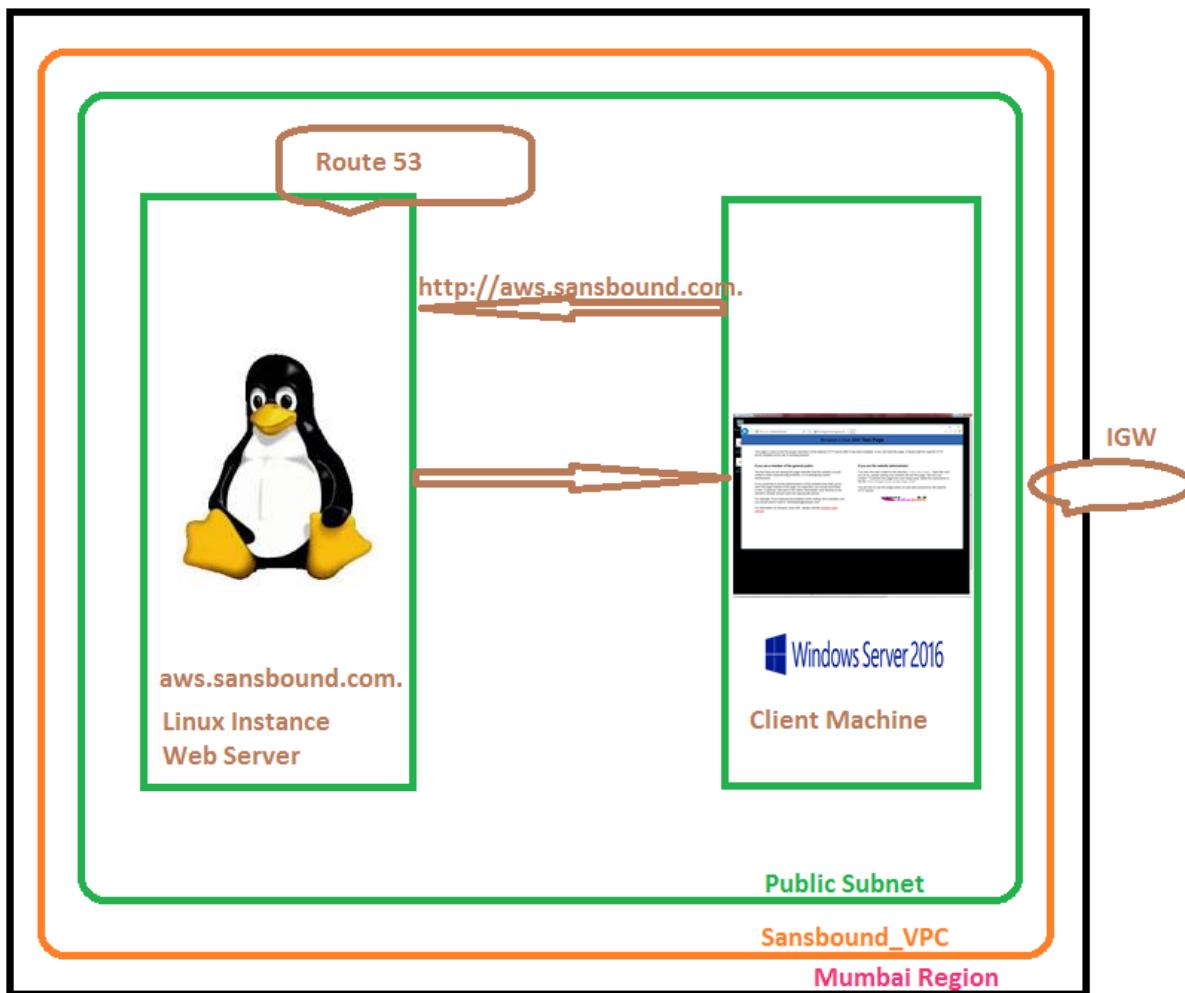


Lab16

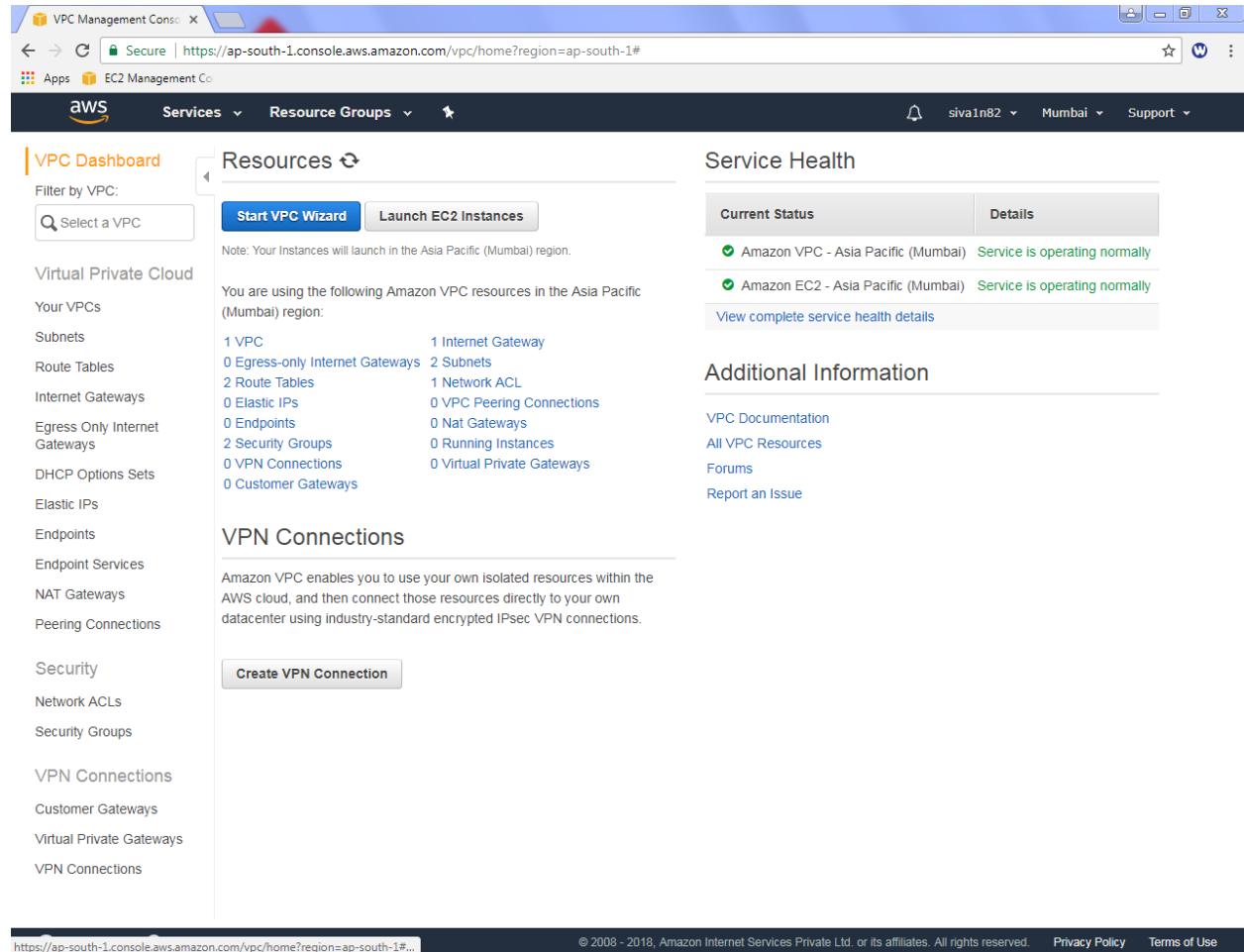
Route 53 – Private Hosted Zone Lab

Scenario:



We have created Sansbound_VPC in Mumbai region, in sansbound subnet we have created public subnet and created one Linux instance and one Windows windows instance. In Linux instance we need to install the web server and in windows machine we need to access the web server by using IP address and FQDN (Fully Qualified Domain Name).

We are in Mumbai region, we need to create one VPC.

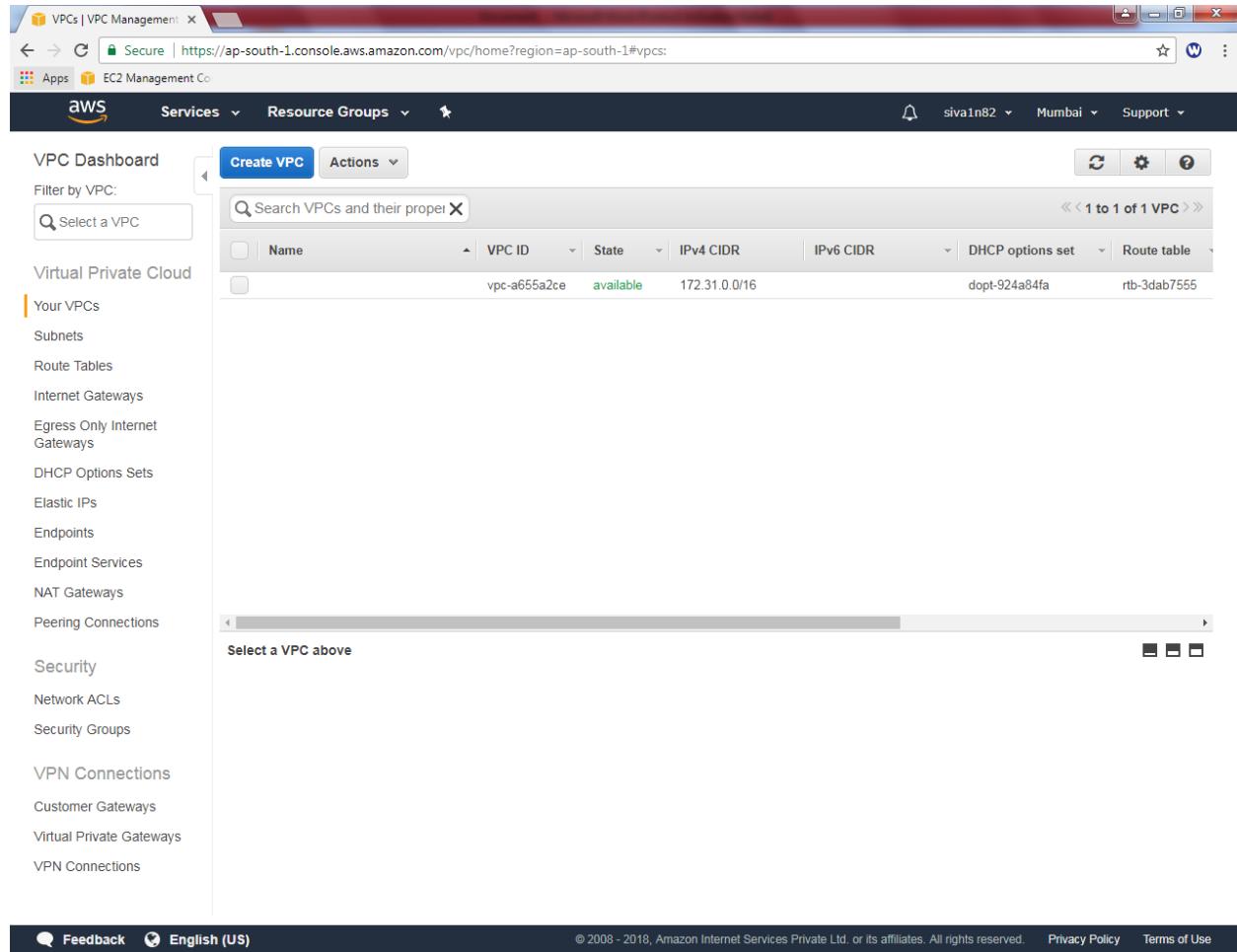


The screenshot shows the AWS VPC Management Console interface. The top navigation bar includes links for Services, Resource Groups, and Support, along with user information (siva1n82, Mumbai). The main content area is the 'VPC Dashboard' under the 'Virtual Private Cloud' section. It features a 'Resources' summary with buttons for 'Start VPC Wizard' and 'Launch EC2 Instances'. Below this, a note states: 'Note: Your Instances will launch in the Asia Pacific (Mumbai) region.' A table provides a quick overview of resources:

1 VPC	1 Internet Gateway
0 Egress-only Internet Gateways	2 Subnets
2 Route Tables	1 Network ACL
0 Elastic IPs	0 VPC Peering Connections
0 Endpoints	0 Nat Gateways
2 Security Groups	0 Running Instances
0 VPN Connections	0 Virtual Private Gateways
0 Customer Gateways	

The 'Service Health' section indicates that both Amazon VPC and Amazon EC2 are operating normally. The 'Additional Information' section links to VPC Documentation, All VPC Resources, Forums, and Report an Issue.

In VPC Dashboard, click “Create VPC”.



The screenshot shows the AWS VPC Management console. The top navigation bar includes the AWS logo, Services dropdown, Resource Groups dropdown, and user information (siva1n82, Mumbai, Support). The main header is "VPCs | VPC Management". Below the header, there's a search bar with placeholder text "Search VPCs and their properties" and a "Create VPC" button. A table displays one VPC entry:

	Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP options set	Route table
<input type="checkbox"/>	vpc-a655a2ce	available	172.31.0.0/16			dopt-924a84fa	rtb-3dab7555

The left sidebar, titled "Virtual Private Cloud", lists various VPC components: Your VPCs, Subnets, Route Tables, Internet Gateways, Egress Only Internet Gateways, DHCP Options Sets, Elastic IPs, Endpoints, Endpoint Services, NAT Gateways, Peering Connections, Security, Network ACLs, Security Groups, VPN Connections, Customer Gateways, Virtual Private Gateways, and another section for VPN Connections. The "Your VPCs" item is currently selected. At the bottom, there are links for Feedback, English (US), and a footer with copyright information: © 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use.

While creating VPC,

Name tag “Sansbound_VPC”

IPV4 CIDR block “10.0.0.0/16”

Create VPC X

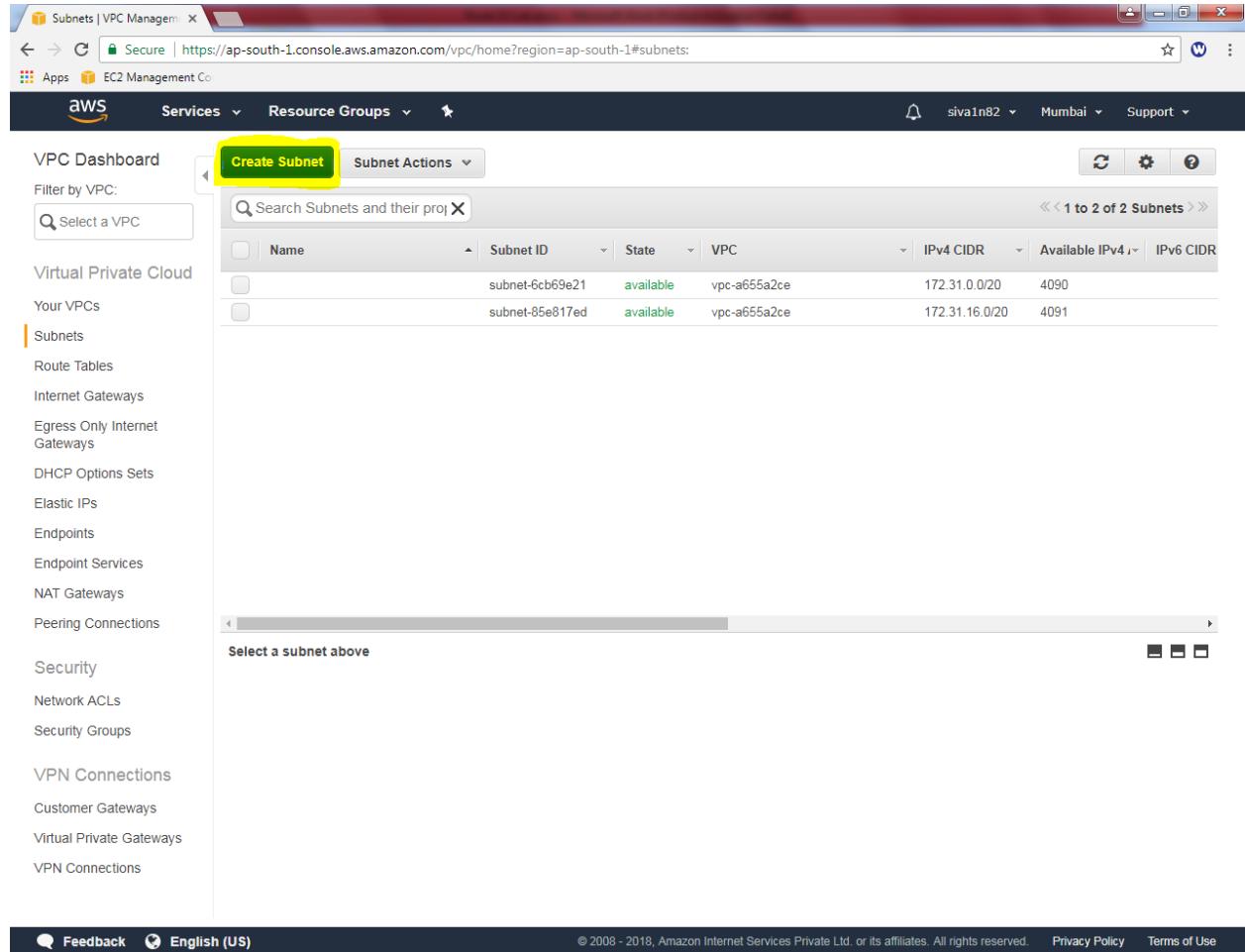
A VPC is an isolated portion of the AWS cloud populated by AWS objects, such as Amazon EC2 instances. You must specify an IPv4 address range for your VPC. Specify the IPv4 address range as a Classless Inter-Domain Routing (CIDR) block; for example, 10.0.0.0/16. You cannot specify an IPv4 CIDR block larger than /16. You can optionally associate an Amazon-provided IPv6 CIDR block with the VPC.

Name tag	<input type="text" value="Sansbound_VPC"/> i
IPv4 CIDR block*	<input type="text" value="10.0.0.0/16"/> i
IPv6 CIDR block*	<input checked="" type="radio"/> No IPv6 CIDR Block i
<input type="radio"/> Amazon provided IPv6 CIDR block	
Tenancy	<input type="button" value="Default"/> i

[Cancel](#) Yes, Create

Click “Yes, create”.

Then we need to create subnet,



The screenshot shows the AWS VPC Management Console with the Subnets page open. The 'Create Subnet' button is highlighted with a yellow box. The page displays two existing subnets:

Name	Subnet ID	State	VPC	IPv4 CIDR	Available IPv4	IPv6 CIDR
subnet-6cb69e21	available	vpc-a655a2ce	172.31.0.0/20	4090		
subnet-85e817ed	available	vpc-a655a2ce	172.31.16.0/20	4091		

The left sidebar shows the VPC Dashboard and various networking services like Subnets, Route Tables, Internet Gateways, etc.

Click “Create subnet”.

While creating subnet,

Name tag: “sansbound_public_subnet”

VPC as “Sansbound_VPC”

Availability Zone : 1B (Optional)

IPV4 CIDR Block 10.0.2.0/24 subnet

Create Subnet

Use the CIDR format to specify your subnet's IP address block (e.g., 10.0.0.0/24). Note that block sizes must be between a /16 netmask and /28 netmask. Also, note that a subnet can be the same size as your VPC. An IPv6 CIDR block must be a /64 CIDR block.

VPC CIDRs		
CIDR	Status	Status Reason
10.0.0.0/16	associated	

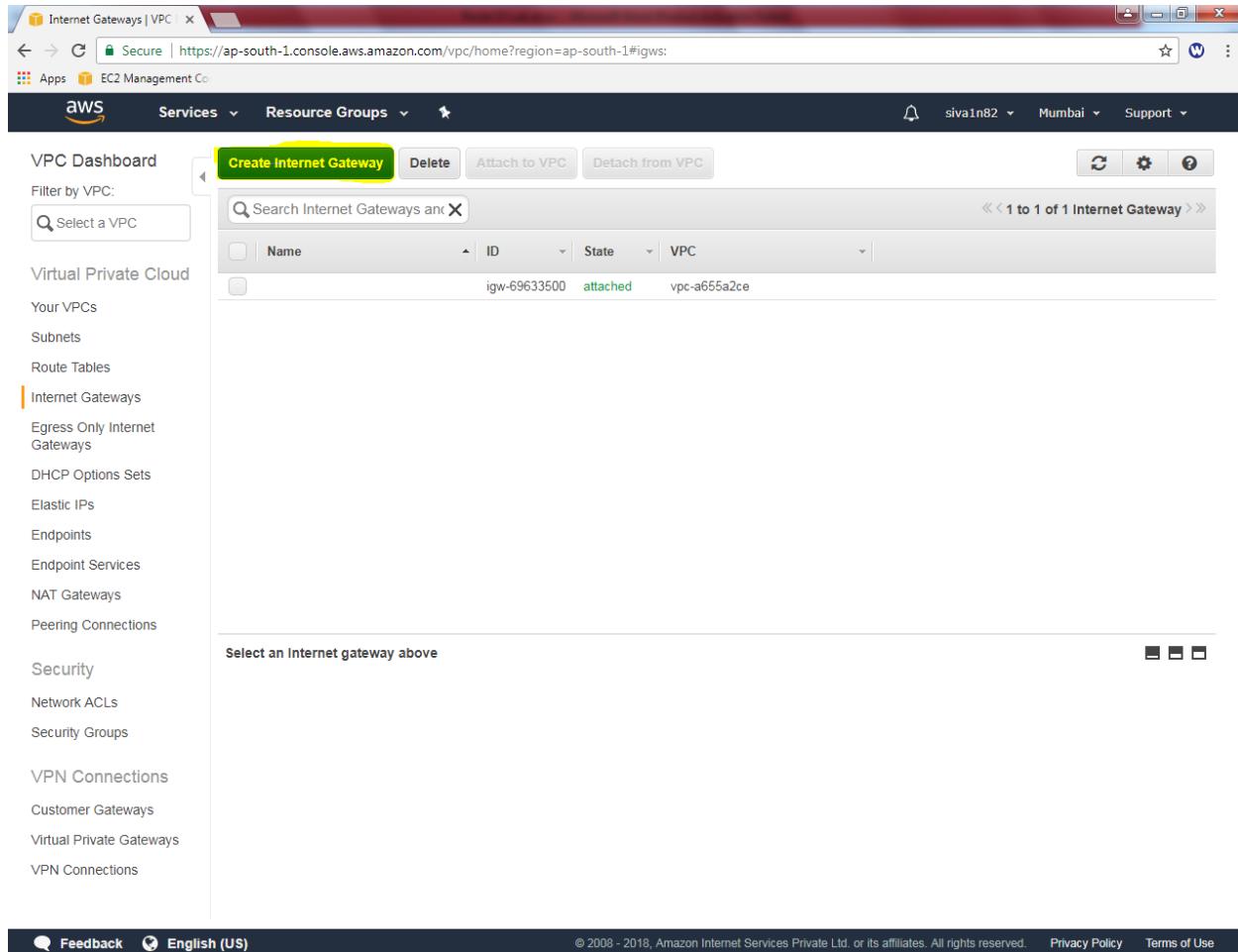
Availability Zone: ap-south-1b

IPv4 CIDR block: 10.0.2.0/24

Cancel **Yes, Create**

Then click “Yes, create”.

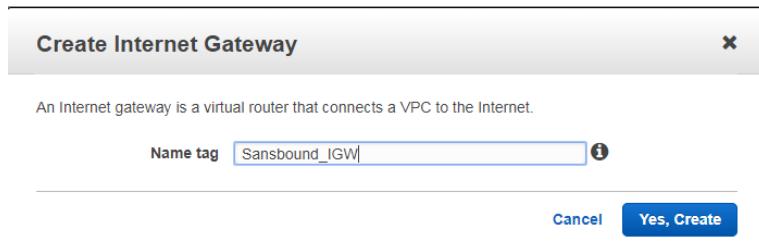
Now, we need to create an Internet Gateway.



The screenshot shows the AWS VPC Internet Gateways page. The left sidebar is titled "Virtual Private Cloud" and includes links for Your VPCs, Subnets, Route Tables, Internet Gateways (which is selected and highlighted in orange), Egress Only Internet Gateways, DHCP Options Sets, Elastic IPs, Endpoints, Endpoint Services, NAT Gateways, Peering Connections, Security, Network ACLs, and Security Groups. The main content area has a title bar with "Create Internet Gateway", "Delete", "Attach to VPC", and "Detach from VPC". Below this is a search bar and a table with columns for Name, ID, State, and VPC. One row is listed: igw-69633500, attached, vpc-a655a2ce. At the bottom, there is a note "Select an internet gateway above" and three small icons. The footer contains links for Feedback, English (US), Privacy Policy, and Terms of Use.

Click “Create Internet Gateway”.

While creating Internet Gateway, name tag as “sansbound_IGW”.



Click "Yes, Create".

In Internet gateway, Sansbound_IGW is in detached mode. We need to attach VPC (Sansbound_VPC) with Internet gateway. Click "Attach to VPC".

Name	ID	State	VPC
igw-69633500	igw-69633500	attached	vpc-a655a2ce
Sansbound_IGW	igw-29321140	detached	

igw-29321140 | Sansbound_IGW

Summary Tags

ID: igw-29321140 | Sansbound_IGW
State: detached

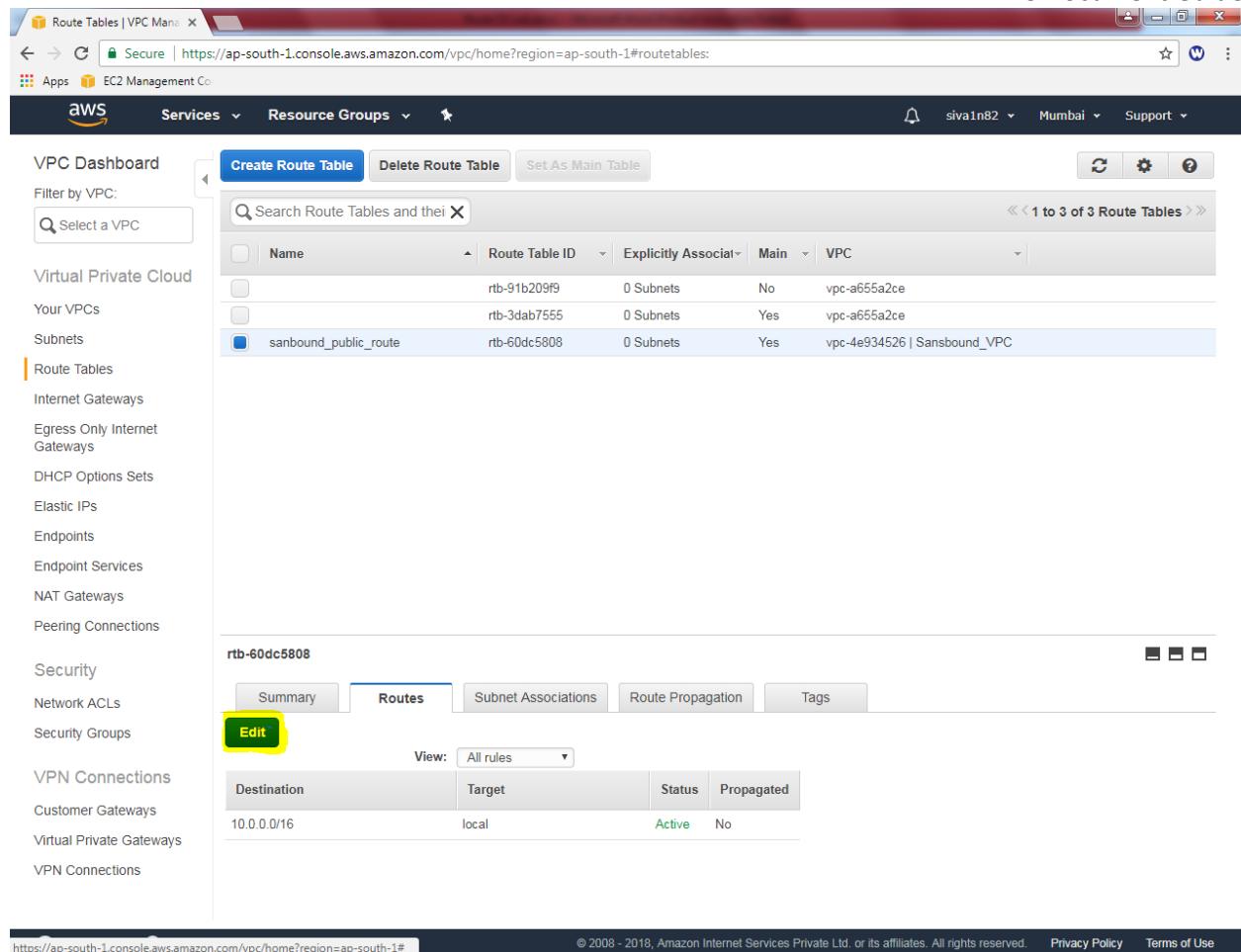
Attached VPC ID:
Attachment state:

Click "Yes, Attach".



In Sansbound_VPC route table, rename as sansbound_public_route.

Then select Route tab, click “Edit”.



Route Tables | VPC Management

Secure | https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#routetables:

VPC Dashboard

Create Route Table Delete Route Table Set As Main Table

Search Route Tables and their Subnets << 1 to 3 of 3 Route Tables >>

Name	Route Table ID	Explicitly Associated	Main	VPC
rtb-91b209f9	0 Subnets	No	vpc-a655a2ce	
rtb-3dab7555	0 Subnets	Yes	vpc-a655a2ce	
sanbound_public_route	rtb-60dc5808	0 Subnets	Yes	vpc-4e934526 Sansbound_VPC

rtb-60dc5808

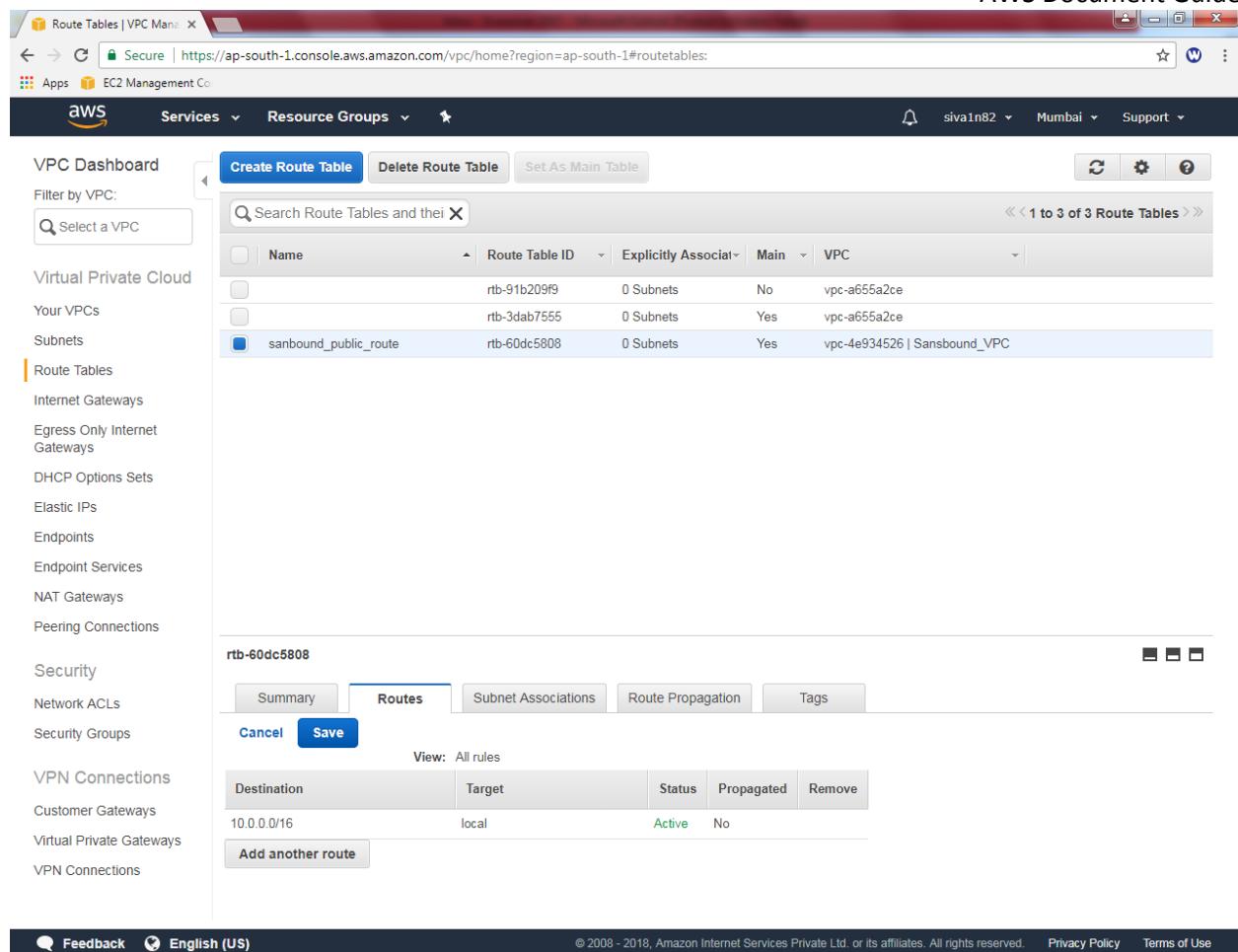
Summary Routes Subnet Associations Route Propagation Tags

Edit View: All rules

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No

https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#routetables: 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use

Click "Add another route"



Route Tables | VPC Manager

Secure | https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#routetables:

VPC Dashboard

Create Route Table Delete Route Table Set As Main Table

Search Route Tables and their routes << 1 to 3 of 3 Route Tables >>

Name	Route Table ID	Explicitly Associated	Main	VPC
rtb-91b209f9	0 Subnets	No	vpc-a655a2ce	
rtb-3dab7555	0 Subnets	Yes	vpc-a655a2ce	
sanbound_public_route	rtb-60dc5808	0 Subnets	Yes	vpc-4e934526 Sansbound_VPC

rtb-60dc5808

Summary Routes Subnet Associations Route Propagation Tags

Cancel Save

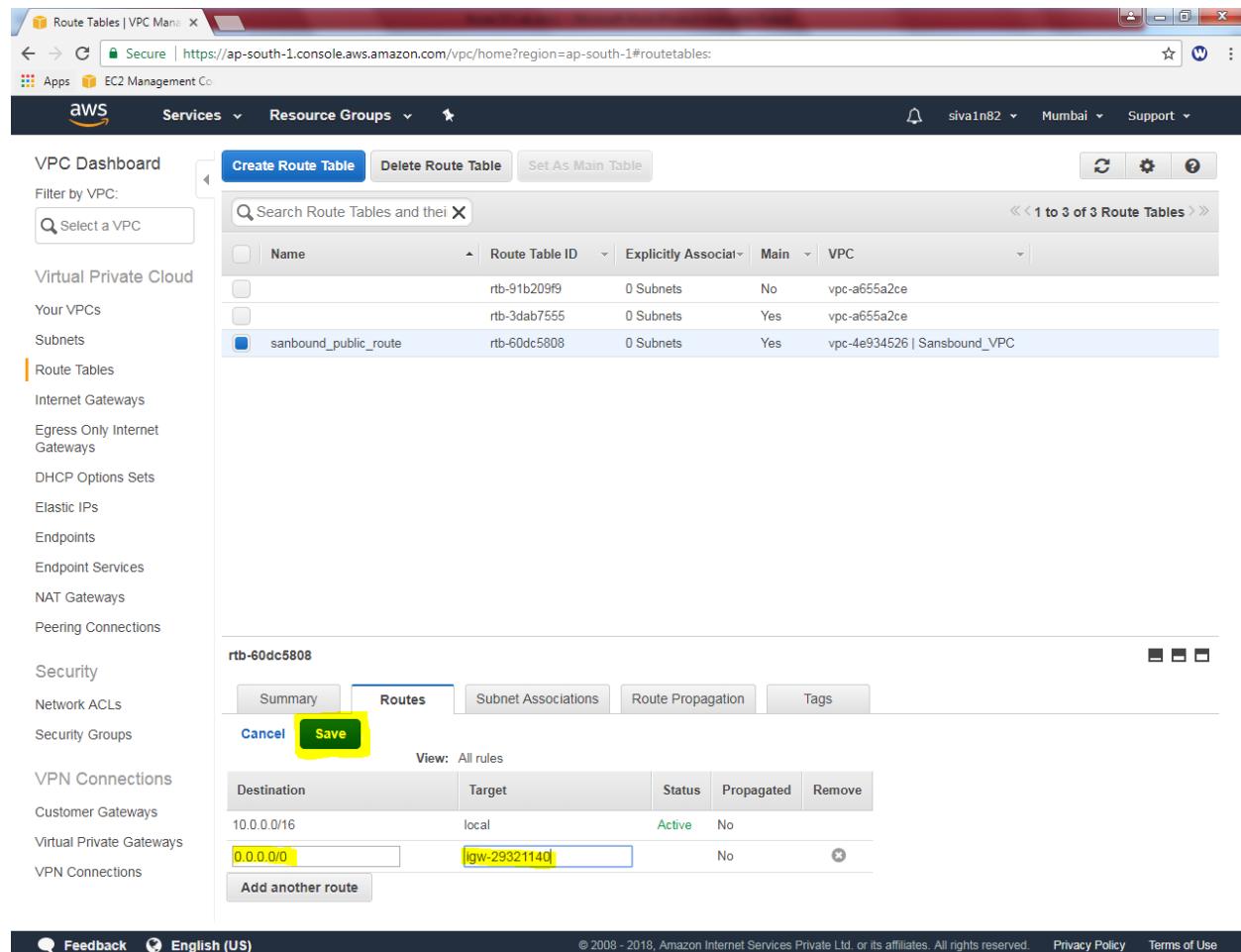
View: All rules

Destination	Target	Status	Propagated	Remove
10.0.0.0/16	local	Active	No	

Add another route

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Add default route 0.0.0.0/0 in sansbound_public_route table and select target as "igw-*".



The screenshot shows the AWS VPC Route Tables interface. On the left, there's a sidebar with various VPC-related options like Internet Gateways, Egress Only Internet Gateways, DHCP Options Sets, and Security Groups. The main area shows a list of existing route tables:

Name	Route Table ID	Explicitly Associated	Main	VPC
rtb-91b209f9	rtb-91b209f9	0 Subnets	No	vpc-a655a2ce
rtb-3dab7555	rtb-3dab7555	0 Subnets	Yes	vpc-a655a2ce
sanbound_public_route	rtb-60dc5808	0 Subnets	Yes	vpc-4e934526 Sansbound_VPC

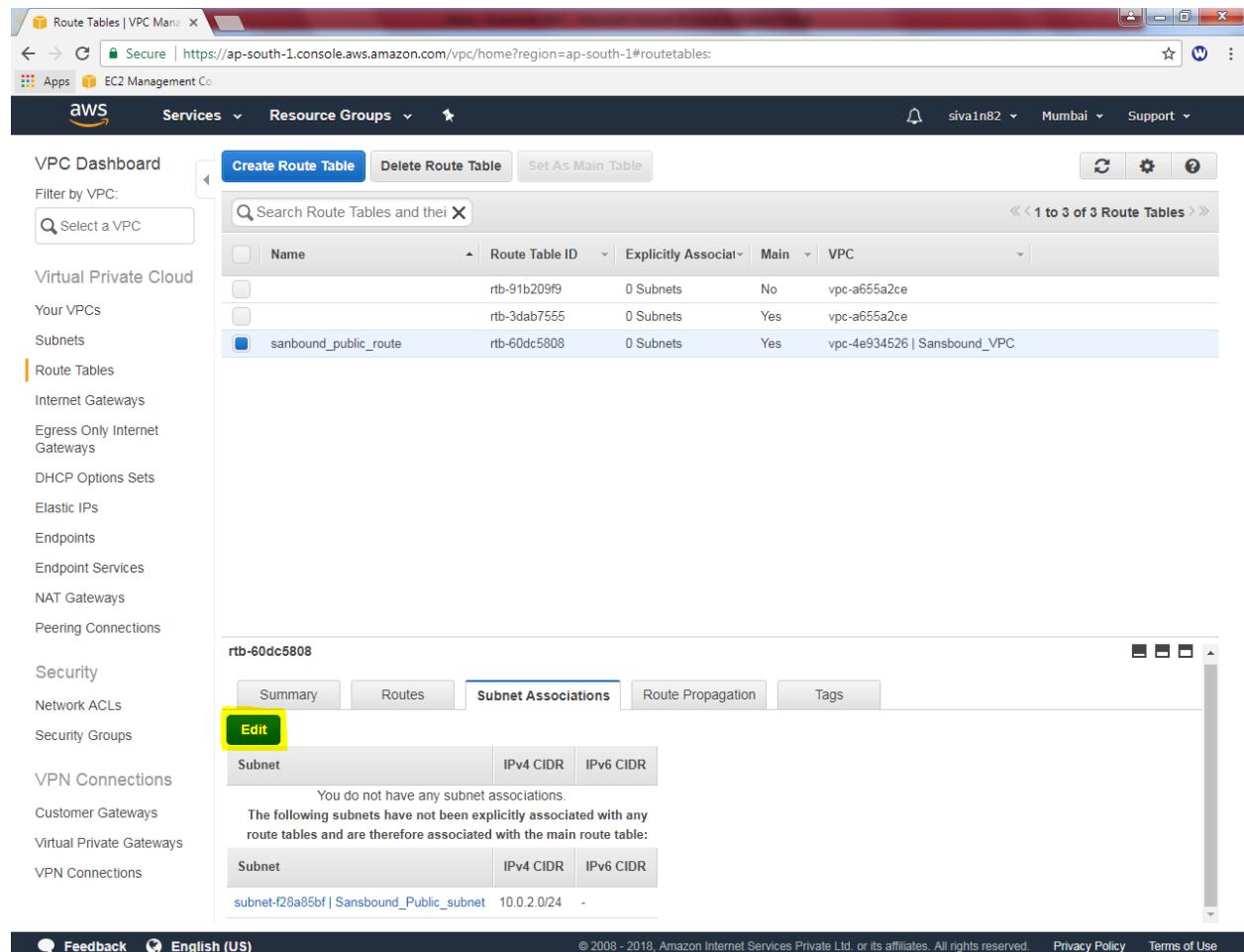
Below this, a specific route table (rtb-60dc5808) is selected. The 'Routes' tab is active, showing a table of routes:

Destination	Target	Status	Propagated	Remove
10.0.0.0/16	local	Active	No	
0.0.0.0/0	igw-29321140	No		

A yellow box highlights the 'Save' button at the bottom of the route table configuration screen.

Then click “Save”.

In Subnet associations tab, click “Edit” option.



The screenshot shows the AWS VPC Route Tables interface. On the left, there's a sidebar with navigation links for Virtual Private Cloud, Route Tables (which is selected), and various other VPC-related services. The main content area displays a list of route tables, with one named "sanbound_public_route" selected. Below this, the details for the selected route table are shown, including its summary, routes, and subnet associations. The "Subnet Associations" tab is active, and the "Edit" button is highlighted with a yellow box. A message indicates that no subnet associations have been explicitly made for this route table, and it lists the subnets associated via the main route table.

Name	Route Table ID	Explicitly Associated	Main	VPC
rtb-91b209f9	0 Subnets	No		vpc-a655a2ce
rtb-3dab7555	0 Subnets	Yes		vpc-a655a2ce
sanbound_public_route	rtb-60dc5808	0 Subnets	Yes	vpc-4e934526 Sansbound_VPC

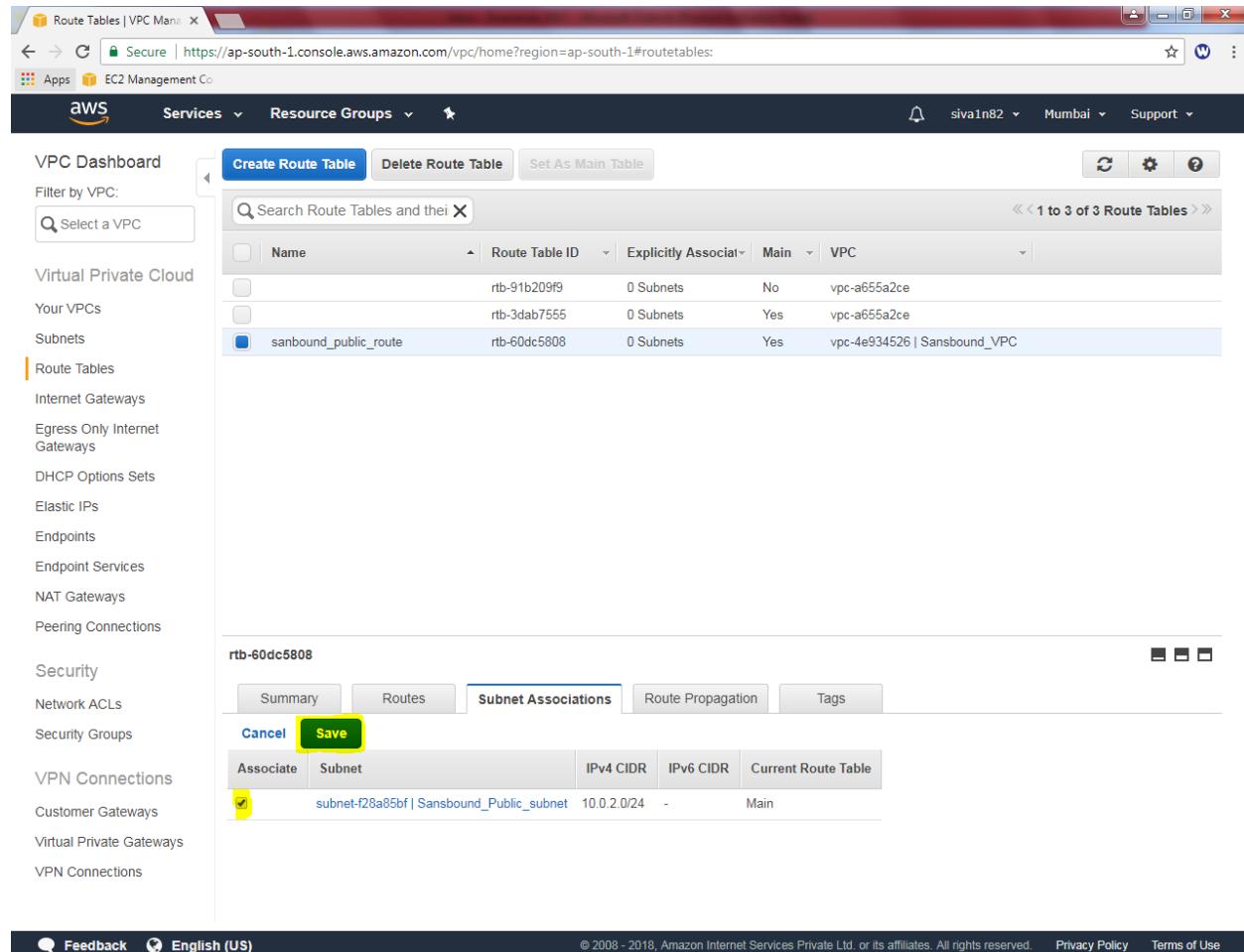
rtb-60dc5808

- Summary
- Routes
- Subnet Associations**
- Route Propagation
- Tags

Edit

Subnet	IPv4 CIDR	IPv6 CIDR
You do not have any subnet associations.		
The following subnets have not been explicitly associated with any route tables and are therefore associated with the main route table:		
Subnet	IPv4 CIDR	IPv6 CIDR
subnet-f28a85bf Sansbound_Public_subnet	10.0.2.0/24	-

Select “Sansbound_Public_Subnet” check box and click “save”.

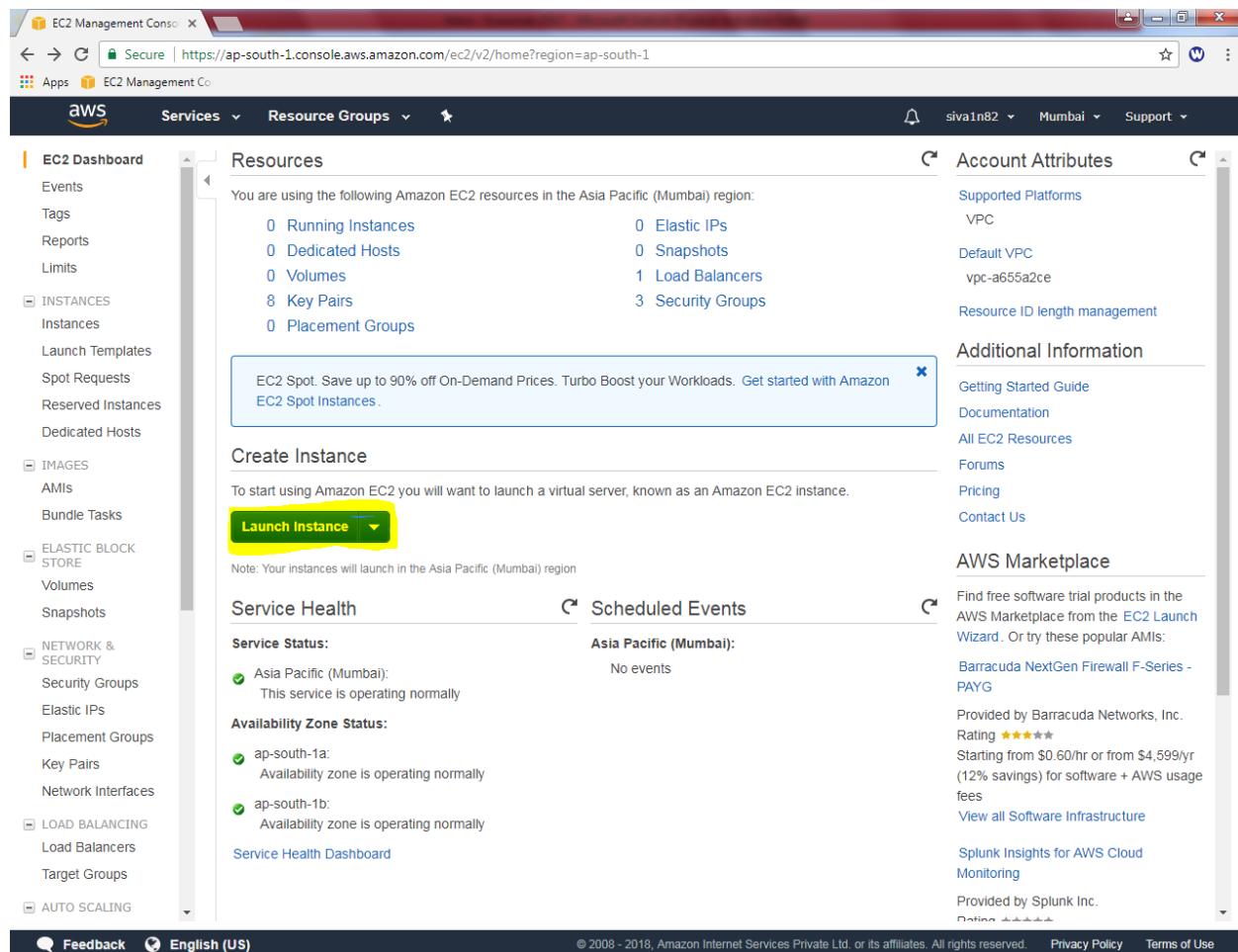


Name	Route Table ID	Explicitly Associated Subnets	Main	VPC
rtb-91b209f9	rtb-91b209f9	0 Subnets	No	vpc-a655a2ce
rtb-3dab7555	rtb-3dab7555	0 Subnets	Yes	vpc-a655a2ce
sanbound_public_route	rtb-60dc5808	0 Subnets	Yes	vpc-4e934526 Sansbound_VPC

rtb-60dc5808				
Summary	Routes	Subnet Associations	Route Propagation	Tags
Cancel	Save			
Associate	Subnet	IPv4 CIDR	IPv6 CIDR	Current Route Table
<input checked="" type="checkbox"/>	subnet-f28a85bf Sansbound_Public_subnet	10.0.0/24	-	Main

Now we need to create two instances.

Goto EC2, click launch instance

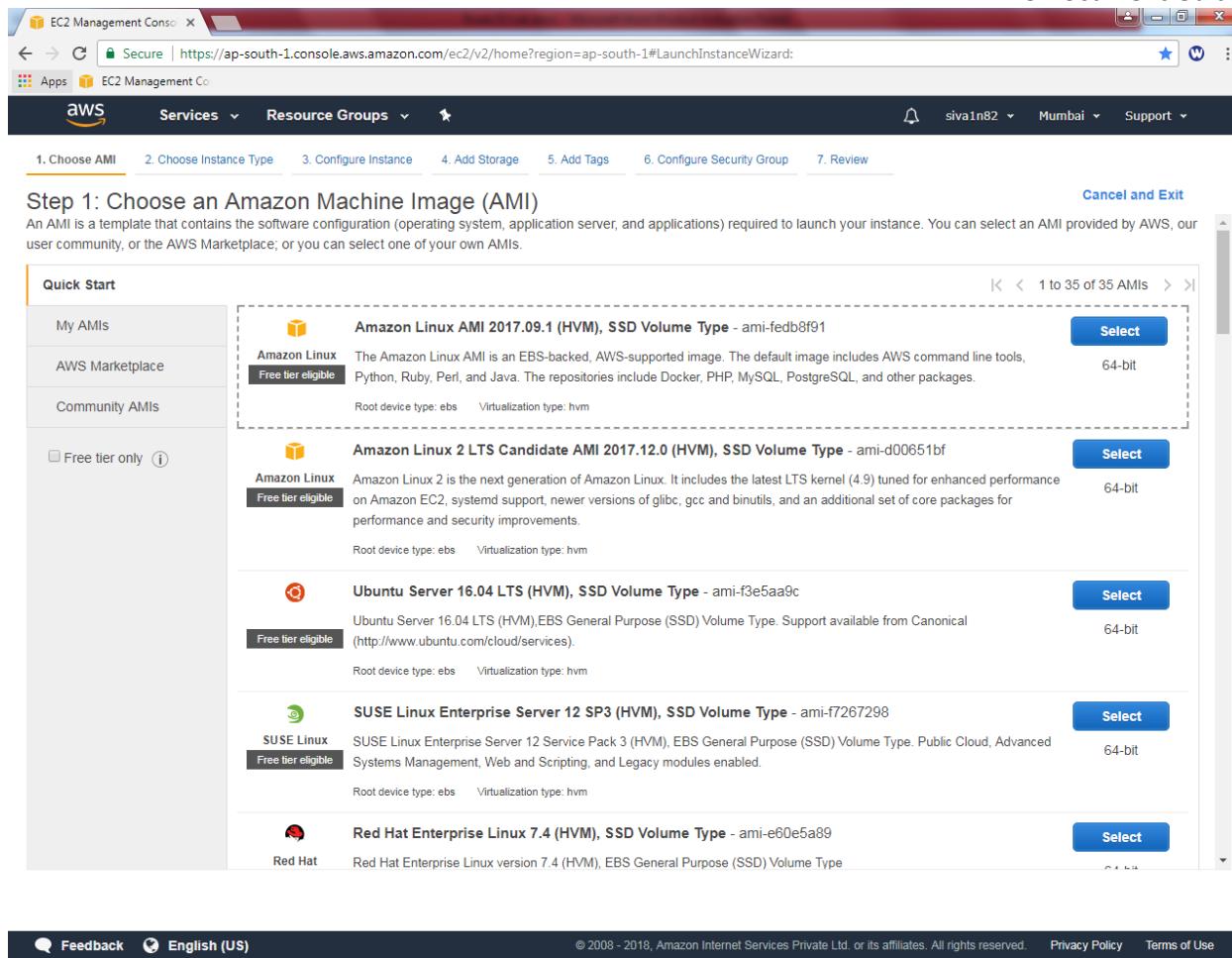


The screenshot shows the AWS EC2 Management Console interface. The left sidebar contains a navigation menu with categories such as EC2 Dashboard, Instances, Images, Elastic Block Store, Network & Security, Load Balancing, and Auto Scaling. The main content area is titled 'Resources' and displays the following resource counts for the Asia Pacific (Mumbai) region:

Resource Type	Count
Running Instances	0
Elastic IPs	0
Dedicated Hosts	0
Volumes	0
Key Pairs	8
Placement Groups	0
Snapshots	0
Load Balancers	1
Security Groups	3

A callout box highlights the 'EC2 Spot' section, which encourages saving up to 90% off On-Demand Prices by Turbo Boosting workloads. Below this, there's a 'Create Instance' section with a prominent yellow 'Launch Instance' button. The right side of the screen features 'Account Attributes' (including Supported Platforms, VPC, Default VPC, and Resource ID length management), 'Additional Information' (links to Getting Started Guide, Documentation, All EC2 Resources, Forums, Pricing, and Contact Us), and the 'AWS Marketplace' section.

Select Amazon Linux AMI and then click Next



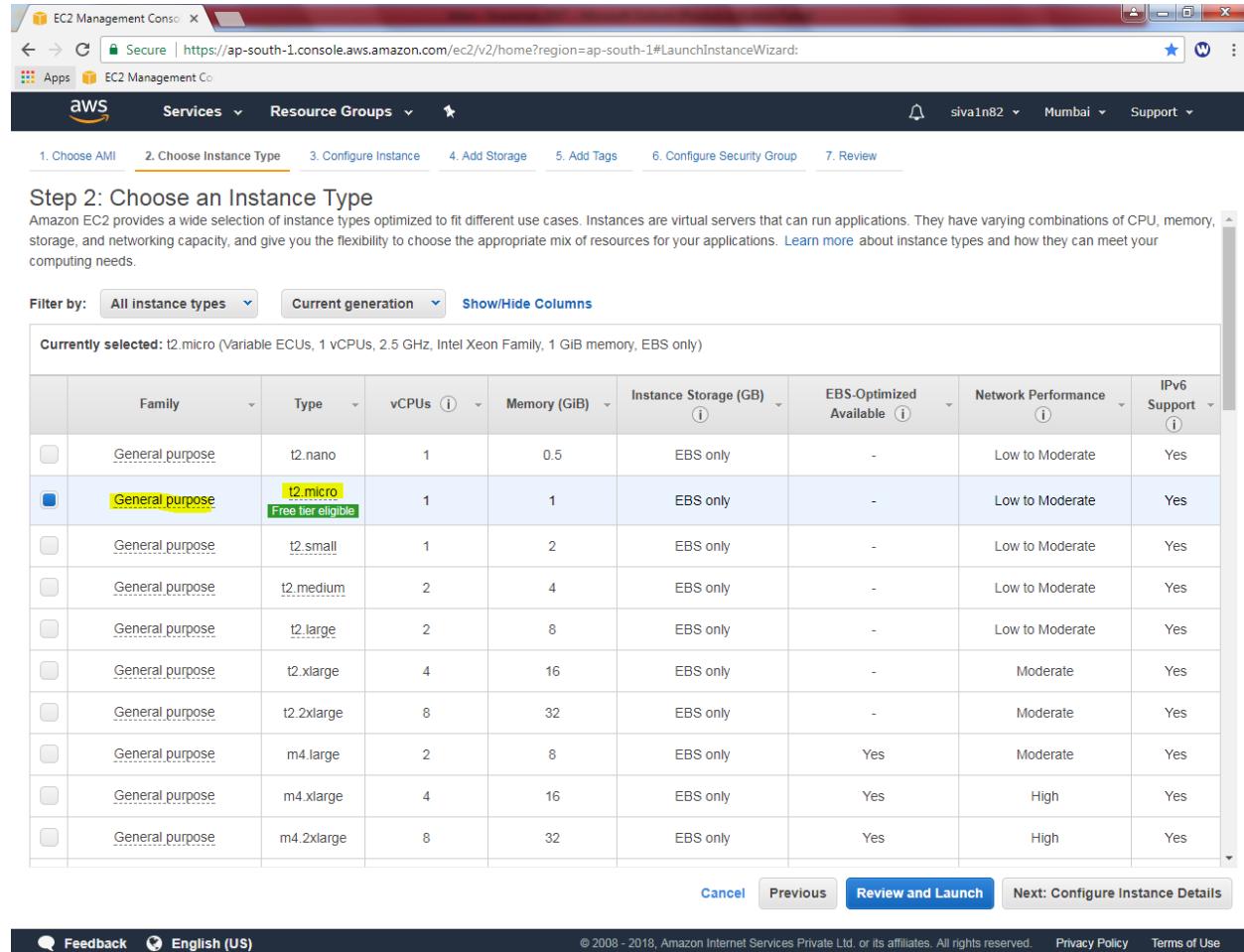
Step 1: Choose an Amazon Machine Image (AMI)

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		Actions	
<input type="checkbox"/> My AMIs	Amazon Linux AMI 2017.09.1 (HVM), SSD Volume Type - ami-fedb8f91	<input type="button" value="Select"/>	64-bit
<input type="checkbox"/> AWS Marketplace	Amazon Linux <small>Free tier eligible</small>	The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.	
<input type="checkbox"/> Community AMIs		Root device type: ebs	Virtualization type: hvm
<input type="checkbox"/> Free tier only <small>(i)</small>			
	Amazon Linux 2 LTS Candidate AMI 2017.12.0 (HVM), SSD Volume Type - ami-d00651bf	<input type="button" value="Select"/>	64-bit
	Amazon Linux <small>Free tier eligible</small>	Amazon Linux 2 is the next generation of Amazon Linux. It includes the latest LTS kernel (4.9) tuned for enhanced performance on Amazon EC2, systemd support, newer versions of glibc, gcc and binutils, and an additional set of core packages for performance and security improvements.	
	Root device type: ebs	Virtualization type: hvm	
	Ubuntu Server 16.04 LTS (HVM), SSD Volume Type - ami-f3e5aa9c	<input type="button" value="Select"/>	64-bit
	Ubuntu Server 16.04 LTS (HVM), EBS General Purpose (SSD) Volume Type. Support available from Canonical (http://www.ubuntu.com/cloud/services).	Root device type: ebs	Virtualization type: hvm
	SUSE Linux Enterprise Server 12 SP3 (HVM), SSD Volume Type - ami-f7267298	<input type="button" value="Select"/>	64-bit
	SUSE Linux Enterprise Server 12 Service Pack 3 (HVM), EBS General Purpose (SSD) Volume Type. Public Cloud, Advanced Systems Management, Web and Scripting, and Legacy modules enabled.	Root device type: ebs	Virtualization type: hvm
	Red Hat Enterprise Linux 7.4 (HVM), SSD Volume Type - ami-e60e5a89	<input type="button" value="Select"/>	64-bit
	Red Hat Enterprise Linux version 7.4 (HVM), EBS General Purpose (SSD) Volume Type	Root device type: ebs	Virtualization type: hvm

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Select “General purpose” – 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.

Filter by: All instance types ▾ Current generation ▾ Show/Hide Columns

Currently selected: t2.micro (Variable ECUs, 1 vCPUs, 2.5 GHz, Intel Xeon Family, 1 GiB memory, EBS only)

	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

Cancel Previous Review and Launch Next: Configure Instance Details

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Network : Sansbound_VPC

Subnet : Public_Subnet

Auto assign Public IP: Enable

EC2 Management Console Secure | https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard:

Apps EC2 Management Co

aws Services Resource Groups

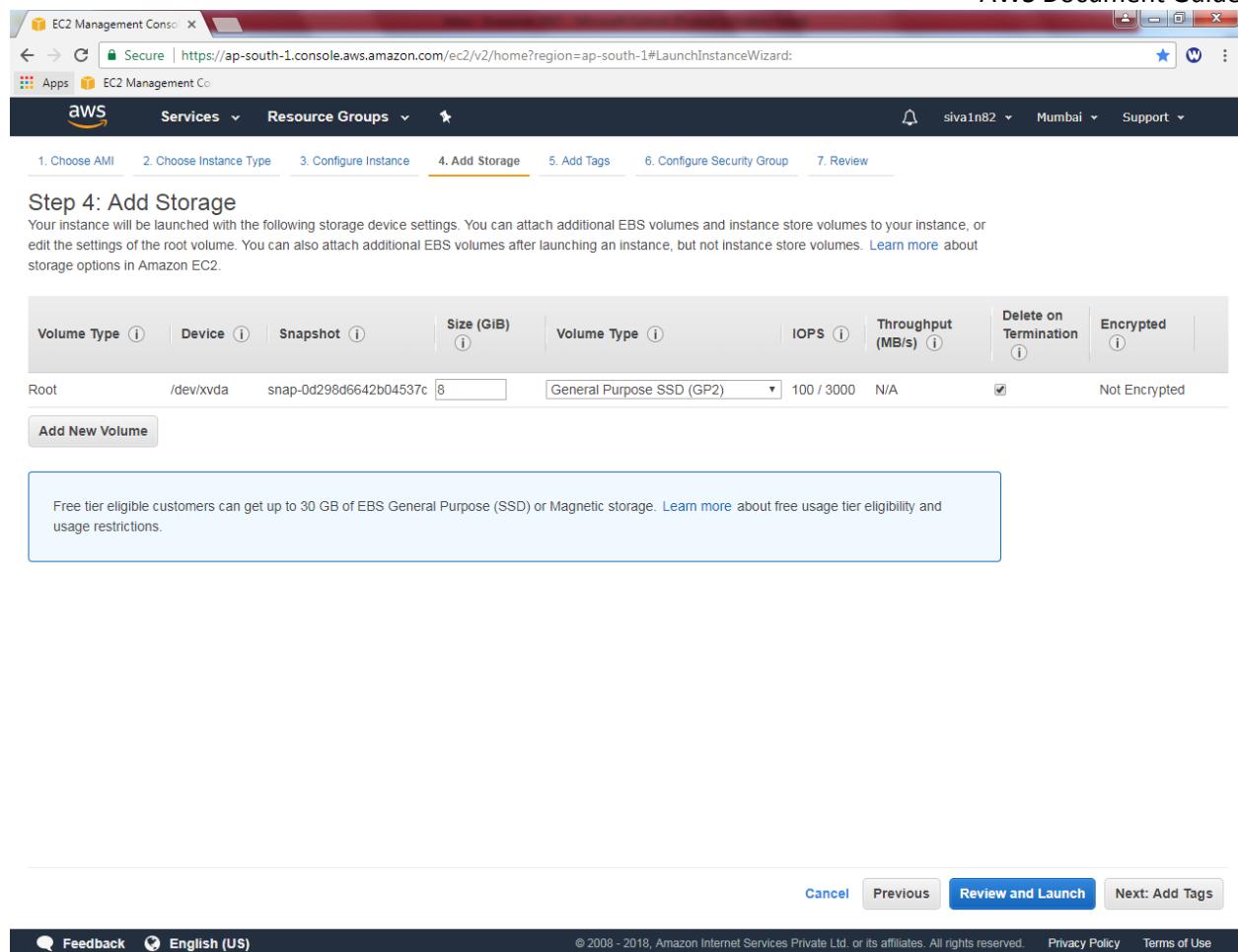
1. Choose AMI 2. Choose Instance Type 3. Configure Instance 4. Add Storage 5. Add Tags 6. Configure Security Group 7. Review

Step 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	<input type="text" value="1"/> Launch into Auto Scaling Group												
Purchasing option	<input checked="" type="checkbox"/> Request Spot Instances												
Network	vpc-4e934526 Sansbound_VPC <input type="button" value="Create new VPC"/>												
Subnet	subnet-f28a65bf Sansbound_Public_subnet ap-so <input type="button" value="Create new subnet"/> 251 IP Addresses available												
Auto-assign Public IP	<input checked="" type="checkbox"/> Enable												
IAM role	<input type="text" value="None"/> <input type="button" value="Create new IAM role"/>												
Shutdown behavior	<input type="text" value="Stop"/>												
Enable termination protection	<input type="checkbox"/> Protect against accidental termination												
Monitoring	<input type="checkbox"/> Enable CloudWatch detailed monitoring <small>Additional charges apply.</small>												
Tenancy	<input type="text" value="Shared - Run a shared hardware instance"/> <small>Additional charges will apply for dedicated tenancy.</small>												
T2 Unlimited	<input type="checkbox"/> Enable <small>Additional charges may apply</small>												
Network interfaces (1)													
<table border="1"> <thead> <tr> <th>Device</th> <th>Network Interface</th> <th>Subnet</th> <th>Primary IP</th> <th>Secondary IP addresses</th> <th>IPv6 IPs</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Device	Network Interface	Subnet	Primary IP	Secondary IP addresses	IPv6 IPs						
Device	Network Interface	Subnet	Primary IP	Secondary IP addresses	IPv6 IPs								
<input type="button" value="Cancel"/> <input type="button" value="Previous"/> <input style="background-color: #0070C0; color: white; font-weight: bold; border: none; padding: 2px 10px;" type="button" value="Review and Launch"/> <input type="button" value="Next: Add Storage"/>													

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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 (MiB/s)	Delete on Termination	Encrypted
Root	/dev/xvda	snap-0d298d6642b04537c	8	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

Add New Volume

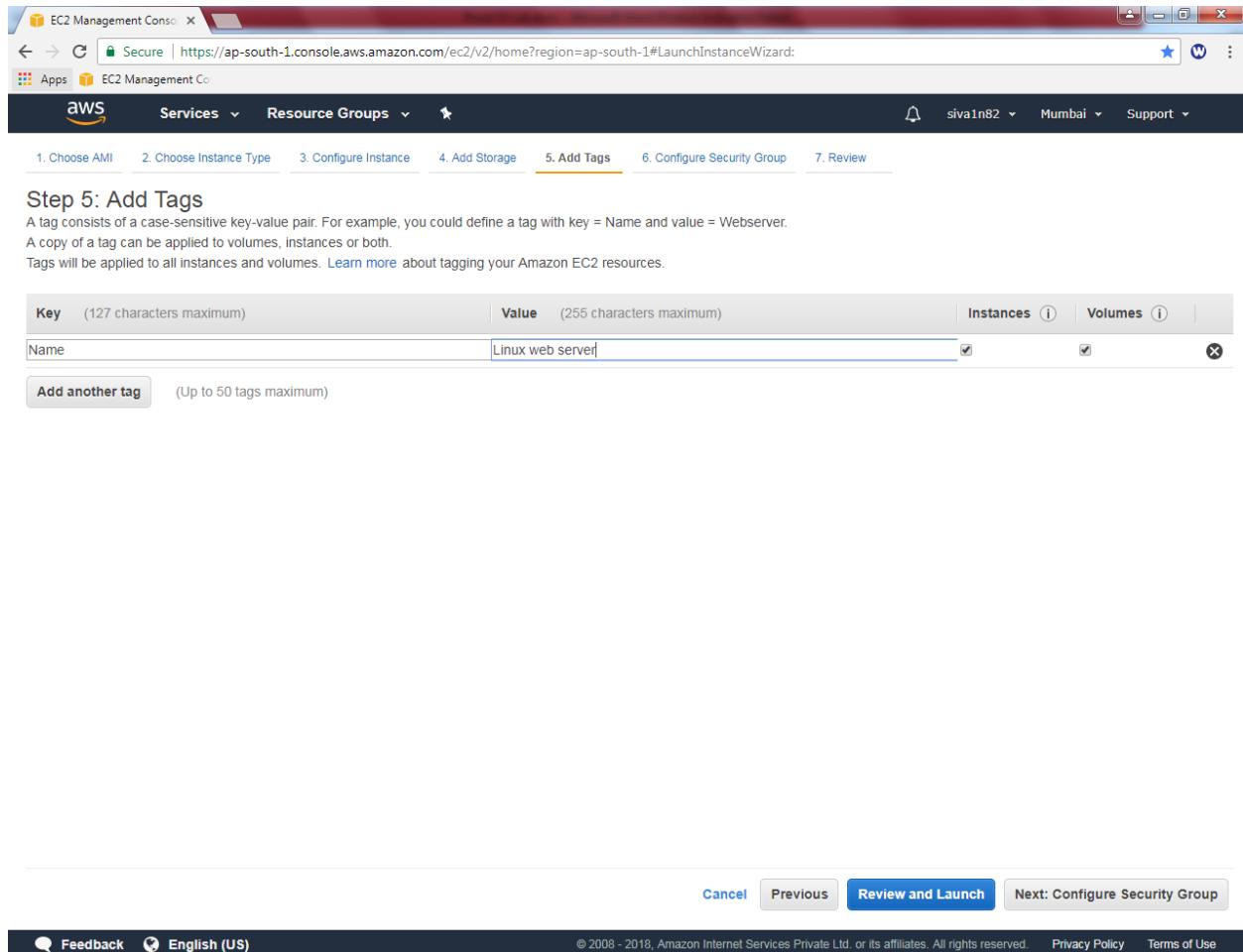
Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

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

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Click "Next" to continue.

Name: Linux web server



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		Linux web server		<input checked="" type="checkbox"/>	<input type="checkbox"/>

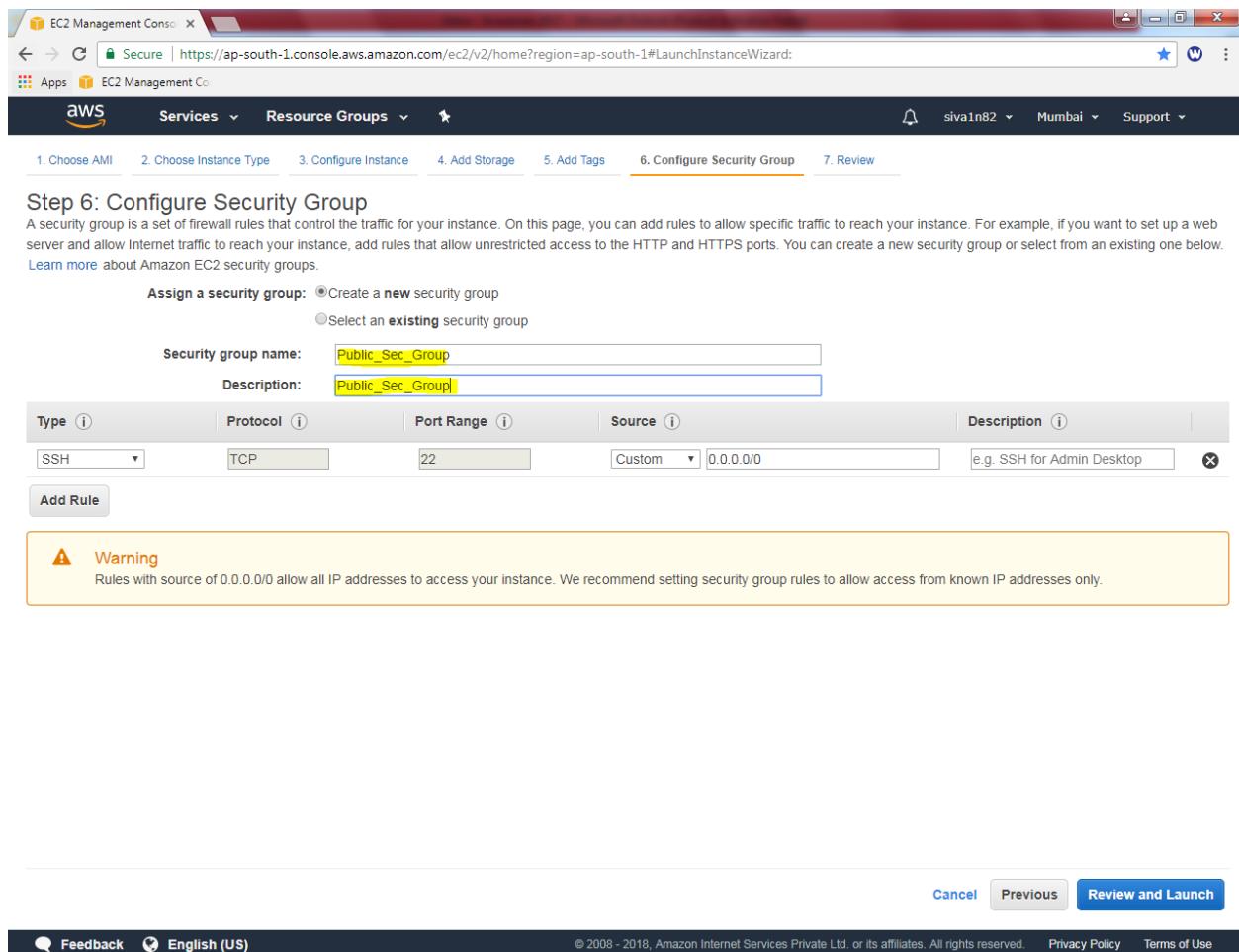
[Add another tag](#) (Up to 50 tags maximum)

[Cancel](#) [Previous](#) **Review and Launch** [Next: Configure Security Group](#)

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

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In Security group configure as Public_Sec_Group.



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
SSH	TCP	22	Custom 0.0.0.0/0	e.g. SSH for Admin Desktop

Add Rule

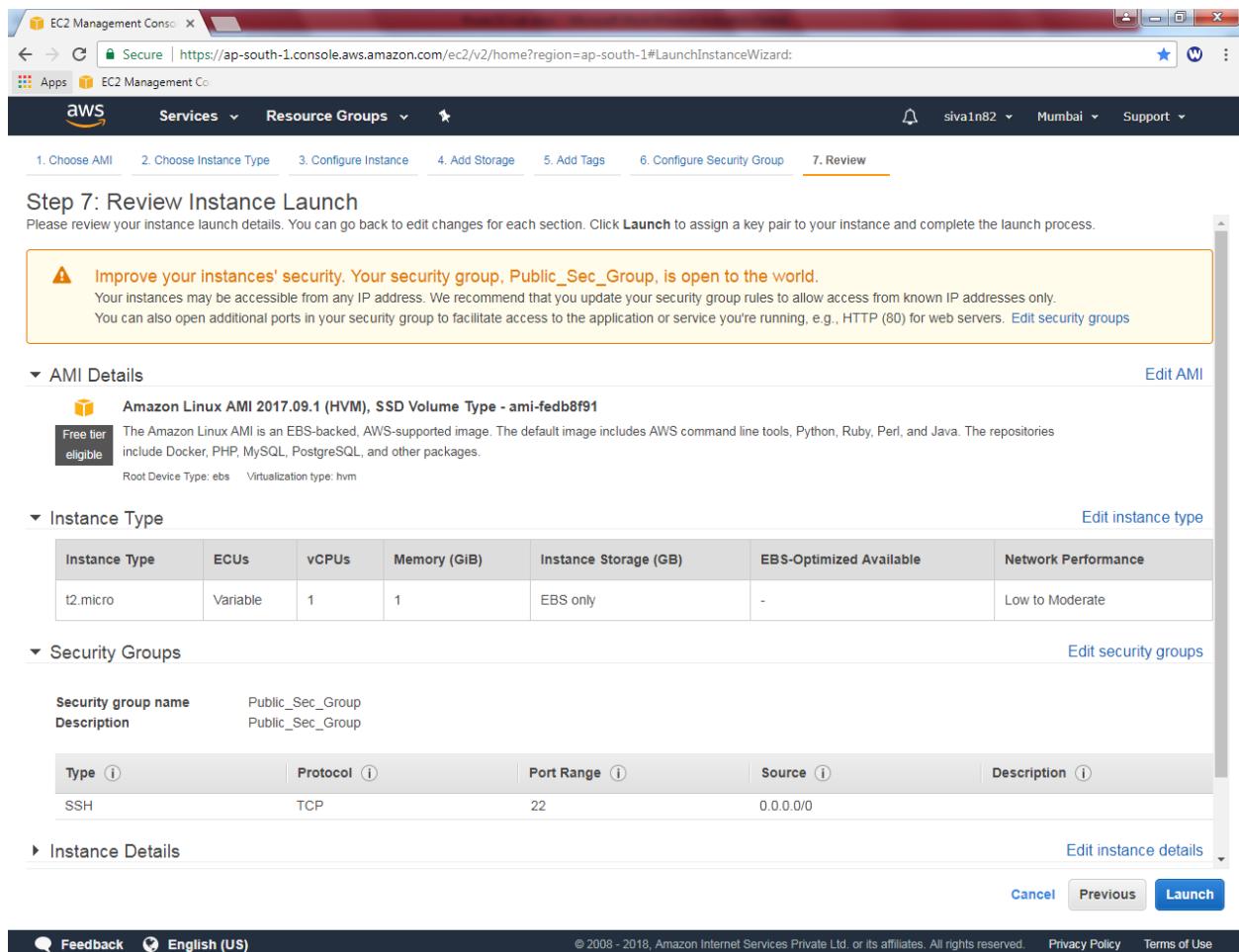
Warning
Rules with source of 0.0.0.0/0 allow all IP addresses to access your instance. We recommend setting security group rules to allow access from known IP addresses only.

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

Feedback **English (US)**

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Click “Review and 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 Edit AMI

Amazon Linux AMI 2017.09.1 (HVM), SSD Volume Type - ami-fedb8f91

Free tier eligible The Amazon Linux AMI is an EBS-backed, AWS-supported image. The default image includes AWS command line tools, Python, Ruby, Perl, and Java. The repositories include Docker, PHP, MySQL, PostgreSQL, and other packages.

Root Device Type: ebs Virtualization type: hvm

Instance Type Edit 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 Edit security groups

Security group name: Public_Sec_Group
Description: Public_Sec_Group

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	0.0.0.0/0	

Instance Details Edit instance details

Cancel **Previous** **Launch**

Feedback **English (US)**

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Then click “Launch”.

Select existing key pair, and check “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

siva2k16 ▾

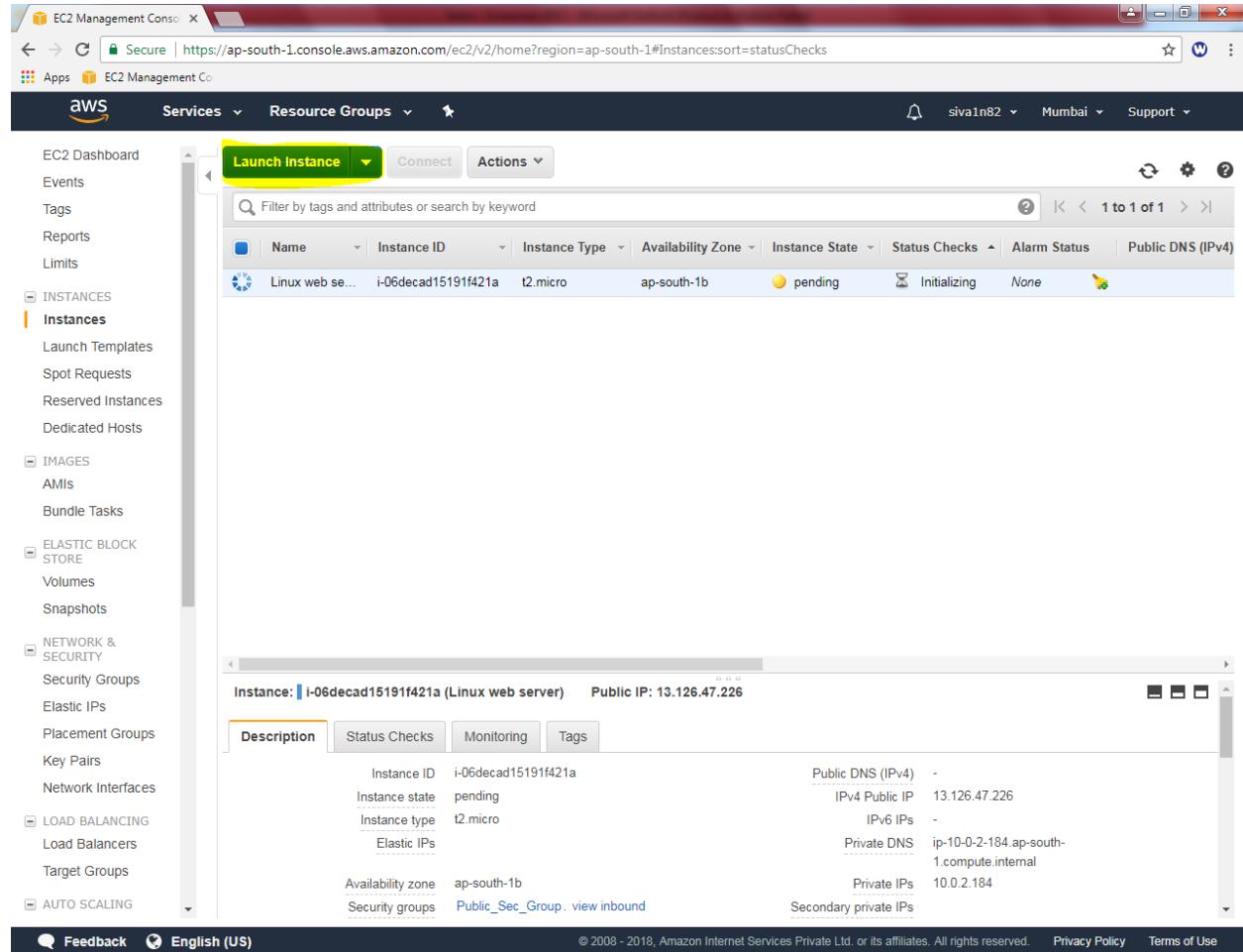
I acknowledge that I have access to the selected private key file (siva2k16.pem), and that without this file, I won't be able to log into my instance.

Cancel

Launch Instances

Click “Launch instances”.

Click “Launch instance to create windows instance”.



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

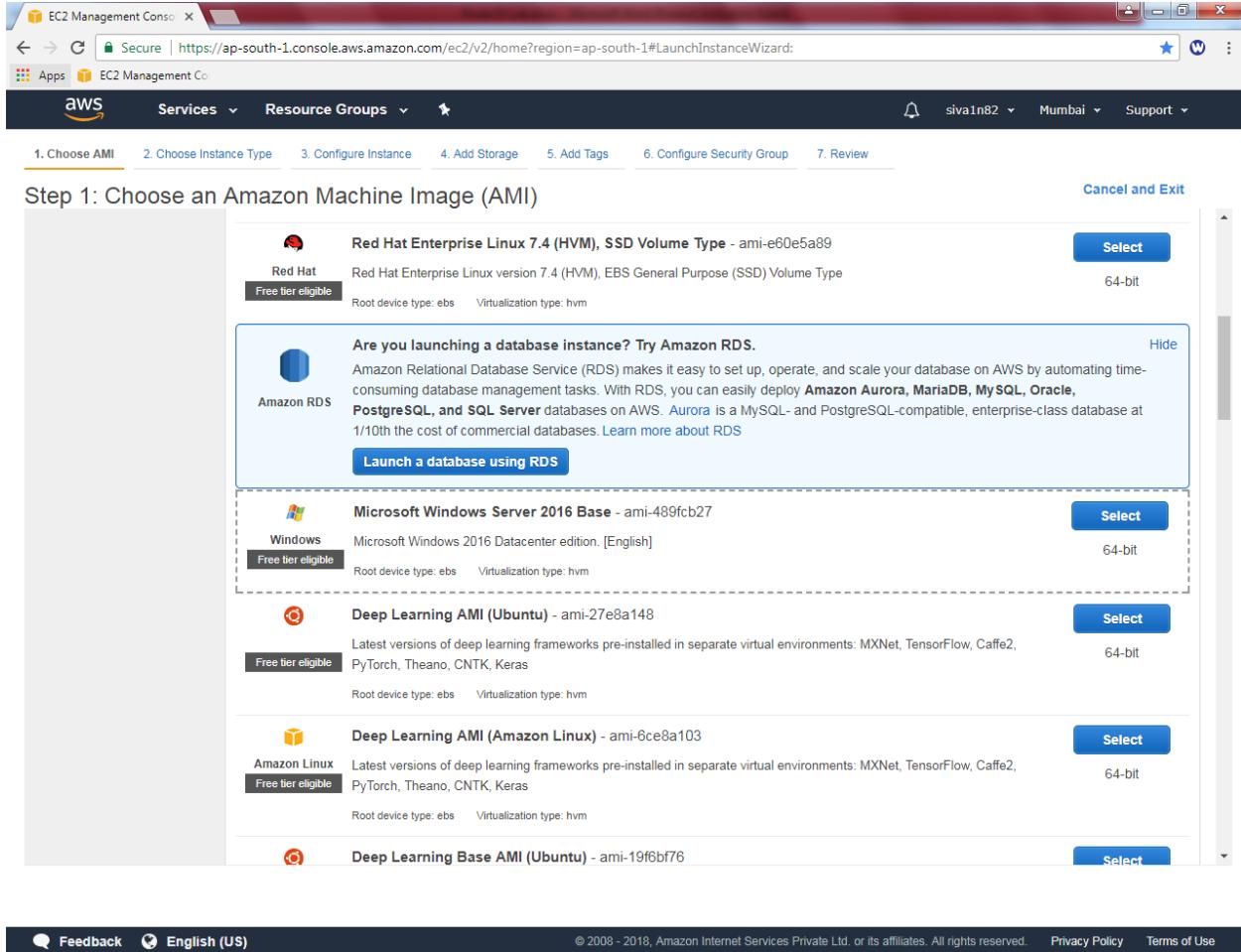
The main content area displays a table of instances. One instance is selected, highlighted with a yellow box around its row:

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
Linux web se...	i-06decad15191f421a	t2.micro	ap-south-1b	pending	Initializing	None	

Below the table, a detailed view of the selected instance (i-06decad15191f421a) is shown. The "Description" tab is selected:

Attribute	Value		
Instance ID	i-06decad15191f421a	Public DNS (IPv4)	-
Instance state	pending	IPv4 Public IP	13.126.47.226
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	ip-10-0-2-184.ap-south-1.compute.internal
Availability zone	ap-south-1b	Private IPs	10.0.2.184
Security groups	Public_Sec_Group, view inbound	Secondary private IPs	

Select “Windows Server 2016 Base”



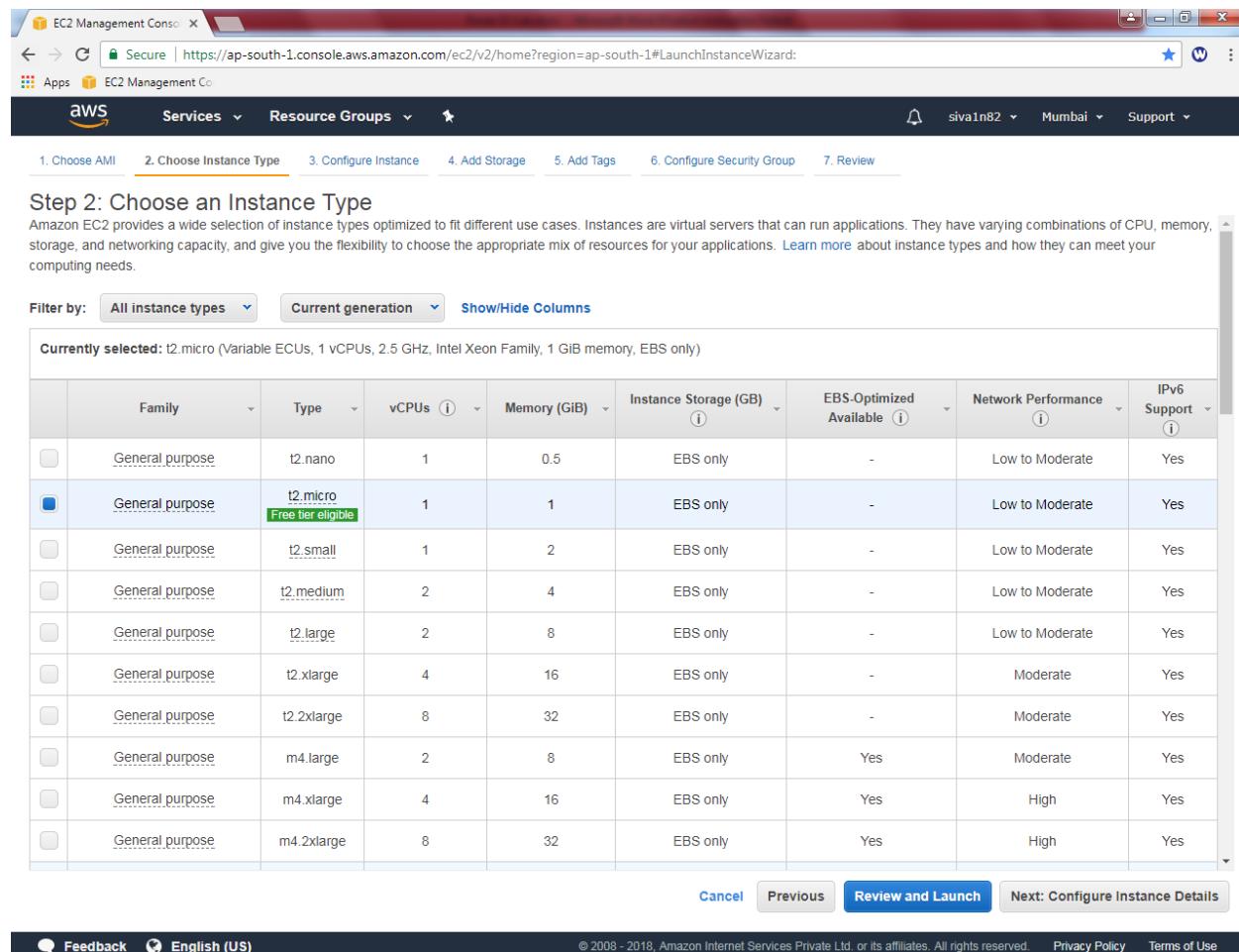
The screenshot shows the AWS EC2 Management Console interface. At the top, there's a navigation bar with tabs like 'Services', 'Resource Groups', and 'Support'. Below the navigation bar, a progress bar indicates the user is at Step 1: Choose an Amazon Machine Image (AMI) out of 7 steps.

In the main content area, the heading 'Step 1: Choose an Amazon Machine Image (AMI)' is displayed. A callout box highlights the 'Amazon RDS' section, which contains a note about launching a database instance using RDS. Below this, several AMI options are listed:

- Red Hat Enterprise Linux 7.4 (HVM), SSD Volume Type - ami-e60e5a89**: Free tier eligible, 64-bit. Includes a note about EBS General Purpose (SSD) Volume Type.
- Microsoft Windows Server 2016 Base - ami-489fcb27**: Windows, Free tier eligible, 64-bit. Microsoft Windows 2016 Datacenter edition [English]. Root device type: ebs, Virtualization type: hvm.
- Deep Learning AMI (Ubuntu) - ami-27e8a148**: Free tier eligible, 64-bit. Latest versions of deep learning frameworks pre-installed in separate virtual environments: MXNet, TensorFlow, Caffe2, PyTorch, Theano, CNTK, Keras. Root device type: ebs, Virtualization type: hvm.
- Deep Learning AMI (Amazon Linux) - ami-6ce8a103**: Amazon Linux, Free tier eligible, 64-bit. Latest versions of deep learning frameworks pre-installed in separate virtual environments: MXNet, TensorFlow, Caffe2, PyTorch, Theano, CNTK, Keras. Root device type: ebs, Virtualization type: hvm.
- Deep Learning Base AMI (Ubuntu) - ami-19f6bf76**: Free tier eligible, 64-bit.

Each AMI entry has a 'Select' button to the right. The 'Microsoft Windows Server 2016 Base' entry is currently selected, indicated by a dashed border around its row.

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 (GiB)	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

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

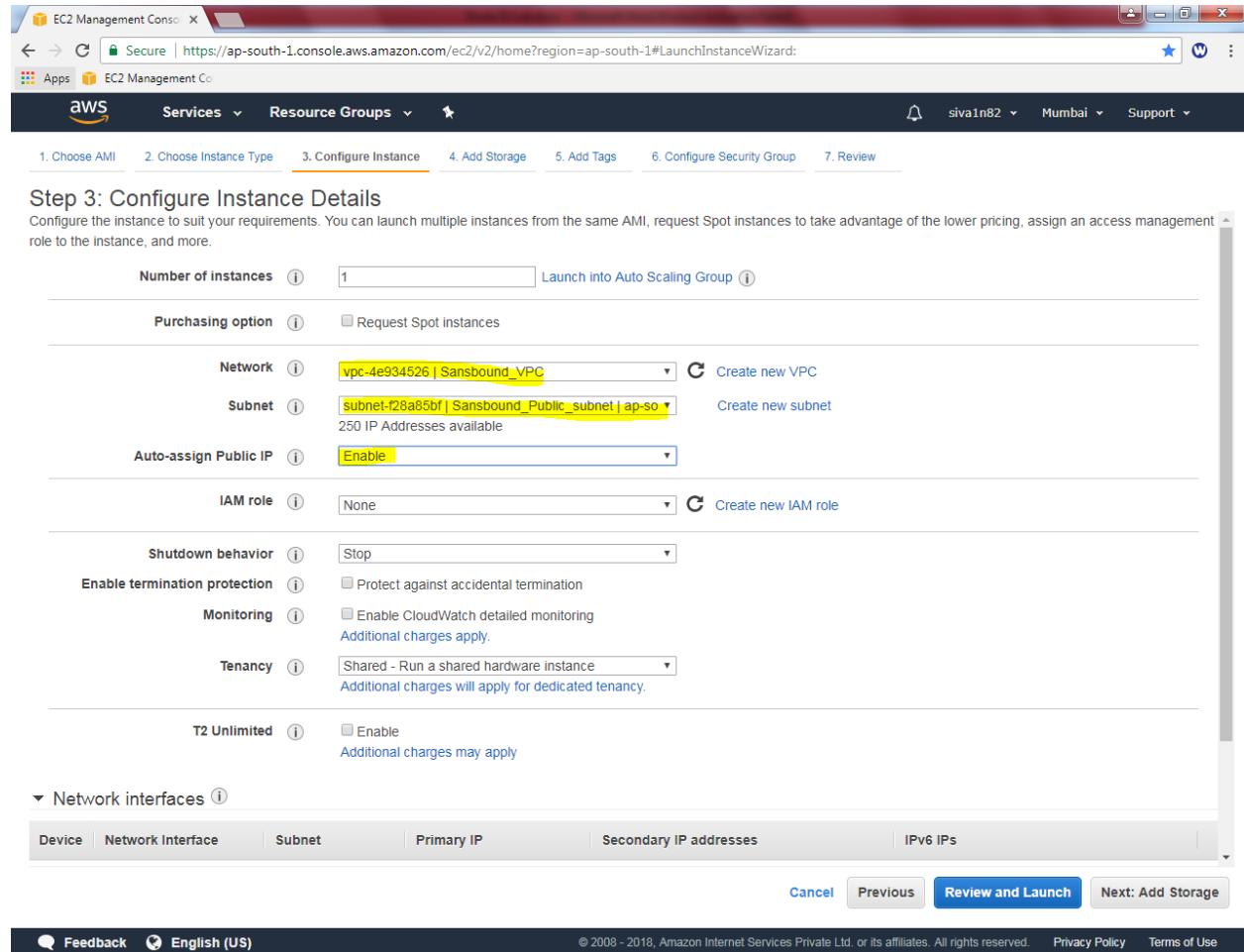
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Click “Next”.

In Network "Sansbound_VPC"

In Subnet "Public Subnet"

Auto assign Public IP : Enable



The screenshot shows the AWS EC2 Management Console Launch Instance Wizard, Step 3: Configure Instance Details. The configuration includes:

- Number of instances:** 1
- Purchasing option:** Request Spot Instances
- Network:** vpc-4e934526 | Sansbound_VPC
- Subnet:** subnets-128a65bf | Sansbound_Public_subnet | ap-south-1 | 250 IP Addresses available
- Auto-assign Public IP:** Enabled
- 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)

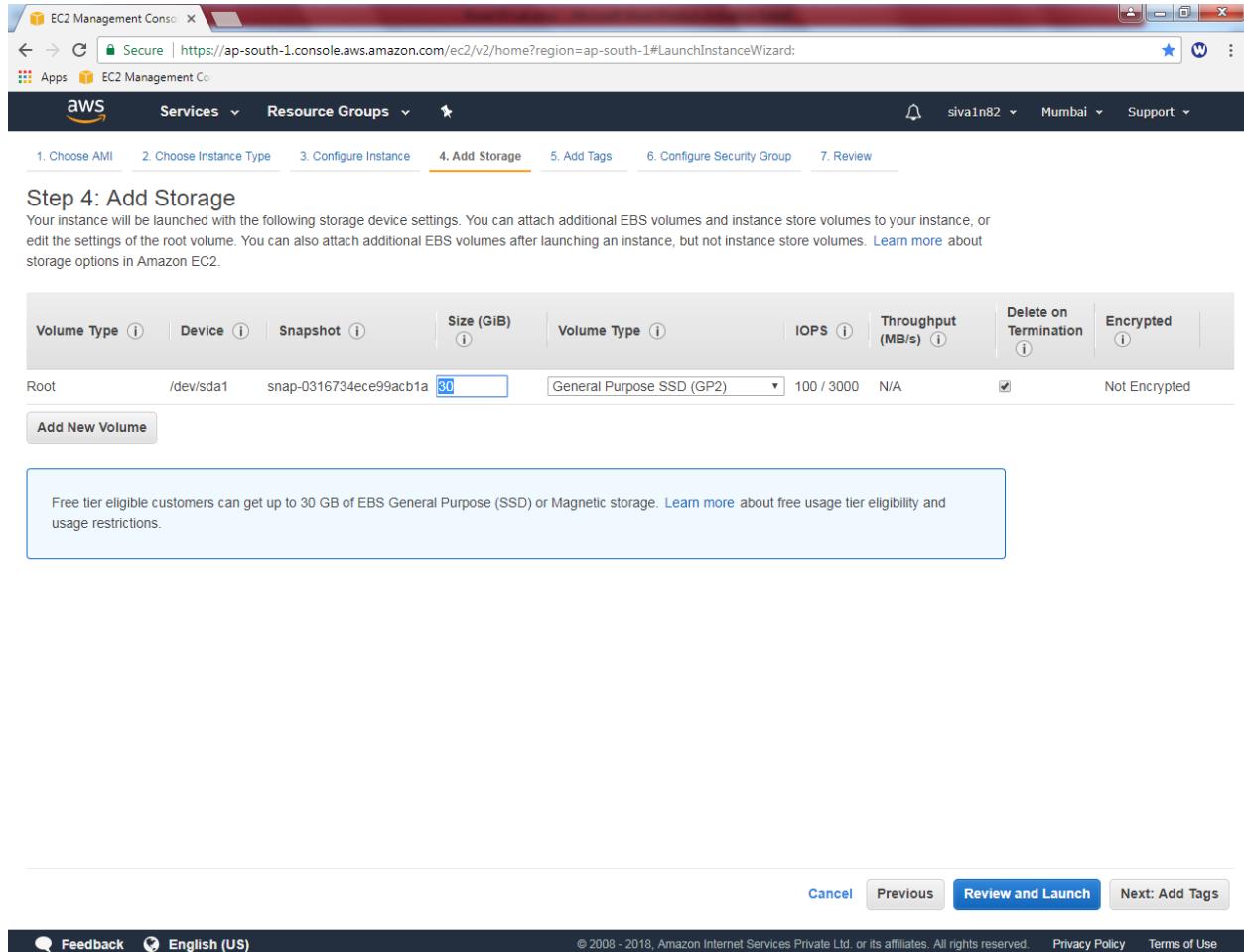
Network interfaces:

Device	Network Interface	Subnet	Primary IP	Secondary IP addresses	IPv6 IPs

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

Click "Next".

Leave default settings and click “Next”.



Volume Type	Device	Snapshot	Size (GiB)	Volume Type	IOPS	Throughput (MB/s)	Delete on Termination	Encrypted
Root	/dev/sda1	snap-0316734ece99acb1a	30	General Purpose SSD (GP2)	100 / 3000	N/A	<input checked="" type="checkbox"/>	Not Encrypted

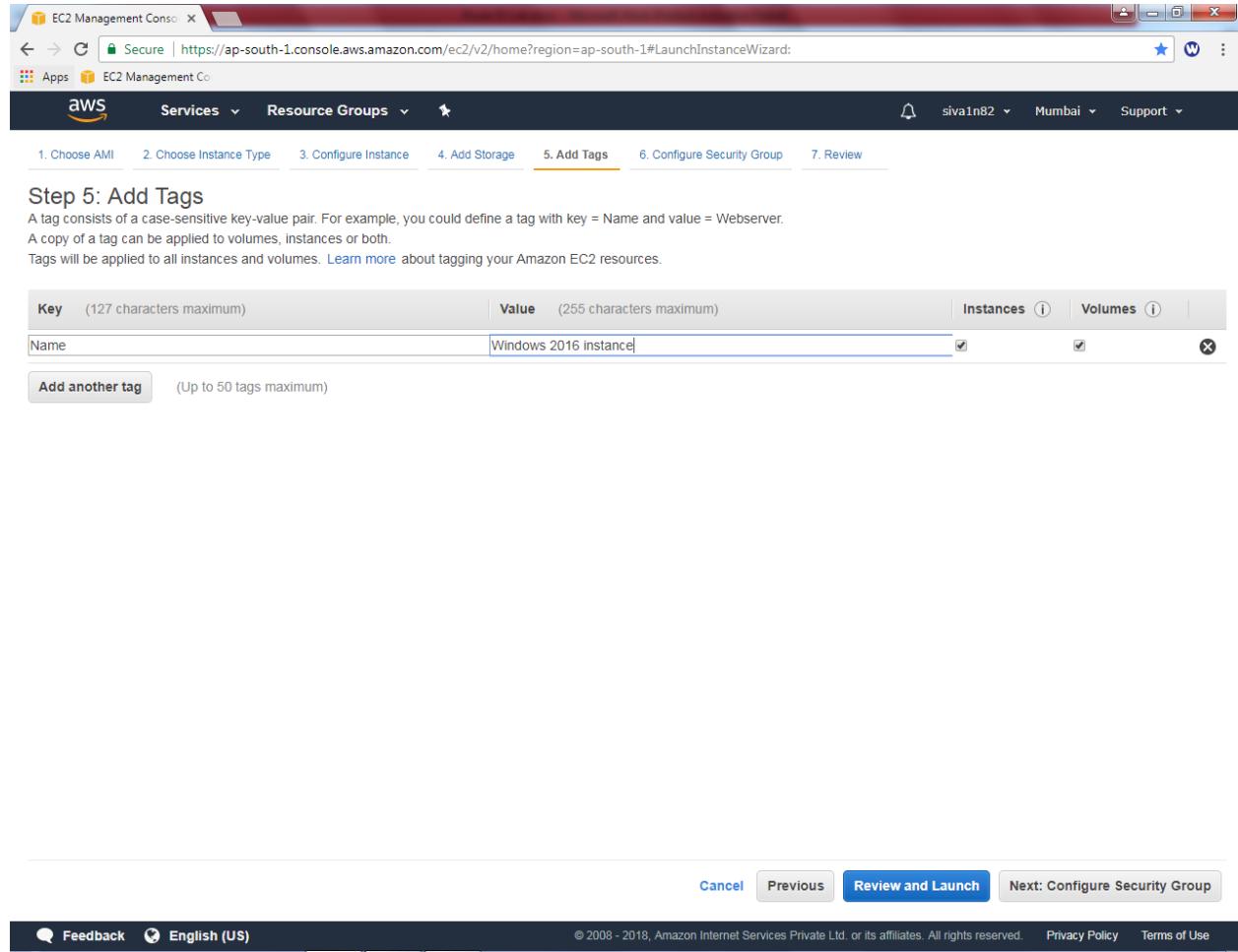
Free tier eligible customers can get up to 30 GB of EBS General Purpose (SSD) or Magnetic storage. [Learn more](#) about free usage tier eligibility and usage restrictions.

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

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

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Name: Windows 2016 instance



The screenshot shows the AWS EC2 Management Console Launch Instance Wizard at Step 5: Add Tags. The URL in the browser is <https://ap-south-1.console.aws.amazon.com/ec2/v2/home?region=ap-south-1#LaunchInstanceWizard>. The navigation bar includes AWS, Services, Resource Groups, and various user and account options.

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.

The main form has two rows:

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

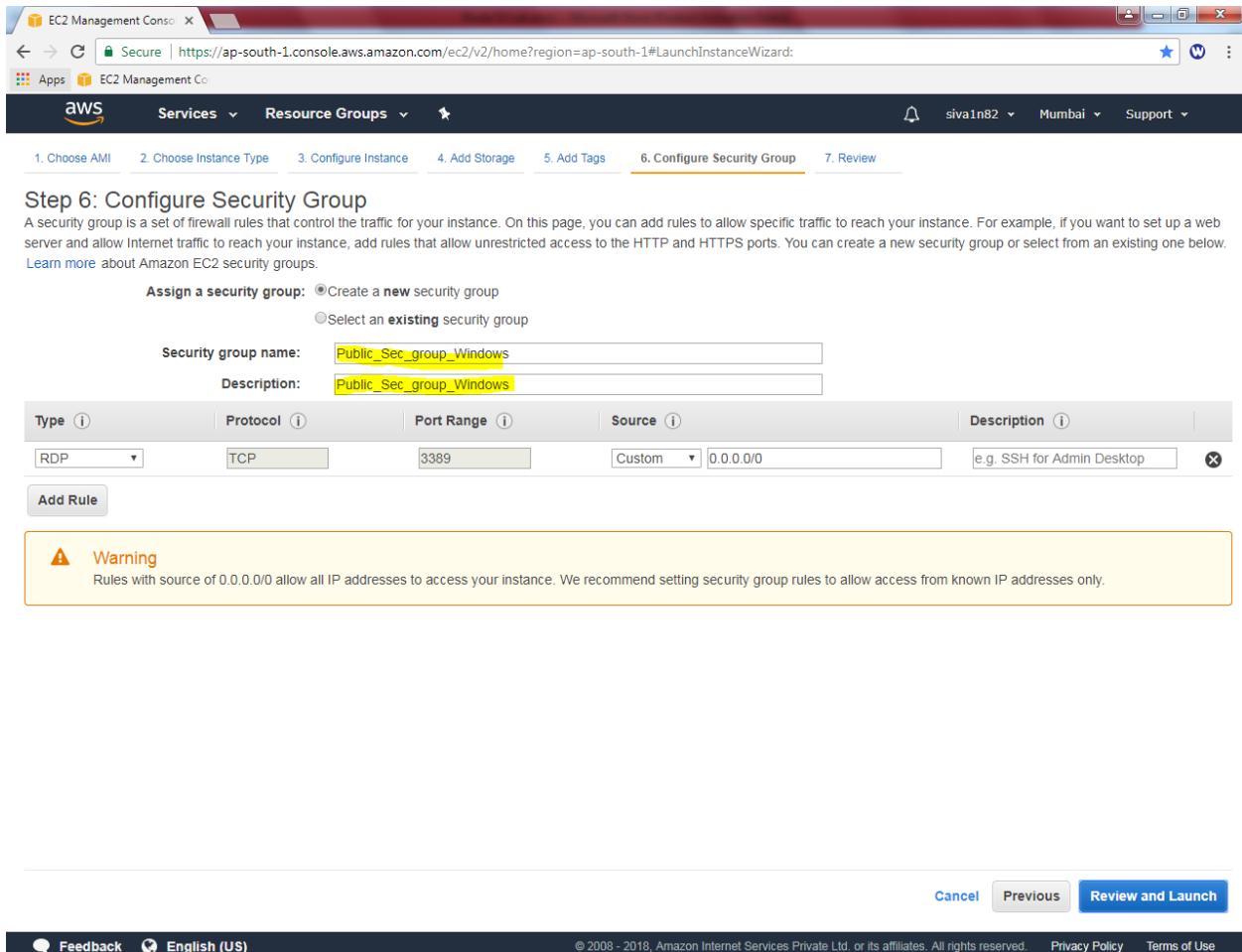
Below the table is a button: **Add another tag** (Up to 50 tags maximum).

At the bottom of the wizard are buttons: Cancel, Previous, **Review and Launch**, and Next: Configure Security Group.

Footer links include Feedback, English (US), © 2008 - 2018, Privacy Policy, and Terms of Use.

Click “Next”.

In Security group, new security group for windows as “Public_Sec_Group_Windows”.



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: **Public_Sec_Group_Windows**
Description: **Public_Sec_Group_Windows**

Type	Protocol	Port Range	Source	Description
RDP	TCP	3389	Custom	0.0.0.0/0
e.g. SSH for Admin Desktop				

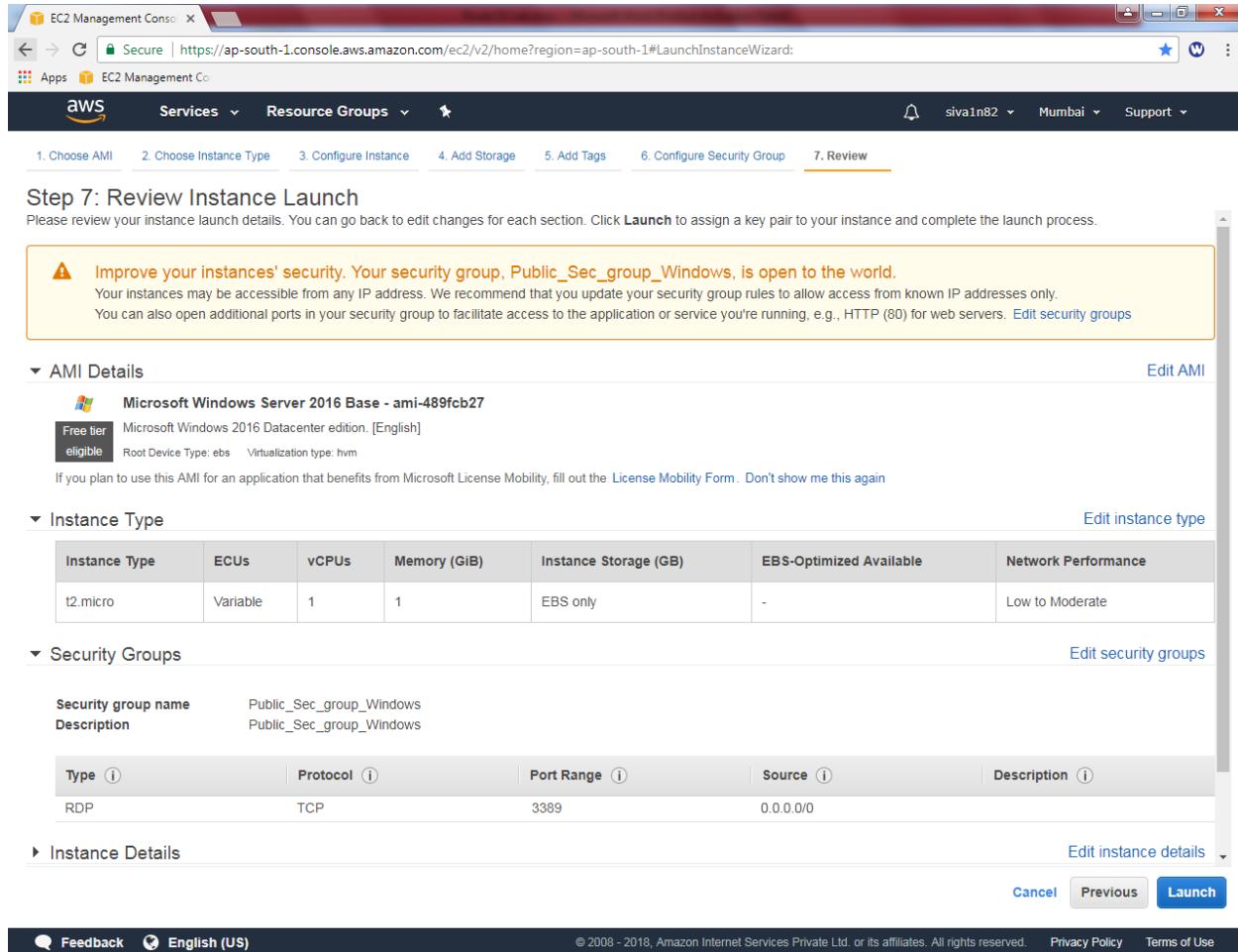
Add Rule

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”.



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-489fcb27

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

Public_Sec_group_Windows

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

Instance Details

Launch

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Click **Launch**.

Choose the existing key pair and then click "I acknowledge" check box.

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

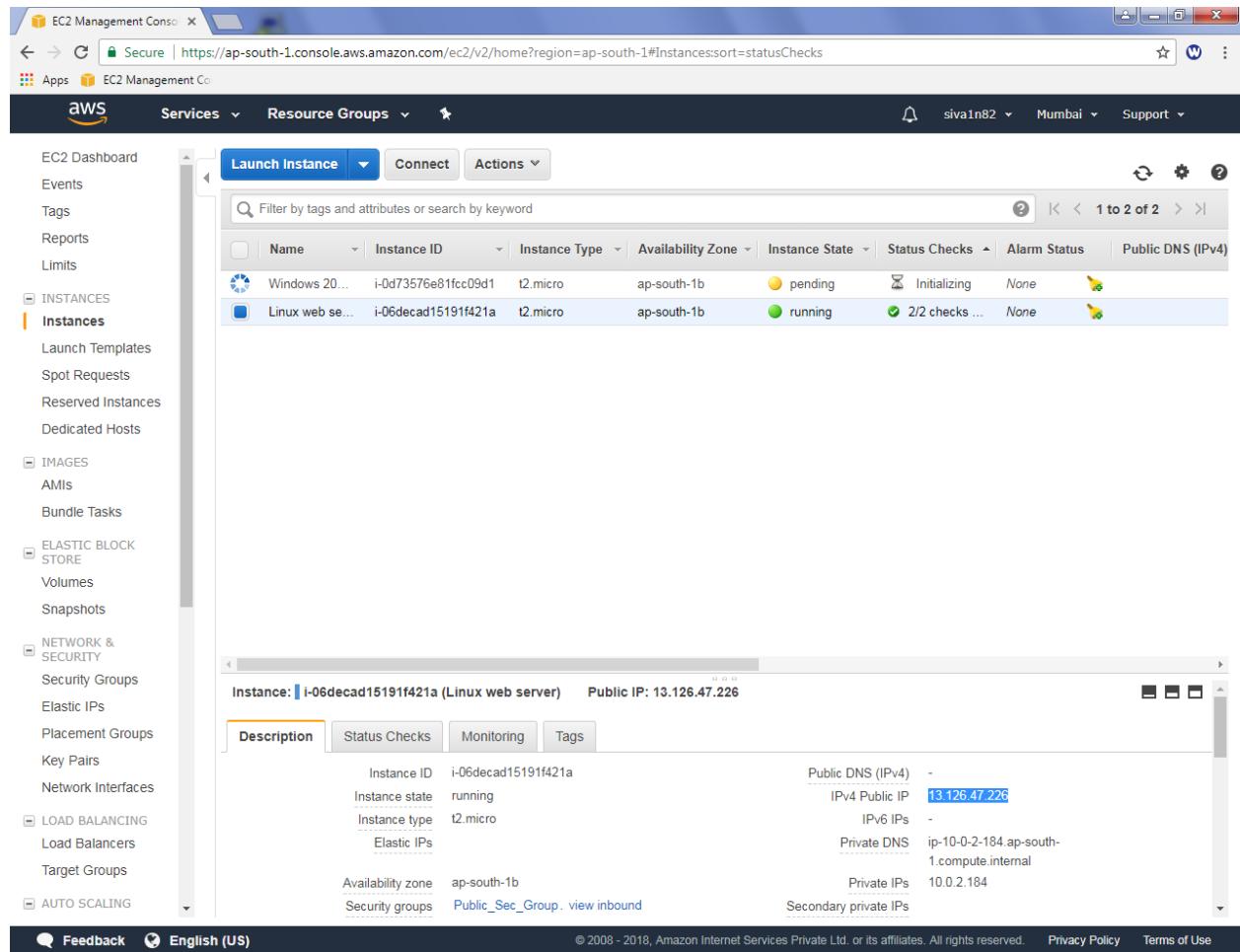
siva2k16 ▼

I acknowledge that I have access to the selected private key file (siva2k16.pem), and that without this file, I won't be able to log into my instance.

[Cancel](#) Launch Instances

Then click Launch Instances.

Get the IP address of Linux machine: 13.126.47.226



The screenshot shows the AWS EC2 Management Console interface. On the left, the navigation sidebar is visible with categories like EC2 Dashboard, Events, Tags, Reports, Limits, Instances, Images, Elastic Block Store, Network & Security, Load Balancing, and Auto Scaling. The 'Instances' section is currently selected.

In the main content area, there is a table listing two instances:

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
Windows 20...	i-0d73576e81fcc09d1	t2.micro	ap-south-1b	pending	Initializing	None	-
Linux web se...	i-06decad15191f421a	t2.micro	ap-south-1b	running	2/2 checks ...	None	13.126.47.226

A modal window is open for the second instance, showing its details:

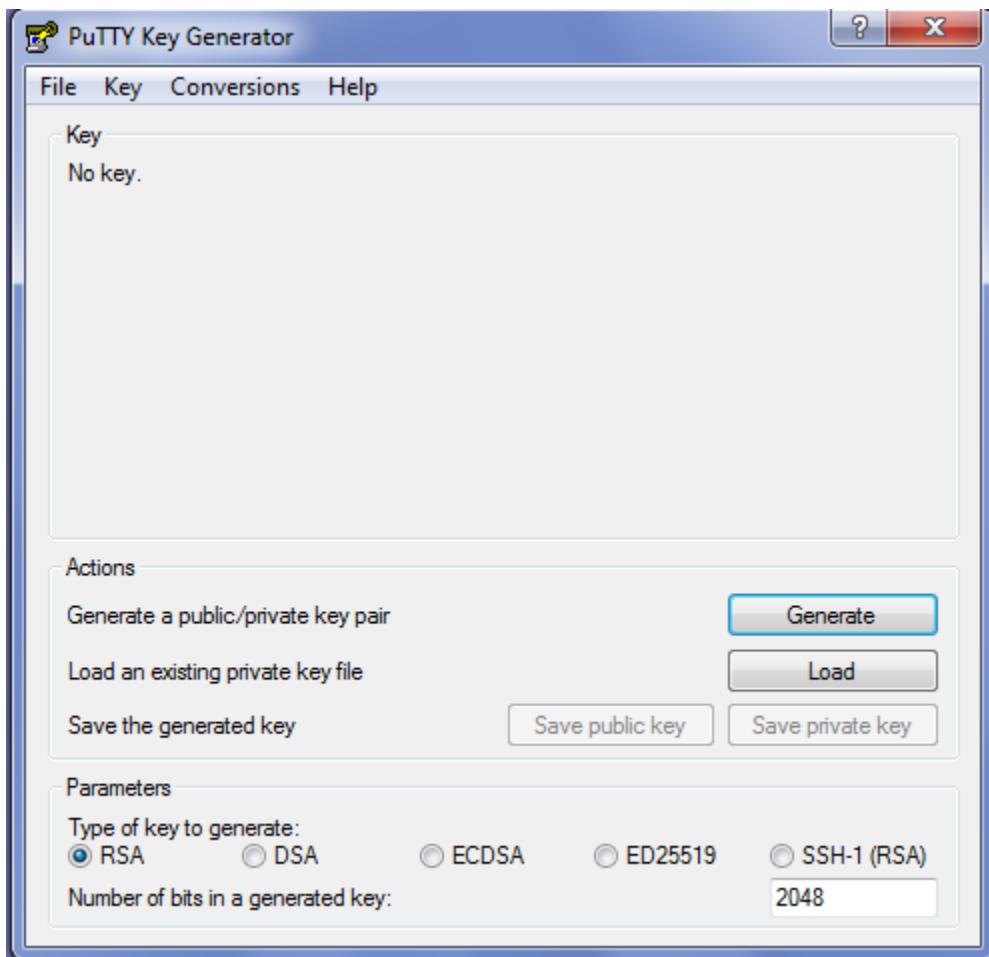
Instance: i-06decad15191f421a (Linux web server) Public IP: 13.126.47.226

Description tab (selected):

Instance ID	i-06decad15191f421a	Public DNS (IPv4)	-
Instance state	running	IPv4 Public IP	13.126.47.226
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	ip-10-0-2-184.ap-south-1.compute.internal
		Private IPs	10.0.2.184
Availability zone	ap-south-1b	Secondary private IPs	
Security groups	Public_Sec_Group. view inbound		

At the bottom of the modal, there are links for Feedback, English (US), Copyright notice (© 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.), Privacy Policy, and Terms of Use.

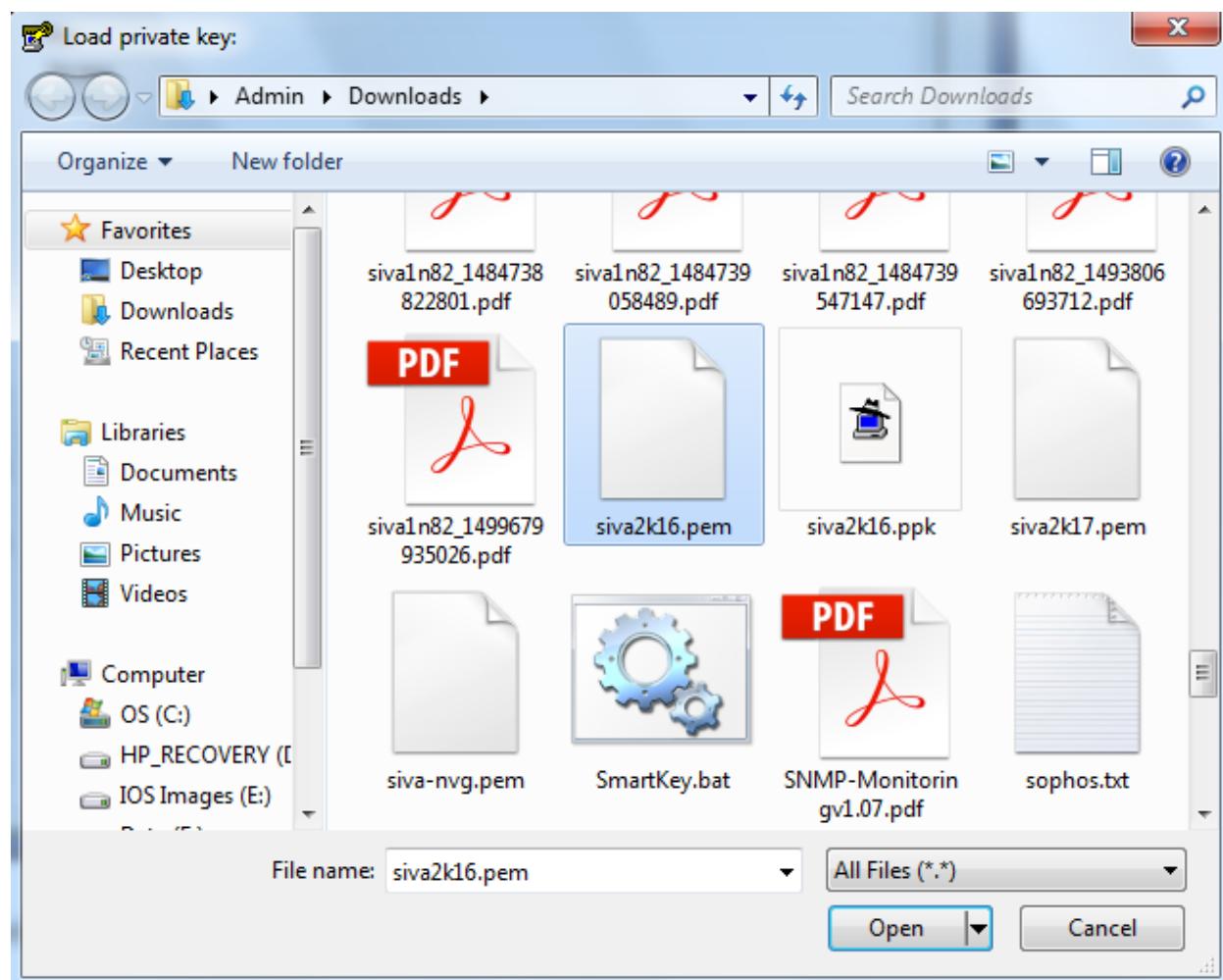
Install putty generator on your local machine and then try to launch Putty key generator.



In File, click “Load private key”.

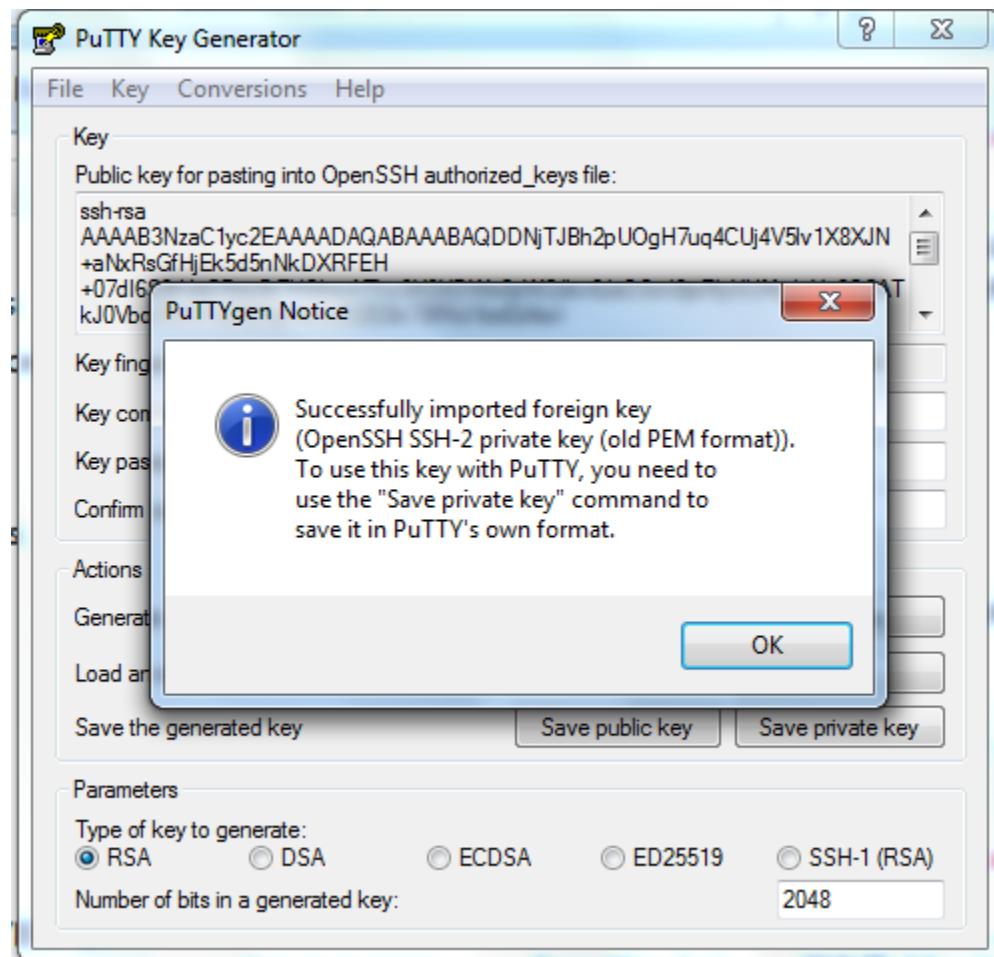
Select the path of *.Pem file to decrypt the private part of the key.

Select “All files” list.



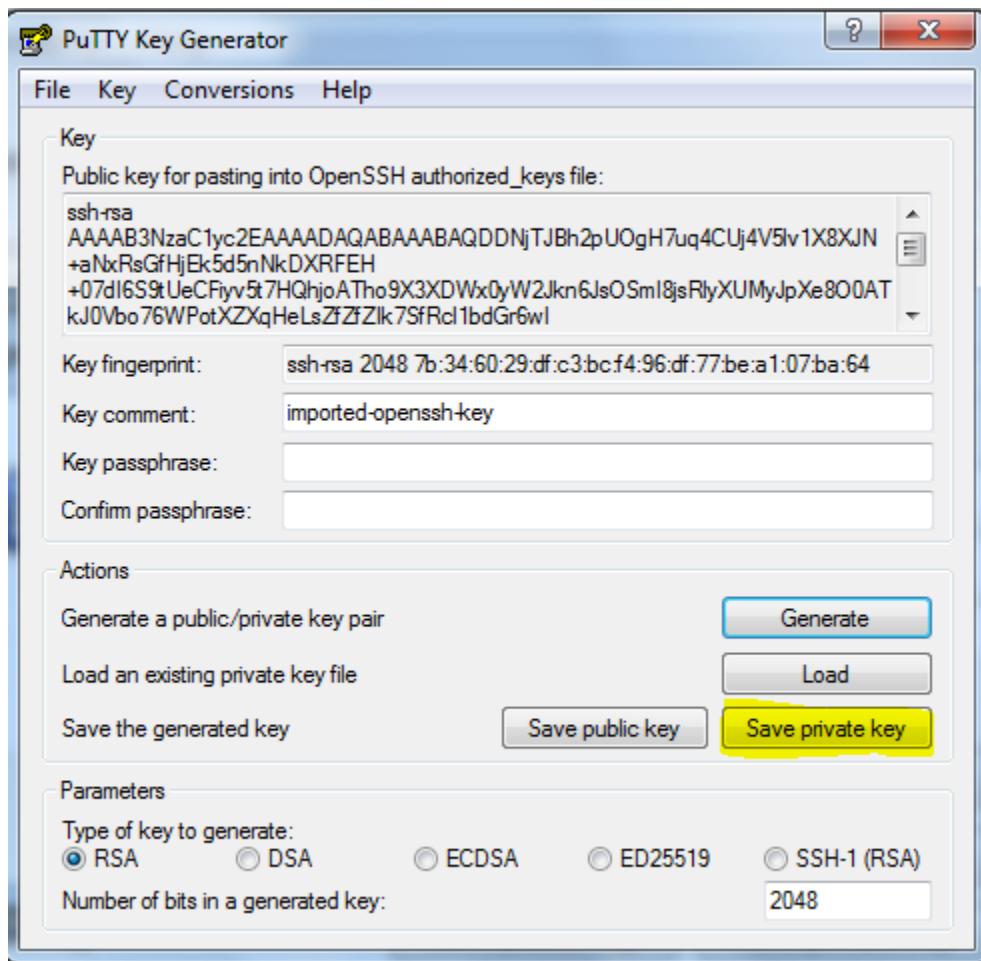
Then click “Open”.

Now you have successfully imported the key.

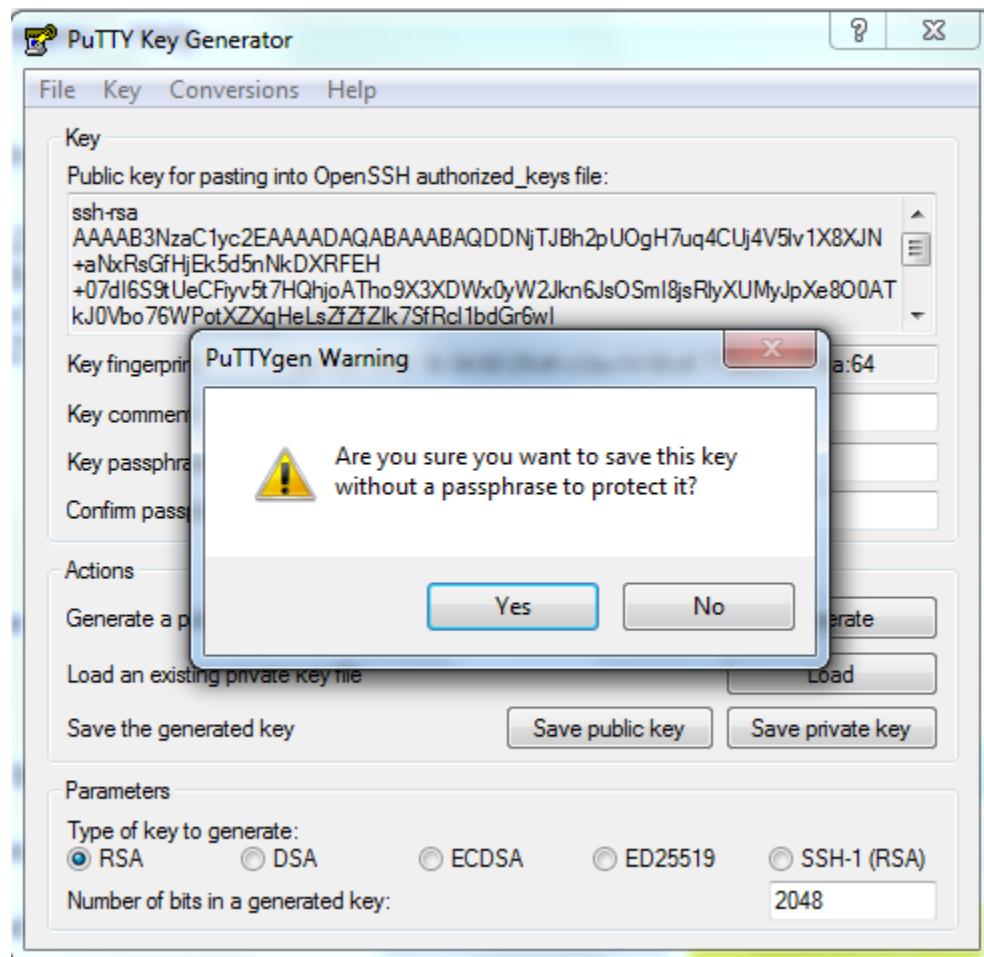


Click "Ok".

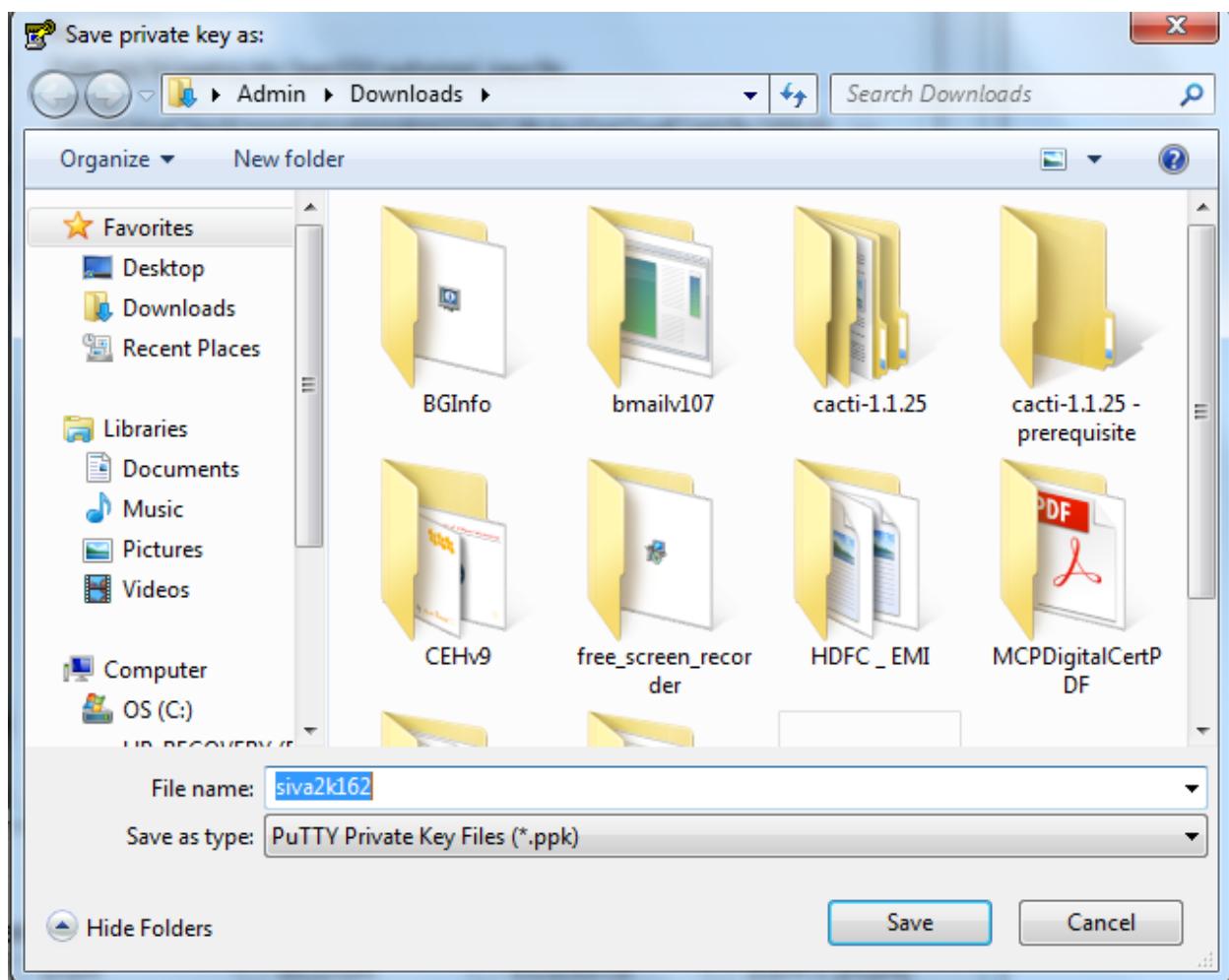
Click "save Private key"



Then click "Yes".

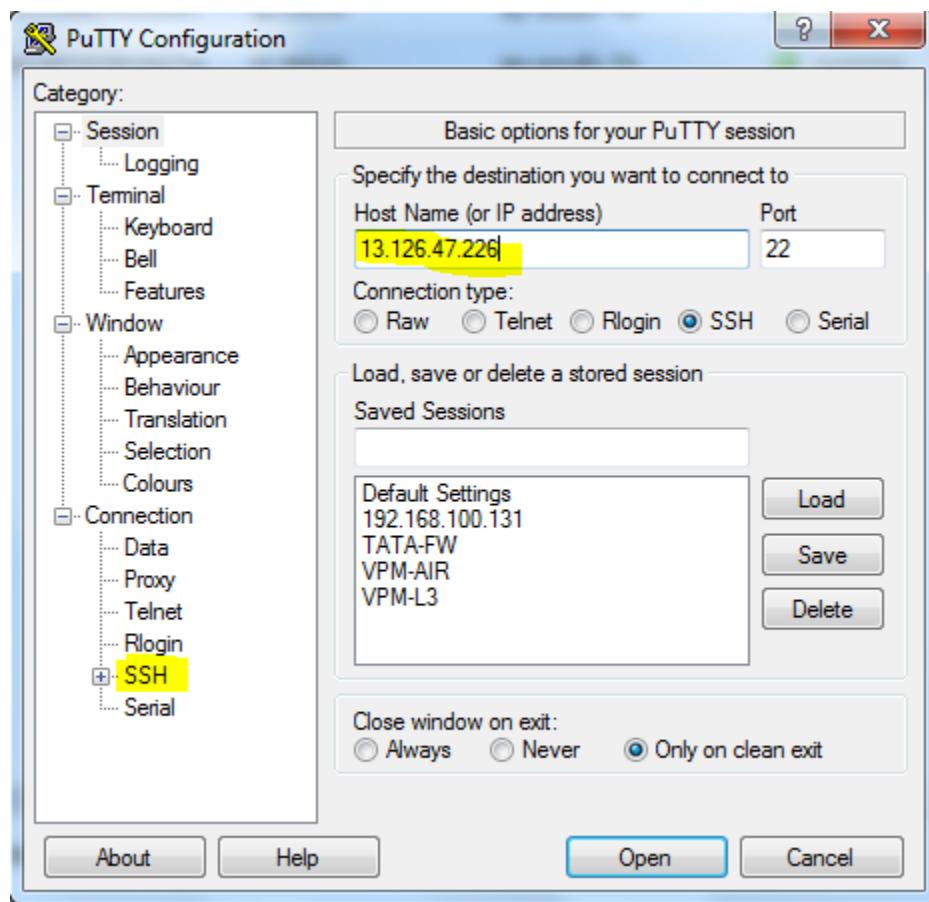


Select the path to store the “*.ppk” file.

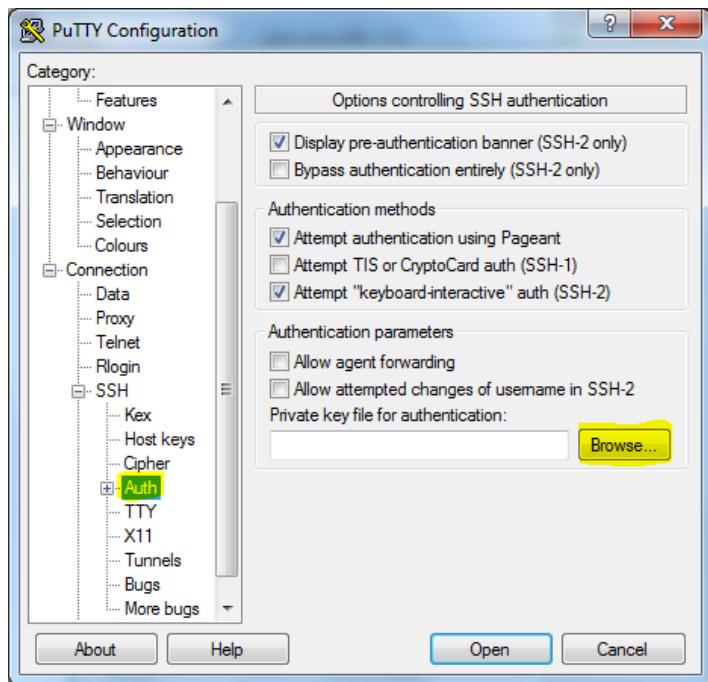


Then click "save".

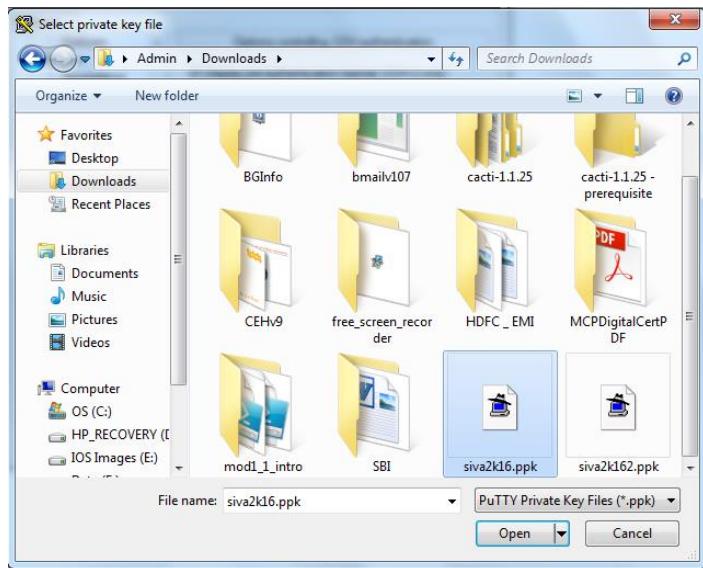
Type host name and click "SSH".



In SSH, expand the + symbol, then click "Auth".

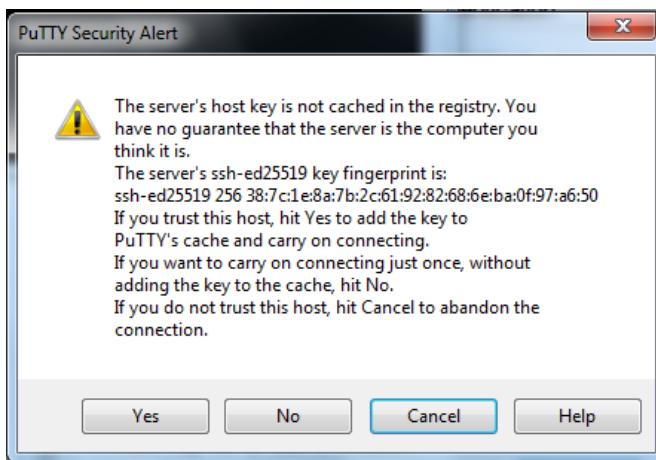
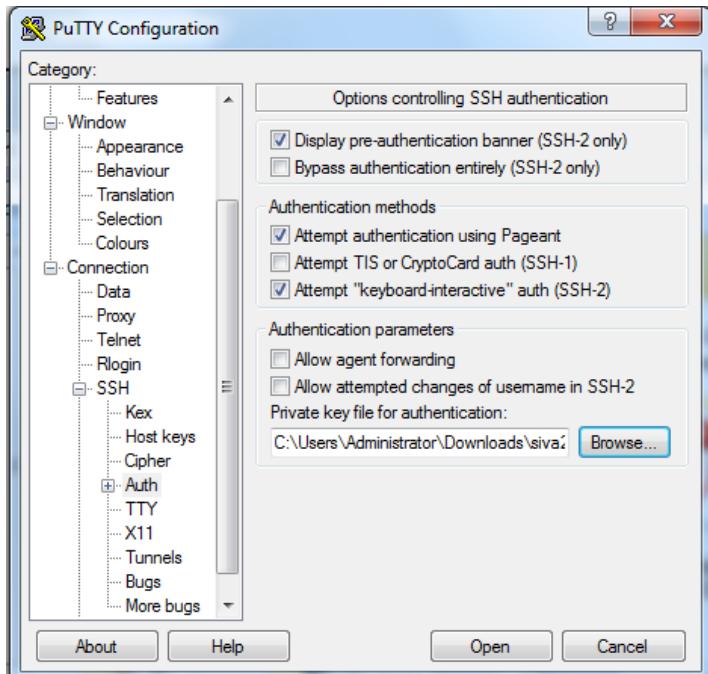


Browse the “*.ppk” file



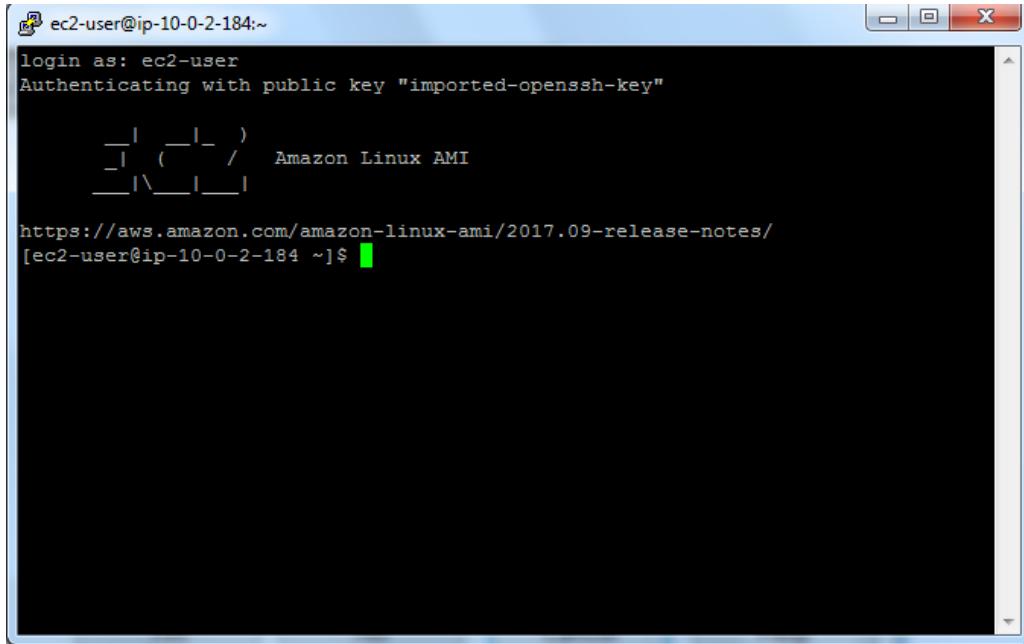
Click “Open”.

Click "Open" to launch the SSH application.



Click "Yes".

Now try username for Linux AMI as "**ec2-user**"



The screenshot shows a terminal window titled "ec2-user@ip-10-0-2-184:~". The session starts with "login as: ec2-user" and "Authenticating with public key "imported-openssh-key"". It then displays the Amazon Linux AMI logo, which is a stylized tree made of vertical lines. Below the logo, the URL "https://aws.amazon.com/amazon-linux-ami/2017.09-release-notes/" is shown, followed by the prompt "[ec2-user@ip-10-0-2-184 ~]\$".

Now you can try to install the web server by using below mentioned command,

Command to install web server is as below.

Yum install httpd

Now you are unable to install the webserver because you need to login in with root / super user account.

Now type

Sudo -i

Then type the command as below

Yum install httpd

```

root@ip-10-0-2-184:~#
[root@ip-10-0-2-184 ~]# yum install httpd
Loaded plugins: priorities, update-motd, upgrade-helper
amzn-main                                         | 2.1 kB     00:00
amzn-updates                                      | 2.5 kB     00:00
Resolving Dependencies
--> Running transaction check
--> Package httpd.x86_64 0:2.2.34-1.16.amzn1 will be installed
--> Processing Dependency: httpd-tools = 2.2.34-1.16.amzn1 for package: httpd-2.
2.34-1.16.amzn1.x86_64
--> Processing Dependency: apr-util-ldap for package: httpd-2.2.34-1.16.amzn1.x8
6_64
--> Processing Dependency: libaprutil-1.so.0()(64bit) for package: httpd-2.2.34-
1.16.amzn1.x86_64
--> Processing Dependency: libapr-1.so.0()(64bit) for package: httpd-2.2.34-1.16
.amzn1.x86_64
--> Running transaction check
--> Package apr.x86_64 0:1.5.2-5.13.amzn1 will be installed
--> Package apr-util.x86_64 0:1.5.4-6.18.amzn1 will be installed
--> Package apr-util-ldap.x86_64 0:1.5.4-6.18.amzn1 will be installed
--> Package httpd-tools.x86_64 0:2.2.34-1.16.amzn1 will be installed
--> Finished Dependency Resolution

Dependencies Resolved

=====


| Package                                   | Arch   | Version           | Repository   | Size  |
|-------------------------------------------|--------|-------------------|--------------|-------|
| <hr/>                                     |        |                   |              |       |
| Installing:                               |        |                   |              |       |
| httpd                                     | x86_64 | 2.2.34-1.16.amzn1 | amzn-updates | 1.2 M |
| Installing for dependencies:              |        |                   |              |       |
| apr                                       | x86_64 | 1.5.2-5.13.amzn1  | amzn-updates | 118 k |
| apr-util                                  | x86_64 | 1.5.4-6.18.amzn1  | amzn-updates | 99 k  |
| apr-util-ldap                             | x86_64 | 1.5.4-6.18.amzn1  | amzn-updates | 19 k  |
| httpd-tools                               | x86_64 | 2.2.34-1.16.amzn1 | amzn-updates | 80 k  |
| <hr/>                                     |        |                   |              |       |
| Transaction Summary                       |        |                   |              |       |
| <hr/>                                     |        |                   |              |       |
| Install 1 Package (+4 Dependent packages) |        |                   |              |       |
| <hr/>                                     |        |                   |              |       |
| Total download size: 1.5 M                |        |                   |              |       |
| Installed size: 3.6 M                     |        |                   |              |       |
| Is this ok [y/d/N]: y                     |        |                   |              |       |


```

Type "Y"to install web server.

```

root@ip-10-0-2-184:~
Installed size: 3.6 M
Is this ok [y/d/N]: y
Downloading packages:
(1/5): apr-util-1.5.4-6.18.amzn1.x86_64.rpm | 99 kB 00:00
(2/5): apr-1.5.2-5.13.amzn1.x86_64.rpm | 118 kB 00:00
(3/5): apr-util-ldap-1.5.4-6.18.amzn1.x86_64.rpm | 19 kB 00:00
(4/5): httpd-tools-2.2.34-1.16.amzn1.x86_64.rpm | 80 kB 00:01
(5/5): httpd-2.2.34-1.16.amzn1.x86_64.rpm | 1.2 MB 00:03
-----
Total 477 kB/s | 1.5 MB 00:03

Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
    Installing : apr-1.5.2-5.13.amzn1.x86_64 1/5
    Installing : apr-util-1.5.4-6.18.amzn1.x86_64 2/5
    Installing : httpd-tools-2.2.34-1.16.amzn1.x86_64 3/5
    Installing : apr-util-ldap-1.5.4-6.18.amzn1.x86_64 4/5
    Installing : httpd-2.2.34-1.16.amzn1.x86_64 5/5
    Verifying : httpd-tools-2.2.34-1.16.amzn1.x86_64 1/5
    Verifying : apr-util-1.5.4-6.18.amzn1.x86_64 2/5
    Verifying : httpd-2.2.34-1.16.amzn1.x86_64 3/5
    Verifying : apr-1.5.2-5.13.amzn1.x86_64 4/5
    Verifying : apr-util-ldap-1.5.4-6.18.amzn1.x86_64 5/5

Installed:
  httpd.x86_64 0:2.2.34-1.16.amzn1

Dependency Installed:
  apr.x86_64 0:1.5.2-5.13.amzn1
  apr-util.x86_64 0:1.5.4-6.18.amzn1
  apr-util-ldap.x86_64 0:1.5.4-6.18.amzn1
  httpd-tools.x86_64 0:2.2.34-1.16.amzn1

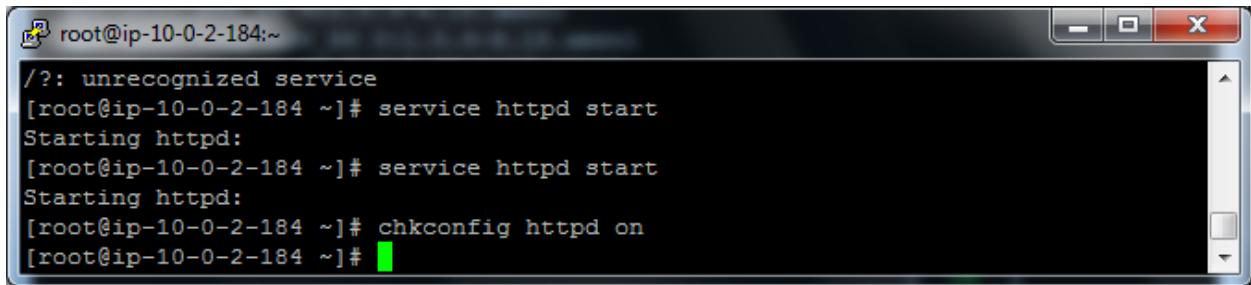
Complete!
[root@ip-10-0-2-184 ~]# service httpd start
Starting httpd: httpd: apr_sockaddr_info_get() failed for ip-10-0-2-184
httpd: Could not reliably determine the server's fully qualified domain name, us
ing 127.0.0.1 for ServerName
[ OK ]
[root@ip-10-0-2-184 ~]# chkconfig httpd on
[root@ip-10-0-2-184 ~]#

```

Then type below mentioned command in Linux ssh.

Service httpd start

Chkconfig httpd on



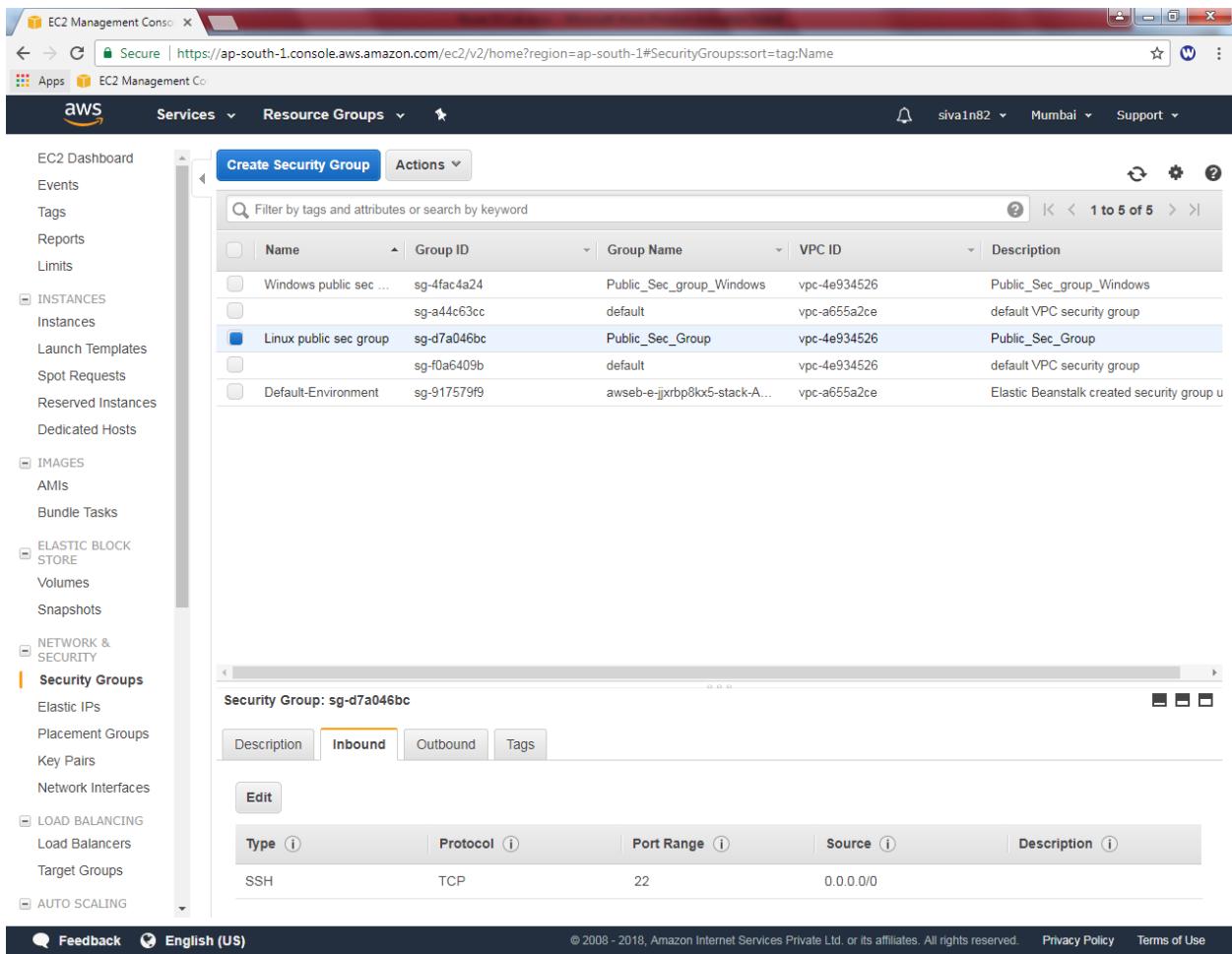
```

root@ip-10-0-2-184:~
/: unrecognized service
[root@ip-10-0-2-184 ~]# service httpd start
Starting httpd:
[root@ip-10-0-2-184 ~]# service httpd start
Starting httpd:
[root@ip-10-0-2-184 ~]# chkconfig httpd on
[root@ip-10-0-2-184 ~]#

```

Now you have successfully installed the web server and service for the same has been started.

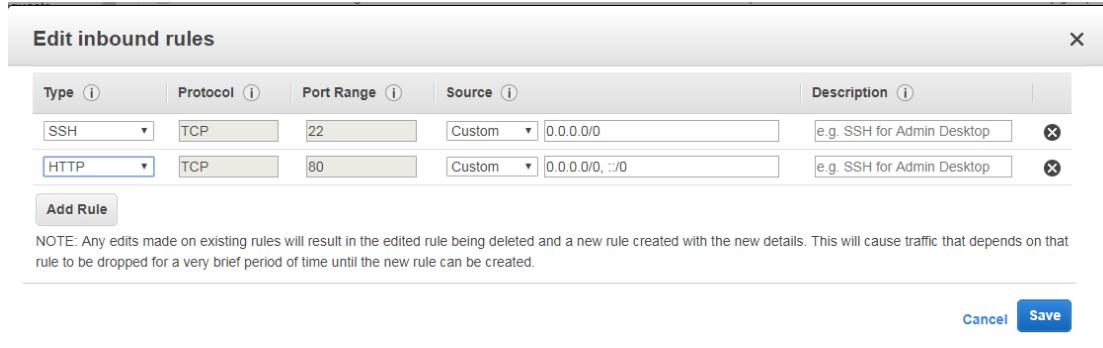
Now you can try to connect the webserver from Windows machine, you would not be able to connect. Because in `Linux_public_sec_group` Port 22 (SSH) only allowed in inbound rule.



Name	Group ID	Group Name	VPC ID	Description
Windows public sec ...	sg-4fac4a24	Public_Sec_group_Windows	vpc-4e934526	Public_Sec_group_Windows
	sg-a44c63cc	default	vpc-a655a2ce	default VPC security group
Linux public sec group	sg-d7a046bc	Public_Sec_Group	vpc-4e934526	Public_Sec_Group
	sg-f0a6409b	default	vpc-4e934526	default VPC security group
Default-Environment	sg-917579f9	awseb-e-jjxrbp8kx5-stack-A...	vpc-a655a2ce	Elastic Beanstalk created security group u

Type	Protocol	Port Range	Source	Description
SSH	TCP	22	0.0.0.0/0	

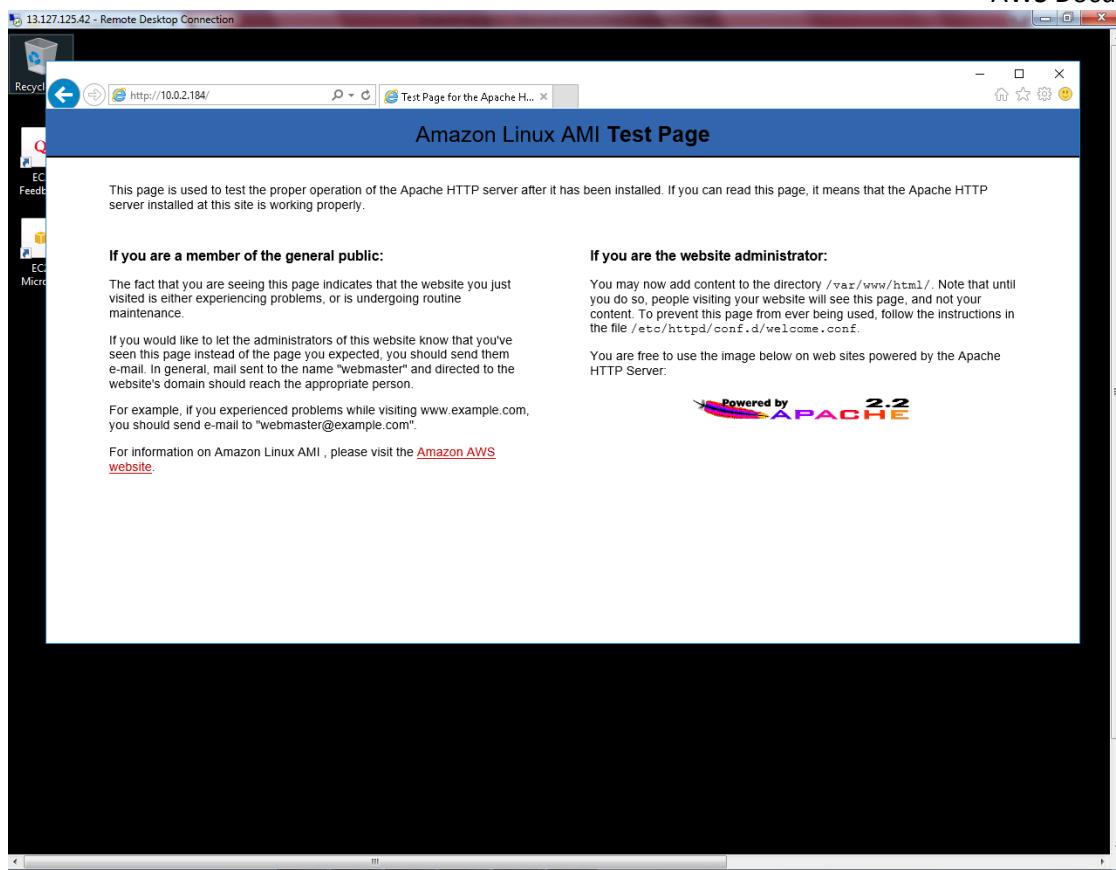
Hence you need to add port 80 in Linux_public_sec_group. Custom : 0.0.0.0/0



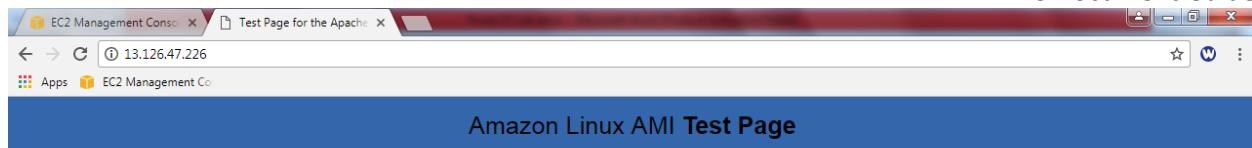
The screenshot shows the 'Edit inbound rules' dialog box. It contains two rows of rule configuration. Row 1: Type: SSH, Protocol: TCP, Port Range: 22, Source: Custom 0.0.0.0/0, Description: e.g. SSH for Admin Desktop. Row 2: Type: HTTP, Protocol: TCP, Port Range: 80, Source: Custom 0.0.0.0/0, Description: e.g. SSH for Admin Desktop. Below the rules is a note: 'NOTE: Any edits made on existing rules will result in the edited rule being deleted and a new rule created with the new details. This will cause traffic that depends on that rule to be dropped for a very brief period of time until the new rule can be created.' At the bottom right are 'Cancel' and 'Save' buttons.

Then click "save".

Now try to connect 10.0.2.184 host from windows machine. We have got the webserver page successfully.



Now tried the web server from internet also that's working fine with IP address.

**If you are a member of the general public:**

The fact that you are seeing this page indicates that the website you just visited is either experiencing problems, or is undergoing routine maintenance.

If you would like to let the administrators of this website know that you've seen this page instead of the page you expected, you should send them e-mail. In general, mail sent to the name "webmaster" and directed to the website's domain should reach the appropriate person.

For example, if you experienced problems while visiting www.example.com, you should send e-mail to "webmaster@example.com".

For information on Amazon Linux AMI , please visit the [Amazon AWS website](#).

If you are the website administrator:

You may now add content to the directory `/var/www/html/`. Note that until you do so, people visiting your website will see this page, and not your content. To prevent this page from ever being used, follow the instructions in the file `/etc/httpd/conf.d/welcome.conf`.

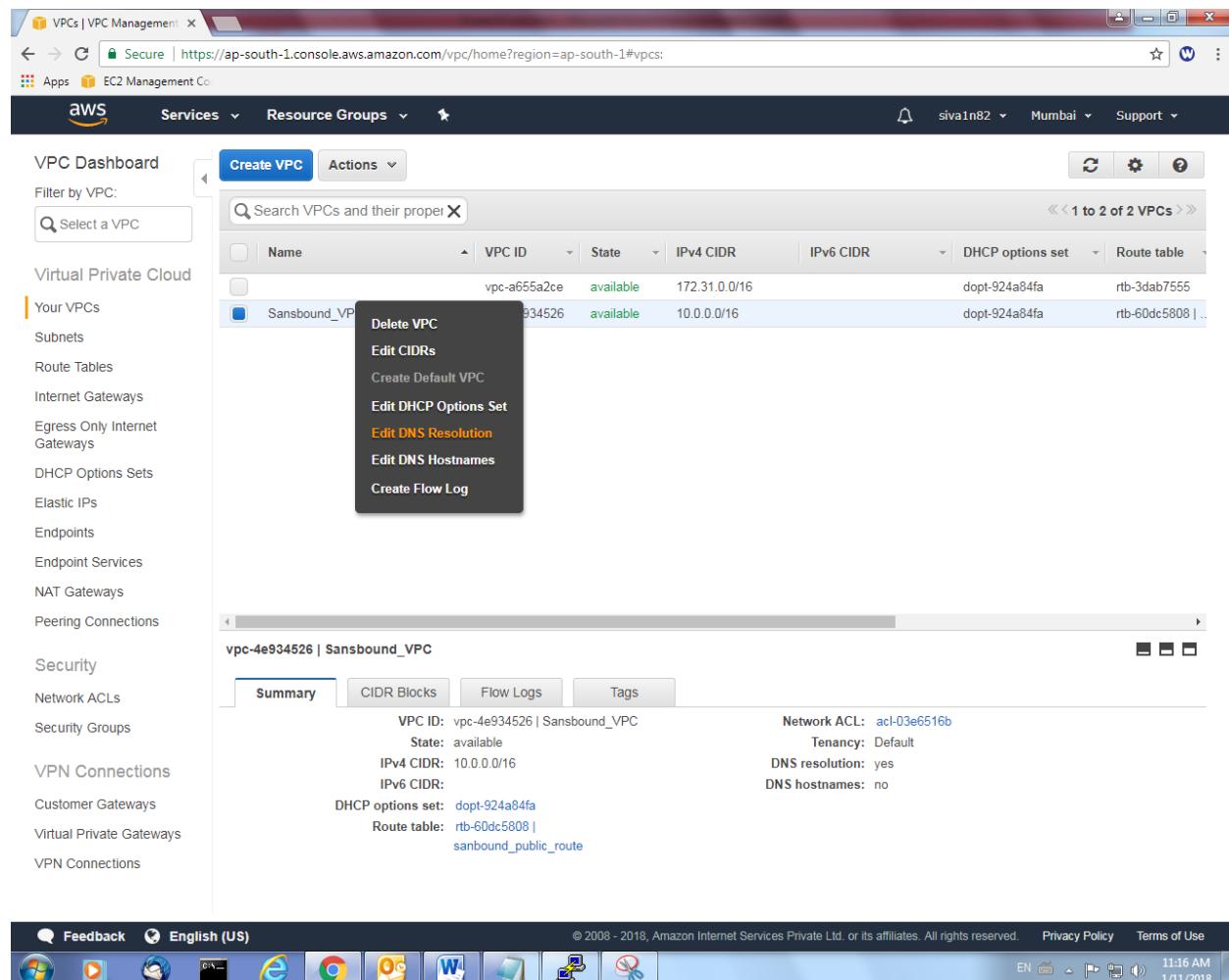
You are free to use the image below on web sites powered by the Apache HTTP Server:



Our Scope is we need to connect the webserver by using Fully Qualified Domain Name (FQDN) from Windows 2016 machine by configuring Route 53. Now we need to configure Route 53.

Before going to configure Route 53, we need to ensure below mentioned settings in VPC.

In "Edit DNS Resolution"

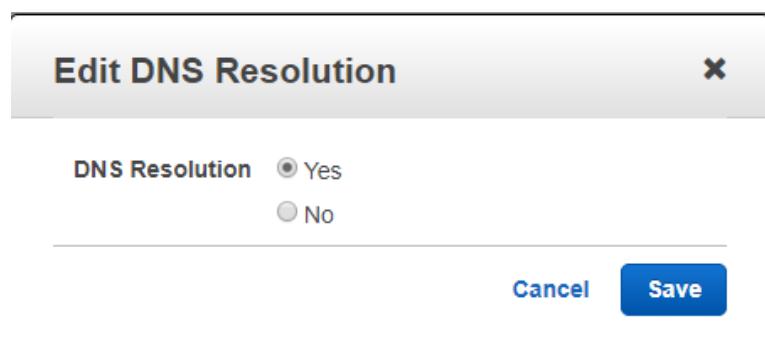


The screenshot shows the AWS VPC Management console. On the left, there's a sidebar with various VPC-related options like Your VPCs, Subnets, Route Tables, etc. The main area shows a table of VPCs. A context menu is open over the row for 'Sansbound_VPC'. The menu items are: Delete VPC, Edit CIDs, Create Default VPC, Edit DHCP Options Set, **Edit DNS Resolution**, Edit DNS Hostnames, and Create Flow Log. The 'Edit DNS Resolution' option is highlighted.

Name	VPC ID	State	IPv4 CIDR	IPv6 CIDR	DHCP options set	Route table
vpc-a655a2ce	available	172.31.0.0/16			dopt-924a84fa	rtb-3dab7555
Sansbound_VPC	available	10.0.0.0/16			dopt-924a84fa	rtb-60dc5808 ...

At the bottom, there's a toolbar with icons for Feedback, English (US), Privacy Policy, Terms of Use, and system status (EN, 11:16 AM, 1/11/2018).

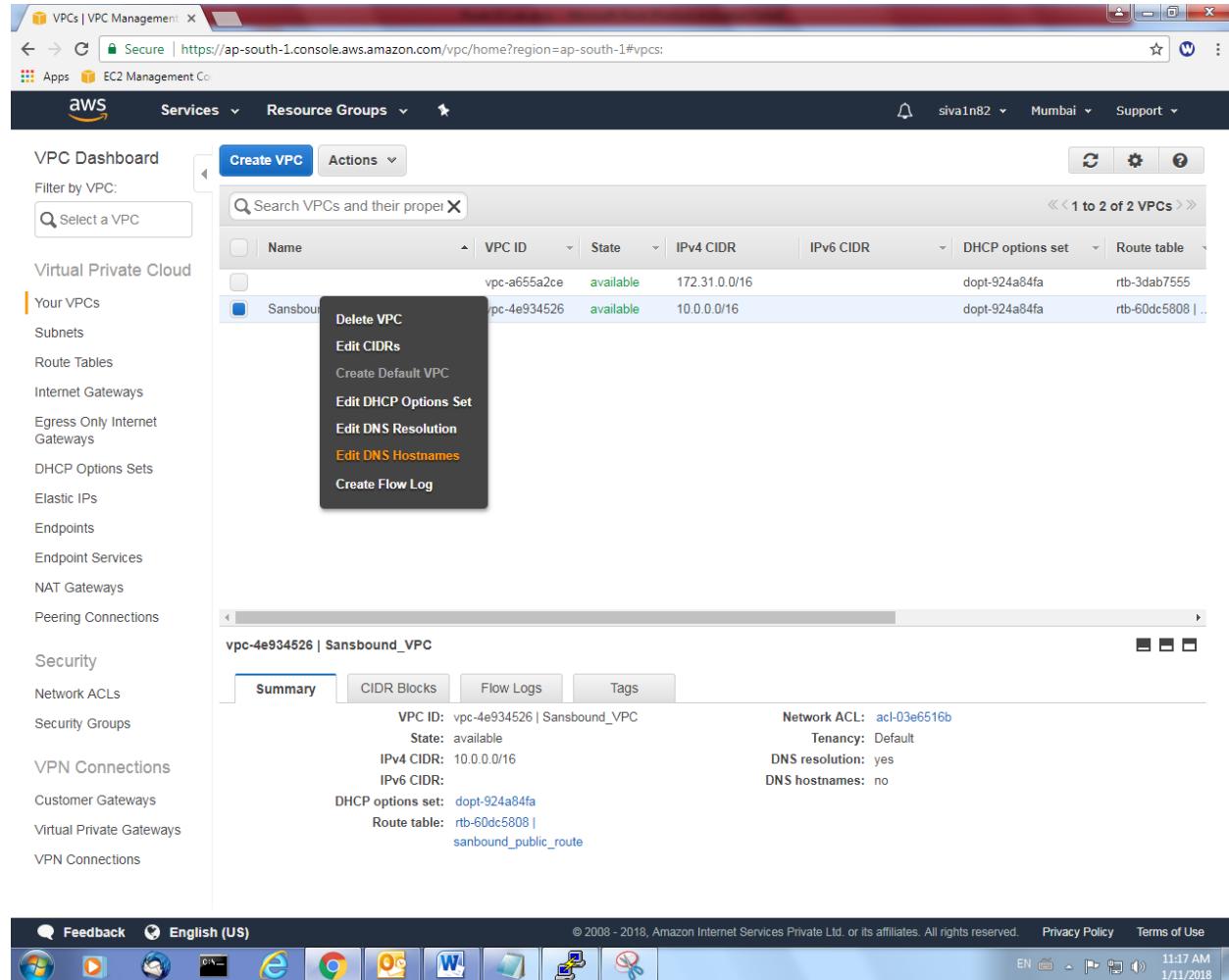
It should be "Yes".



The dialog box has a title 'Edit DNS Resolution'. It contains a question 'DNS Resolution' followed by two radio buttons: 'Yes' (selected) and 'No'. At the bottom are 'Cancel' and 'Save' buttons.

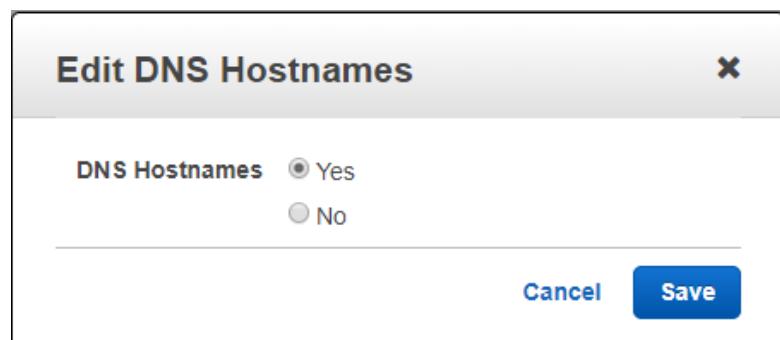
Before going to configure Route 53, we need to ensure below mentioned settings in VPC.

In “Edit DNS Hostnames”

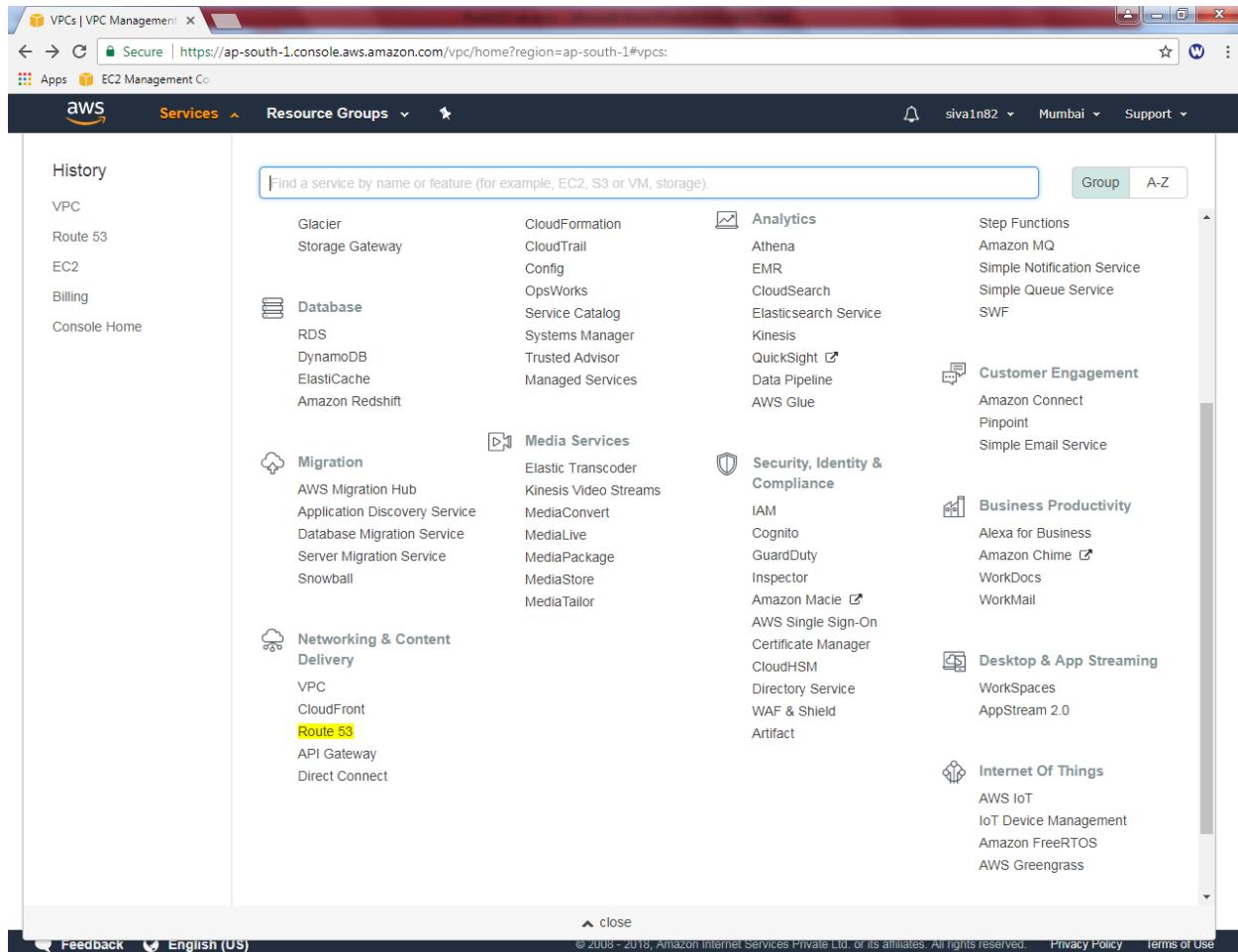


The screenshot shows the AWS VPC Management console. On the left, there's a sidebar with various VPC-related options like Your VPCs, Subnets, Route Tables, etc. In the main area, a list of VPCs is shown with two entries: 'vpc-a655a2ce' and 'vpc-4e934526'. A context menu is open over the second entry ('vpc-4e934526'), and the 'Edit DNS Hostnames' option is highlighted. Below the list, a detailed view of the selected VPC ('vpc-4e934526 | Sansbound_VPC') is displayed, showing its configuration details. At the bottom, there's a standard Windows-style taskbar with icons for various applications.

It should be “Yes”.



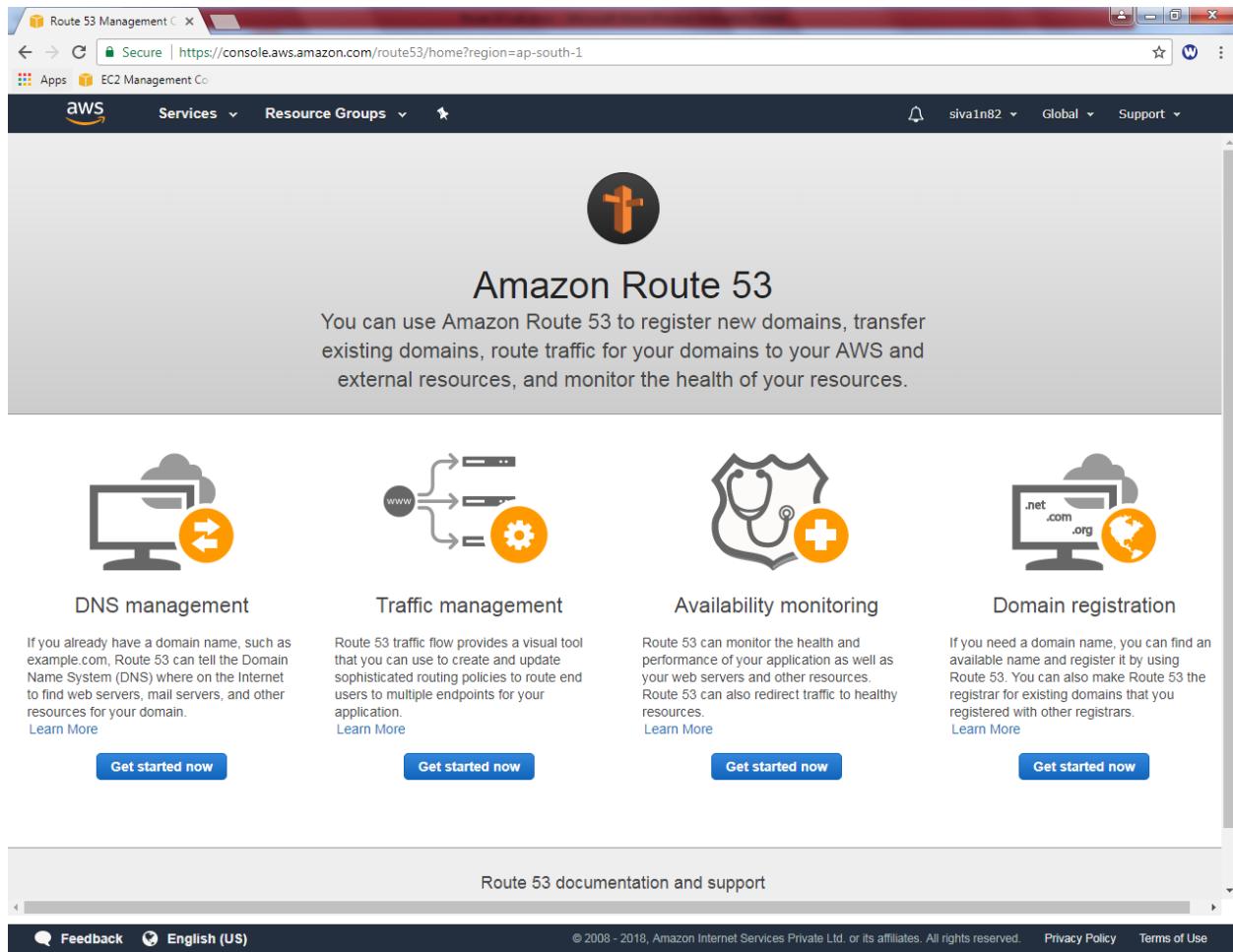
Goto Route 53,



The screenshot shows the AWS Management Console interface. The top navigation bar includes the AWS logo, a search bar, and links for 'Services', 'Resource Groups', and 'Support'. The main content area displays a grid of AWS services categorized into groups. The 'Route 53' service is highlighted in yellow, indicating it is selected or the target of the instruction. Other visible services include VPC, EC2, Billing, Console Home, Analytics, Customer Engagement, Business Productivity, Desktop & App Streaming, Internet Of Things, and various databases like RDS, DynamoDB, ElastiCache, and Amazon Redshift.

Category	Service
VPC	Route 53
EC2	
Billing	
Console Home	
Analytics	Athena, EMR, CloudSearch, Elasticsearch Service, Kinesis, QuickSight, Data Pipeline, AWS Glue
Customer Engagement	Amazon Connect, Pinpoint, Simple Email Service
Business Productivity	Alexa for Business, Amazon Chime, WorkDocs, WorkMail
Desktop & App Streaming	WorkSpaces, AppStream 2.0
Internet Of Things	AWS IoT, IoT Device Management, Amazon FreeRTOS, AWS Greengrass
Media Services	Elastic Transcoder, Kinesis Video Streams, MediaConvert, MediaLive, MediaPackage, MediaStore, MediaTailor
Security, Identity & Compliance	IAM, Cognito, GuardDuty, Inspector, Amazon Macie, AWS Single Sign-On, Certificate Manager, CloudHSM, Directory Service, WAF & Shield, Artifact
Networking & Content Delivery	VPC, CloudFront, Route 53, API Gateway, Direct Connect

Click “DNS Management”

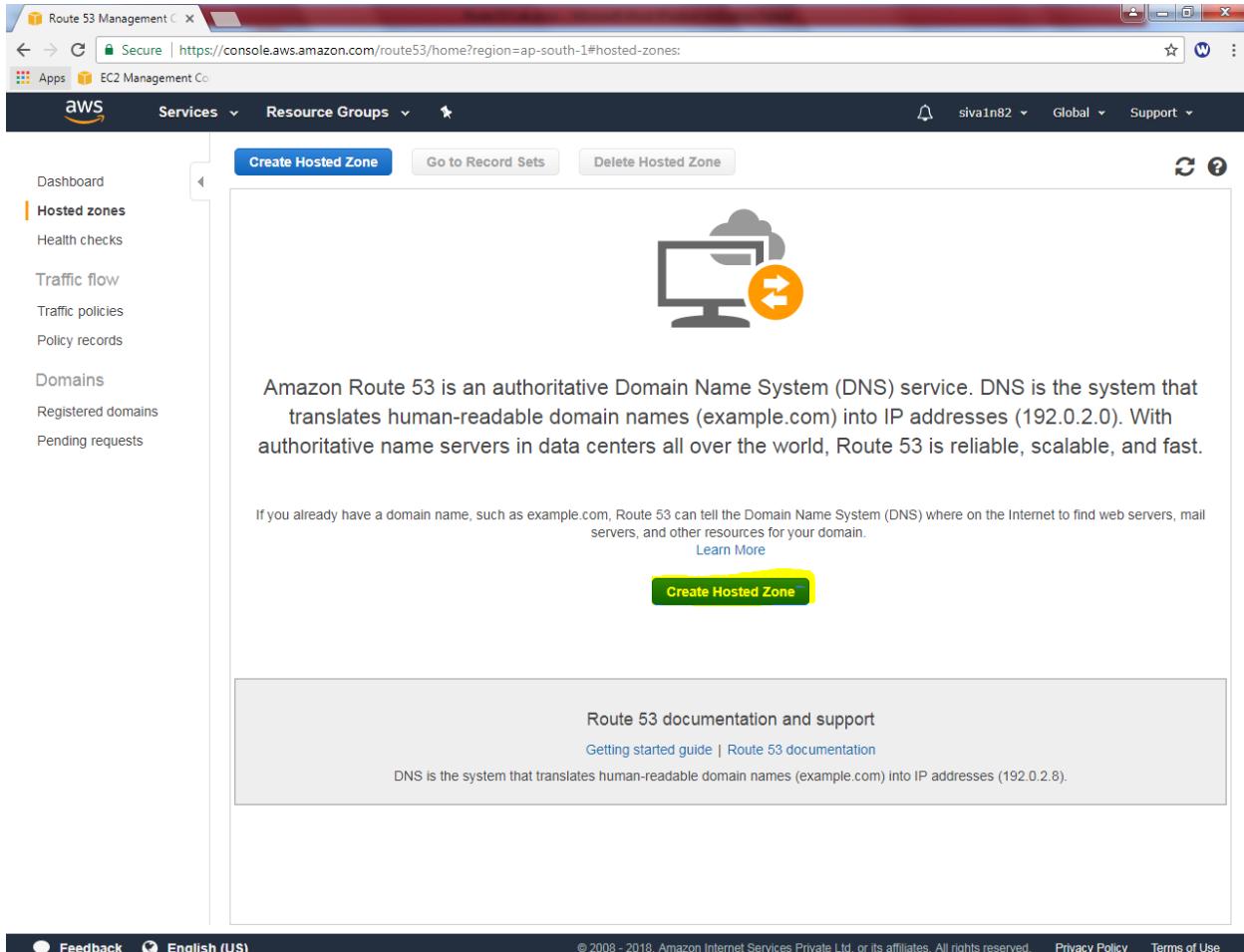


The screenshot shows the AWS Route 53 Management console. At the top, there's a navigation bar with links for 'Services' (highlighted), 'Resource Groups', and 'Support'. Below the navigation is a large central section featuring the Amazon Route 53 logo and a brief description: "You can use Amazon Route 53 to register new domains, transfer existing domains, route traffic for your domains to your AWS and external resources, and monitor the health of your resources." Below this, there are four main service sections, each with an icon and a 'Get started now' button:

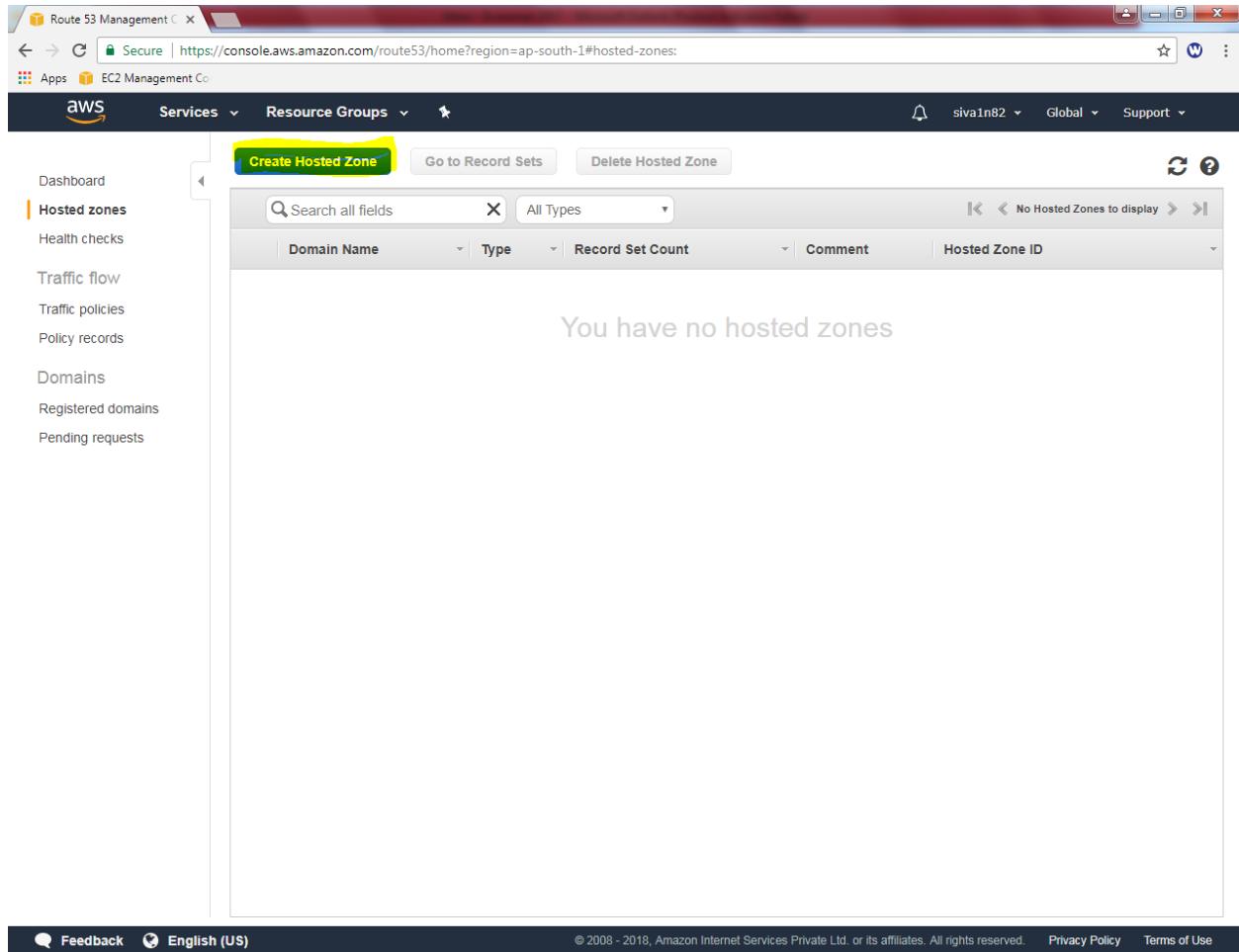
- DNS management**: Shows a computer monitor with a cloud icon. Description: If you already have a domain name, such as example.com, Route 53 can tell the Domain Name System (DNS) where on the Internet to find web servers, mail servers, and other resources for your domain. [Learn More](#)
- Traffic management**: Shows a network diagram with a 'www' node connected to multiple endpoints. Description: Route 53 traffic flow provides a visual tool that you can use to create and update sophisticated routing policies to route end users to multiple endpoints for your application. [Learn More](#)
- Availability monitoring**: Shows a shield with a stethoscope and a plus sign. Description: Route 53 can monitor the health and performance of your application as well as your web servers and other resources. Route 53 can also redirect traffic to healthy resources. [Learn More](#)
- Domain registration**: Shows a computer monitor with a globe icon. Description: If you need a domain name, you can find an available name and register it by using Route 53. You can also make Route 53 the registrar for existing domains that you registered with other registrars. [Learn More](#)

At the bottom of the page, there's a footer with links for 'Feedback', 'English (US)', '© 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.', 'Privacy Policy', and 'Terms of Use'.

Click "Create Hosted Zone".



Click “Create Hosted Zone”.



The screenshot shows the AWS Route 53 Management console. The URL in the address bar is <https://console.aws.amazon.com/route53/home?region=ap-south-1#hosted-zones>. The left sidebar has 'Hosted zones' selected. The main area displays a table with one row, indicating 'You have no hosted zones'. A yellow box highlights the 'Create Hosted Zone' button at the top of the table area.

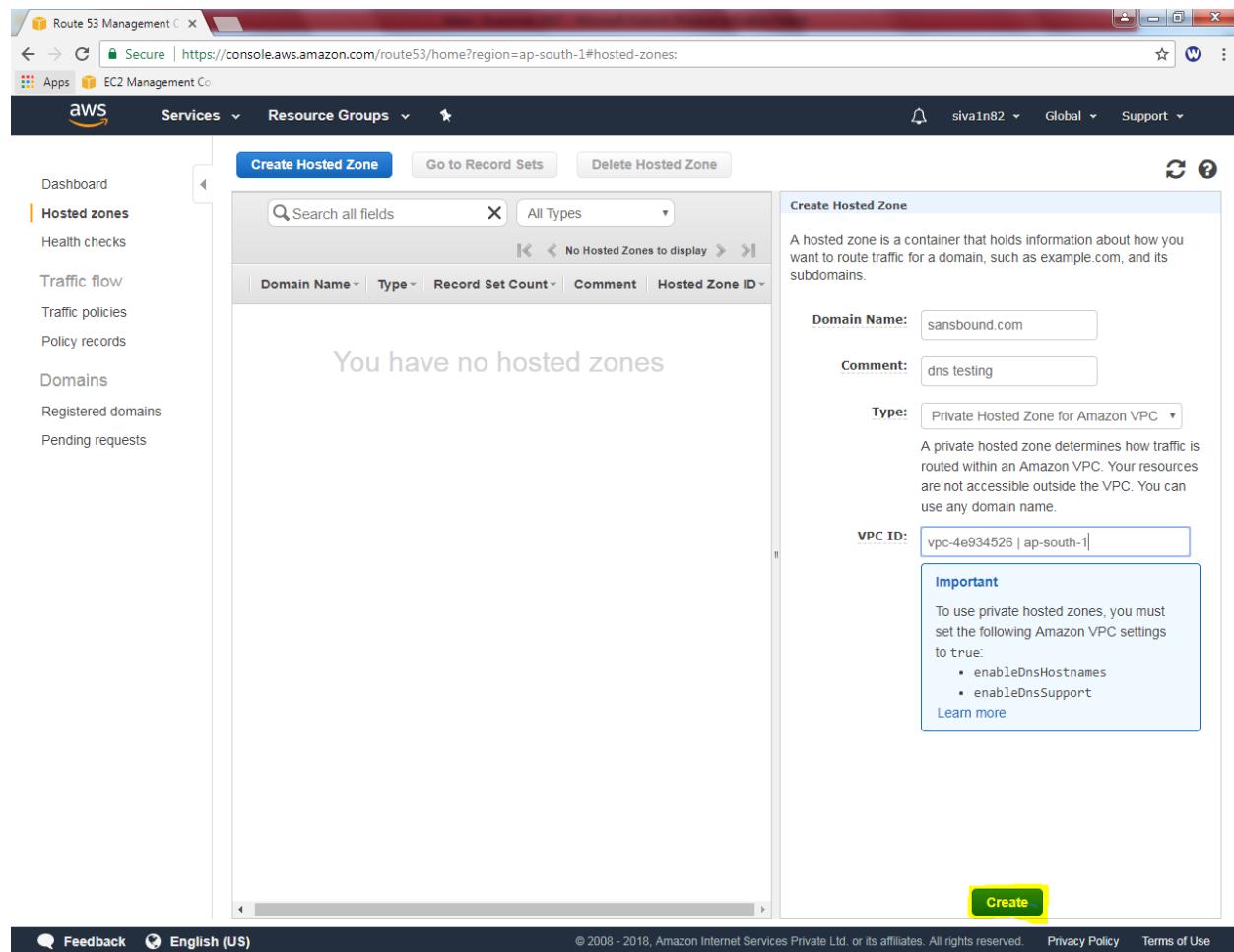
While creating Hosted Zone,

Domain name: sansbound.com

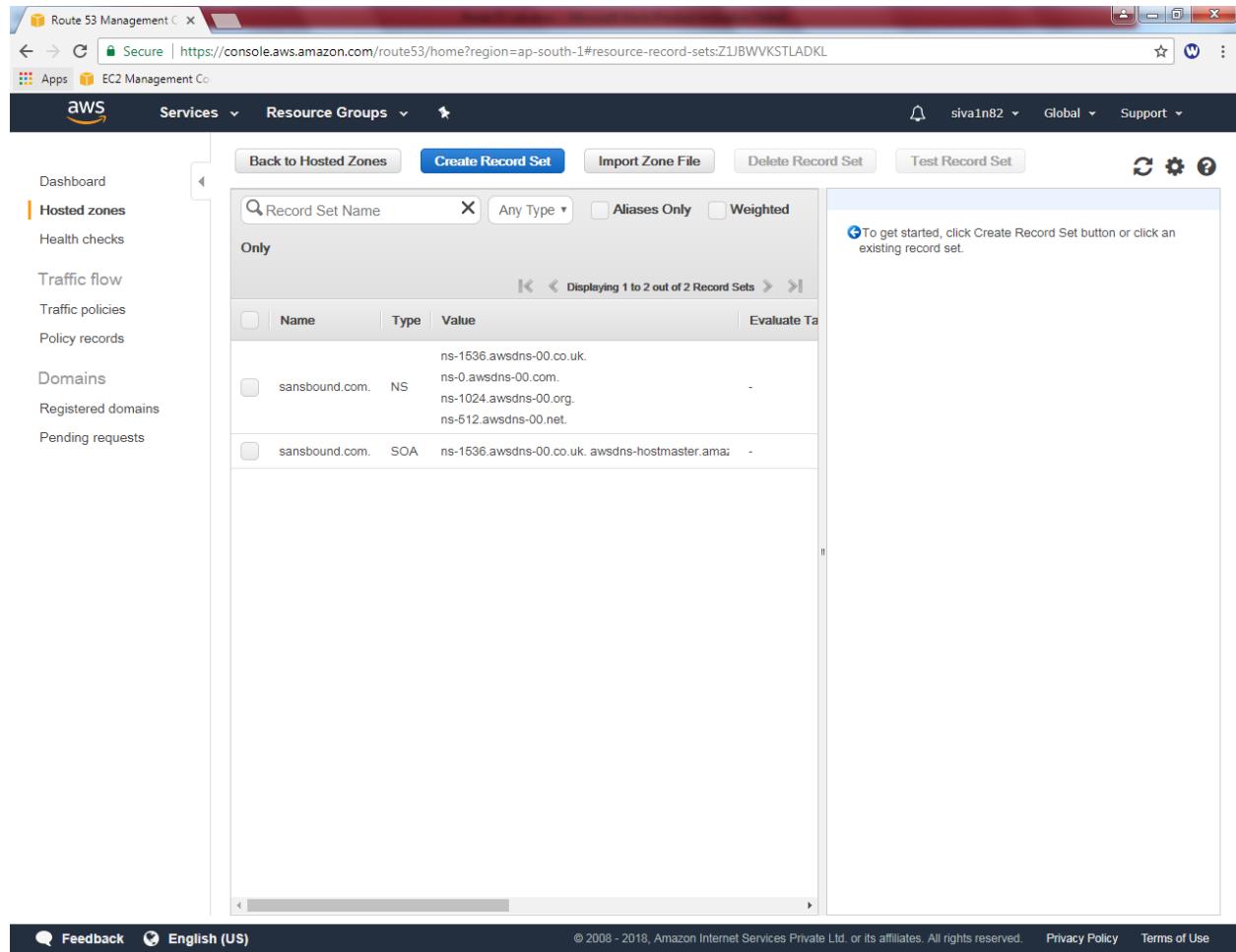
Comment: dns testing

Type: Private Hosted Zone for Amazon VPC

VPC ID: Mumbai



Then click "Yes, create".



The screenshot shows the AWS Route 53 Management console. The left sidebar is collapsed, showing options like Dashboard, Hosted zones (which is selected), Health checks, Traffic flow, Traffic policies, Policy records, Domains, Registered domains, and Pending requests. The main content area is titled "Resource Groups" and shows a table of record sets for the hosted zone "sansbound.com.". The table has columns for Name, Type, and Value.

	Name	Type	Value	Evaluate Ta
[checkbox]	sansbound.com.	NS	ns-1536.awsdns-00.co.uk. ns-0.awsdns-00.com. ns-1024.awsdns-00.org. ns-512.awsdns-00.net.	-
[checkbox]	sansbound.com.	SOA	ns-1536.awsdns-00.co.uk. awsdns-hostmaster.amazon.com. ns-1536.awsdns-00.co.uk. awsdns-ns-1536.awsdns-00.co.uk.	-

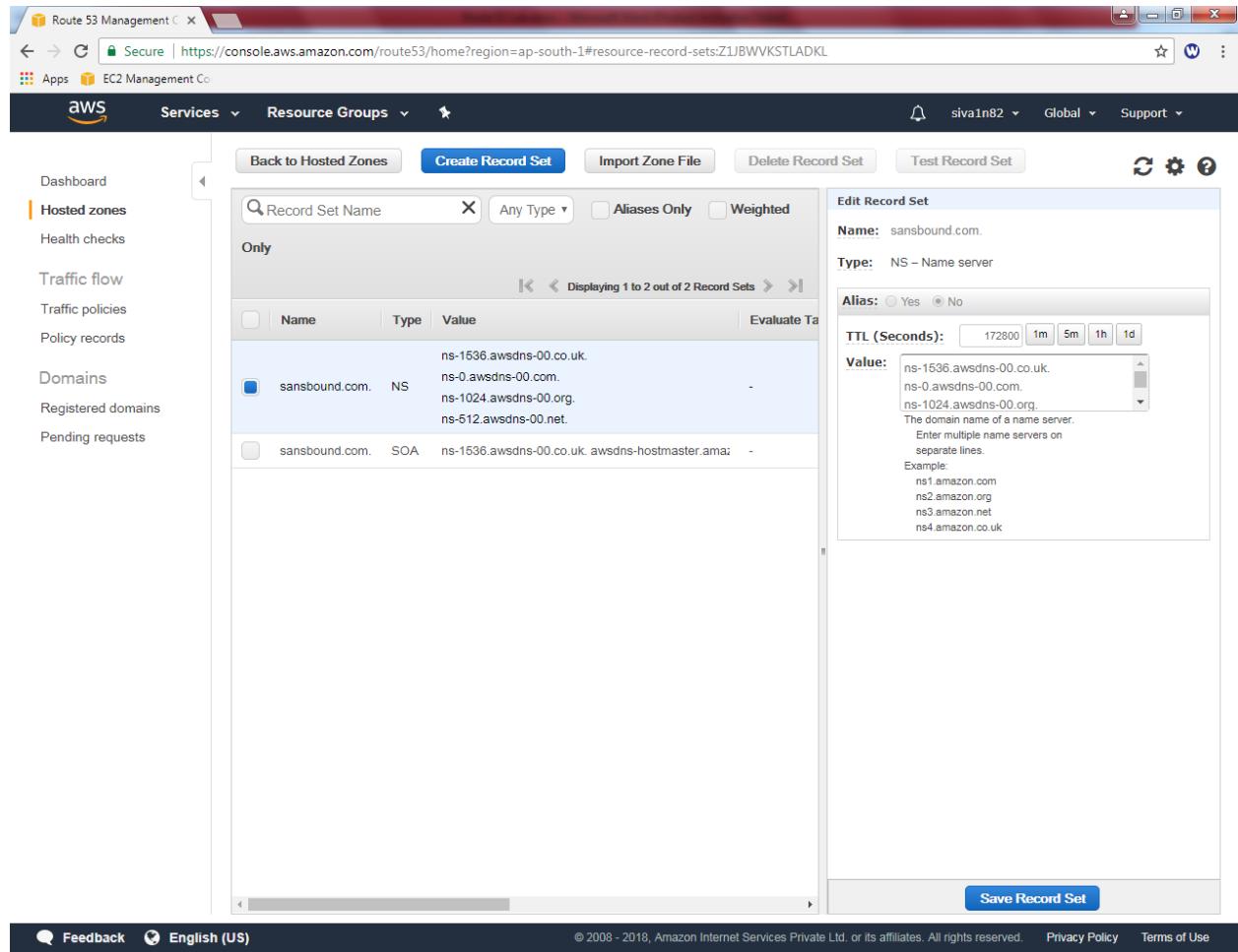
To get started, click Create Record Set button or click an existing record set.

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In sansbound.com server we have NS record and SOA record.

Select sansbund.com,

Then click "create record set"



The screenshot shows the AWS Route 53 Management console. The left sidebar is collapsed, showing options like Dashboard, Hosted zones, Traffic flow, Domains, and Support. The main area shows a table of record sets for the domain sansbund.com. One record set is selected, showing its details in a modal window.

	Name	Type	Value
[checkbox]	sansbund.com.	NS	ns-1536.awsdns-00.co.uk. ns-0.awsdns-00.com. ns-1024.awsdns-00.org. ns-512.awsdns-00.net.
[checkbox]	sansbund.com.	SOA	ns-1536.awsdns-00.co.uk. awsdns-hostmaster.amazon.co.uk. ns-1536.awsdns-00.co.uk. awsdns-ns-00.amazon.co.uk. 172800 3600 120 1800 60

Edit Record Set

Name: sansbund.com.

Type: NS – Name server

Alias: Yes No

TTL (Seconds): 172800 | 1m | 5m | 1h | 1d

Value:

```
ns-1536.awsdns-00.co.uk.
ns-0.awsdns-00.com.
ns-1024.awsdns-00.org.
```

The domain name of a name server.
Enter multiple name servers on separate lines.
Example:
ns1.amazon.com
ns2.amazon.org
ns3.amazon.net
ns4.amazon.co.uk

Save Record Set

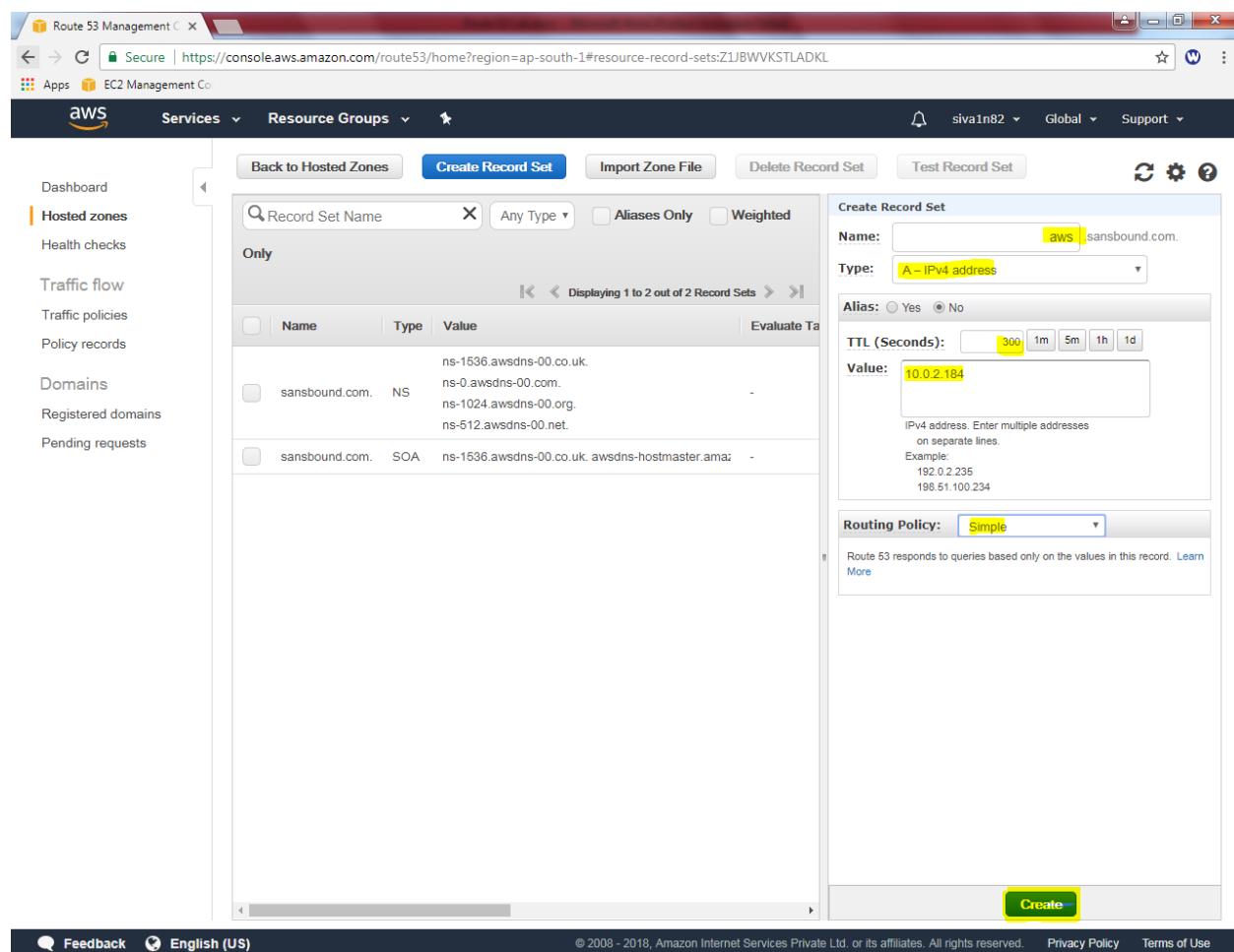
While creating record set,

Name: aws.sansbound.com

Type: A – IPV4 address

Value : (10.0.2.184) host machine

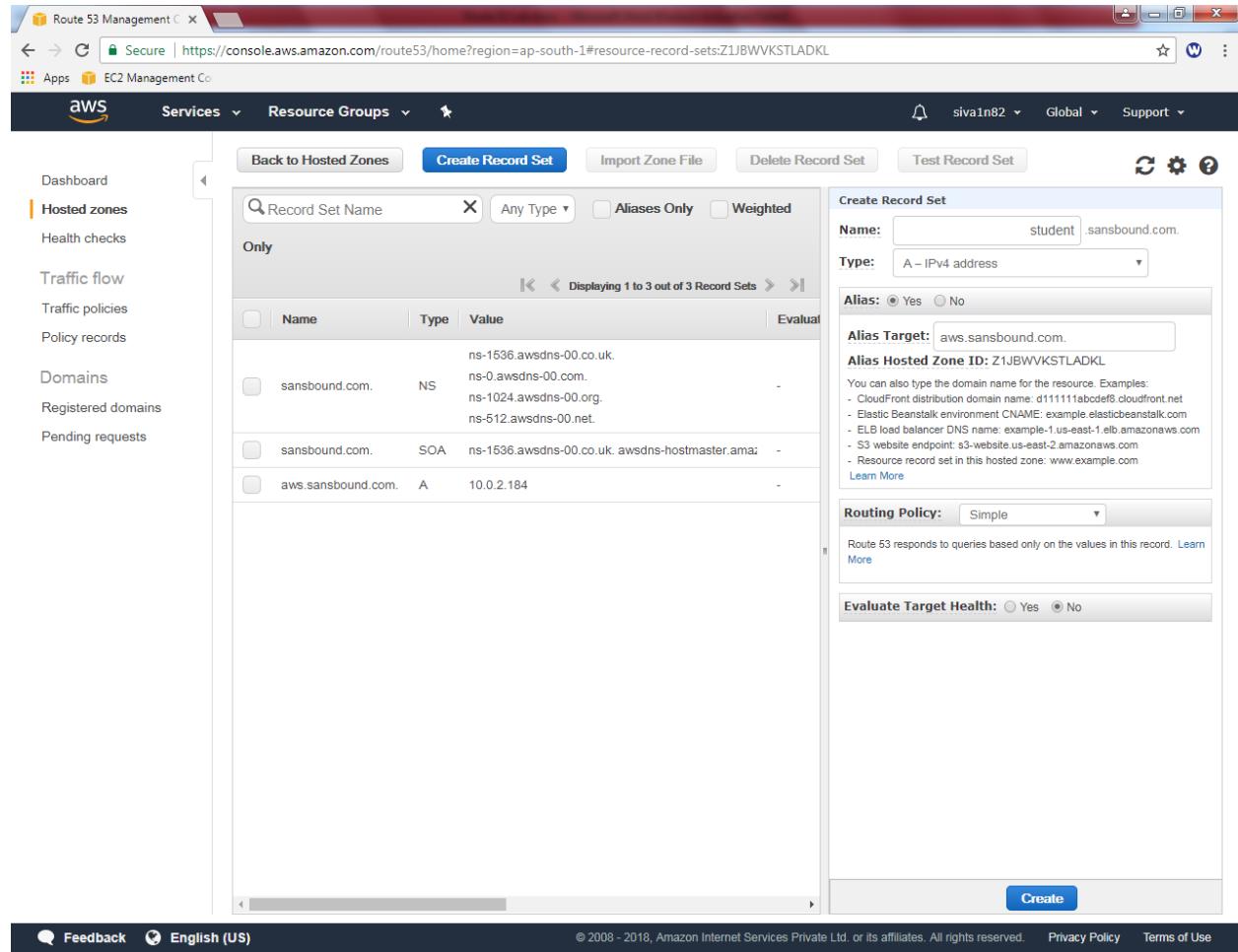
Route Policy : Simple



The screenshot shows the AWS Route 53 Management console. On the left, there's a navigation sidebar with options like Dashboard, Hosted zones, Traffic flow, Domains, and so on. The main area is titled 'Create Record Set' for a record set named 'aws.sansbound.com'. The 'Type' is set to 'A - IPV4 address' with the value '10.0.2.184'. The 'Routing Policy' is set to 'Simple'. Below the form, there's a table showing existing records for the 'sansbound.com' zone, including NS and SOA records. At the bottom right, there's a large green 'Create' button.

Then click "Create".

We have created successfully A record for aws.sansbound.com.



The screenshot shows the AWS Route 53 Management console interface. On the left, there's a sidebar with navigation links like Dashboard, Hosted zones, Health checks, Traffic flow, Traffic policies, Policy records, Domains, Registered domains, and Pending requests. The 'Hosted zones' link is currently selected. The main area displays a table of existing records for the domain 'sansbound.com.' under the 'Only' tab. The table has columns for Name, Type, and Value. One entry for 'ns-1536.awsdns-00.co.uk.' is expanded, showing its sub-records: NS, ns-0.awsdns-00.com., ns-1024.awsdns-00.org., and ns-512.awsdns-00.net.. Another entry for 'sansbound.com.' is listed under SOA, and a third for 'aws.sansbound.com.' is listed under A with the value '10.0.2.184'. To the right of the table, a 'Create Record Set' dialog is open. It includes fields for 'Name' (set to 'student'), 'Type' (set to 'A - IPv4 address'), and an 'Alias' section where 'Yes' is selected and the 'Alias Target' is set to 'aws.sansbound.com.'. There are also sections for 'Routing Policy' (set to 'Simple') and 'Evaluate Target Health' (set to 'No'). At the bottom of the dialog is a large blue 'Create' button.

Now we can try to connect <http://aws.sansbound.com> from microsoft windows 2016 server. We have got the webserver successfully.

