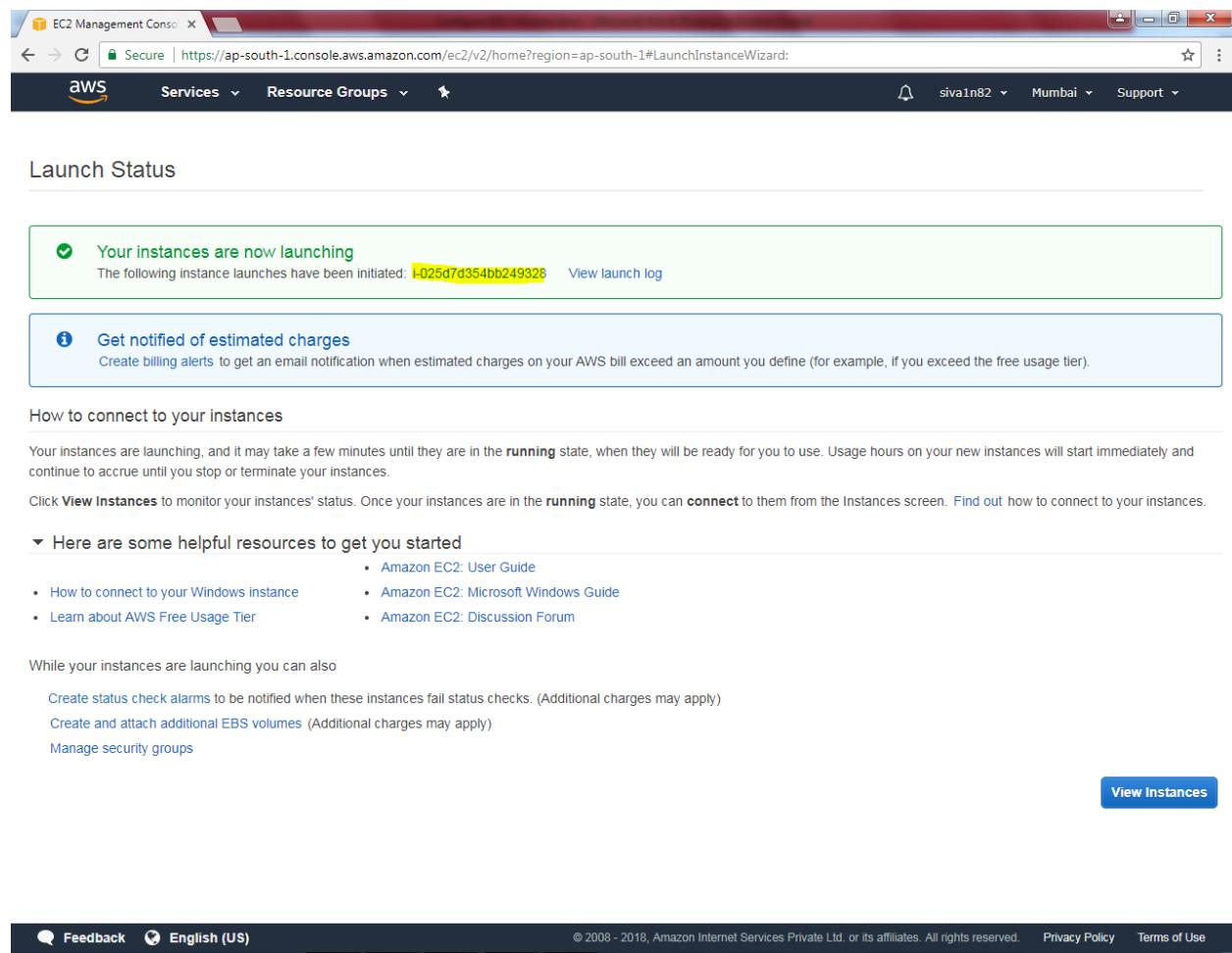
Choose an existing key pair
Select a key pair
Eveningaws

I acknowledge that I have access to the selected private key file (Eveningaws.pem), and that without this file, I won't be able to log into my instance.

[Cancel](#) Launch Instances

Click “launch Instance”.

Click the highlighted area to view the instance.



The screenshot shows the AWS EC2 Management Console with the URL <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard>. The browser title bar says "EC2 Management Console". The AWS logo is in the top left, and the top navigation bar includes "Services", "Resource Groups", a bell icon, "siva1n82", "Mumbai", and "Support".

Launch Status

Your instances are now launching
The following instance launches have been initiated: **I-025d7d354bb249328** [View launch log](#)

Get notified of estimated charges
[Create billing alerts](#) to get an email notification when estimated charges on your AWS bill exceed an amount you define (for example, if you exceed the free usage tier).

How to connect to your instances

Your instances are launching, and it may take a few minutes until they are in the **running** state, when they will be ready for you to use. Usage hours on your new instances will start immediately and continue to accrue until you stop or terminate your instances.

Click [View Instances](#) to monitor your instances' status. Once your instances are in the **running** state, you can **connect** to them from the Instances screen. [Find out](#) how to connect to your instances.

▼ Here are some helpful resources to get you started

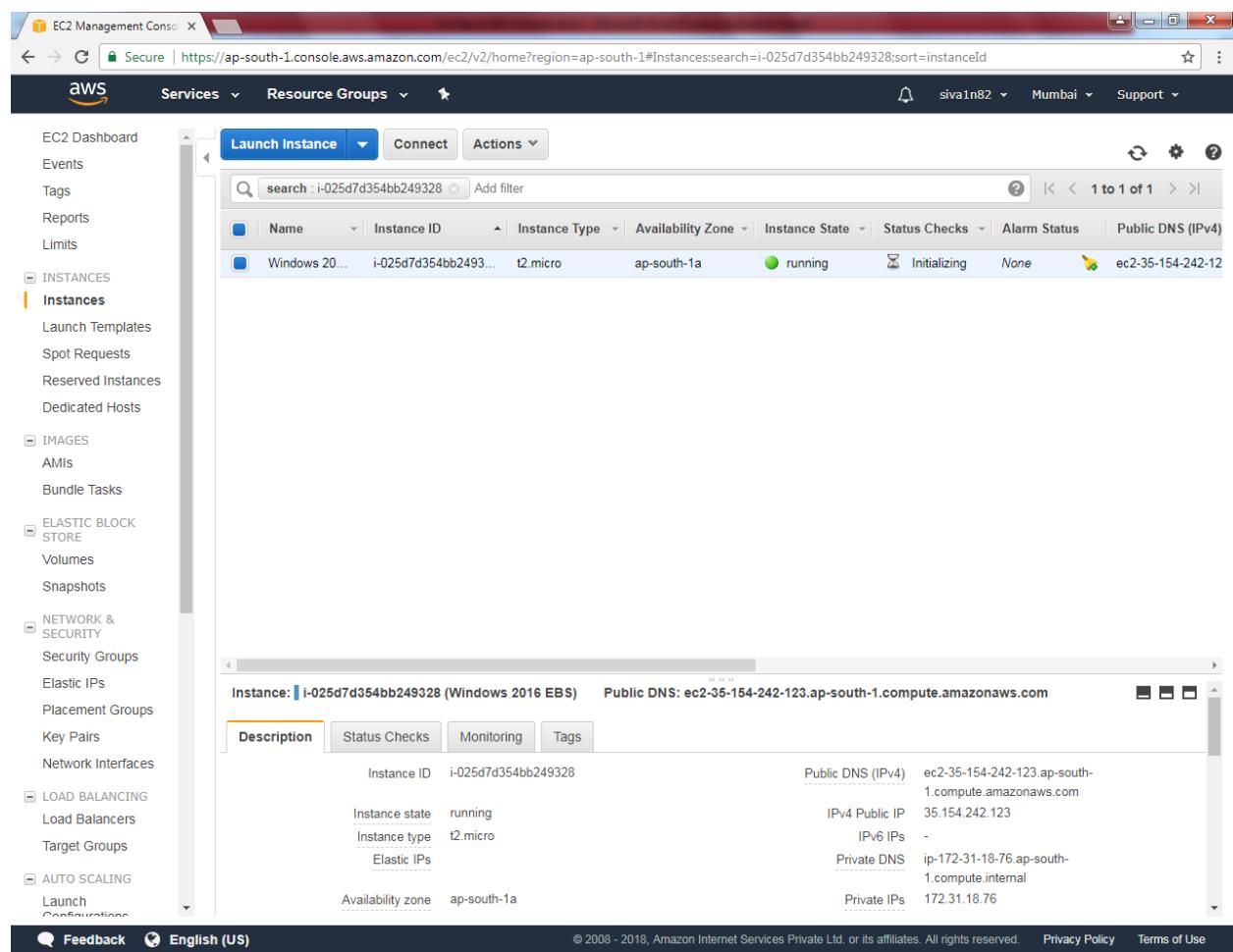
- [Amazon EC2: User Guide](#)
- [How to connect to your Windows instance](#)
- [Learn about AWS Free Usage Tier](#)
- [Amazon EC2: Microsoft Windows Guide](#)
- [Amazon EC2: Discussion Forum](#)

While your instances are launching you can also

- [Create status check alarms](#) to be notified when these instances fail status checks. (Additional charges may apply)
- [Create and attach additional EBS volumes](#) (Additional charges may apply)
- [Manage security groups](#)

[View Instances](#)

Server is getting ready, wait up to 2/2 status checks.

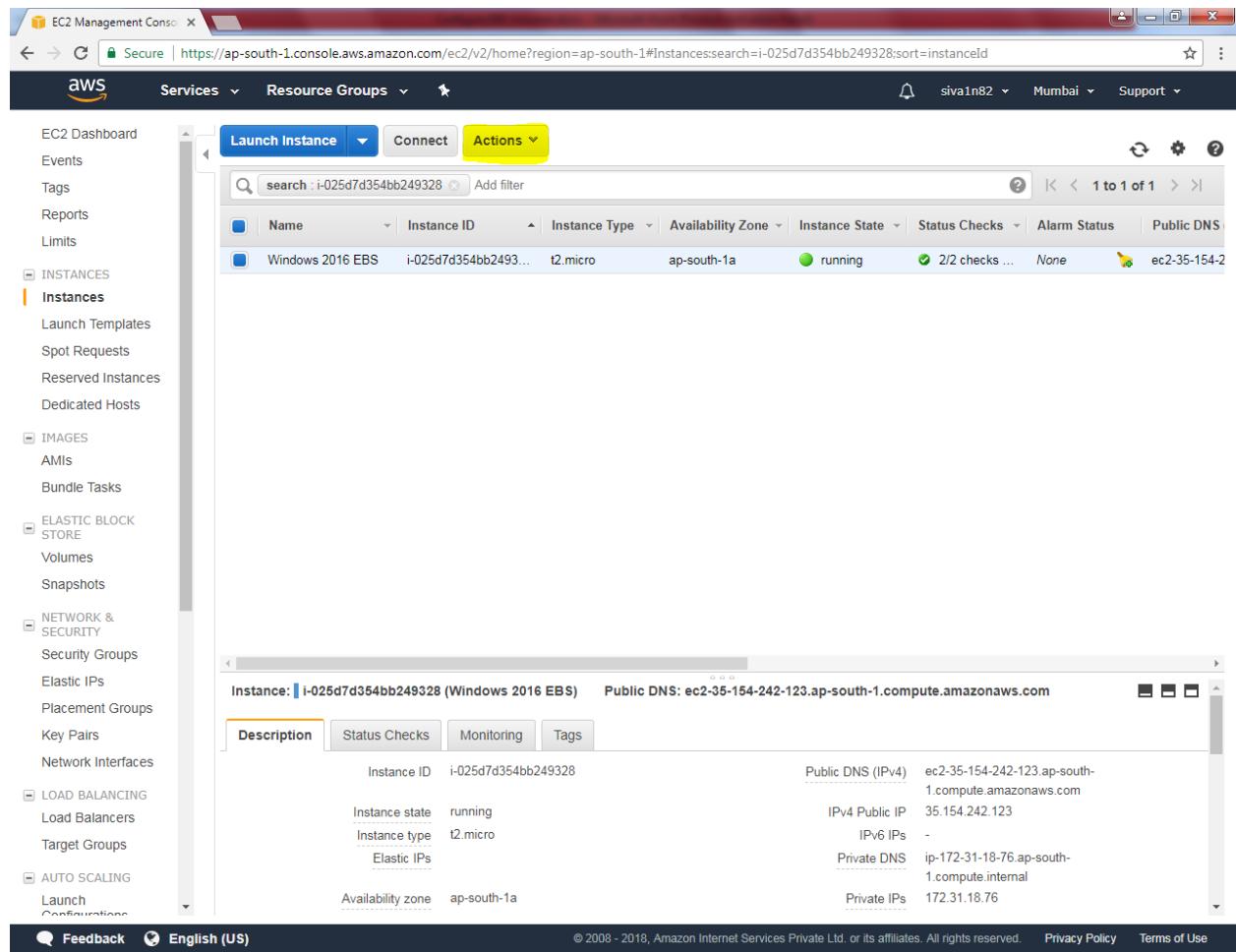


The screenshot shows the AWS EC2 Management Console interface. The left sidebar navigation includes: EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES (selected), Instances, Launch Templates, Spot Requests, Reserved Instances, Dedicated Hosts, IMAGES (AMIs, Bundle Tasks), ELASTIC BLOCK STORE (Volumes, Snapshots), NETWORK & SECURITY (Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces), LOAD BALANCING (Load Balancers, Target Groups), and AUTO SCALING (Launch Configurations). The main content area displays a table of instances. A single instance is selected, showing its details in a modal window. The instance information is as follows:

Description		Status Checks		Monitoring		Tags	
Instance ID	i-025d7d354bb249328	Public DNS (IPv4)	ec2-35-154-242-123.ap-south-1.compute.amazonaws.com				
Instance state	running	IPv4 Public IP	35.154.242.123				
Instance type	t2.micro	IPv6 IPs	-				
Elastic IPs		Private DNS	ip-172-31-18-76.ap-south-1.compute.internal				
Availability zone	ap-south-1a	Private IPs	172.31.18.76				

At the bottom of the modal, it says "Instance: i-025d7d354bb249328 (Windows 2016 EBS) Public DNS: ec2-35-154-242-123.ap-south-1.compute.amazonaws.com". The status bar at the bottom of the browser window shows "© 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use".

Click “Actions”



The screenshot shows the AWS EC2 Management Console interface. The top navigation bar includes the AWS logo, Services dropdown, Resource Groups dropdown, a bell icon, user information (siva1n82, Mumbai), and Support dropdown. The main menu on the left has categories like EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES (with Instances selected), IMAGES, AMIs, Bundle Tasks, ELASTIC BLOCK STORE, Volumes, Snapshots, NETWORK & SECURITY, Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces, LOAD BALANCING, Load Balancers, Target Groups, and AUTO SCALING, Launch Configurations. The central pane displays a table of instances. The first instance listed is a Windows 2016 EBS instance with the following details:

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS
Windows 2016 EBS	i-025d7d354bb249328	t2.micro	ap-south-1a	running	2/2 checks ...	None	ec2-35-154-2

Below the table, a detailed view for the selected instance (i-025d7d354bb249328) is shown. The instance is a Windows 2016 EBS instance with the following configuration:

Description	Value	Description	Value
Instance ID	i-025d7d354bb249328	Public DNS (IPv4)	ec2-35-154-242-123.ap-south-1.compute.amazonaws.com
Instance state	running	IPv4 Public IP	35.154.242.123
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	ip-172-31-18-76.ap-south-1.compute.internal
Availability zone	ap-south-1a	Private IPs	172.31.18.76

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Click “Get Password”.

Connect To Your Instance

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 ec2-35-154-242-123.ap-south-1.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.
If you need any assistance connecting to your instance, please see our [connection documentation](#).

[Close](#)

Click "Choose File".

Connect To Your Instance > Get Password X

The following Key Pair was associated with this instance when it was created.

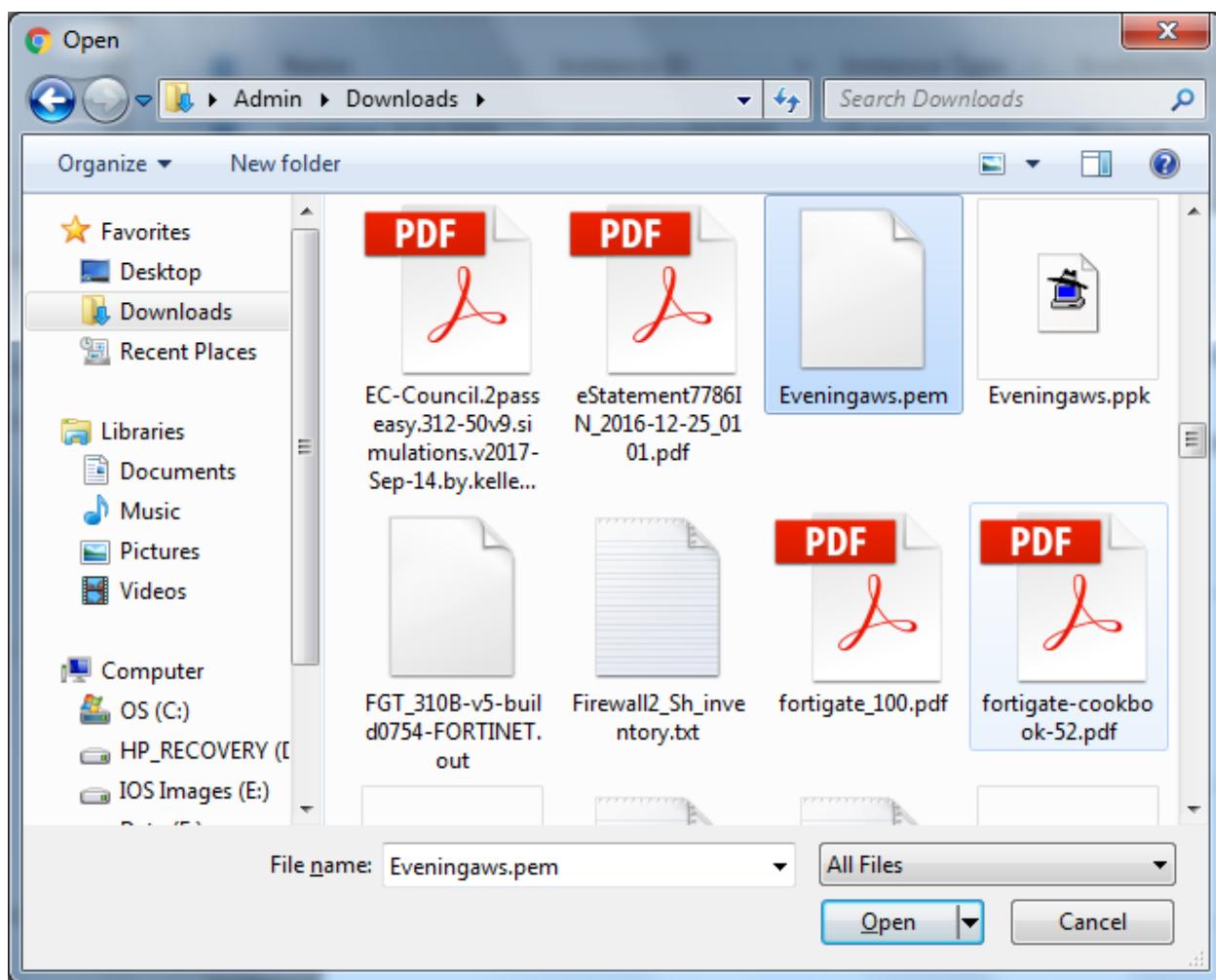
Key Name Eveningaws.pem

In order to retrieve your password you will need to specify the path of this Key Pair on your local machine:

Key Pair Path No file chosen

Or you can copy and paste the contents of the Key Pair below:

Locate the “Eveningaws.pem” file.



Click “Open”.

Click "Decrypt Password".

Connect To Your Instance > Get Password X

The following Key Pair was associated with this instance when it was created.

Key Name Eveningaws.pem

In order to retrieve your password you will need to specify the path of this Key Pair on your local machine:

Key Pair Path Eveningaws.pem

Or you can copy and paste the contents of the Key Pair below:

```
-----BEGIN RSA PRIVATE KEY-----
MIIEowlBAAKCAQEAjg+h2SSjkteK5CxwM3CniHtf/5xMKVBKXNmifwc3v70wZ1Pl
eR9VhcKeq6okzzQQ9u+QH3QF5RaxXNc2ELM+WQWdc2cHXH081YepMOU+HQUpOHv+ZO0
MZl54MmiXXGjsHHEuZw0vlZMJPz6Spw8svcxYVhK4SWxYosY3x9W+pXAKTefncS7PVzmE0
mancrERfXc4mmF9tCv5HI9suOjtlBpOaaRY4kBdtZnrodfggQ3khs4HIGmuScSTdQL7FiBbXh
l8N1embl93Arcm8YjMPA/xQZYHgIJ
```

Decrypt Password

Back **Close**

You have got the password successfully.

Connect To Your Instance

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 ec2-35-154-242-123.ap-south-1.compute.amazonaws.com
User name Administrator
Password 6D-vQ%EB\$alZ(2x@x*Bir=vtSppeIWZ8

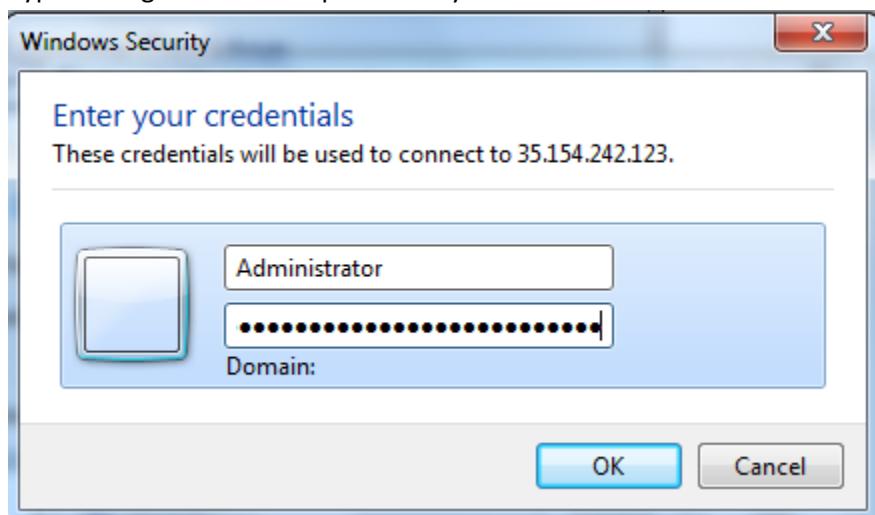
If you've joined your instance to a directory, you can use your directory credentials to connect to your instance.
If you need any assistance connecting to your instance, please see our [connection documentation](#).

[Close](#)

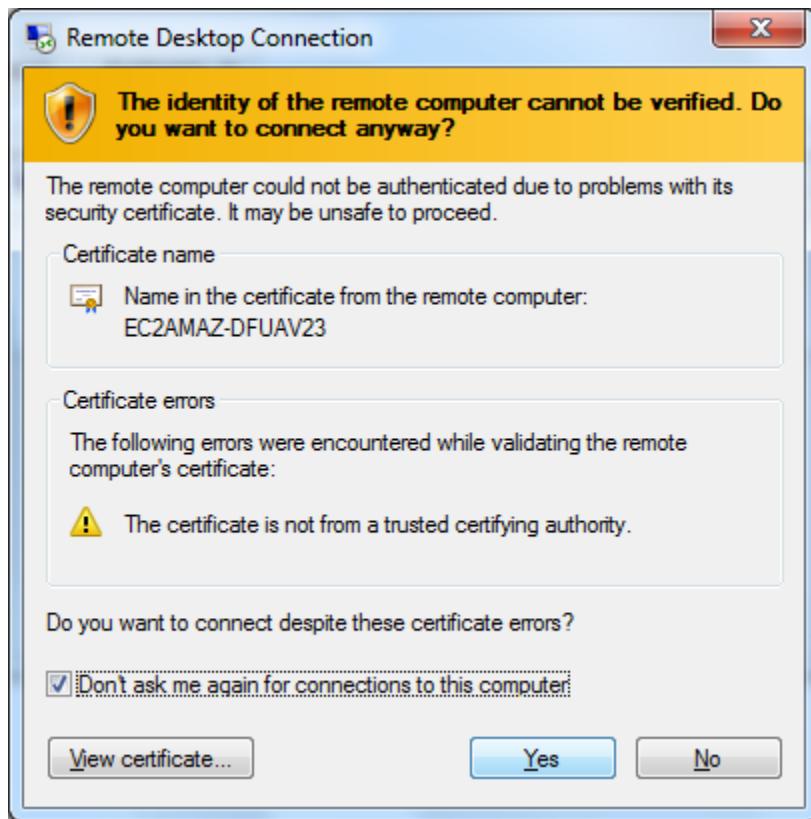
Type mstsc in run box, then type the Ip address of the server.



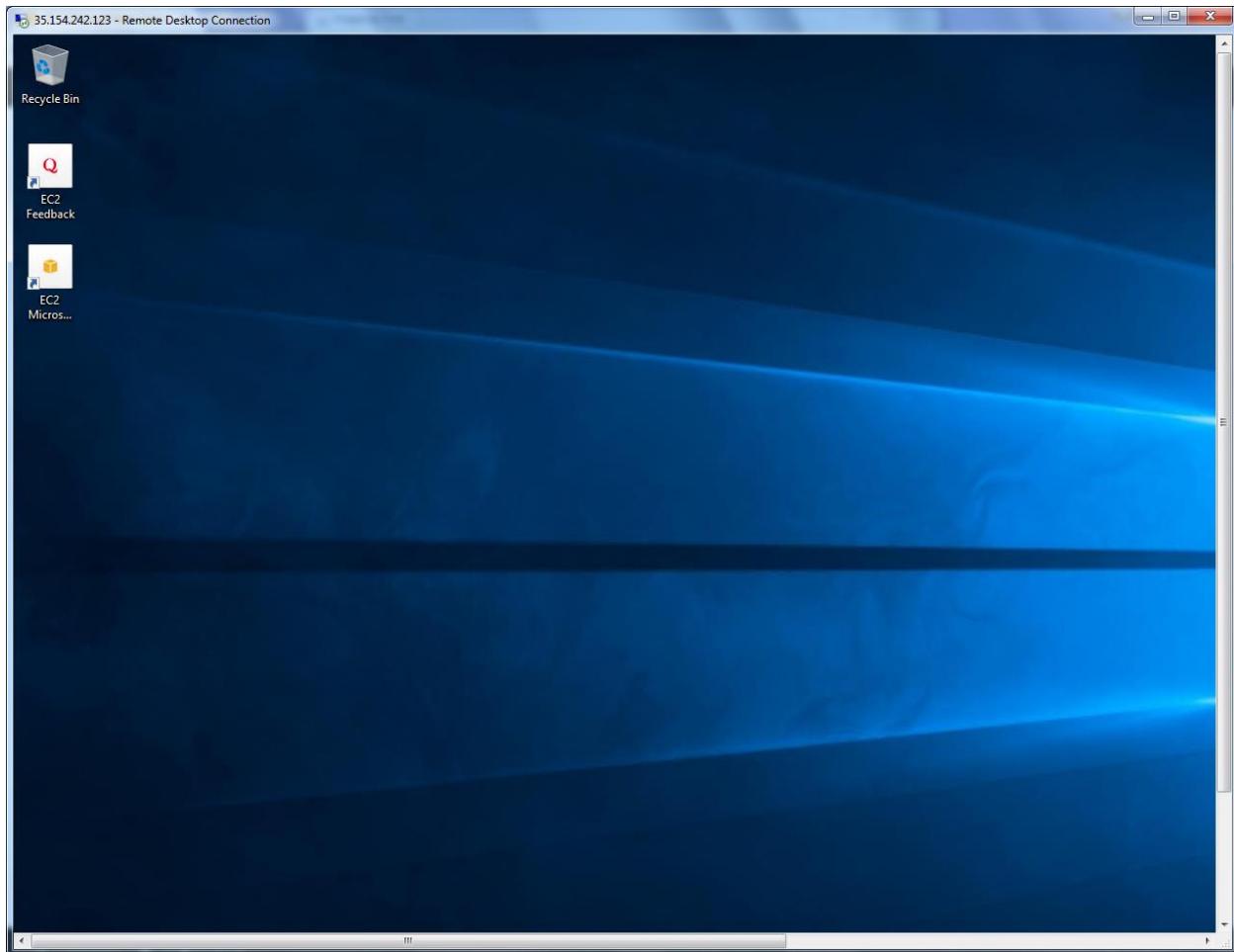
Type the login credentials provided by awS.



Click "Yes".

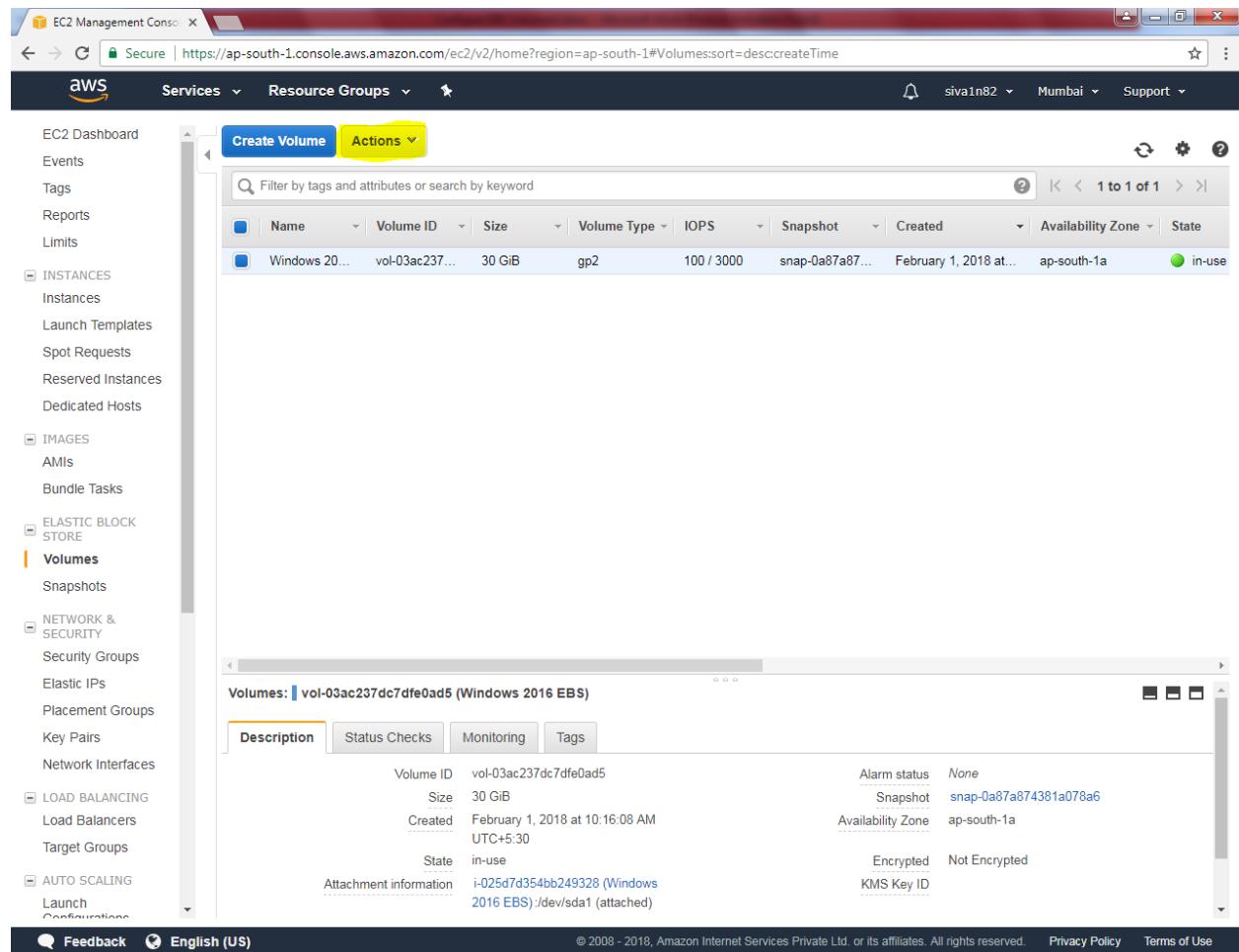


We have connected the server successfully.



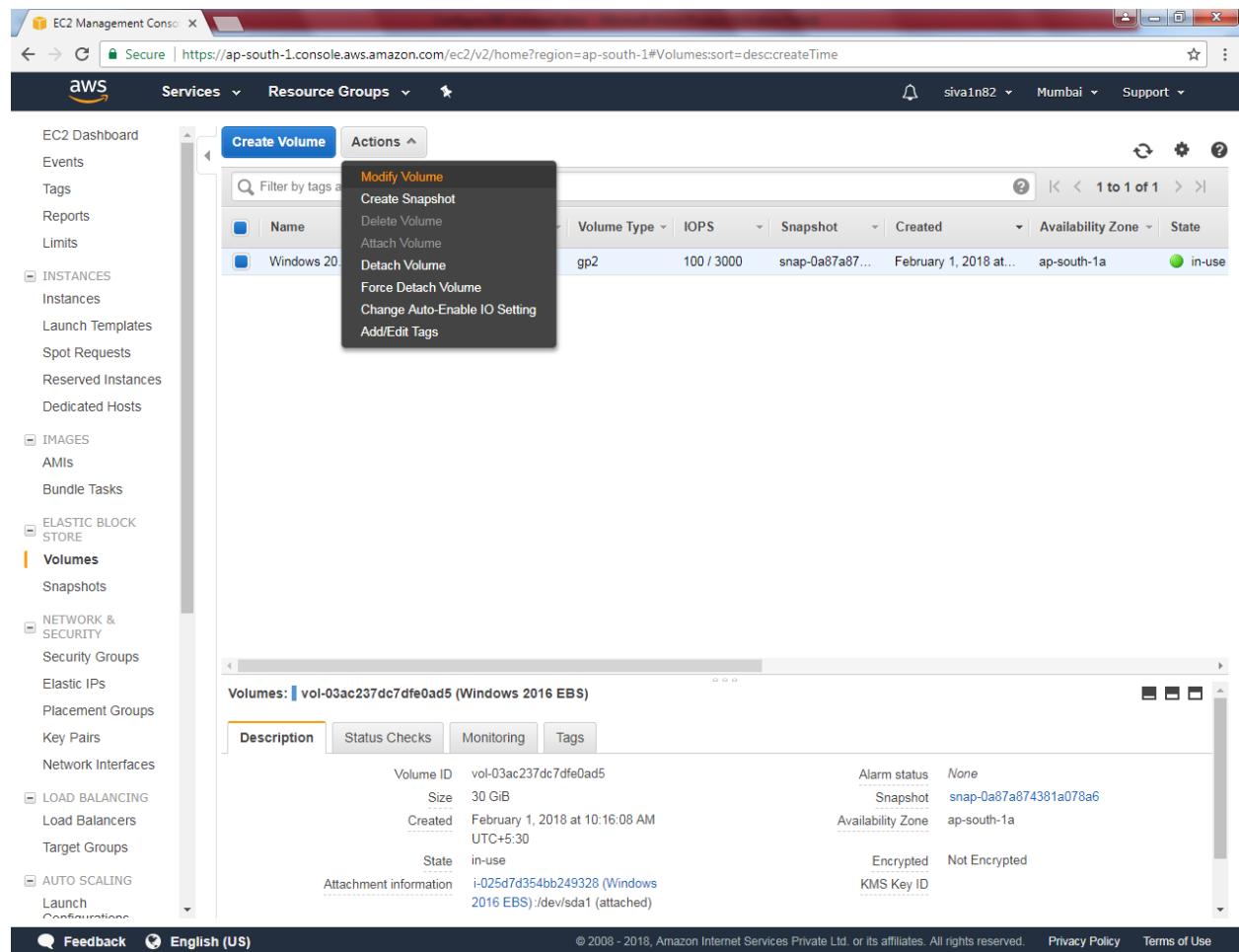
Now we need to modify the volume in AWS console.

Click "Volume".



Name	Volume ID	Size	Volume Type	IOPS	Snapshot	Created	Availability Zone	State
Windows 20...	vol-03ac237...	30 GiB	gp2	100 / 3000	snap-0a87a87...	February 1, 2018 at...	ap-south-1a	in-use

Click “Modify volume”.



The screenshot shows the AWS EC2 Management Console interface. On the left, there is a navigation sidebar with various service links like EC2 Dashboard, Instances, AMIs, and Volumes. The 'Volumes' link under 'ELASTIC BLOCK STORE' is currently selected and highlighted in orange. In the main content area, a table lists a single EBS volume named 'Windows 20'. A context menu is open over this volume, with 'Actions' expanded. The 'Modify Volume' option is highlighted in yellow. Other options in the menu include Create Snapshot, Delete Volume, Attach Volume, Detach Volume, Force Detach Volume, Change Auto-Enable IO Setting, and Add/Edit Tags. Below the table, there is a detailed view of the volume's properties, including Volume ID (vol-03ac237dc7dfe0ad5), Size (30 GiB), Created (February 1, 2018 at 10:16:08 AM UTC+5:30), State (in-use), and Attachment information (i-025d7d354bb249328 (Windows 2016 EBS) /dev/sda1 (attached)).

Type the size is 35GiB. (If you want to make it as 31GiB you can do the same).

Modify Volume X

Volume ID: vol-03ac237dc7dfe0ad5

Volume Type: General Purpose SSD (GP2) 35 i

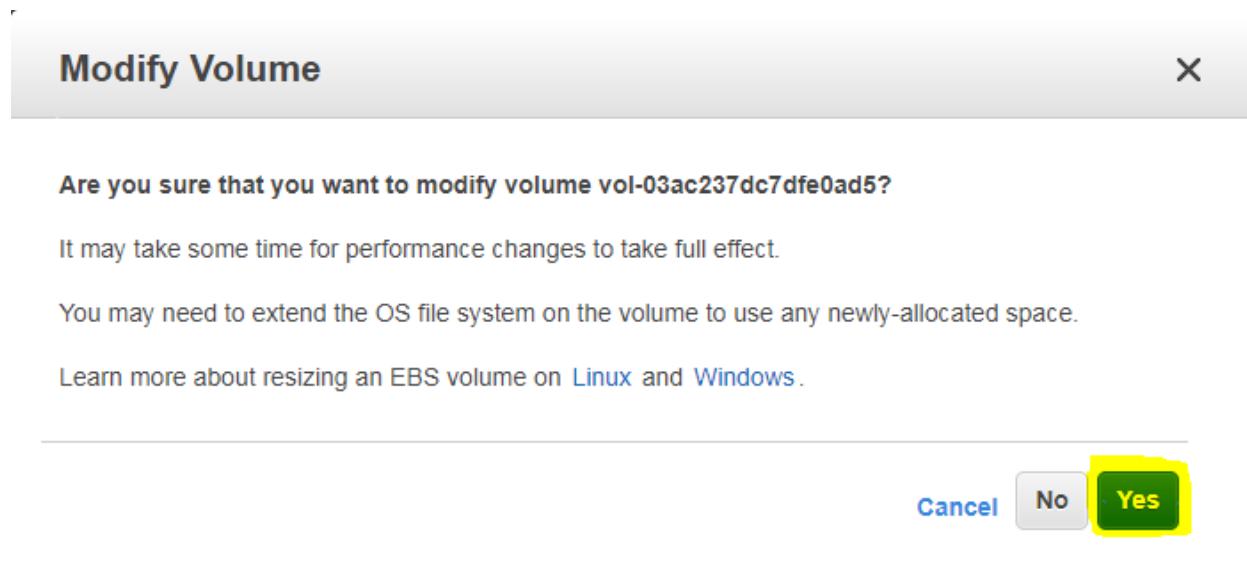
Size: 35 (Min: 1 GiB, Max: 16384 GiB) i

IOPS: 105 / 3000 (Baseline of 3 IOPS per GiB with a minimum of 100 IOPS, burstable to 3000 IOPS) i

Cancel Modify

Click "Modify".

Click "Yes".



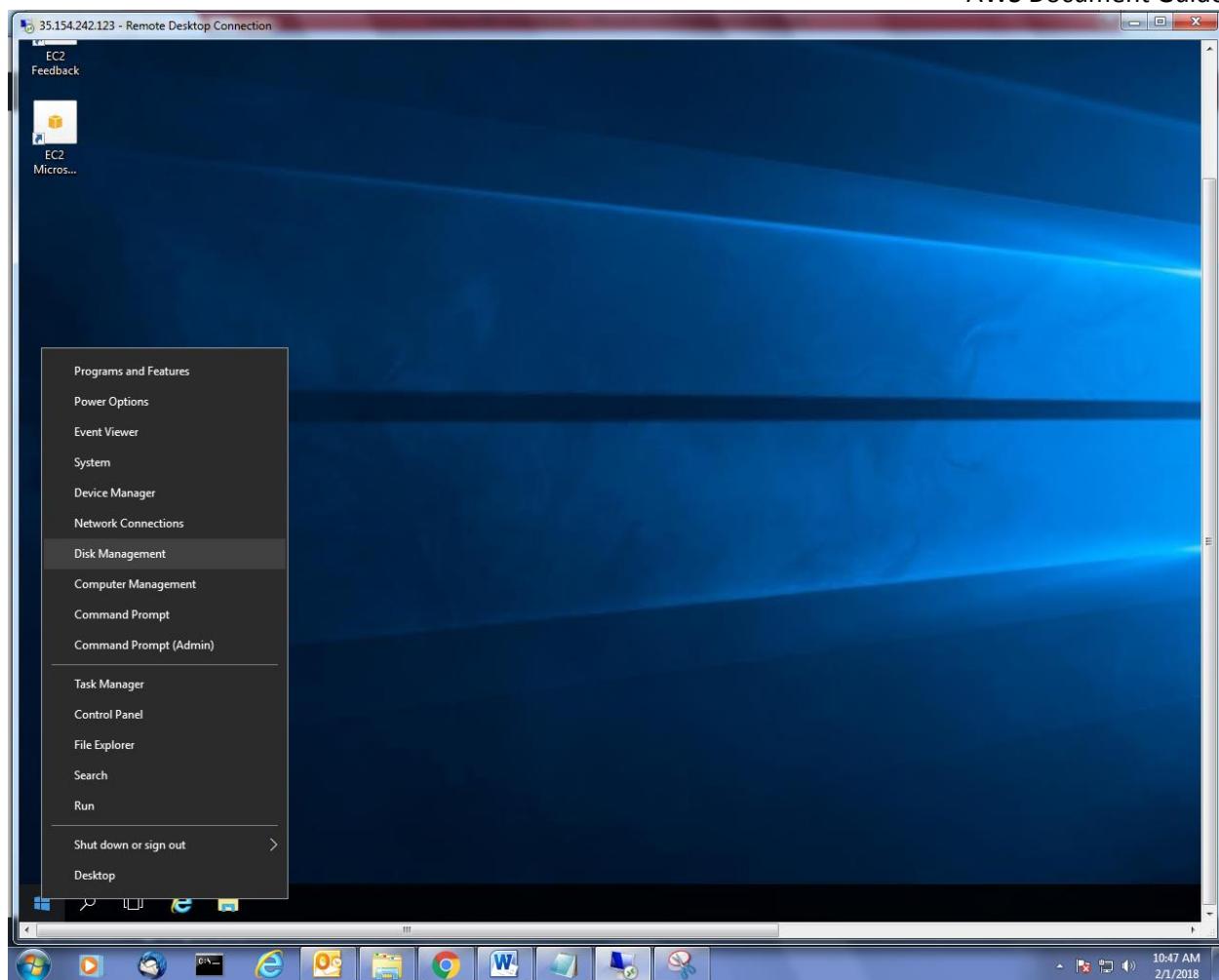
We have got information that Modify volume request succeeded.

Modify Volume

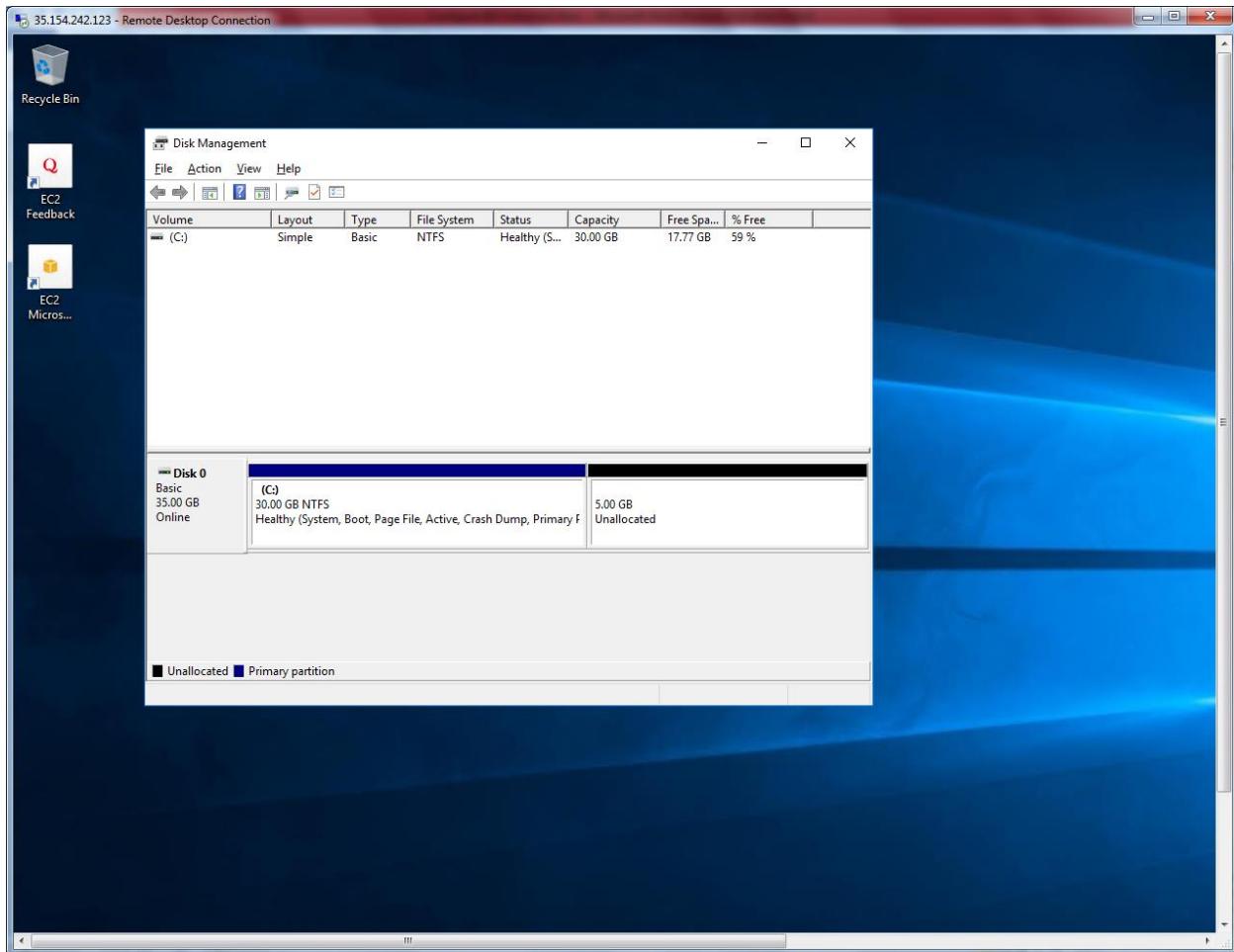
 **Modify Volume Request Succeeded**
Your volume is now being modified.

Close

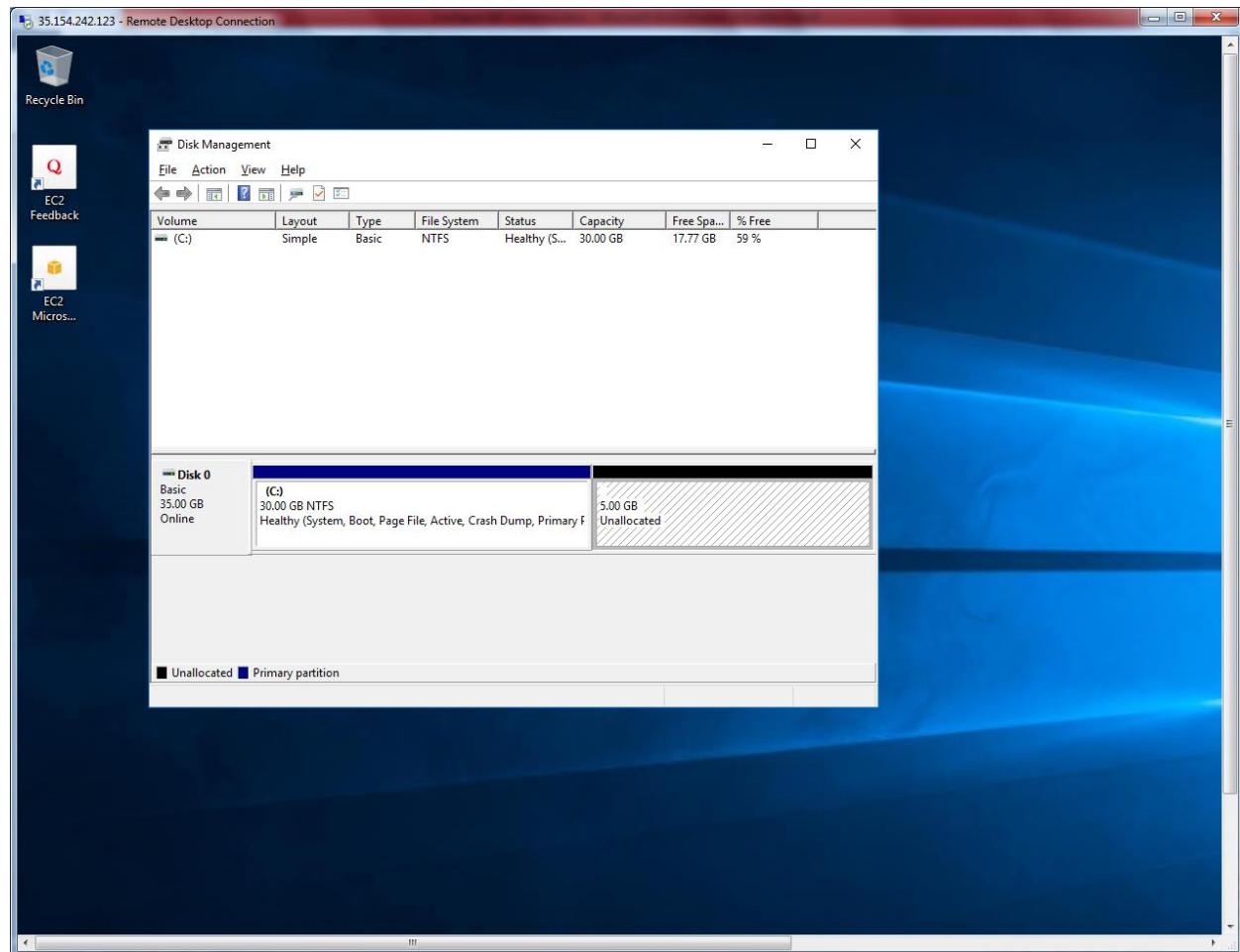
Right click start menu to get “Disk management”.



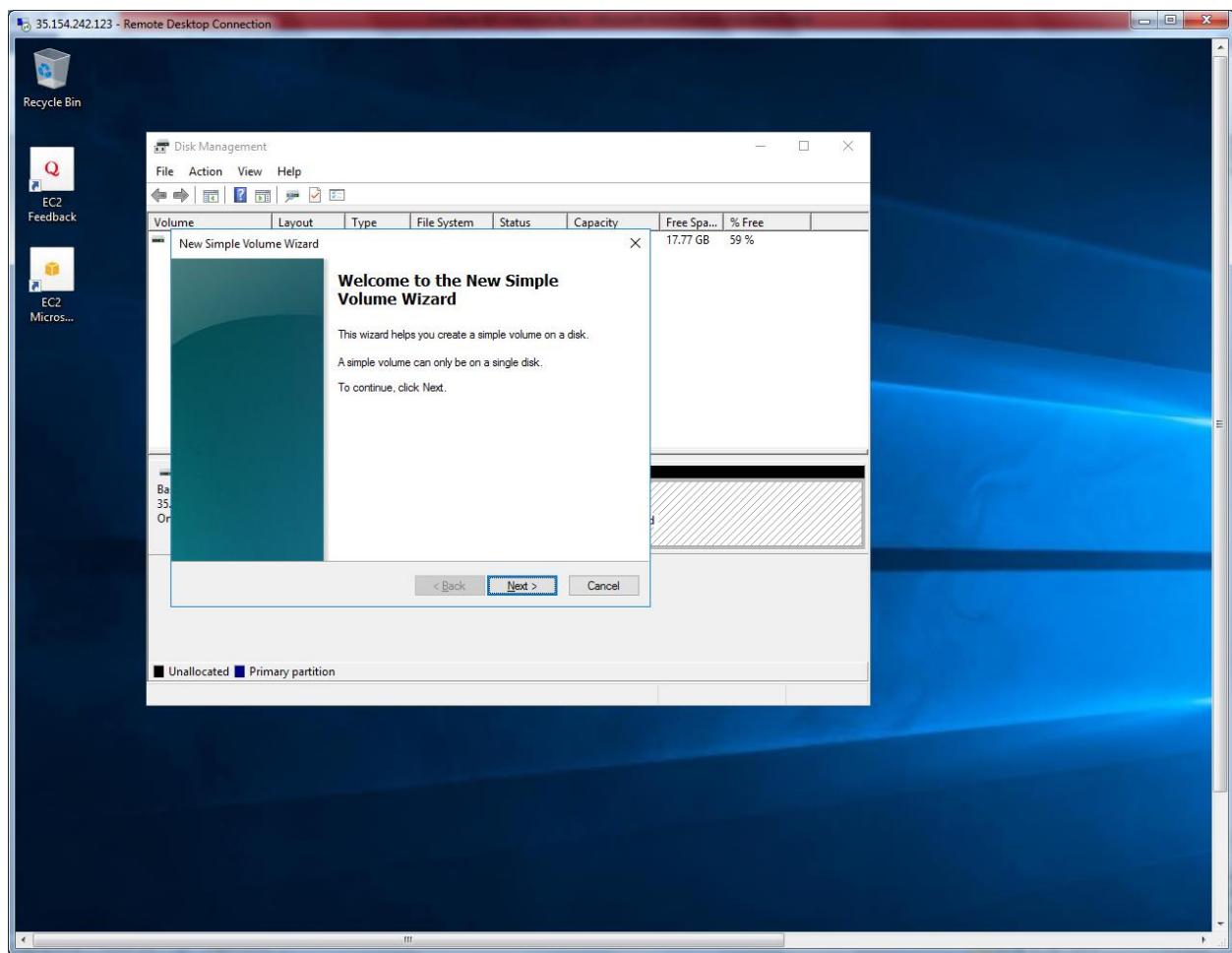
Open the disk management, modified partition will not shown by default. You need to press “F5”. Now you can able to see “5.0” GB in unallocated partition.



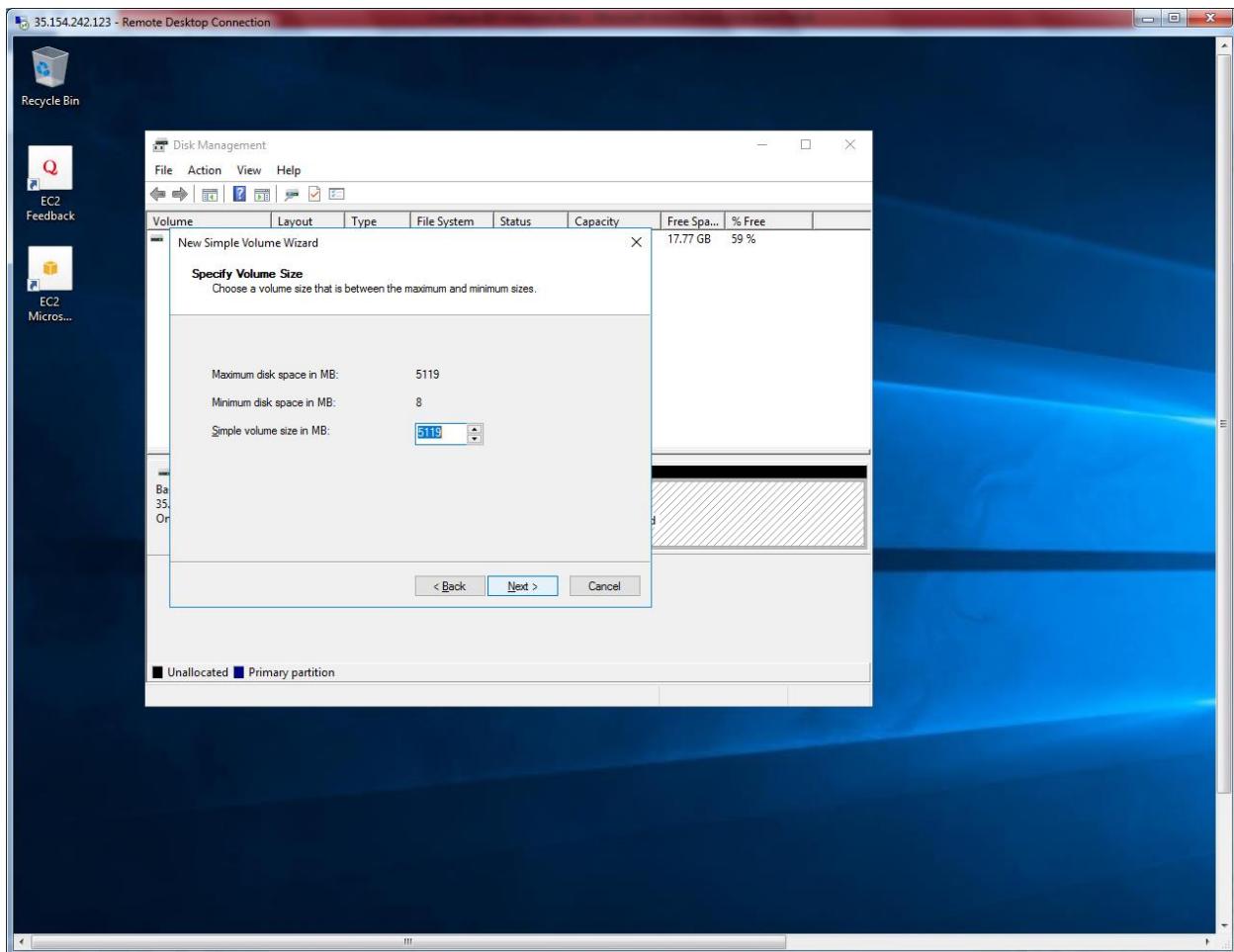
Select the unallocated partition and right click and then click “New Simple Volume”.



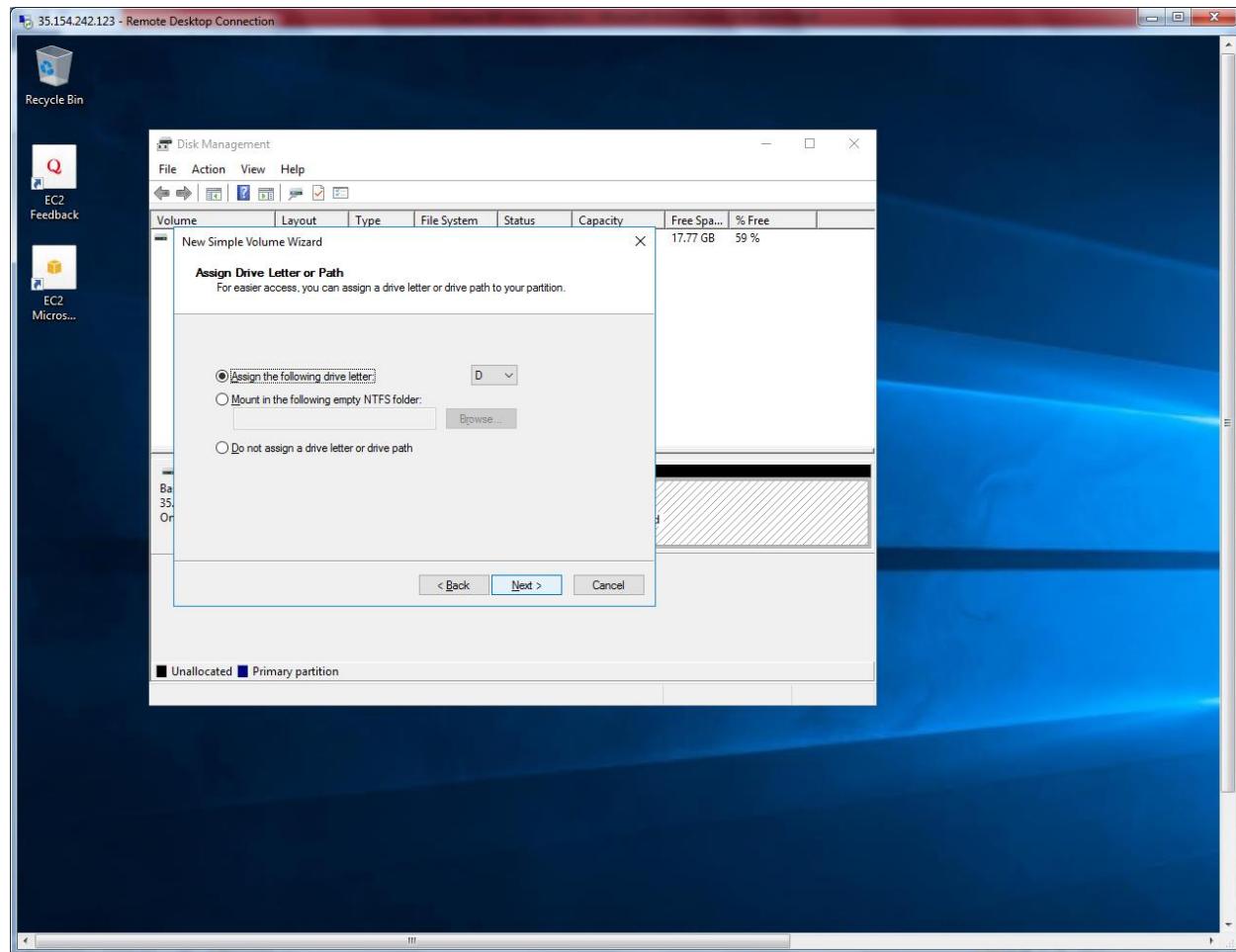
Click “Next”.



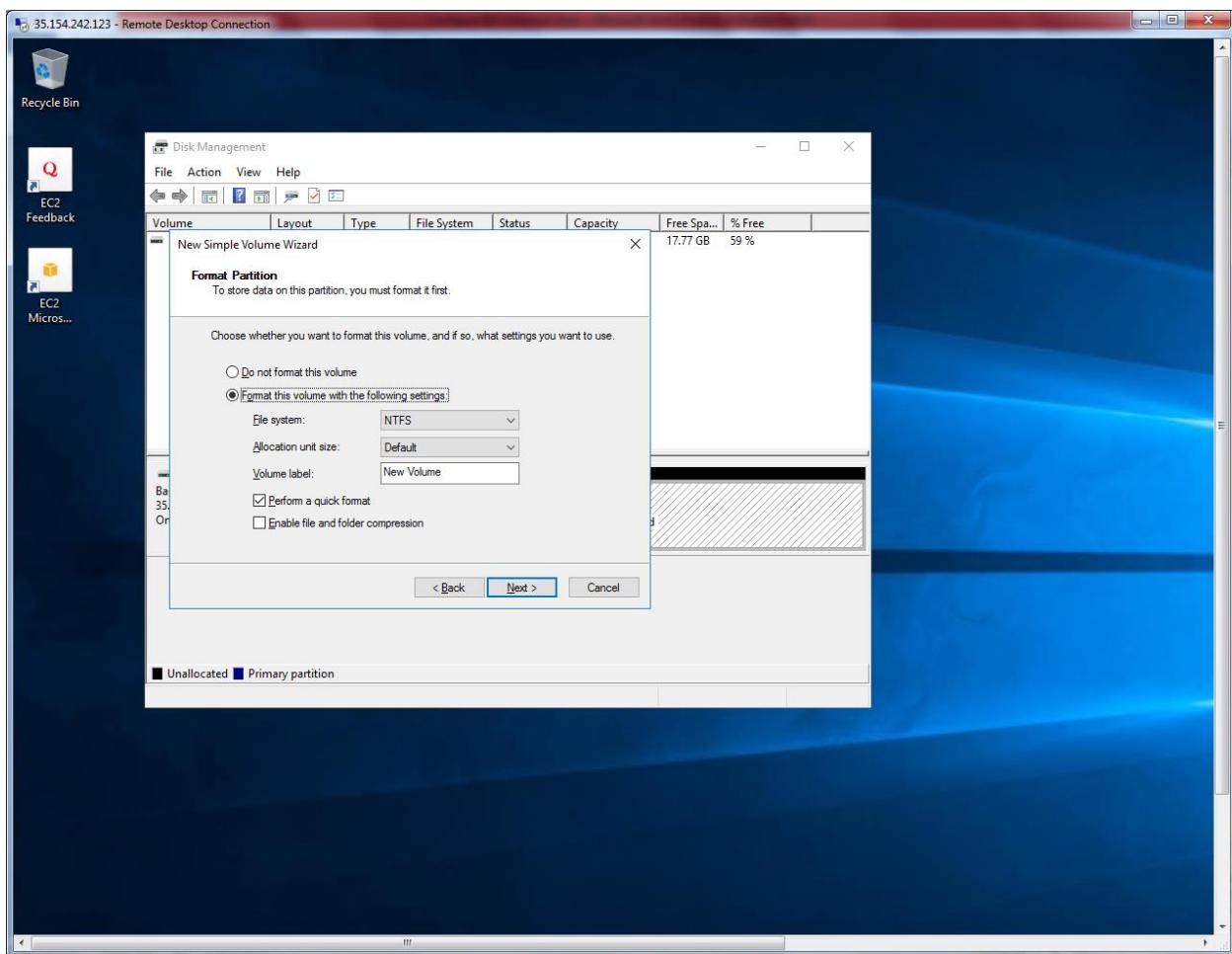
Click “Next”.

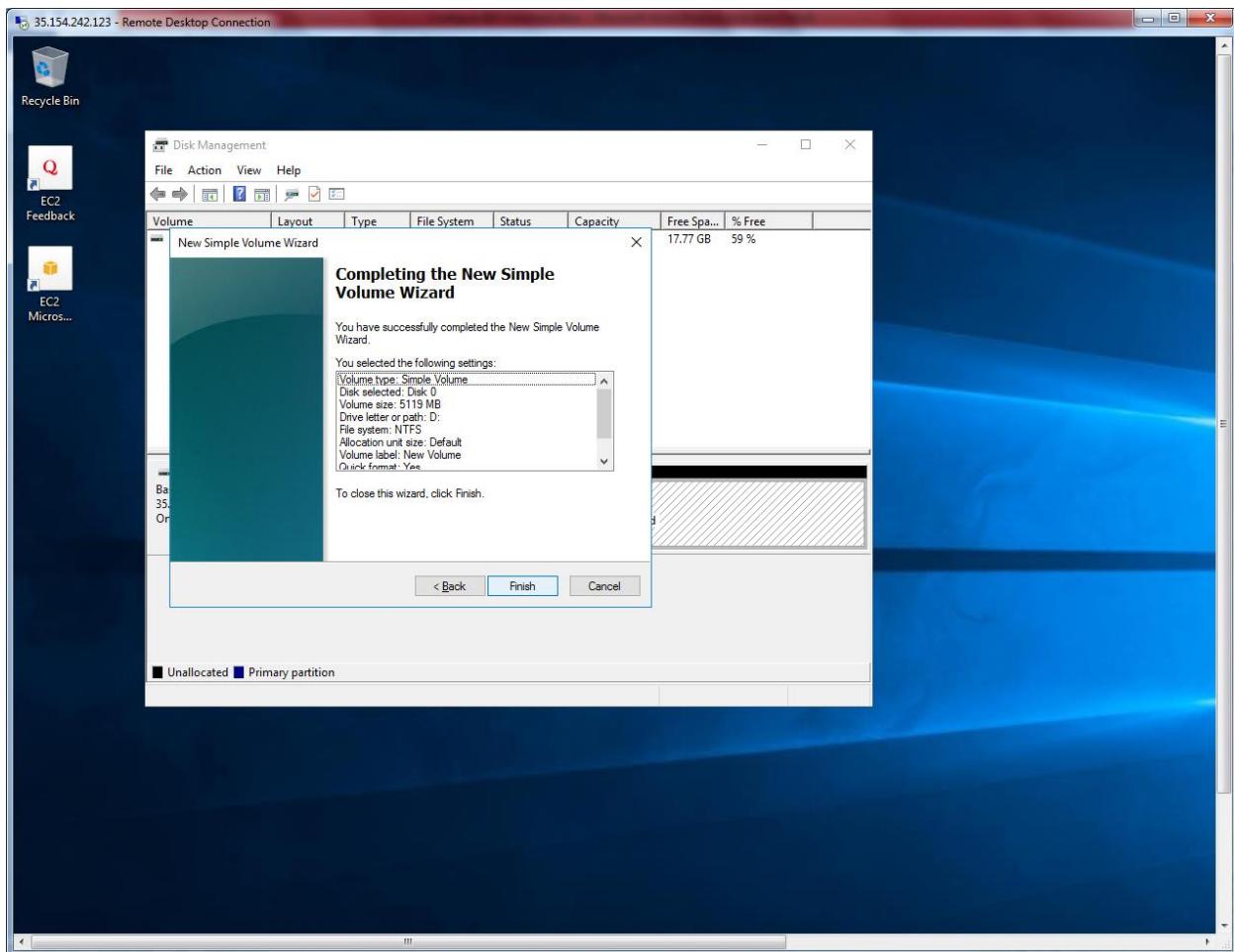


Click “Next”.



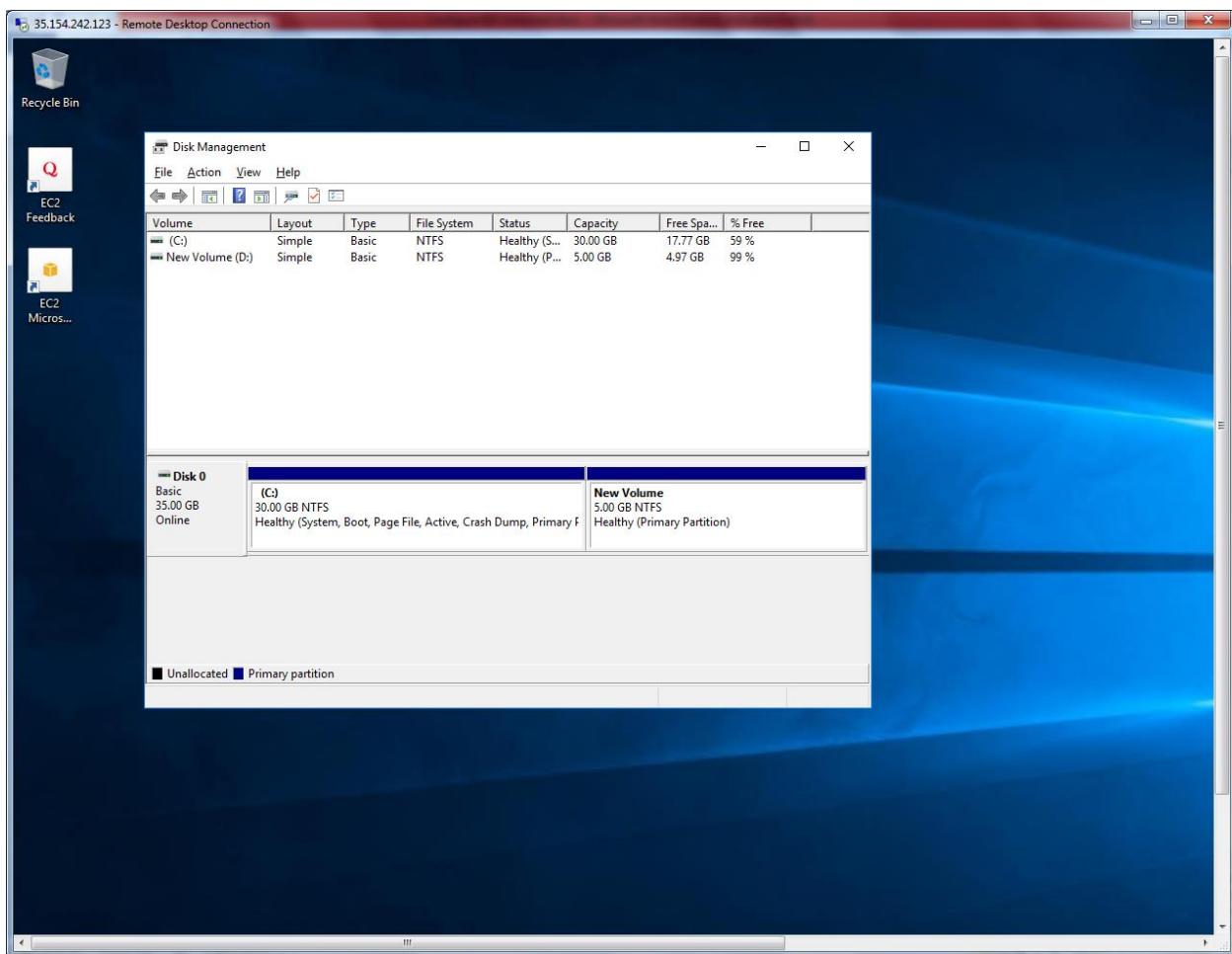
Click “Next”.



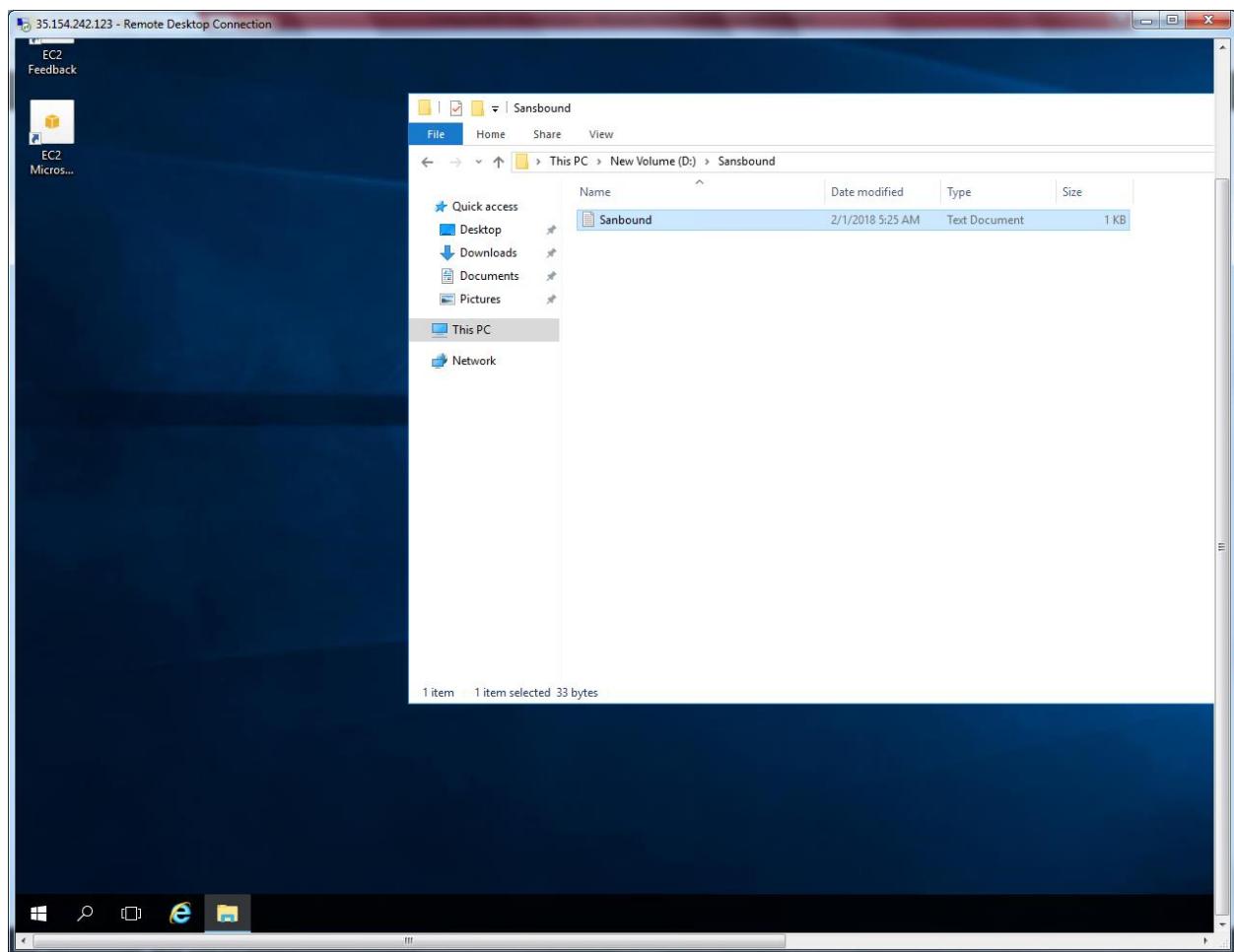


Click "Finish".

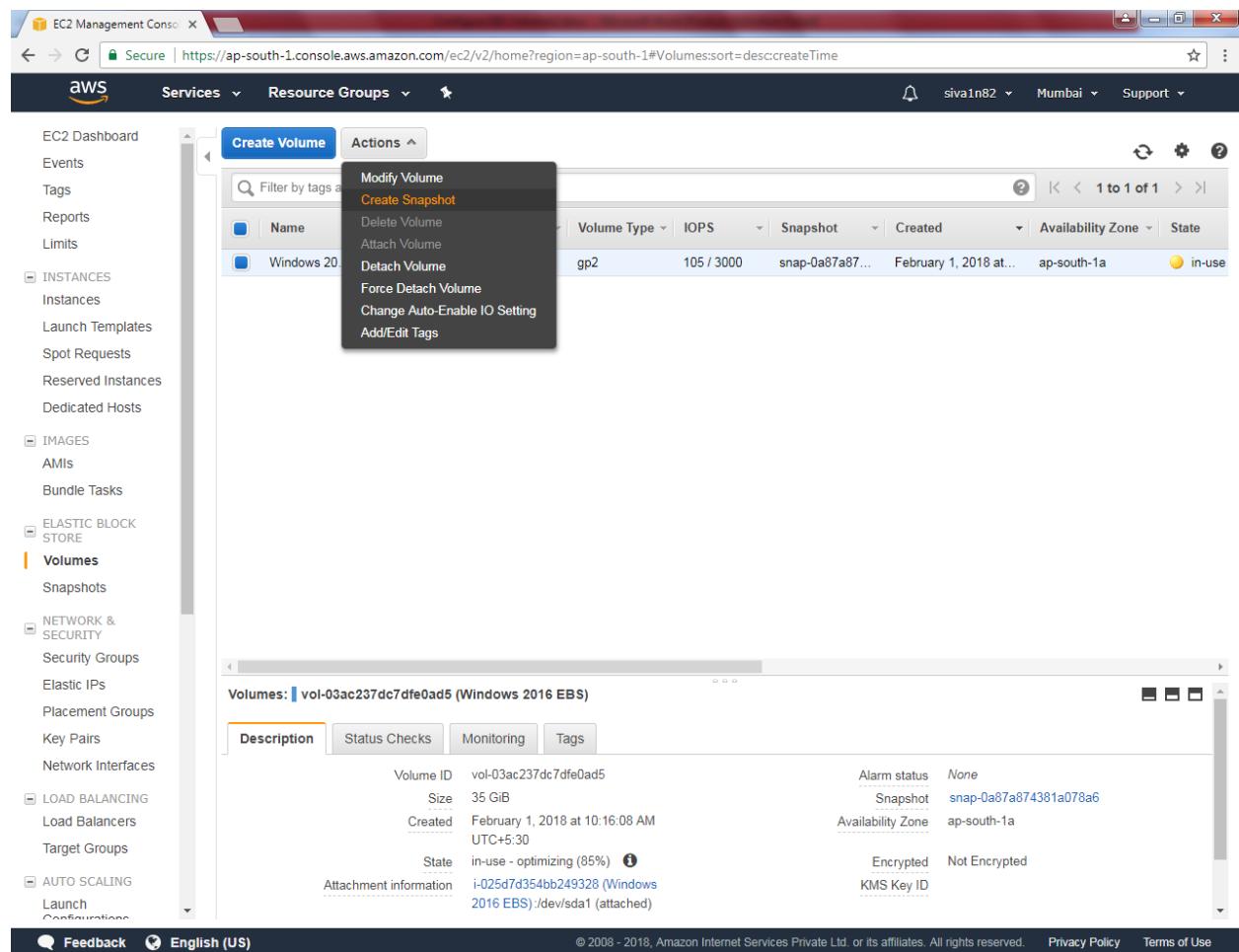
Now 5GB partition is ready.



I have stored some data in new volume.



Goto Volume, click “Create Snapshot”.



Type Name as "SansboundAMI" and Description as "Sansbound AMI".

Create Snapshot

Volume ⓘ vol-03ac237dc7dfe0ad5 (Windows 2016 EBS)

Name ⓘ SansboundAMI

Description ⓘ SansboundAMI|

Encrypted ⓘ No

[Cancel](#) [Create](#)

Snapshot creation has been started.

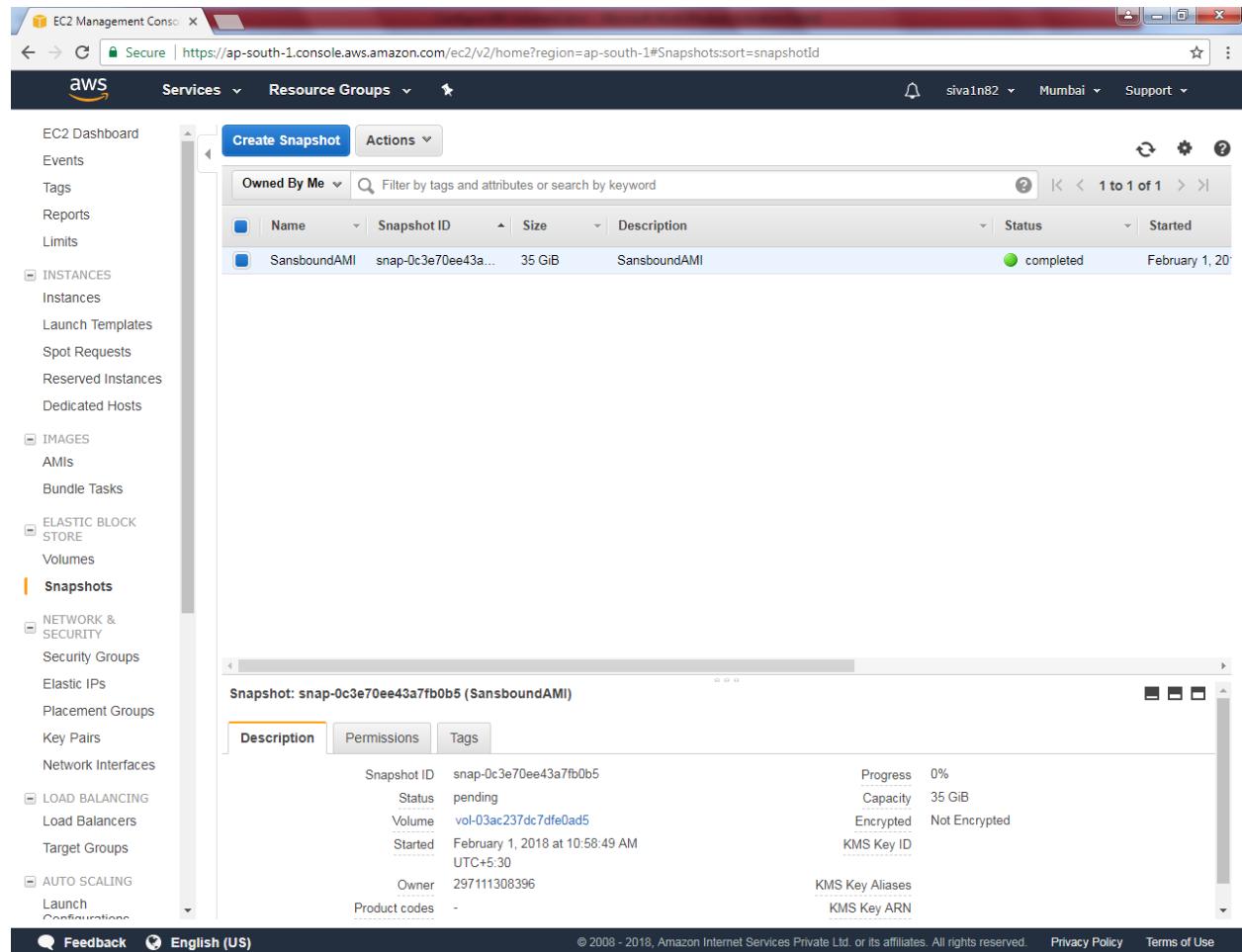
Create Snapshot

✓ **Snapshot Creation Started**
[View snapshot snap-0c3e70ee43a7fb0b5](#)

[Close](#)

Click snapshot menu,

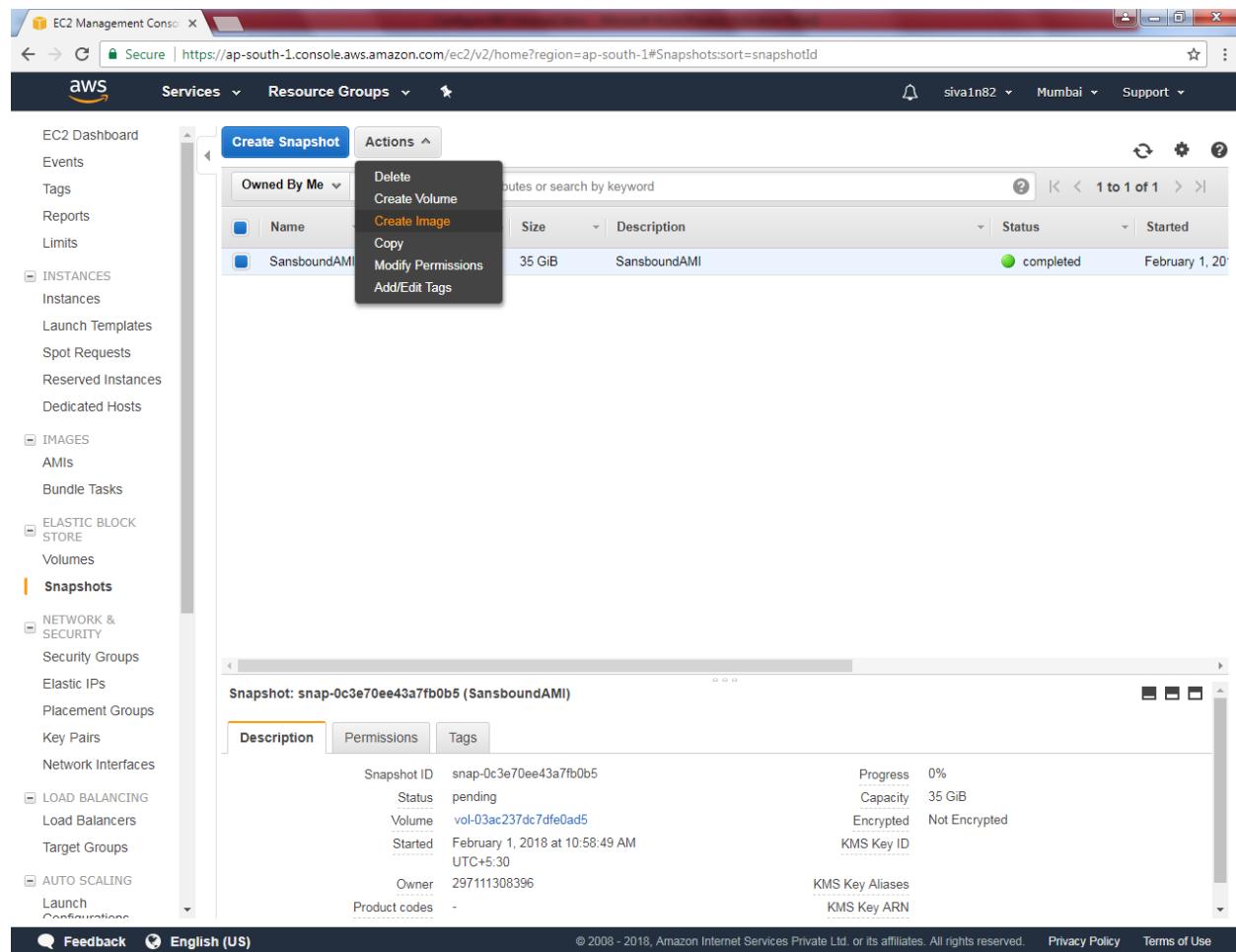
Now snapshot is completed.



The screenshot shows the AWS EC2 Management Console interface. The left sidebar navigation bar includes links for EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Launch Templates, Spot Requests, Reserved Instances, Dedicated Hosts, AMIs, Bundle Tasks, Elastic Block Store, Volumes, and Snapshots. The 'Solutions' section is also visible. The main content area displays a table of snapshots owned by the user, with one entry for 'SansboundAMI'. A detailed view of this snapshot is shown in a modal window. The modal window has tabs for Description, Permissions, and Tags. The Description tab displays the following details:

	Value		Value
Snapshot ID	snap-0c3e70ee43a7fb0b5	Progress	0%
Status	pending	Capacity	35 GiB
Volume	vol-03ac237d7dfe0ad5	Encrypted	Not Encrypted
Started	February 1, 2018 at 10:58:49 AM UTC+5:30	KMS Key ID	
Owner	297111308396	KMS Key Aliases	
Product codes	-	KMS Key ARN	

Now we need to create an image by using the snapshot.



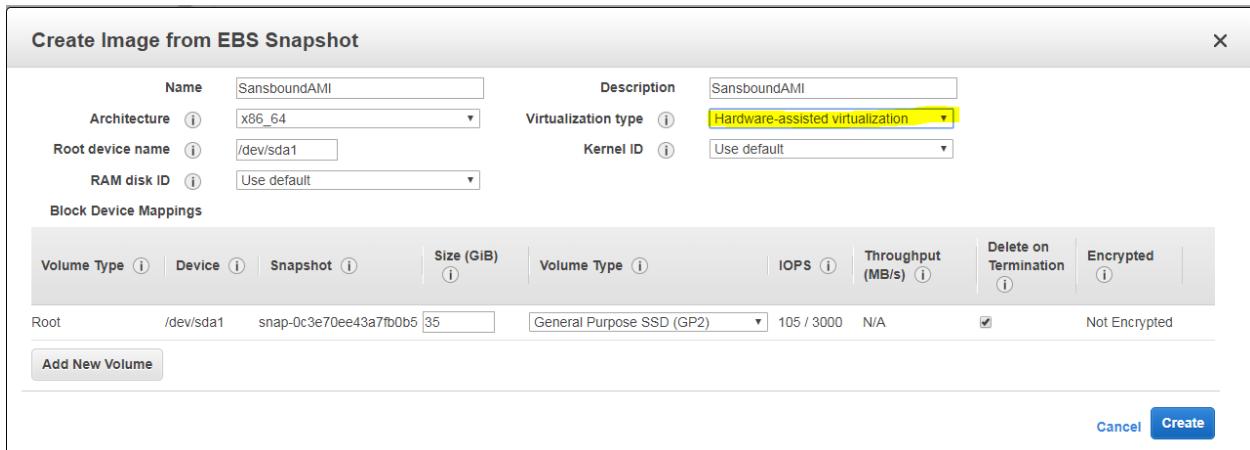
The screenshot shows the AWS EC2 Management Console interface. On the left, there is a navigation sidebar with various service links like EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Launch Templates, Spot Requests, Reserved Instances, Dedicated Hosts, AMIs, Bundle Tasks, Volumes, and Snapshots. The 'Snapshots' link is currently selected and highlighted in orange. In the main content area, a table lists a single snapshot named 'SansboundAMI'. A context menu is open over this snapshot, with the 'Create Image' option highlighted in orange. Below the table, a detailed view of the snapshot 'snap-0c3e70ee43a7fb0b5 (SansboundAMI)' is shown, including its description, permissions, and tags. The description tab is active, displaying details such as Snapshot ID, Status, Volume, Started, Owner, Progress, Capacity, Encrypted status, KMS Key ID, KMS Key Aliases, and KMS Key ARN.

Click "create image"

Type name as SansboundAMI

Description as SansboundAMI

And Select Hardware-assisted virtualization



The screenshot shows the 'Create Image from EBS Snapshot' dialog box. The 'Name' field is set to 'SansboundAMI'. The 'Architecture' field is set to 'x86_64'. The 'Virtualization type' dropdown is set to 'Hardware-assisted virtualization'. The 'Root device name' is '/dev/sda1'. The 'Kernel ID' is set to 'Use default'. Under 'Block Device Mappings', there is one entry for 'Root': 'Device' is '/dev/sda1', 'Snapshot' is 'snap-0c3e70ee43a7fb0b5', 'Size (GiB)' is '35', 'Volume Type' is 'General Purpose SSD (GP2)', 'IOPS' is '105 / 3000', 'Throughput (MB/s)' is 'N/A', 'Delete on Termination' is checked, and 'Encrypted' is unchecked. At the bottom right are 'Cancel' and 'Create' buttons.

Then click "Create".

Create Image from EBS Snapshot X

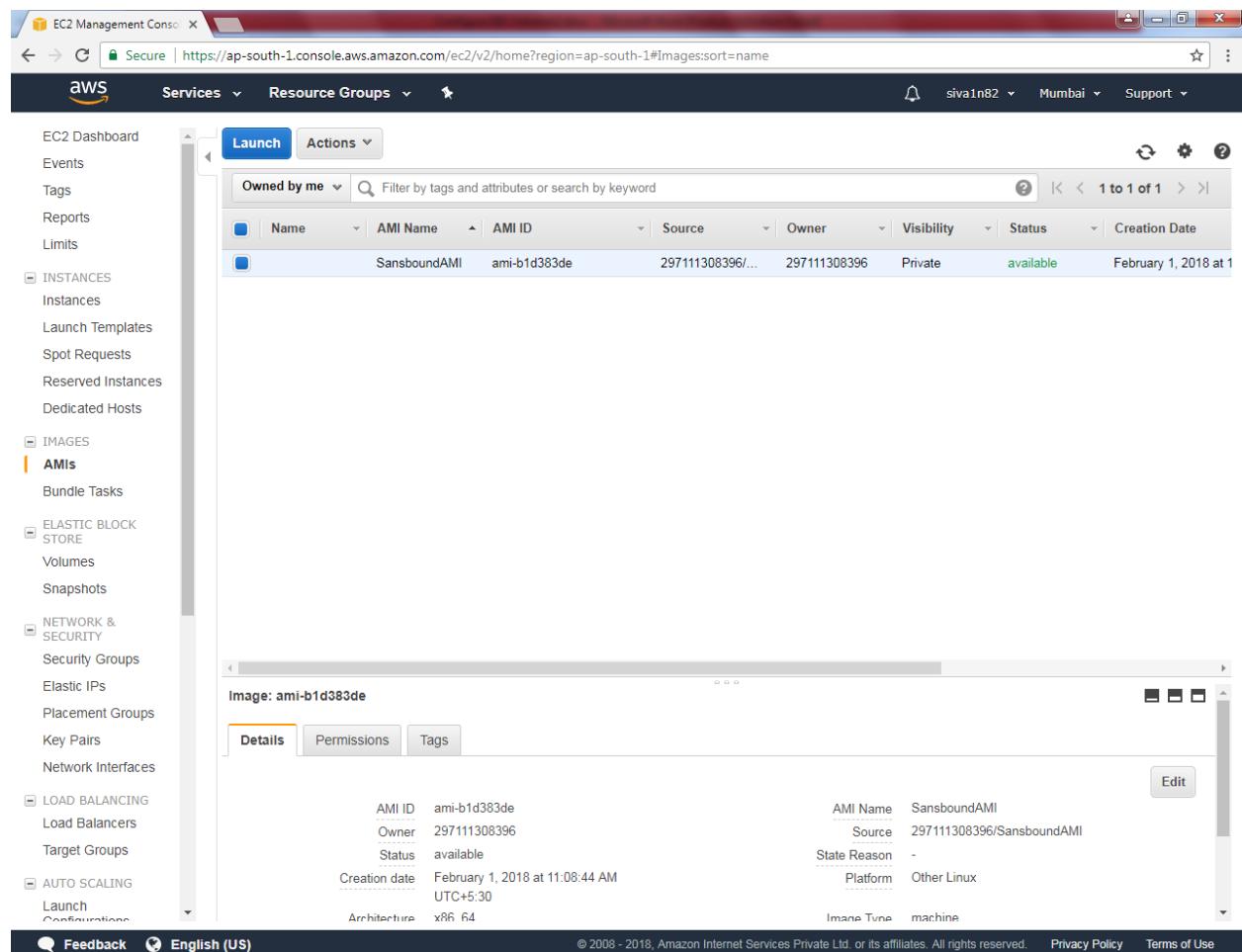
✓ Create Image request received.

[View pending image ami-b1d383de](#)

[Close](#)

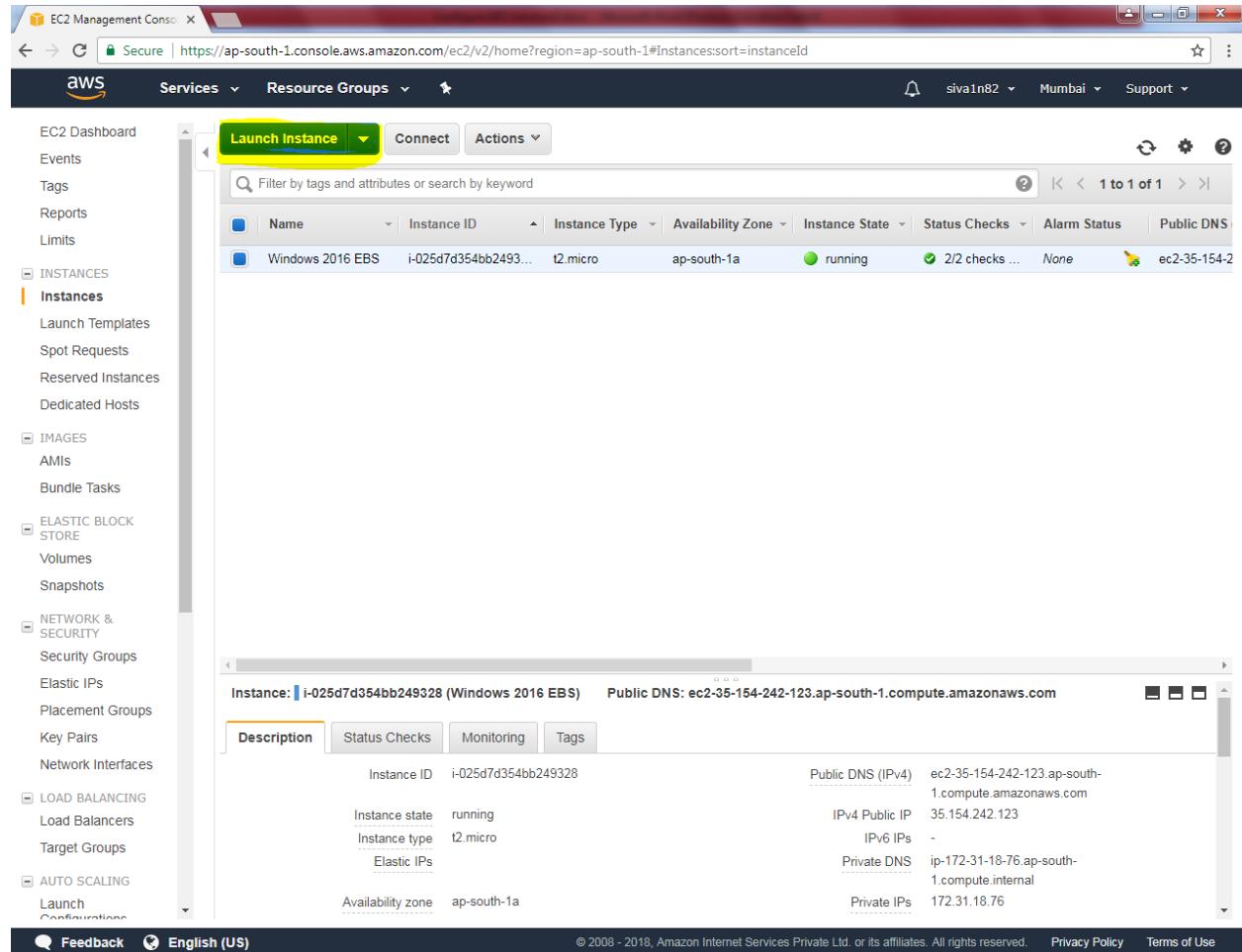
Goto AMIs,

You can able to see that image is available.



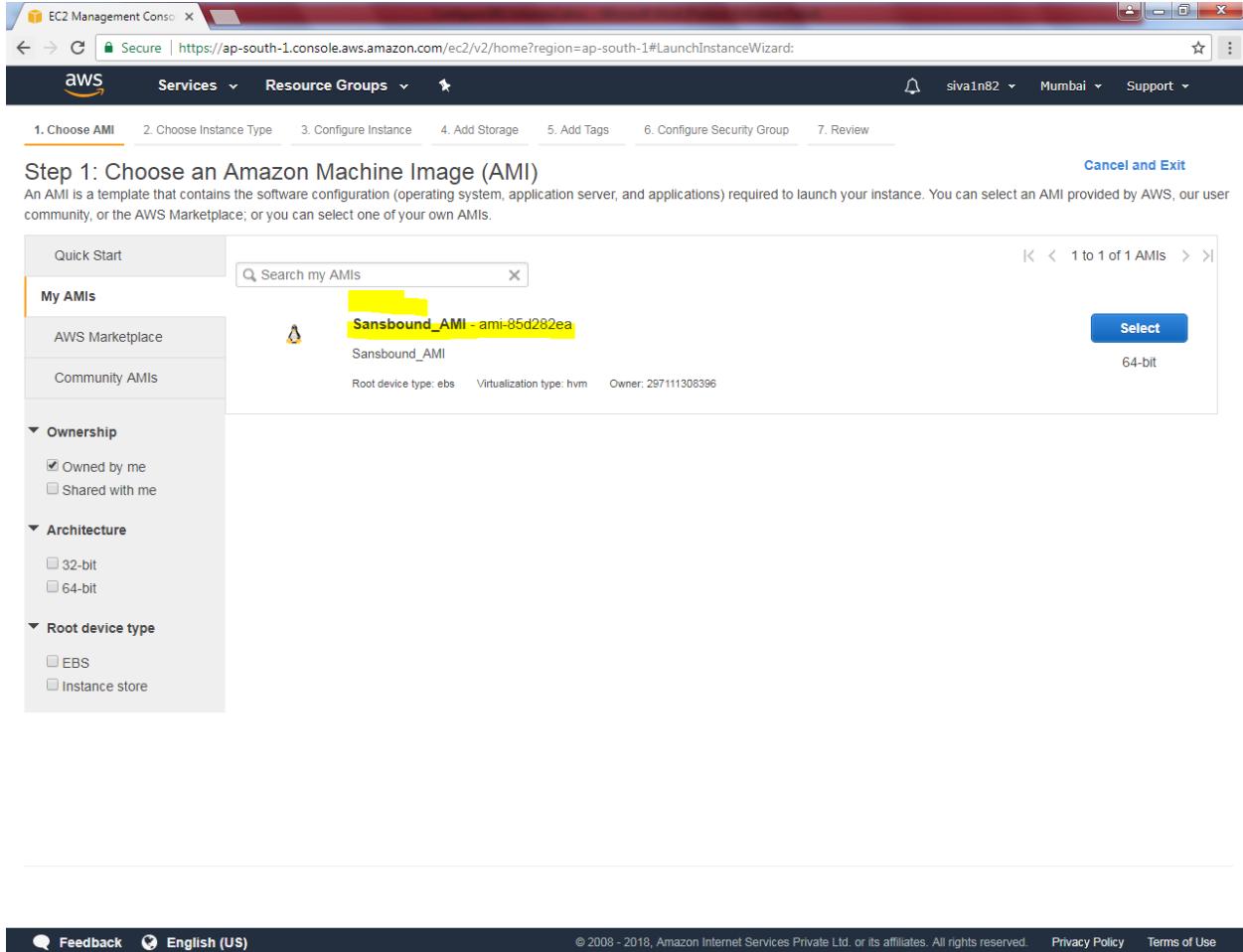
The screenshot shows the AWS EC2 Management Console interface. The left sidebar navigation menu includes: EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES (Instances, Launch Templates, Spot Requests, Reserved Instances, Dedicated Hosts), IMAGES (AMIs, Bundle Tasks), ELASTIC BLOCK STORE (Volumes, Snapshots), NETWORK & SECURITY (Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces), LOAD BALANCING (Load Balancers, Target Groups), and AUTO SCALING (Launch Configurations). The 'AMIs' section is currently selected. The main content area displays a table of available AMIs, with one entry highlighted: 'SansboundAMI' (ami-b1d383de). The table columns include: Name, AMI Name, AMI ID, Source, Owner, Visibility, Status, and Creation Date. Below the table, a detailed view for the 'Image: ami-b1d383de' is shown, with tabs for Details, Permissions, and Tags. The 'Details' tab is active, displaying information such as AMI ID (ami-b1d383de), Owner (297111308396), Status (available), Creation date (February 1, 2018 at 11:08:44 AM UTC+5:30), Architecture (x86_64), AMI Name (SansboundAMI), Source (297111308396/SansboundAMI), State Reason (-), Platform (Other Linux), and Image Type (machine). At the bottom of the page, there are links for Feedback, English (US), and footer text: © 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use.

Go to instances, Click “Launch instance”.



The screenshot shows the AWS EC2 Management Console interface. The left sidebar menu is visible, showing options like EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES (with Instances selected), IMAGES, AMIs, Bundle Tasks, ELASTIC BLOCK STORE, Volumes, Snapshots, NETWORK & SECURITY, Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces, LOAD BALANCING, Load Balancers, Target Groups, and AUTO SCALING. The main content area displays a table of instances. One instance is selected, highlighted with a yellow box. The instance details are shown in a modal window at the bottom right. The modal window title is "Instance: i-025d7d354bb249328 (Windows 2016 EBS)". It contains tabs for Description, Status Checks, Monitoring, and Tags. Under the Description tab, the instance ID is i-025d7d354bb249328, the instance state is running, the instance type is t2.micro, and the availability zone is ap-south-1a. To the right, network information is listed: Public DNS (IPv4) is ec2-35-154-242-123.ap-south-1.compute.amazonaws.com, IPv4 Public IP is 35.154.242.123, IPv6 IPs are -, Private DNS is ip-172-31-18-76.ap-south-1.compute.internal, and Private IPs are 172.31.18.76.

Click "My AMIs" then select Sansbound_AMI.



Step 1: Choose an Amazon Machine Image (AMI)

An AMI is a template that contains the software configuration (operating system, application server, and applications) required to launch your instance. You can select an AMI provided by AWS, our user community, or the AWS Marketplace; or you can select one of your own AMIs.

Quick Start

My AMIs

AWS Marketplace

Community AMIs

Ownership

Architecture

Root device type

Sansbound_AMI - ami-85d282ea

Select

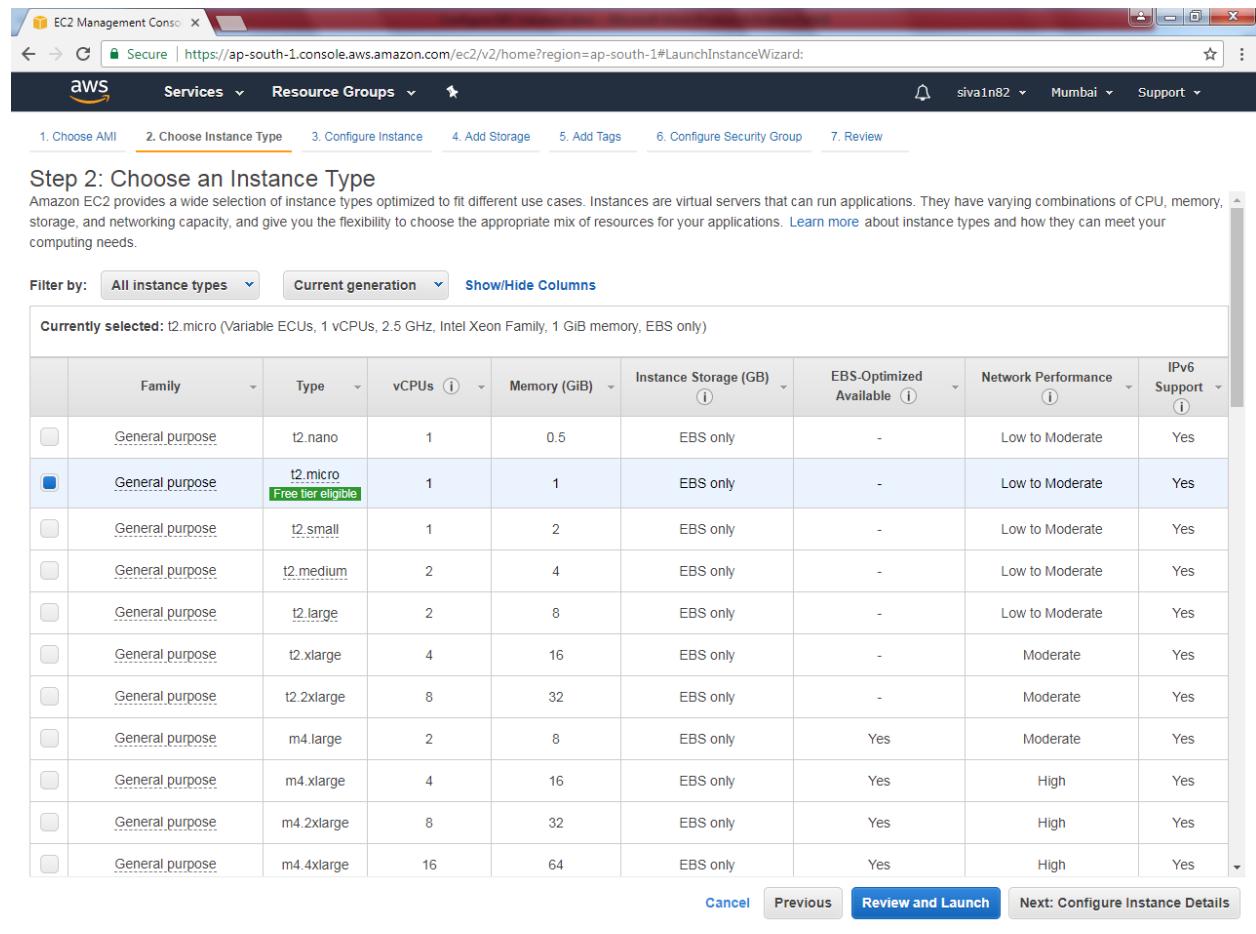
64-bit

1 to 1 of 1 AMIs

Feedback English (US)

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Select “t2.micro”.



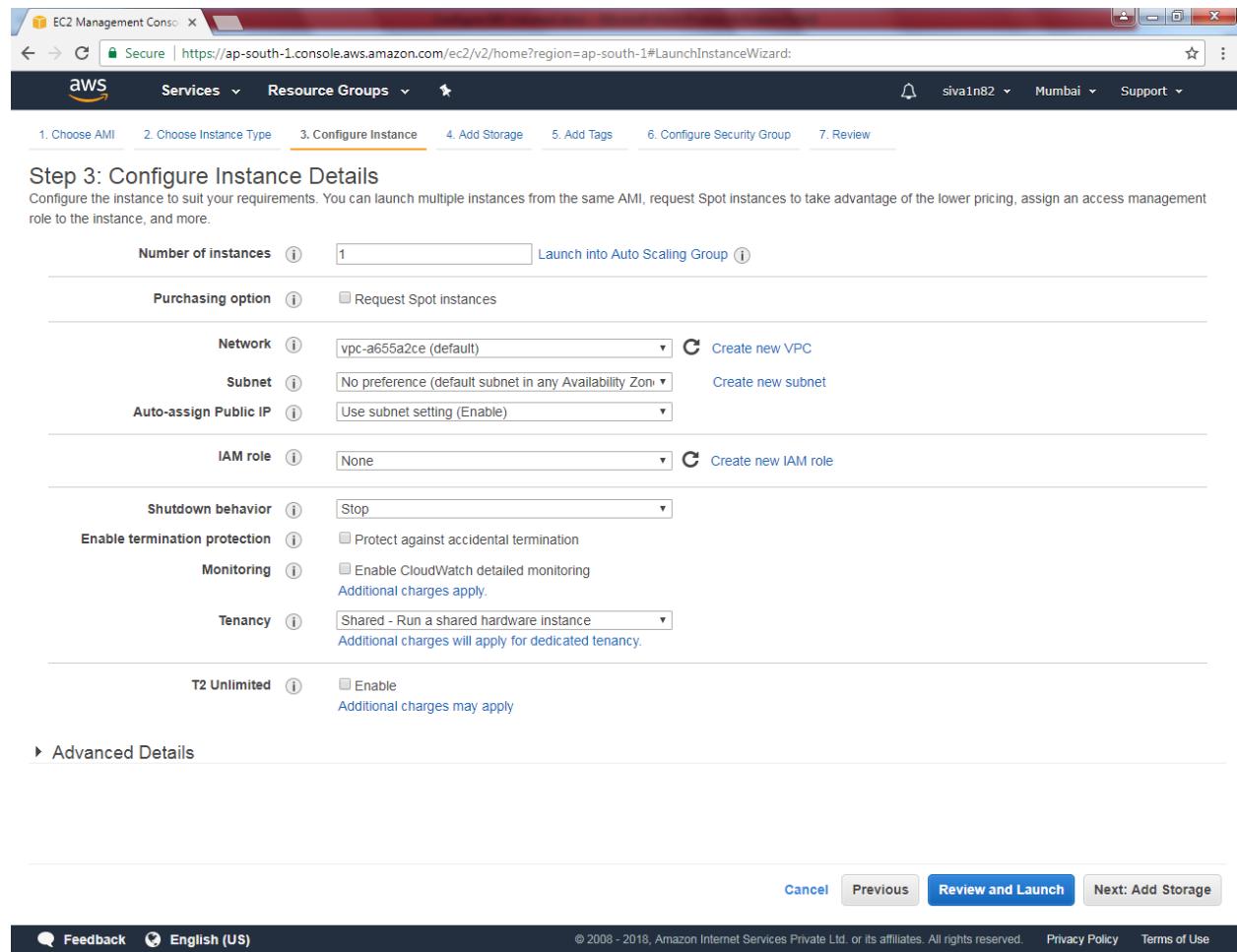
The screenshot shows the AWS EC2 Management Console with the URL <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard>. The page is titled "Step 2: Choose an Instance Type". It displays a table of instance types with the following columns: Family, Type, vCPUs, Memory (GiB), Instance Storage (GB), EBS-Optimized Available, Network Performance, and IPv6 Support. The "t2.micro" row is highlighted with a green background, indicating it is selected. The "t2.nano" row is also visible above it.

	Family	Type	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance	IPv6 Support
<input type="checkbox"/>	General purpose	t2.nano	1	0.5	EBS only	-	Low to Moderate	Yes
<input checked="" type="checkbox"/>	General purpose	t2.micro Free tier eligible	1	1	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.small	1	2	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.medium	2	4	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.large	2	8	EBS only	-	Low to Moderate	Yes
<input type="checkbox"/>	General purpose	t2.xlarge	4	16	EBS only	-	Moderate	Yes
<input type="checkbox"/>	General purpose	t2.2xlarge	8	32	EBS only	-	Moderate	Yes
<input type="checkbox"/>	General purpose	m4.large	2	8	EBS only	Yes	Moderate	Yes
<input type="checkbox"/>	General purpose	m4.xlarge	4	16	EBS only	Yes	High	Yes
<input type="checkbox"/>	General purpose	m4.2xlarge	8	32	EBS only	Yes	High	Yes
<input type="checkbox"/>	General purpose	m4.4xlarge	16	64	EBS only	Yes	High	Yes

Buttons at the bottom: Cancel, Previous, **Review and Launch**, Next: Configure Instance Details

Click “Next”.

Leave default settings and click “Next”.



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

Purchasing option: Request Spot instances

Network: vpc-a655a2ce (default)

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

Auto-assign Public IP: Use subnet setting (Enable)

IAM role: None

Shutdown behavior: Stop

Enable termination protection: Protect against accidental termination

Monitoring: Enable CloudWatch detailed monitoring
Additional charges apply

Tenancy: Shared - Run a shared hardware instance
Additional charges will apply for dedicated tenancy.

T2 Unlimited: Enable
Additional charges may apply

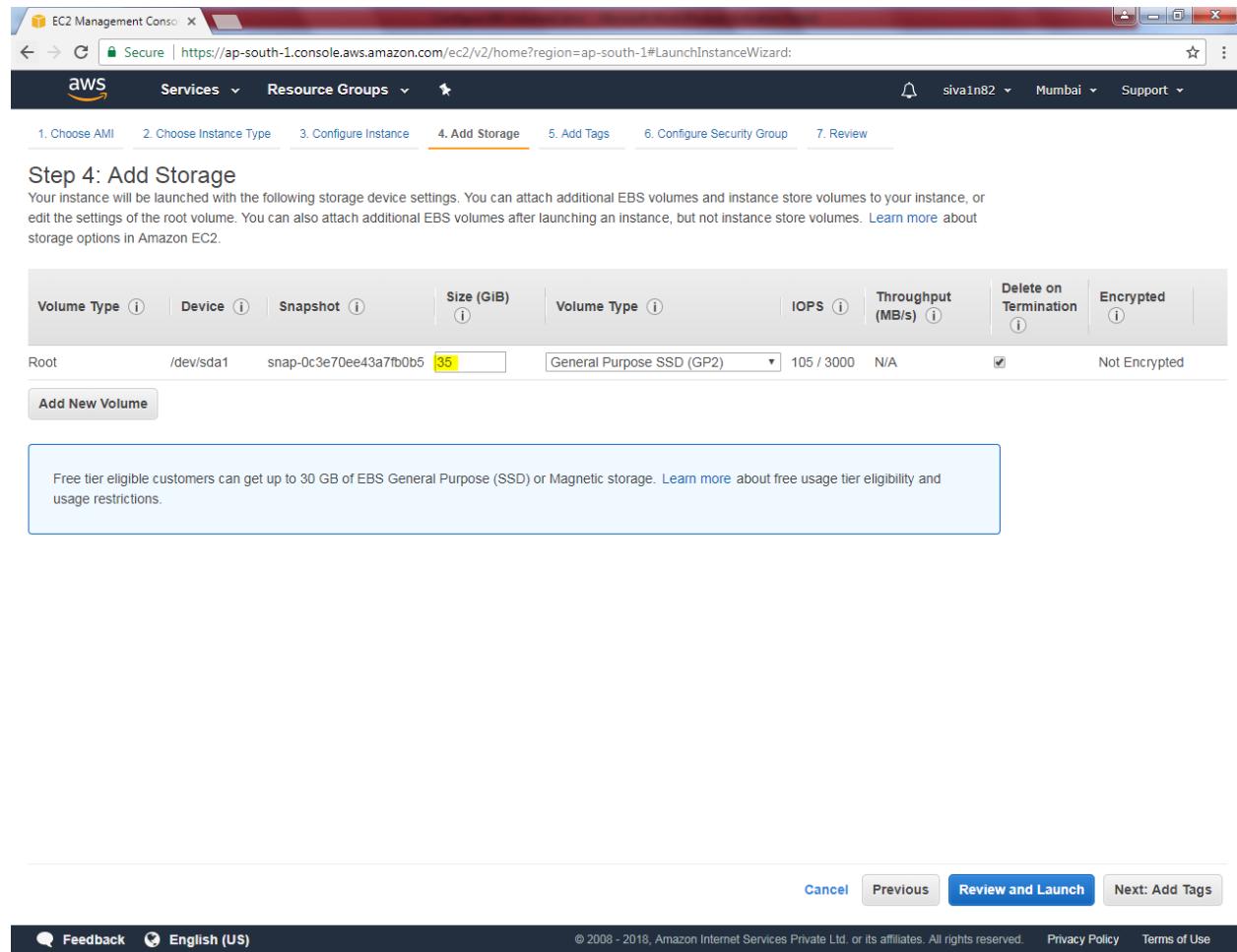
Advanced Details

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

[Feedback](#) [English \(US\)](#)

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Leave the default settings and click “next”.



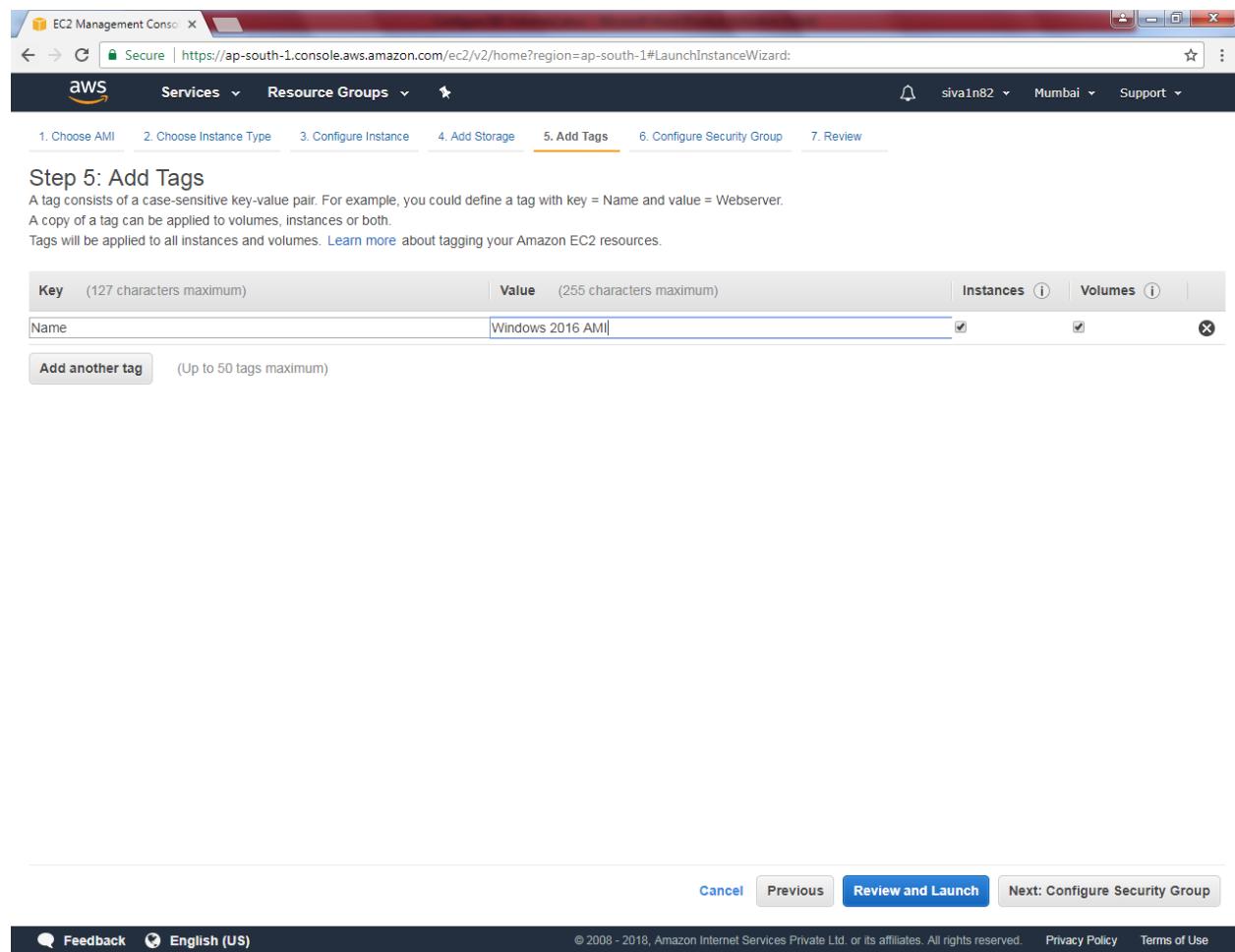
The screenshot shows the AWS EC2 Management Console Launch Instance Wizard, specifically Step 4: Add Storage. The URL in the browser is <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard>. The page displays a table for adding storage volumes. A new volume is being added with the following details:

Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
Root	/dev/sda1	snap-0c3e70ee43a7fb0b5	35	General Purpose SSD (GP2)	105 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

A note below the table states: "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."

At the bottom of the page, there are navigation buttons: Cancel, Previous, **Review and Launch** (highlighted in blue), and Next: Add Tags.

Key as Name and Value s “Windows 2016 AMI”.



EC2 Management Console x

Secure | https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard:

AWS Services Resource Groups

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.

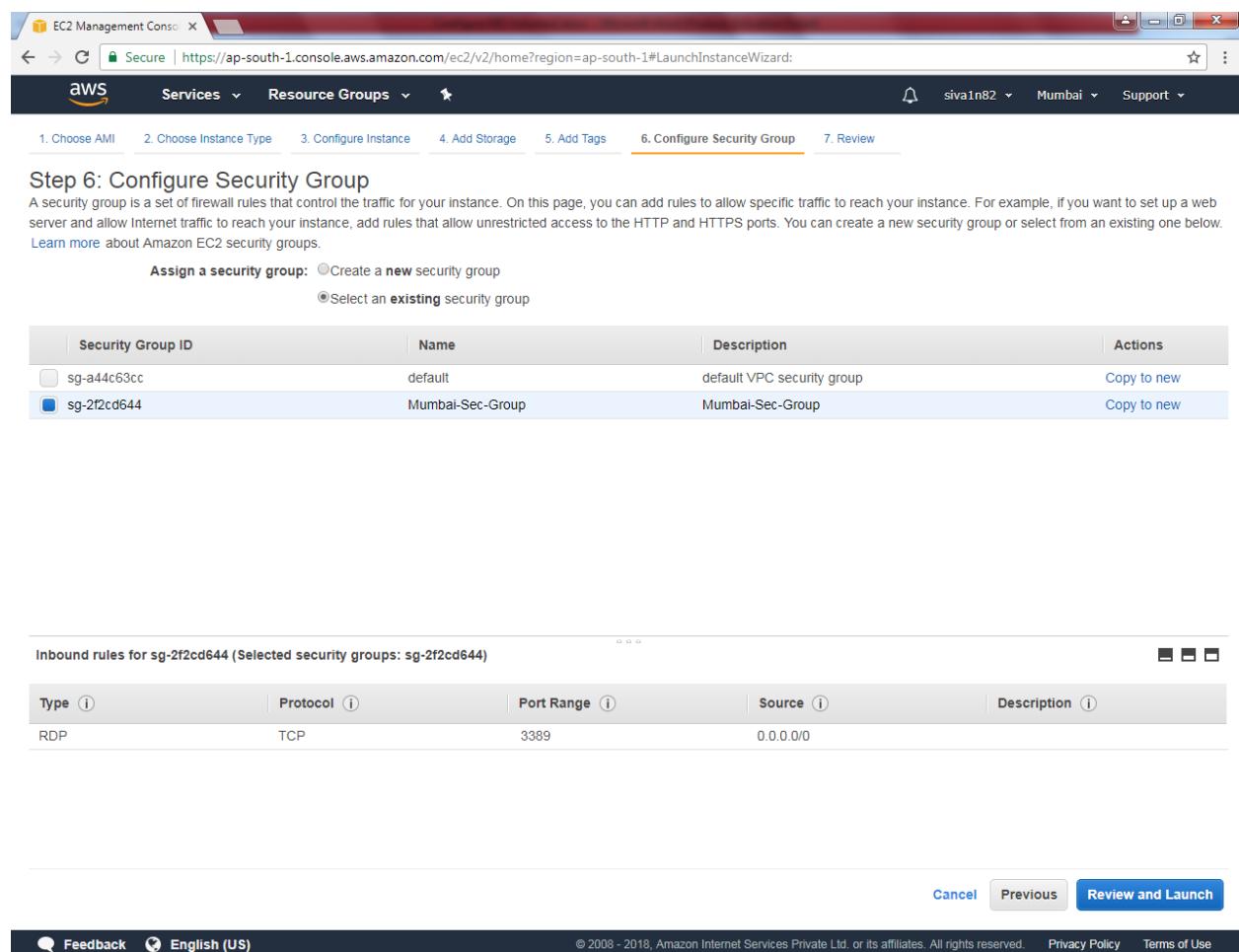
Key	(127 characters maximum)	Value	(255 characters maximum)	Instances	Volumes
Name		Windows 2016 AMI		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Add another tag (Up to 50 tags maximum)

Cancel Previous Review and Launch Next: Configure Security Group

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Select using existing group “Mumbai sec Group”.



The screenshot shows the AWS EC2 Management Console with the URL <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard>. The page is titled "Step 6: Configure Security Group".

Assign a security group:

- Create a new security group
- Select an existing security group

Security Group ID	Name	Description	Actions
sg-a44c63cc	default	default VPC security group	Copy to new
sg-2f2cd644	Mumbai-Sec-Group	Mumbai-Sec-Group	Copy to new

Inbound rules for sg-2f2cd644 (Selected security groups: sg-2f2cd644)

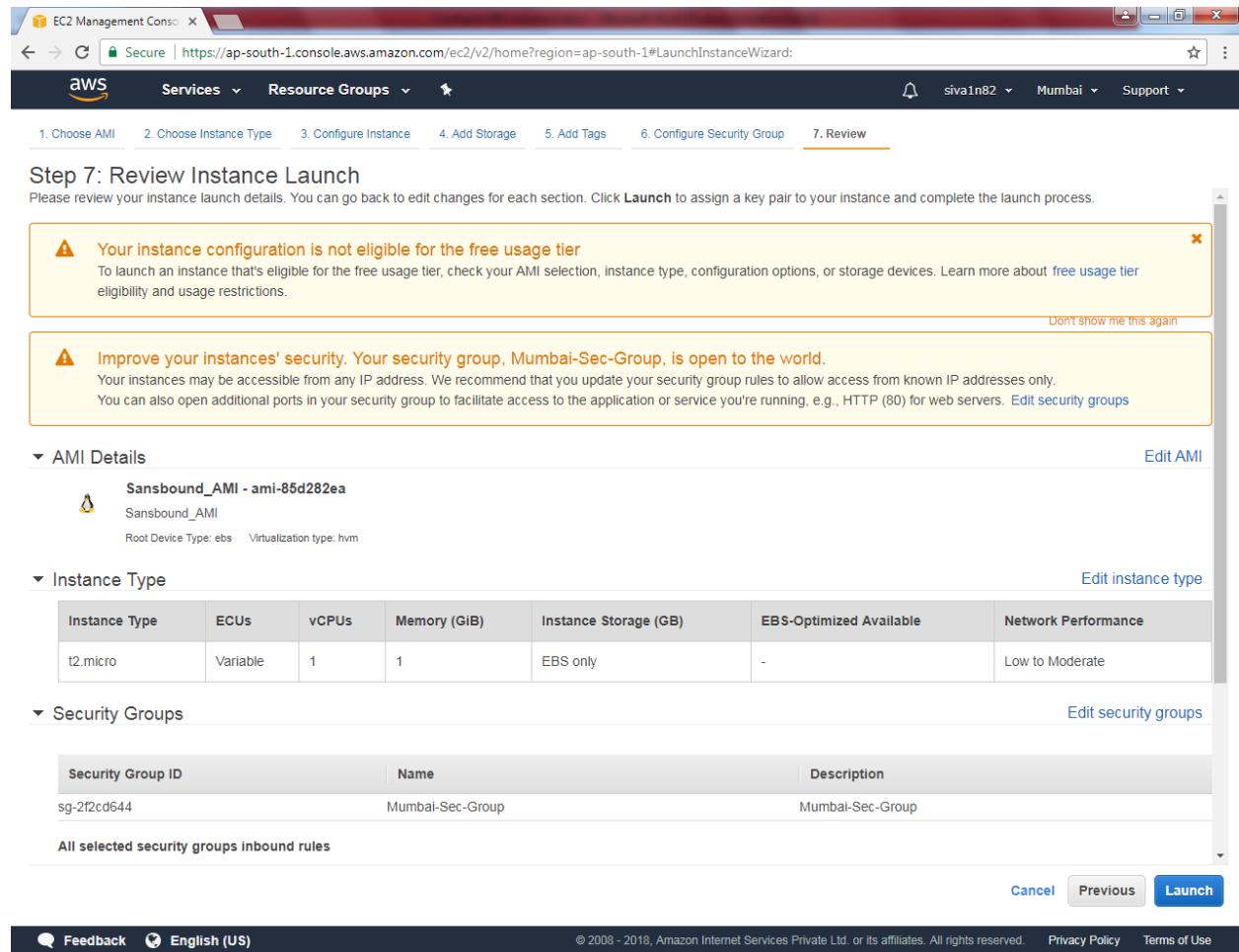
Type	Protocol	Port Range	Source	Description
RDP	TCP	3389	0.0.0.0/0	

Buttons at the bottom: Cancel, Previous, **Review and Launch**.

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In this stage you will get some message that we need to permit port 22 / ssh to access the system. Please Leave that click “Continue”.

Click "Launch".



The screenshot shows the AWS EC2 Management Console in a browser window. The URL is <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard>. The top navigation bar includes the AWS logo, Services dropdown, Resource Groups dropdown, and user information (siva1n82, Mumbai, Support). Below the navigation is a breadcrumb trail: 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 is selected.

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.

AMI Details:

- Your instance configuration is not eligible for the free usage tier. To launch an instance that's eligible for the free usage tier, check your AMI selection, instance type, configuration options, or storage devices. Learn more about [free usage tier](#) eligibility and usage restrictions.

Instance Type:

Instance Type	ECUs	vCPUs	Memory (GiB)	Instance Storage (GB)	EBS-Optimized Available	Network Performance
t2.micro	Variable	1	1	EBS only	-	Low to Moderate

Security Groups:

Security Group ID	Name	Description
sg-2f2cd644	Mumbai-Sec-Group	Mumbai-Sec-Group

All selected security groups inbound rules

Buttons at the bottom right: Cancel, Previous, **Launch**.

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Select the eveningaws key and click “Launch instances”.

Select an existing key pair or create a new key pair X

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](#).

Choose an existing key pair ▼

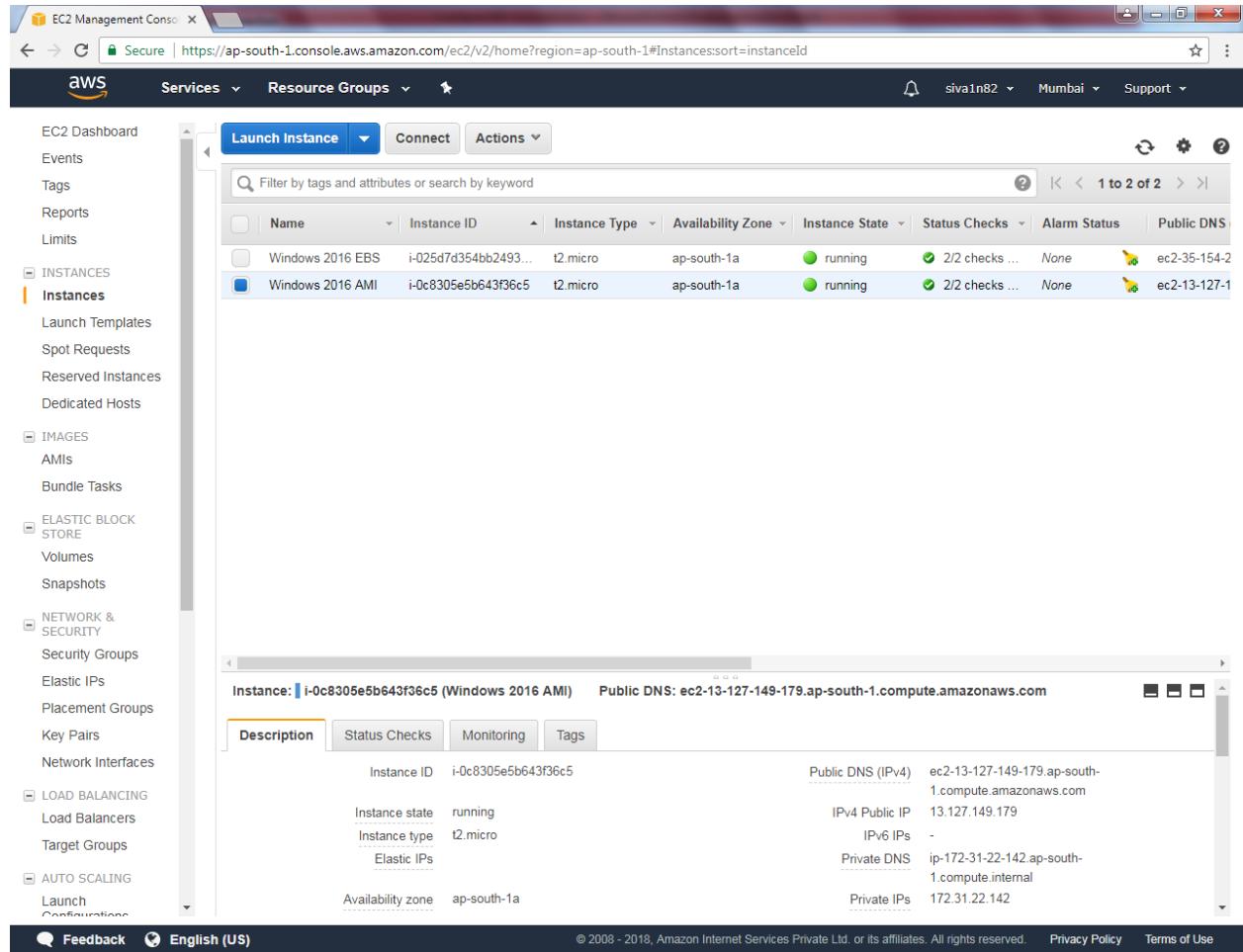
Select a key pair

Eveningaws ▼

I acknowledge that I have access to the selected private key file (Eveningaws.pem), and that without this file, I won't be able to log into my instance.

[Cancel](#) Launch Instances

Now the server is ready.



The screenshot shows the AWS EC2 Management Console interface. The left sidebar navigation menu includes:

- EC2 Dashboard
- Events
- Tags
- Reports
- Limits
- INSTANCES** (selected)
- Instances** (selected)
- Launch Templates
- Spot Requests
- Reserved Instances
- Dedicated Hosts
- IMAGES**
- AMIs
- Bundle Tasks
- ELASTIC BLOCK STORE**
- Volumes
- Snapshots
- NETWORK & SECURITY**
- Security Groups
- Elastic IPs
- Placement Groups
- Key Pairs
- Network Interfaces
- LOAD BALANCING**
- Load Balancers
- Target Groups
- AUTO SCALING**
- Launch
- Configurations

The main content area displays the 'Instances' list with two items:

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS
Windows 2016 EBS	i-025d7d354bb2493...	t2.micro	ap-south-1a	running	2/2 checks ...	None	ec2-35-154-2
Windows 2016 AMI	i-0c8305e5b643f36c5	t2.micro	ap-south-1a	running	2/2 checks ...	None	ec2-13-127-1

A detailed view of the second instance (Windows 2016 AMI) is shown in a modal window:

Instance: i-0c8305e5b643f36c5 (Windows 2016 AMI) Public DNS: ec2-13-127-149-179.ap-south-1.compute.amazonaws.com

Description tab (selected):

Instance ID	i-0c8305e5b643f36c5	Public DNS (IPv4)	ec2-13-127-149-179.ap-south-1.compute.amazonaws.com
Instance state	running	IPv4 Public IP	13.127.149.179
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	ip-172-31-22-142.ap-south-1.compute.internal
Availability zone	ap-south-1a	Private IPs	172.31.22.142

Status Checks tab:

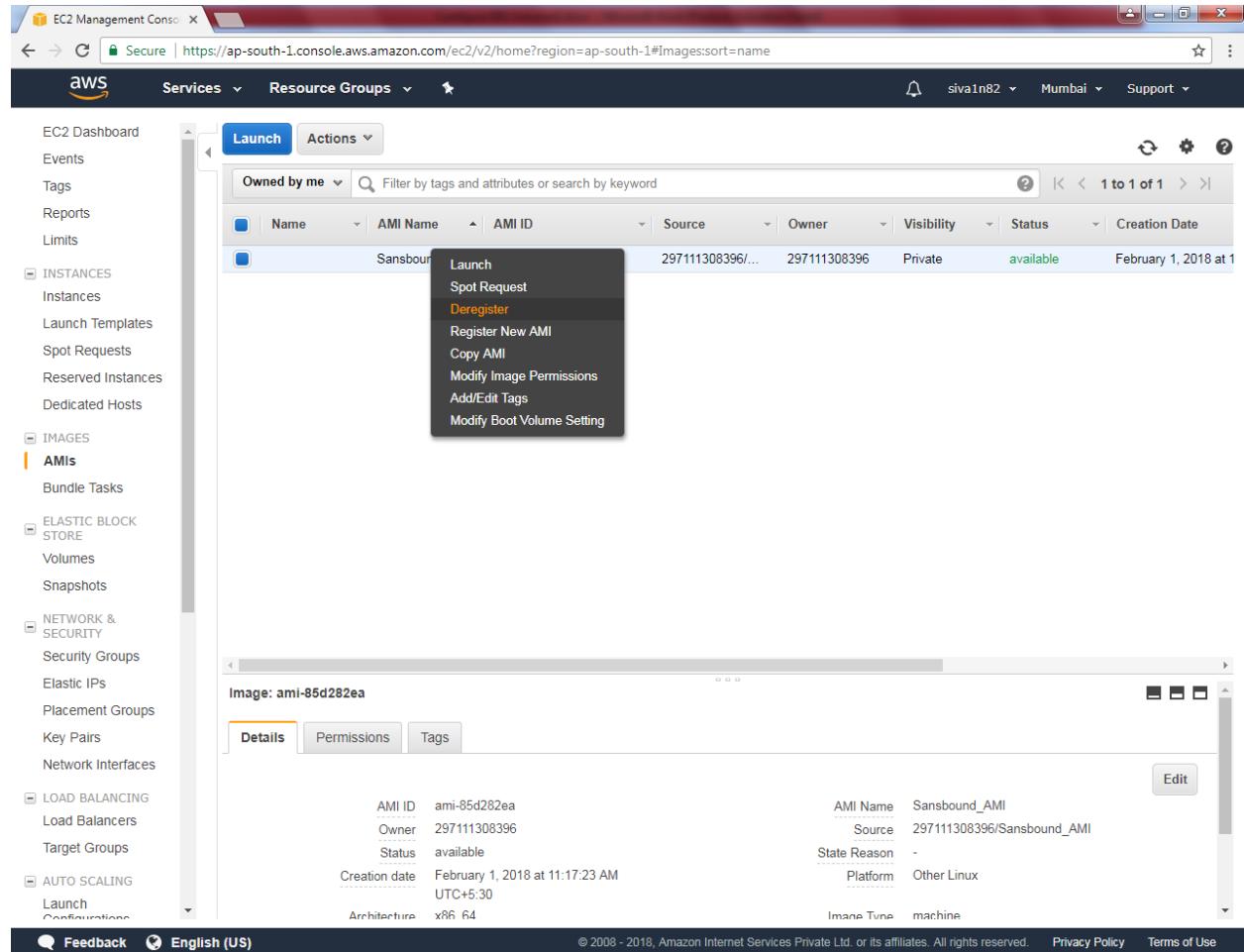
Monitoring tab:

Tags tab:

The output was not come in this scenario. Hence, you need to delete/ terminate the instance.

Go to snapshots. Select snapshot and then right click. Delete.

Go to AMIs, Then you need to deregister the AMI image, it will shows some error.



The screenshot shows the AWS EC2 Management Console interface. On the left, there's a navigation sidebar with various services like Instances, AMIs, Elastic Block Store, Network & Security, Load Balancing, and Auto Scaling. The 'AMIs' section is currently selected. In the main content area, a table lists AMIs. One row, titled 'Sansbound_AMI', is selected. A context menu is open over this row, listing several actions: Launch, Spot Request, Deregister, Register New AMI, Copy AMI, Modify Image Permissions, Add/Edit Tags, and Modify Boot Volume Setting. The 'Deregister' option is highlighted in orange. Below the table, a detailed view of the selected AMI ('Image: ami-85d282ea') is shown with tabs for Details, Permissions, and Tags. The 'Details' tab is active, displaying information such as AMI ID (ami-85d282ea), Owner (297111308396), Status (available), Creation date (February 1, 2018 at 11:17:23 AM UTC+5:30), Architecture (x86_64), AMI Name (Sansbound_AMI), Source (297111308396/Sansbound_AMI), State Reason (-), Platform (Other Linux), and Image Type (machine). At the bottom of the page, there are links for Feedback, Language (English (US)), and legal notices.

Click "Deregister".

It will take some time to remove.