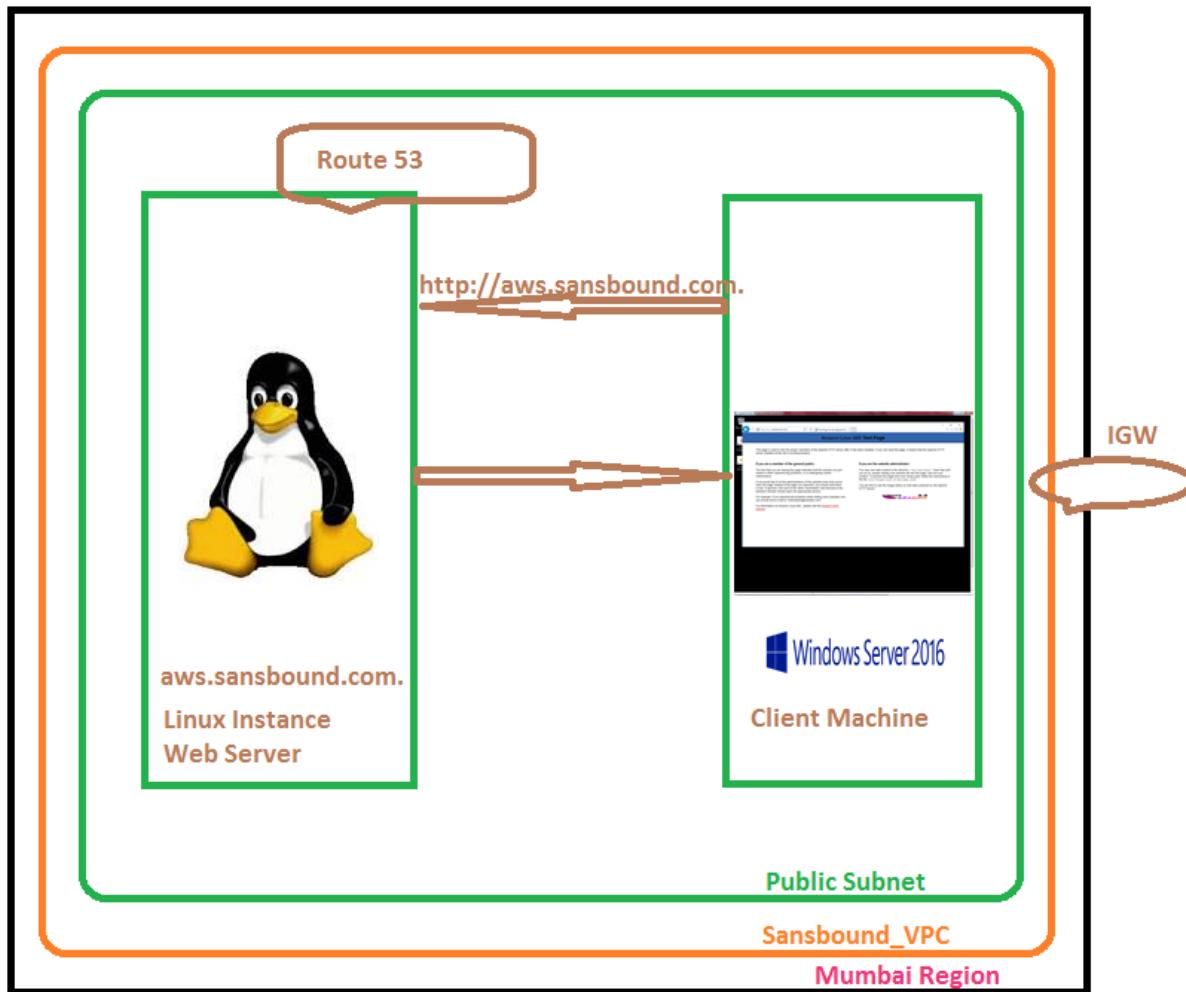


Lab16

Route 53 – Private Hosted Zone Lab

Scenario:

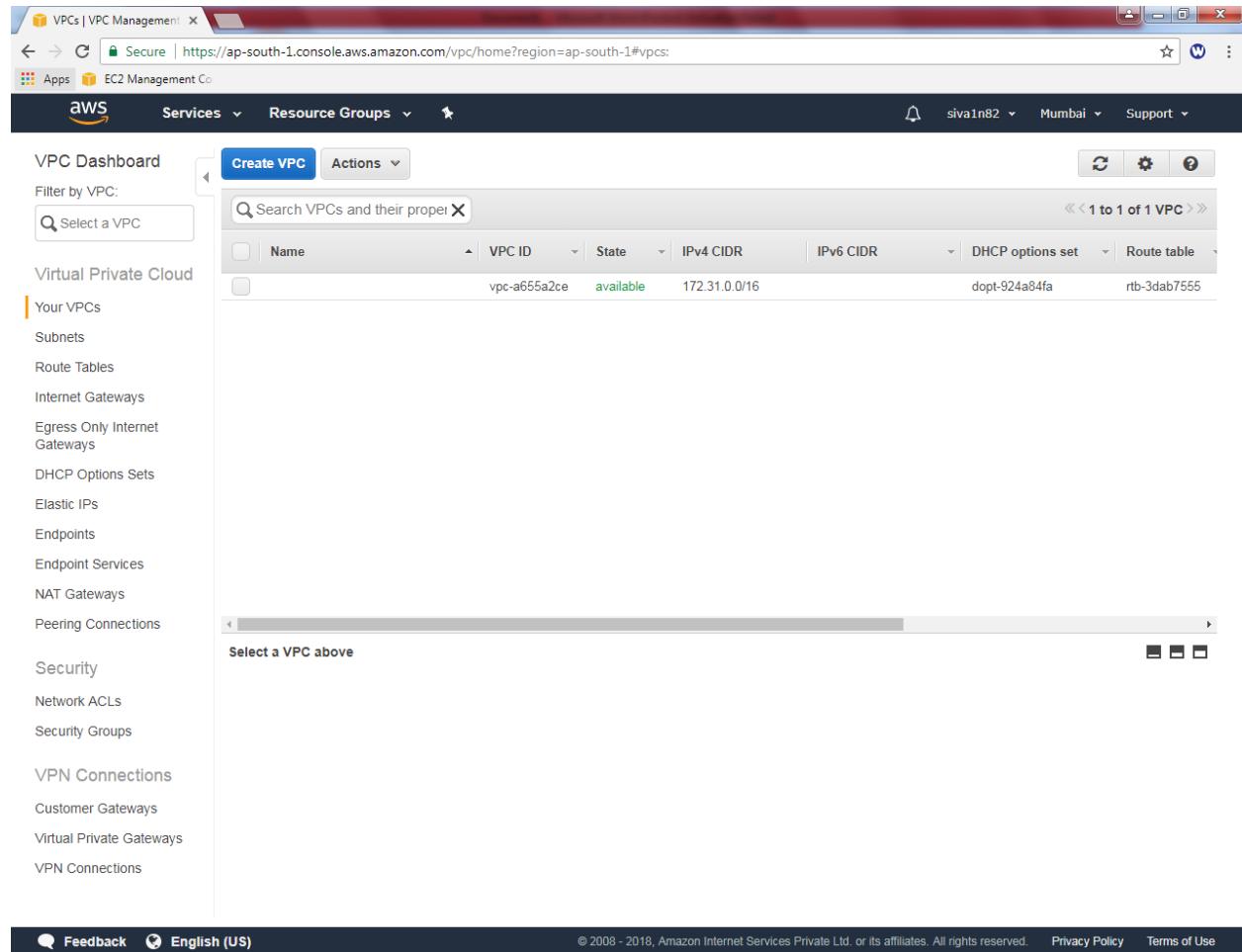


We have created Sansbound_VPC in Mumbai region, in sansbound subnet we have created public subnet and created one Linux instance and one Windows windows instance. In Linux instance we need to install the web server and in windows machine we need to access the web server by using IP address and FQDN (Fully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

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

The screenshot shows the AWS VPC Management Console interface. At the top, there's a navigation bar with links for 'Secure' (https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#), 'AWS' logo, 'Services' dropdown, 'Resource Groups' dropdown, and user information ('siva1n82', 'Mumbai', 'Support'). Below the navigation is a search bar labeled 'Select a VPC' and a 'Start VPC Wizard' button. To the right of the search bar is a 'Launch EC2 Instances' button. A note below the search bar states: 'Note: Your Instances will launch in the Asia Pacific (Mumbai) region.' On the left, a 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 VPN Connections. In the center, under 'Resources', there are two main sections: 'Service Health' and 'Additional Information'. 'Service Health' displays current status for Amazon VPC and Amazon EC2, both marked as 'Service is operating normally'. 'Additional Information' includes links to 'VPC Documentation', 'All VPC Resources', 'Forums', and 'Report an Issue'. At the bottom of the page, there's a footer with the URL 'https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1...', a copyright notice '© 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.', and links for 'Privacy Policy' and 'Terms of Use'.

In VPC Dashboard, click “Create VPC”.



The screenshot shows the AWS VPC Management console. The top navigation bar includes links for 'Secure', 'https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#vpcs:', 'AWS', 'Services', 'Resource Groups', and user information ('siva1n82', 'Mumbai', 'Support'). The main content area is titled 'VPC Dashboard' and features a 'Create VPC' button. A search bar at the top right says 'Search VPCs and their properties'. Below it is a table with one row of data:

	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

The left sidebar 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 VPN Connections. At the bottom, there are links for 'Feedback', 'English (US)', and copyright information: '© 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved.' followed by 'Privacy Policy' and 'Terms of Use'.

While creating VPC,

Name tag “Sansbound_VPC”

IPV4 CIDR block “10.0.0.0/16”

Create VPC

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 Sansbound_VPC i

IPv4 CIDR block* 10.0.0.0/16 i

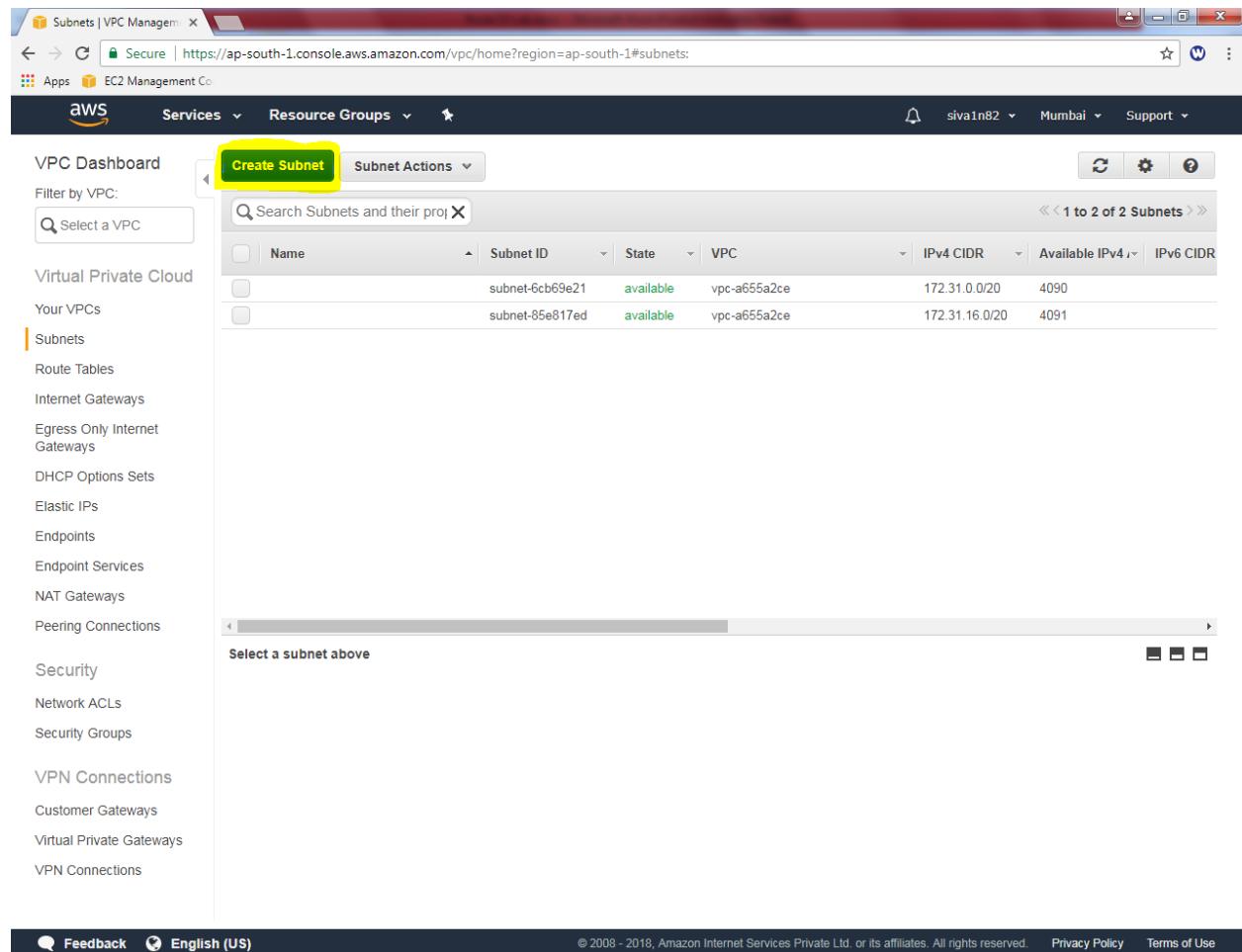
IPv6 CIDR block* No IPv6 CIDR Block i
 Amazon provided IPv6 CIDR block

Tenancy Default i

Cancel Yes, Create

Click “Yes, create”.

Then we need to create subnet,



The screenshot shows the AWS VPC Subnets Management console. On the left, there's a sidebar with various network-related services like VPC Dashboard, Your VPCs, Subnets (which is selected and highlighted in orange), 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 VPN Connections. The main area has a search bar at the top labeled "Search Subnets and their prop X". Below it is a table with two rows of subnet information:

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		

At the bottom of the main area, there's a message: "Select a subnet above". At the very bottom of the page, there are links for Feedback, English (US), Privacy Policy, and Terms of Use.

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. On the left, there's a sidebar with various VPC-related options like Your VPCs, Subnets, Route Tables, and Internet Gateways (which is currently selected). The main content area has a table showing one Internet Gateway named 'igw-69633500' which is 'attached' to 'vpc-a655a2ce'. At the top of this section, there are buttons for 'Create Internet Gateway', 'Delete', 'Attach to VPC', and 'Detach from VPC'. A yellow box highlights the 'Create Internet Gateway' button. Below the table, there's a note saying 'Select an Internet gateway above' followed by three small icons.

Click “Create Internet Gateway”.

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

A modal dialog box titled "Create Internet Gateway" is shown. It contains a single input field labeled "Name tag" with the value "Sansbound_IGW". Below the input field are two buttons: "Cancel" and "Yes, Create".

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”.

The screenshot shows the AWS VPC Dashboard. On the left, there's a sidebar with various VPC-related options like Your VPCs, Subnets, Route Tables, and Internet Gateways (which is currently selected). The main area displays a table of Internet Gateways. One row, labeled 'Sansbound_IGW' with ID 'igw-29321140', has its 'State' field highlighted with a yellow box and labeled 'detached'. Above the table, there are buttons for 'Create Internet Gateway', 'Delete', 'Attach to VPC' (which is also highlighted with a yellow box), and 'Detach from VPC'. Below the table, there's a detailed view for the selected gateway, showing its ID, state (detached), and attached VPC ID.

Click “Yes, Attach”.



In Sansbound_VPC route table, rename as sansbound_public_route.

Then select Route tab, click “Edit”.

The screenshot shows the AWS VPC Management Console. On the left, there's a sidebar with various VPC-related options like Virtual Private Cloud, Your VPCs, Subnets, Route Tables (which is selected and highlighted in orange), Internet Gateways, Egress Only Internet Gateways, DHCP Options Sets, Elastic IPs, Endpoints, Endpoint Services, NAT Gateways, Peering Connections, Security, Network ACLs, and Security Groups. The main area shows a list of Route Tables with columns for Name, Route Table ID, Explicitly Associated, Main, and VPC. One route table, 'sanbound_public_route', is selected and highlighted with a blue border. Below this, the details for 'rtb-60dc5808' are shown, with the 'Routes' tab selected. An 'Edit' button is highlighted with a yellow box. The table below shows a single rule: Destination 10.0.0.0/16, Target local, Status Active, Propagated No. At the bottom, the URL is https://ap-south-1.console.aws.amazon.com/vpc/home?region=ap-south-1#, and there are links for Privacy Policy and Terms of Use.

Click “Add another route”

The screenshot shows the AWS VPC Management Console. On the left, there is a navigation sidebar with various VPC-related options like Virtual Private Cloud, Your VPCs, Subnets, Route Tables, Internet Gateways, etc. The 'Route Tables' section is currently selected. The main area displays a list of route tables with columns for Name, Route Table ID, Explicitly Associated, Main, and VPC. One route table, 'sanbound_public_route' (rtb-60dc5808), is selected and shown in more detail. This detailed view includes tabs for Summary, Routes (which is selected), Subnet Associations, Route Propagation, and Tags. Under the 'Routes' tab, a table lists a single rule: Destination 10.0.0.0/16, Target local, Status Active, Propagated No. There is also a 'Save' button and an 'Add another route' link.

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 management interface. On the left, there's a sidebar with various VPC-related options like Virtual Private Cloud, Your VPCs, Subnets, Route Tables (which is selected), Internet Gateways, Egress Only Internet Gateways, DHCP Options Sets, Elastic IPs, Endpoints, Endpoint Services, NAT Gateways, Peering Connections, Security, Network ACLs, and Security Groups. The main area shows a list of Route Tables with columns for Name, Route Table ID, Explicitly Associated, Main, and VPC. One route table, 'sanbound_public_route', is selected. Below this, a detailed view for 'rtb-60dc5808' is shown with tabs for Summary, Routes (which is selected), Subnet Associations, Route Propagation, and Tags. Under the 'Routes' tab, there's a table with columns for Destination, Target, Status, Propagated, and Remove. A new route is being added with '0.0.0.0/0' as the destination and 'igw-29321140' as the target. The 'Save' button is highlighted with a yellow box. At the bottom, there are links for Feedback, English (US), and footer links for Privacy Policy and Terms of Use.

Then click “Save”.

In Subnet associations tab, click “Edit” option.

The screenshot shows the AWS VPC Management Console. On the left, there's a sidebar with various VPC-related options like Virtual Private Cloud, Your VPCs, Subnets, and Route Tables. The Route Tables section is currently selected. The main area displays a list of three 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

For the selected route table (rtb-60dc5808), a detailed view is shown. The 'Subnet Associations' tab is active, and the 'Edit' button is highlighted with a yellow box. Below it, a message states: "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:". A table lists a single subnet:

Subnet	IPv4 CIDR	IPv6 CIDR
subnet-f28a85bf Sansbound_Public_subnet	10.0.2.0/24	-

At the bottom, there are links for Feedback, English (US), Copyright notice (© 2008 - 2018), Privacy Policy, and Terms of Use.

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

The screenshot shows the AWS VPC Route Tables management interface. The left sidebar lists various VPC components, with 'Route Tables' currently selected. The main content area shows a table of route tables, with the row for 'sanbound_public_route' (rtb-60dc5808) highlighted. Below this, a detailed view of the selected route table is shown, specifically the 'Subnet Associations' tab. The 'Save' button in this section is highlighted with a yellow box.

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

Now we need to create two instances.

Goto EC2, click launch instance

You are using the following Amazon EC2 resources in the Asia Pacific (Mumbai) region:

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

Create Instance

To start using Amazon EC2 you will want to launch a virtual server, known as an Amazon EC2 instance.

Launch Instance

Note: Your instances will launch in the Asia Pacific (Mumbai) region

Service Health

Service Status:

- ✓ Asia Pacific (Mumbai): This service is operating normally

Availability Zone Status:

- ✓ ap-south-1a: Availability zone is operating normally
- ✓ ap-south-1b: Availability zone is operating normally

[Service Health Dashboard](#)

Scheduled Events

Asia Pacific (Mumbai):

No events

AWS Marketplace

Find free software trial products in the AWS Marketplace from the [EC2 Launch Wizard](#). Or try these popular AMIs:

Barracuda NextGen Firewall F-Series - PAYG

Provided by Barracuda Networks, Inc.
Rating ★★★★☆
Starting from \$0.60/hr or from \$4,599/yr (12% savings) for software + AWS usage fees
[View all Software Infrastructure](#)

Splunk Insights for AWS Cloud Monitoring

Provided by Splunk Inc.
[View details](#)

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

- My AMIs
- AWS Marketplace
- Community AMIs

Free tier only ⓘ

Image	Name	Description	Select	64-bit
Amazon Linux	Amazon Linux AMI 2017.09.1 (HVM), SSD Volume Type - ami-fedb8f91	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.	Select	64-bit
Amazon Linux	Amazon Linux 2 LTS Candidate AMI 2017.12.0 (HVM), SSD Volume Type - ami-d00651bf	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.	Select	64-bit
Ubuntu	Ubuntu Server 16.04 LTS (HVM), SSD Volume Type - ami-f3e5aa9c	Ubuntu Server 16.04 LTS (HVM). EBS General Purpose (SSD) Volume Type. Support available from Canonical (http://www.ubuntu.com/cloud/services).	Select	64-bit
SUSE Linux	SUSE Linux Enterprise Server 12 SP3 (HVM), SSD Volume Type - ami-f7267298	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.	Select	64-bit
Red Hat	Red Hat Enterprise Linux 7.4 (HVM), SSD Volume Type - ami-e60e5a89	Red Hat Enterprise Linux version 7.4 (HVM). EBS General Purpose (SSD) Volume Type	Select	64-bit

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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

Services Resource Groups

siva1n82 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 3: Configure Instance Details

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

Number of instances: 1 [Launch into Auto Scaling Group](#)

Purchasing option: Request Spot Instances

Network: vpc-4e934526 | Sansbound_VPC [Create new VPC](#)

Subnet: subnet-f28a65bf | Sansbound_Public_subnet | ap-so [Create new subnet](#)
251 IP Addresses available

Auto-assign Public IP: 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](#)

Network interfaces

Device	Network Interface	Subnet	Primary IP	Secondary IP addresses	IPv6 IPs
--------	-------------------	--------	------------	------------------------	----------

Cancel Previous **Review and Launch** 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 (MB/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 checked="" type="checkbox"/>

Add another tag (Up to 50 tags maximum)

Cancel Previous Review and Launch Next: Configure Security Group

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In Security group configure as Public_Sec_Group.

The screenshot shows the AWS EC2 Management Console interface. At the top, there's a navigation bar with links for 'Secure', 'AWS', 'Services', 'Resource Groups', 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', and '7. Review'. The main content area is titled 'Step 6: Configure Security Group'. It contains instructions about security groups and a link to learn more. A warning message at the bottom of the page advises against allowing all IP addresses to access the instance. At the bottom right, there are buttons for 'Cancel', 'Previous', and 'Review and Launch'.

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

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

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

Description Public_Sec_Group

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

Instance Details

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Cancel **Previous** **Launch**

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

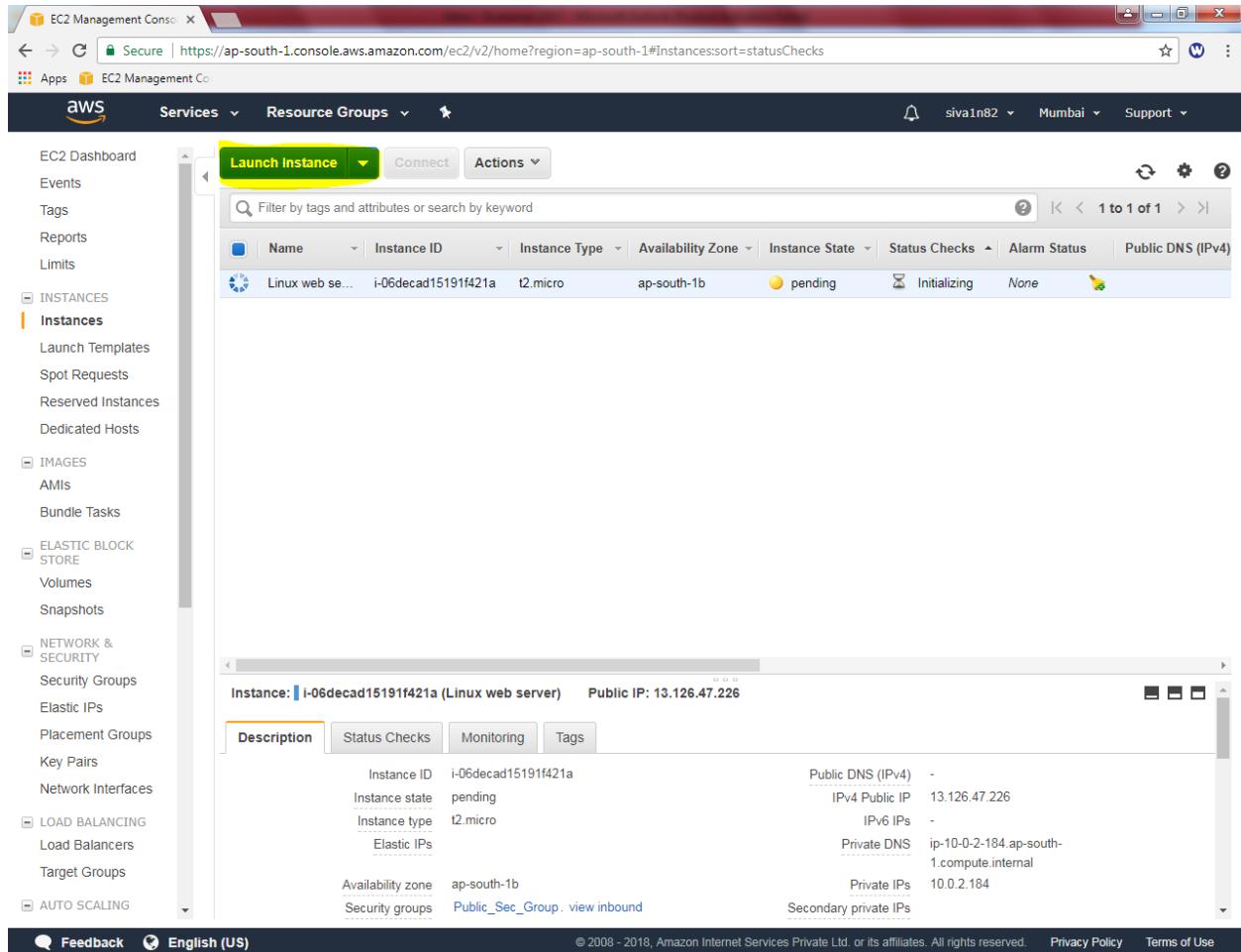
siva2k16 ▼

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 (with Instances selected), Launch Templates, Spot Requests, Reserved Instances, Dedicated Hosts, IMAGES (with AMIs selected), Bundle Tasks, ELASTIC BLOCK STORE (with Volumes and Snapshots), NETWORK & SECURITY (with Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces), LOAD BALANCING (with Load Balancers and Target Groups), and AUTO SCALING. The main content area displays a table of instances. A yellow box highlights the 'Launch Instance' button at the top of the table header. Below the table, a detailed view of instance i-06decad15191f421a is shown, including its description, status checks, monitoring, and tags. The instance details include: Instance ID (i-06decad15191f421a), Instance state (pending), Instance type (t2.micro), Availability zone (ap-south-1b), Security groups (Public_Sec_Group), Public DNS (IPv4) (13.126.47.226), Private DNS (ip-10-0-2-184.ap-south-1.compute.internal), Private IP (10.0.2.184), and Secondary private IP (-). The bottom of the screen shows standard AWS footer links: Feedback, English (US), Privacy Policy, and Terms of Use.

Select “Windows Server 2016 Base”

Step 1: Choose an Amazon Machine Image (AMI)

Red Hat Enterprise Linux 7.4 (HVM), SSD Volume Type - ami-e60e5a89
Red Hat Enterprise Linux version 7.4 (HVM), EBS General Purpose (SSD) Volume Type
Free tier eligible
Root device type: ebs Virtualization type: hvm
Select 64-bit

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

Microsoft Windows Server 2016 Base - ami-489fcb27
Microsoft Windows 2016 Datacenter edition. [English]
Free tier eligible
Root device type: ebs Virtualization type: hvm
Select 64-bit

Deep Learning AMI (Ubuntu) - ami-27e8a148
Latest versions of deep learning frameworks pre-installed in separate virtual environments: MXNet, TensorFlow, Caffe2, PyTorch, Theano, CNTK, Keras
Free tier eligible
Root device type: ebs Virtualization type: hvm
Select 64-bit

Deep Learning AMI (Amazon Linux) - ami-6ce8a103
Latest versions of deep learning frameworks pre-installed in separate virtual environments: MXNet, TensorFlow, Caffe2, PyTorch, Theano, CNTK, Keras
Free tier eligible
Root device type: ebs Virtualization type: hvm
Select 64-bit

Deep Learning Base AMI (Ubuntu) - ami-19f6bf76
Select

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

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

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 at Step 3: Configure Instance Details. The instance type is chosen as t2.micro. The configuration includes:

- Number of instances:** 1 (selected)
- Purchasing option:** Request Spot Instances (unchecked)
- Network:** vpc-4e934526 | Sansbound_VPC
- Subnet:** subnet-f28a65bf | Sansbound_Public_subnet | ap-south-1 | 250 IP Addresses available
- Auto-assign Public IP:** Enable
- IAM role:** None
- Shutdown behavior:** Stop
- Enable termination protection:** Protect against accidental termination (unchecked)
- 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 is a table for Network interfaces with columns: Device, Network Interface, Subnet, Primary IP, Secondary IP addresses, and IPv6 IPs. The table currently has no data.

Buttons at the bottom right include: Cancel, Previous, Review and Launch (highlighted in blue), and Next: Add Storage.

Click "Next".

Leave default settings and click "Next".

The screenshot shows the AWS EC2 Management Console interface. The URL in the address bar 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 horizontal progress bar with steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure Instance, 4. Add Storage (highlighted in blue), 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-0316734ece99acb1a	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.

Buttons at the bottom: Cancel, Previous, **Review and Launch** (highlighted in blue), Next: Add Tags.

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Name: Windows 2016 instance

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 instance		<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”.

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

The screenshot shows the AWS EC2 Management Console interface. At the top, there's a navigation bar with links for 'Services', 'Resource Groups', and 'Support'. Below the navigation bar, a progress bar indicates 'Step 6: Configure Security Group' is active. A sub-header 'Assign a security group:' has two options: 'Create a new security group' (selected) and 'Select an existing security group'. The 'Security group name:' field contains 'Public_Sec_group_Windows' and the 'Description:' field contains 'Public_Sec_group_Windows'. Below these fields is a table for defining security rules. The first rule is set up with 'Type: RDP', 'Protocol: TCP', 'Port Range: 3389', and 'Source: Custom 0.0.0.0/0'. A note below the table says: '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.' At the bottom of the page are buttons for 'Cancel', 'Previous', and 'Review and Launch'.

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
 Microsoft Windows 2016 Datacenter edition. [English]
 Free tier eligible
 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

Security group name: Public_Sec_group_Windows
Description: Public_Sec_group_Windows

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

Instance Details

[Edit instance details](#)

[Cancel](#) [Previous](#) **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, there's a navigation sidebar with categories like EC2 Dashboard, Events, Tags, Reports, Limits, INSTANCES (with 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, and AUTO SCALING.

The main content area has tabs for Launch Instance, Connect, and Actions. Below these are two tables:

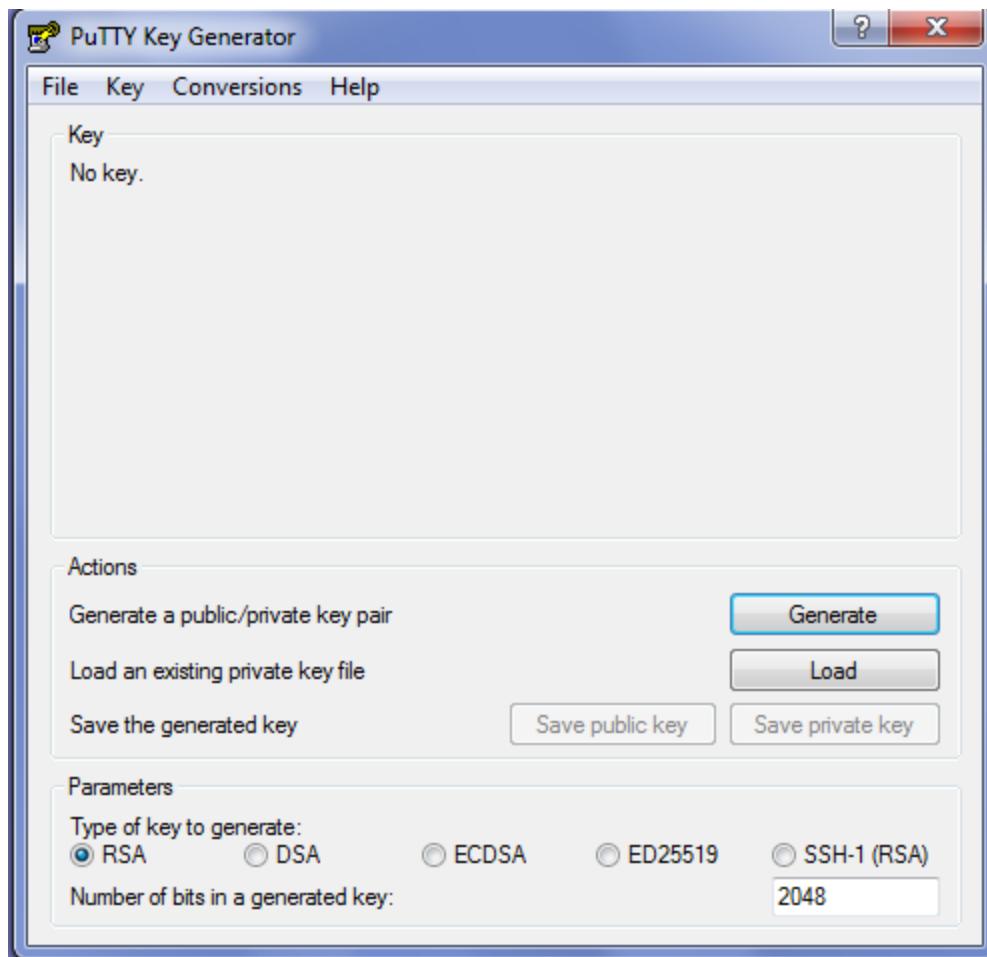
Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)
Windows 20...	i-0d73576e81fc09d1	t2.micro	ap-south-1b	Pending	Initializing	None	-
Linux web se...	i-06decad15191f421a	t2.micro	ap-south-1b	running	2/2 checks ...	None	13.126.47.226

Below the tables, a specific instance is selected: "Instance: i-06decad15191f421a (Linux web server) Public IP: 13.126.47.226". A detailed view panel shows the following information:

Description	Value	Description	Value
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
Availability zone	ap-south-1b	Private IPs	10.0.2.184
Security groups	Public_Sec_Group . view inbound	Secondary private IPs	-

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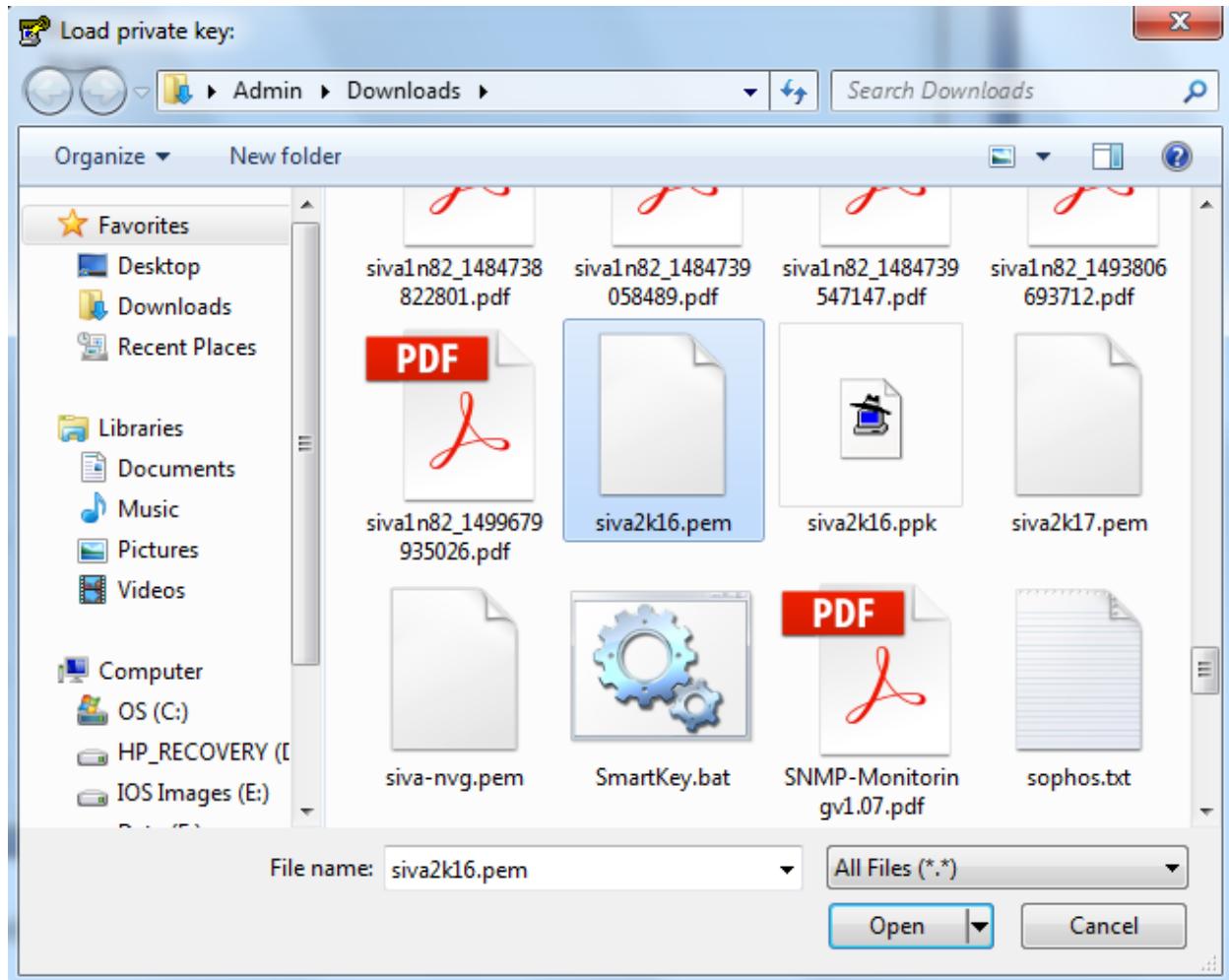
Install putty generator on your local machine and then try to launch Putty key generator.



In File, click “Load private key”.

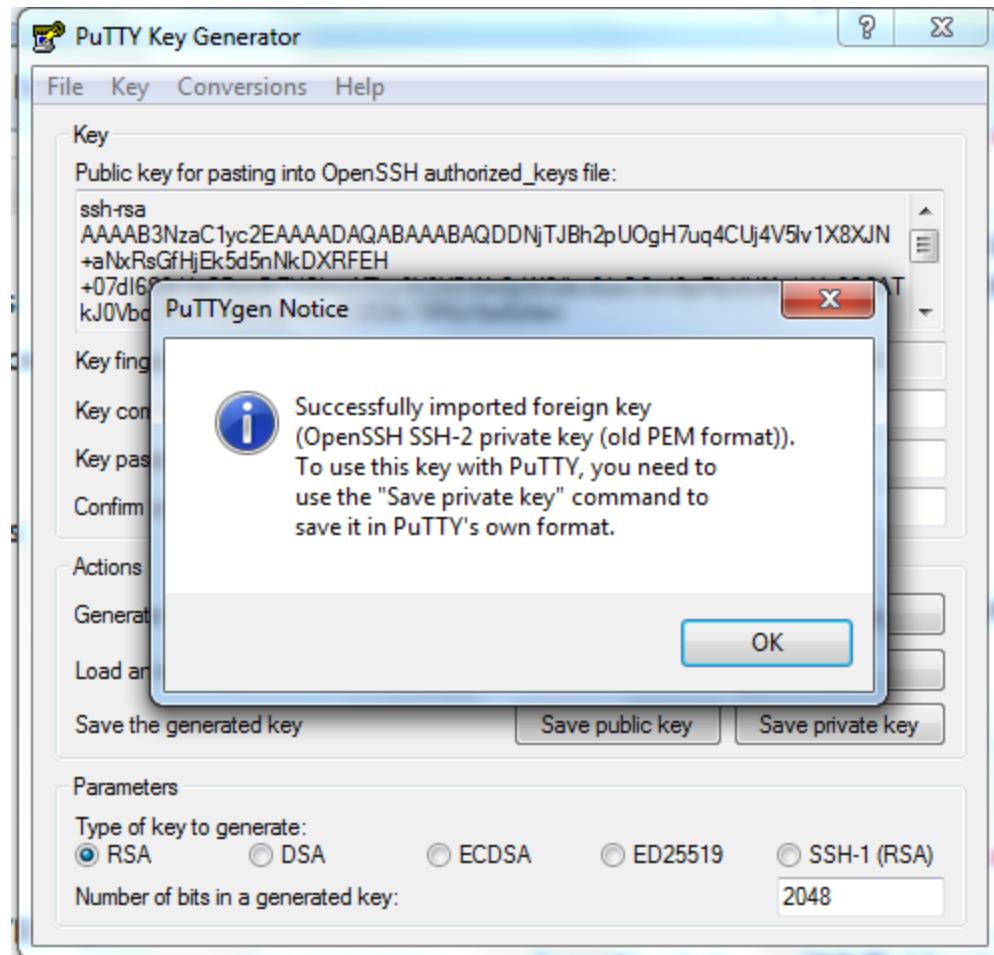
Select the path of *.Pem file to decrypt the private part of the key.

Select “All files” list.



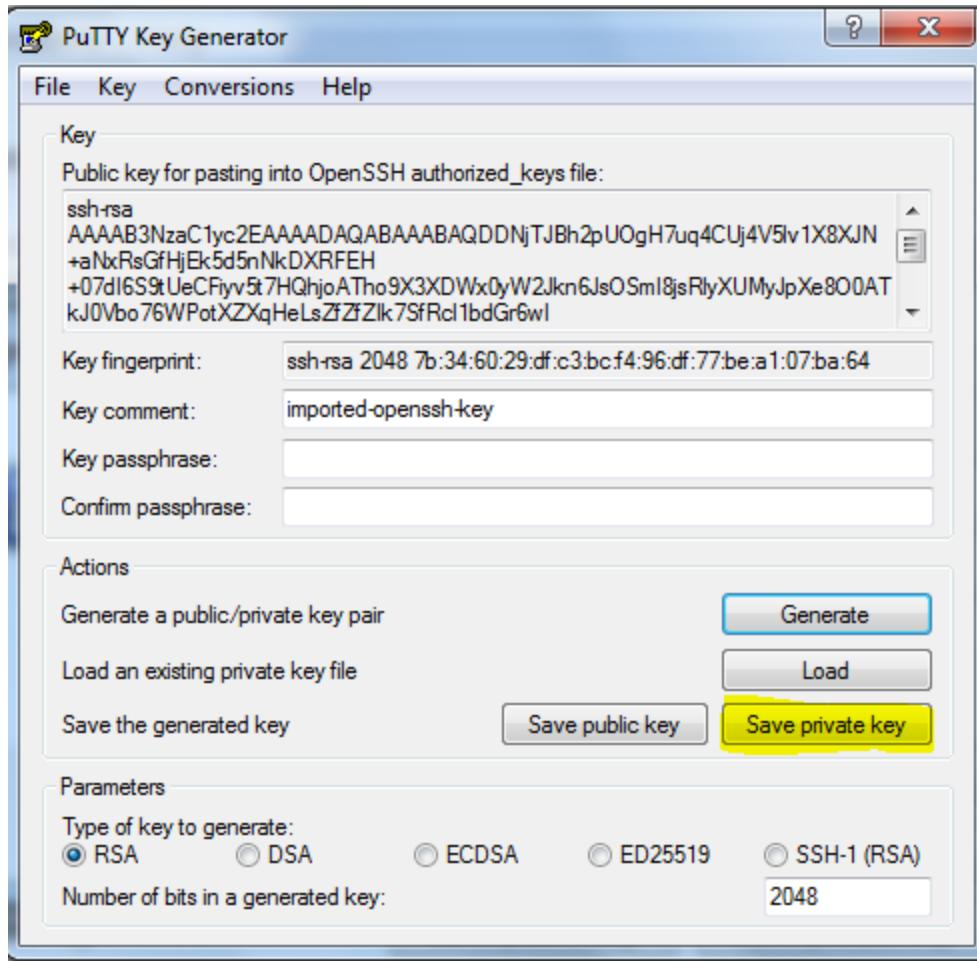
Then click "Open".

Now you have successfully imported the key.

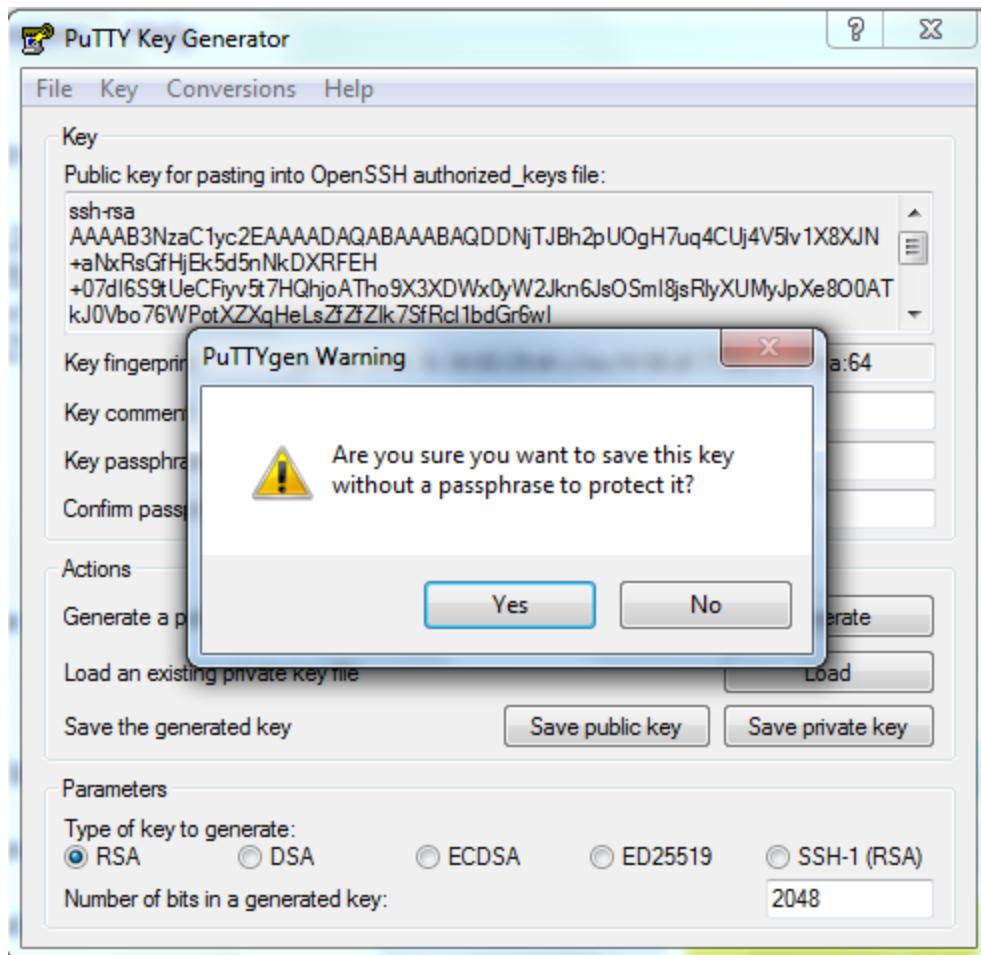


Click “Ok”.

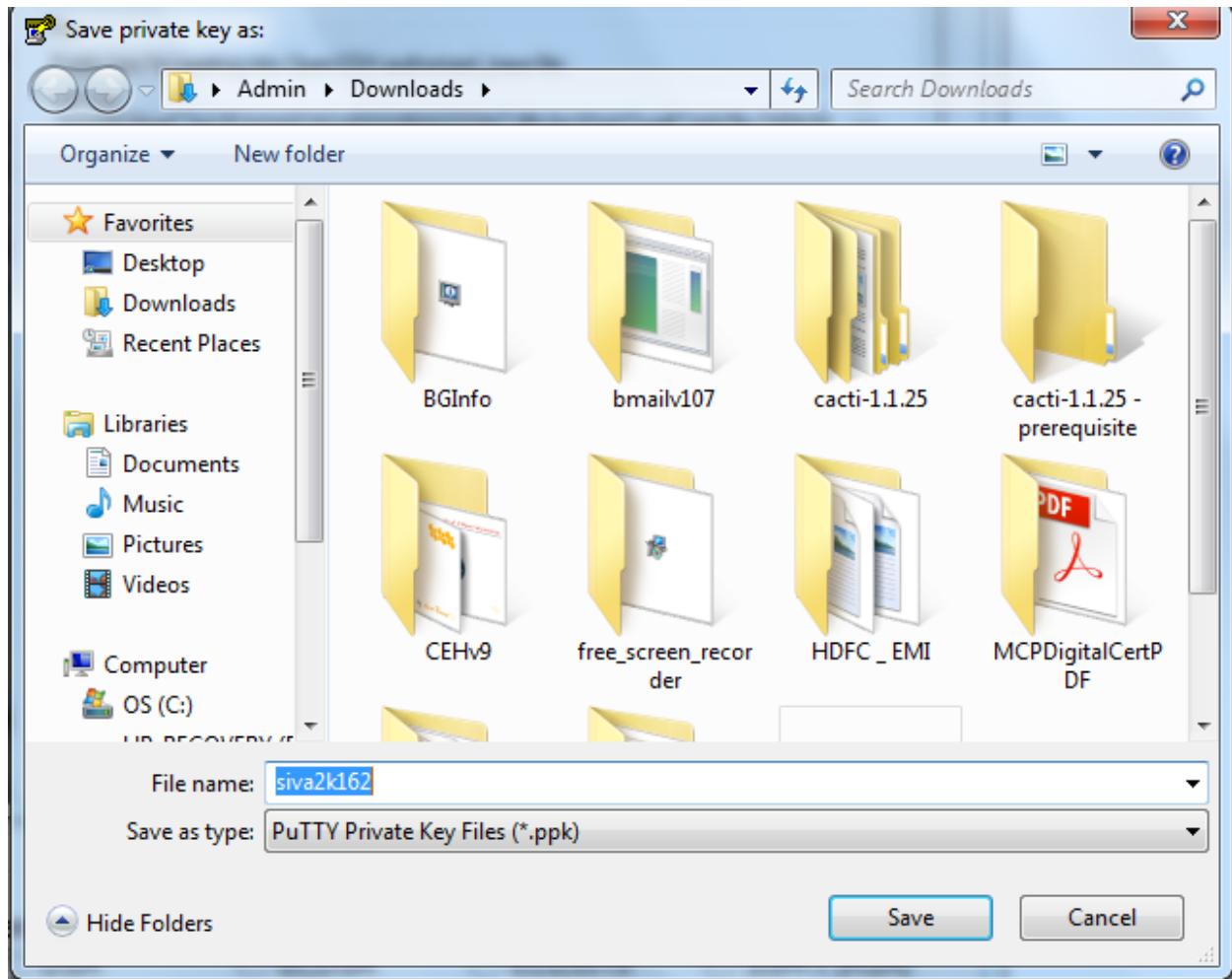
Click “save Private key”



Then click “Yes”.

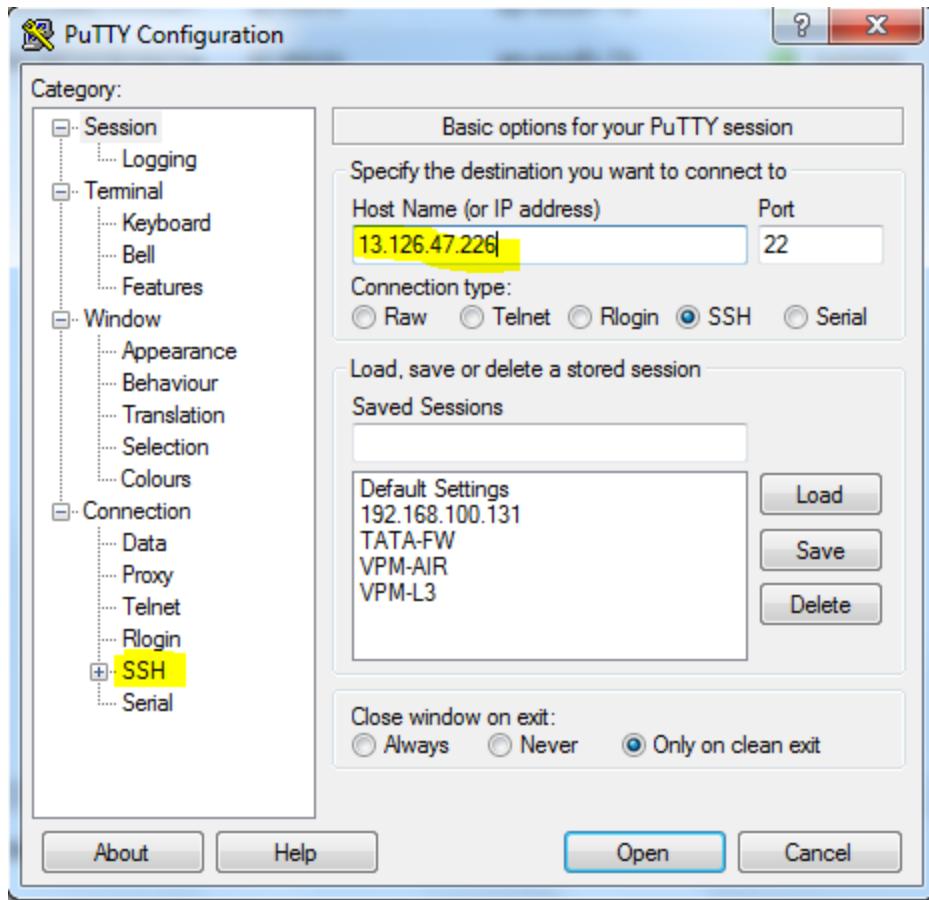


Select the path to store the “*.ppk” file.

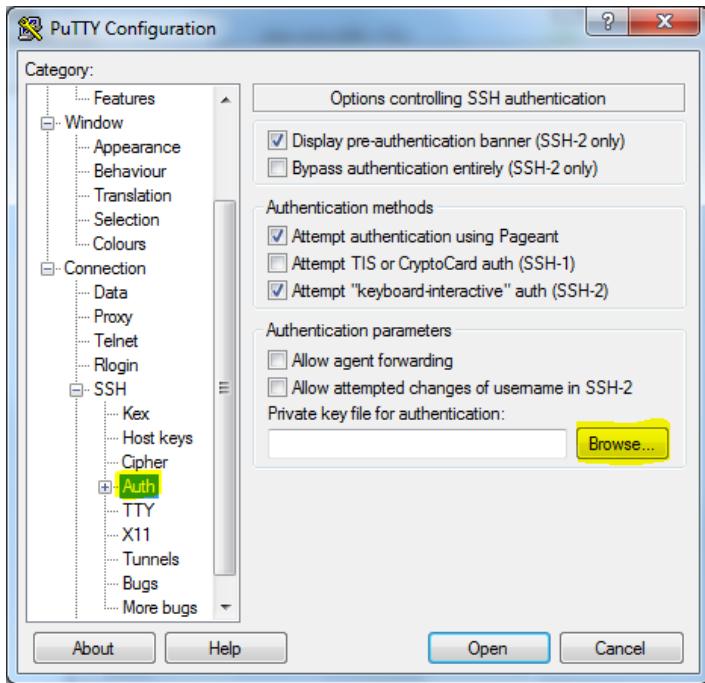


Then click "save".

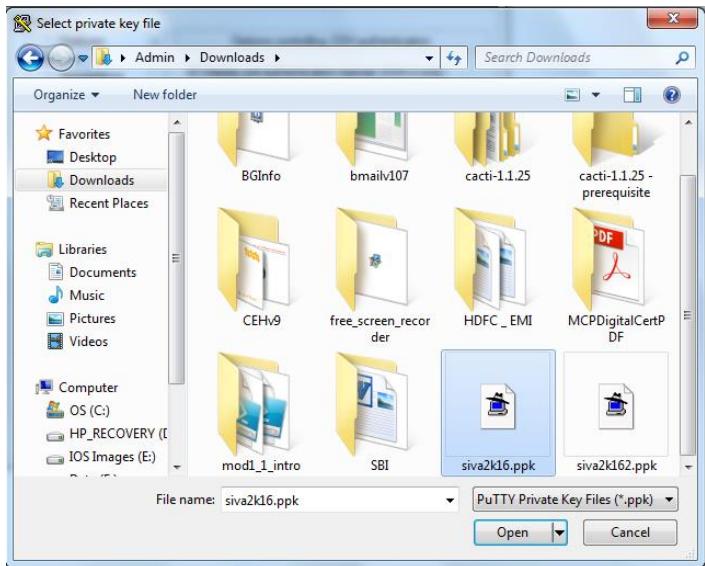
Type host name and click "SSH".



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

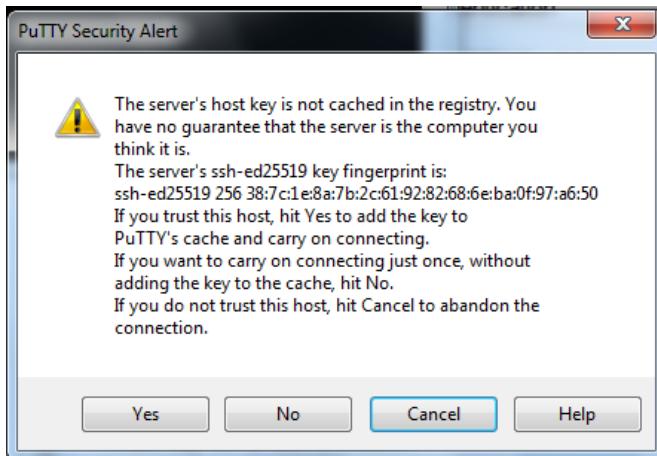
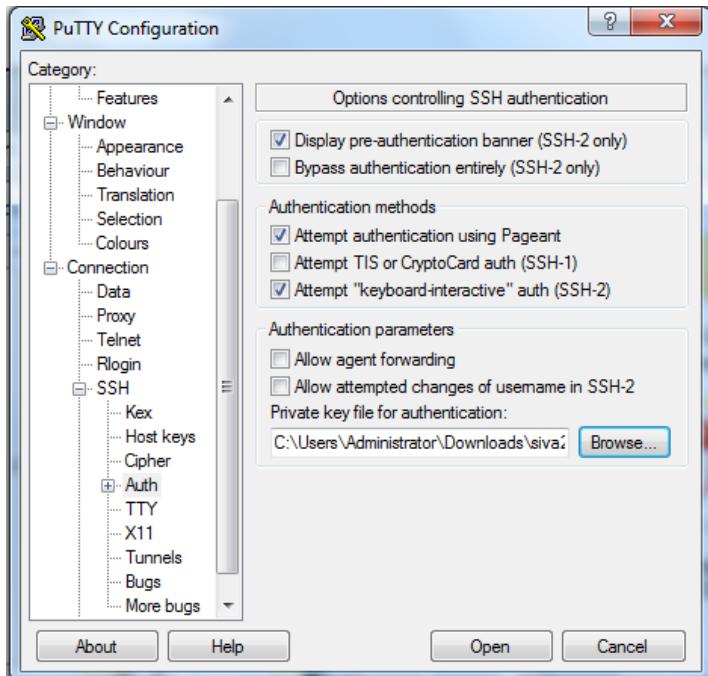


Browse the “*.ppk” file



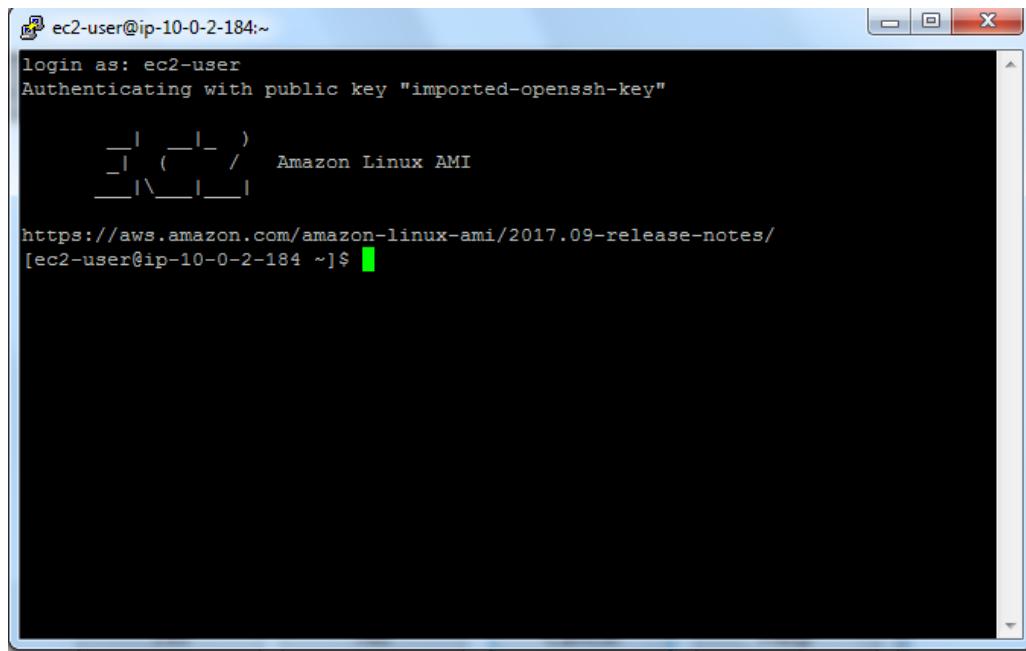
Click "Open".

Click “Open”to launch the SSH application.



Click “Yes”.

Now try username for Linux AMI as **“ec2-user”**



```
ec2-user@ip-10-0-2-184:~  
login as: ec2-user  
Authenticating with public key "imported-openssh-key"  
[ec2-user@ip-10-0-2-184 ~]$ https://aws.amazon.com/amazon-linux-ami/2017.09-release-notes/
```

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:~]# 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.x86_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
=====
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

Transaction Summary
=====
Install 1 Package (+4 Dependent packages)

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

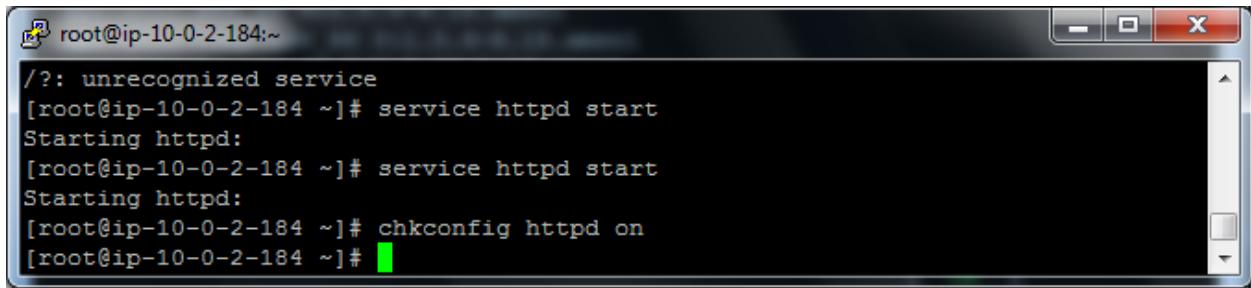
Dependency Installed:
  apr.x86_64 0:1.5.2-5.13.amzn1
  apr-util.x86_64 0:1.5.4-6.18.amzn1
  apr-util-ldap.x86_64 0:1.5.4-6.18.amzn1
  httpd-tools.x86_64 0:2.2.34-1.16.amzn1

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
[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



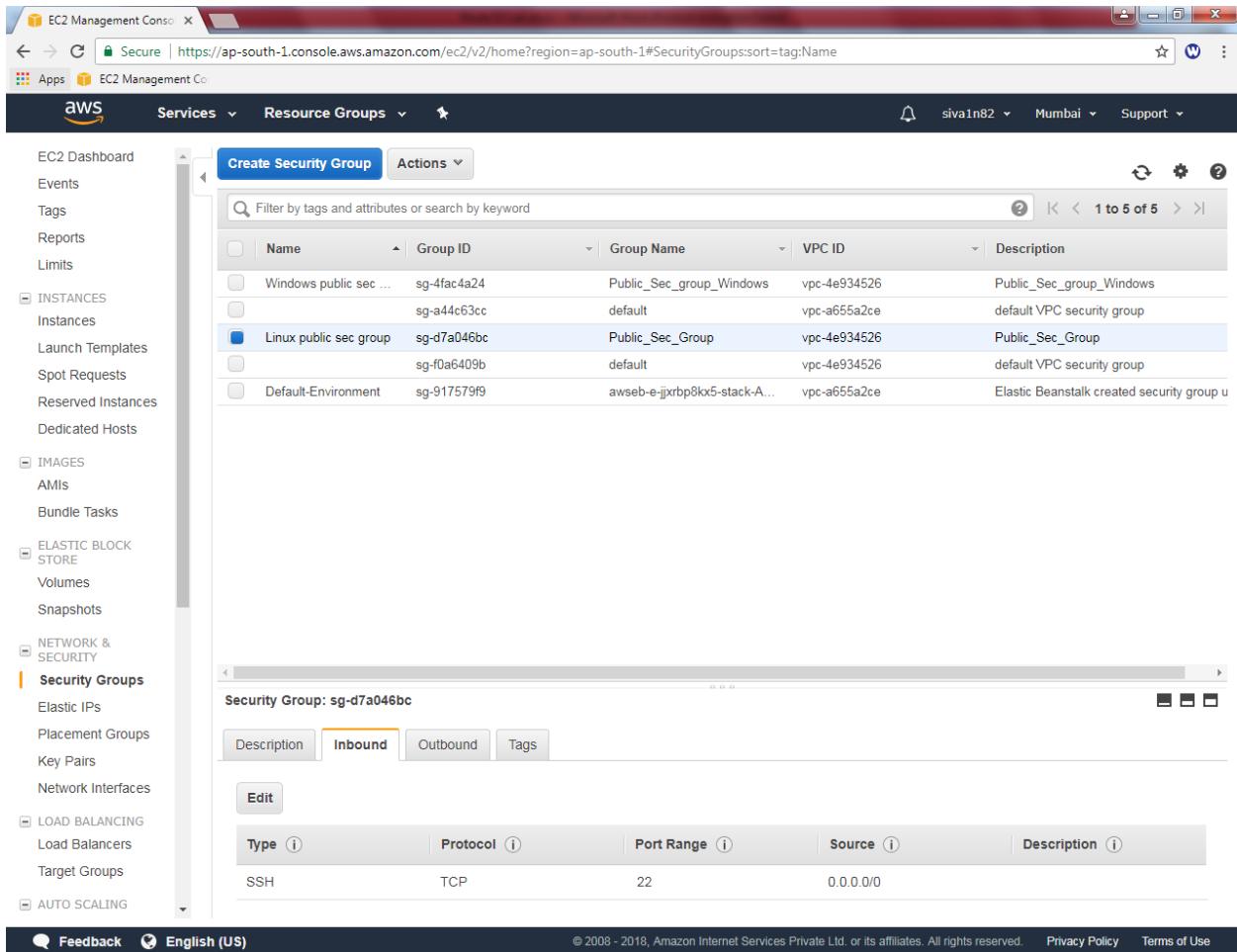
```

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.



The screenshot shows the AWS EC2 Management Console. The left sidebar navigation 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. The 'Security Groups' section is currently selected.

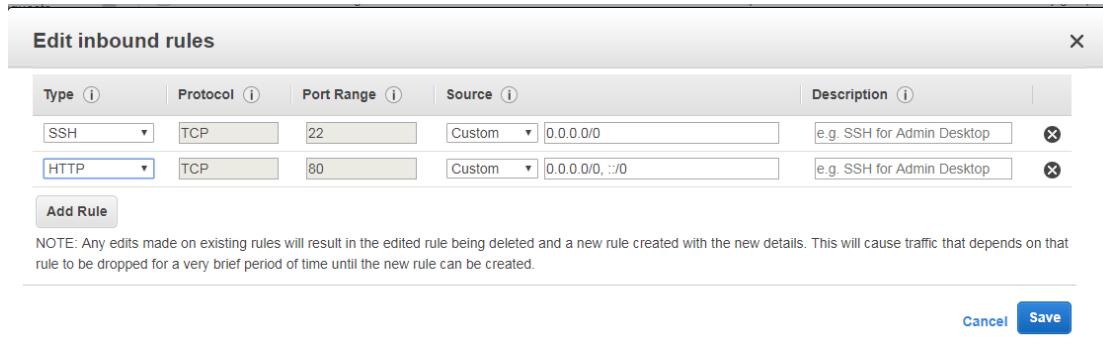
The main content area displays a table of security groups:

	Name	Group ID	VPC ID	Description
<input type="checkbox"/>	Windows public sec ...	sg-4fac4a24	vpc-4e934526	Public_Sec_group_Windows
<input type="checkbox"/>	sg-a44c63cc	default	vpc-a655a2ce	default VPC security group
<input checked="" type="checkbox"/>	Linux public sec group	sg-d7a046bc	vpc-4e934526	Public_Sec_Group
<input type="checkbox"/>	sg-f0a6409b	default	vpc-4e934526	default VPC security group
<input type="checkbox"/>	Default-Environment	sg-917579f9	awseb-e-ijxrbp8kx5-stack-A...	Elastic Beanstalk created security group u

Below the table, the details for the selected security group ('sg-d7a046bc') are shown. The 'Inbound' tab is selected, showing one rule:

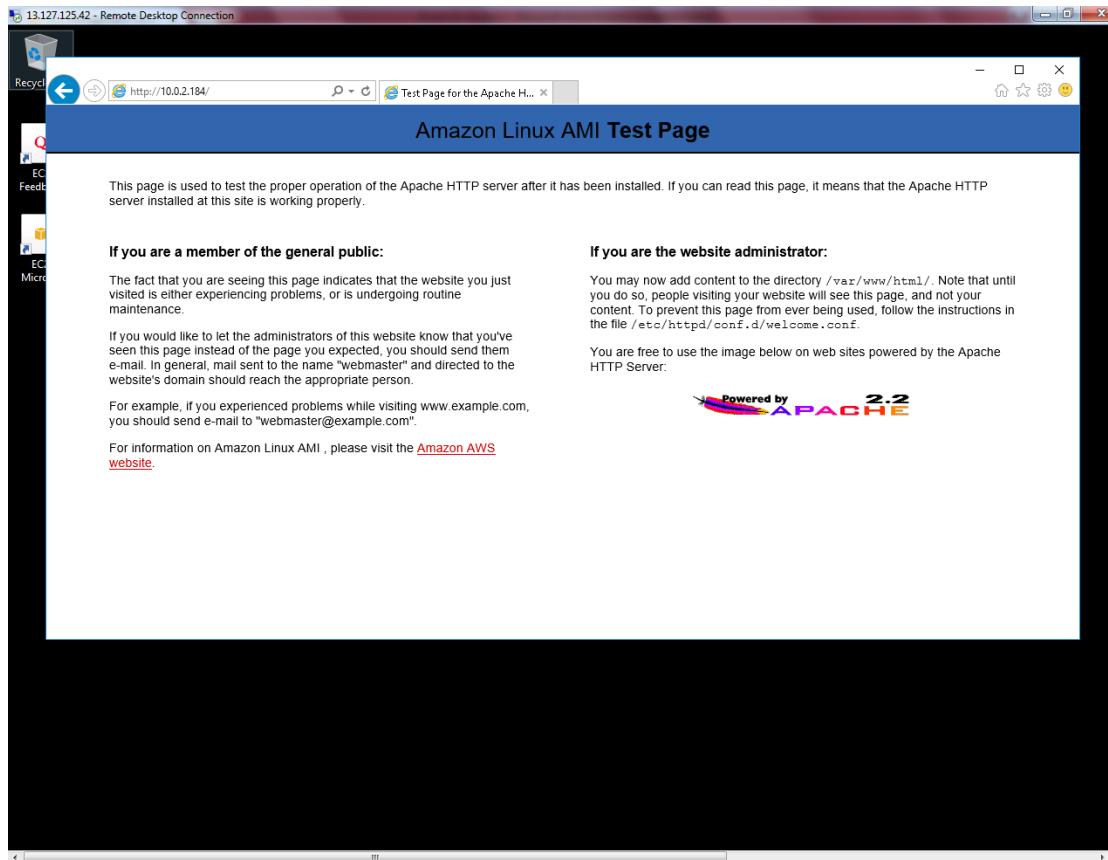
Type	Protocol	Port Range	Source	Description
SSH	TCP	22	0.0.0.0/0	

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

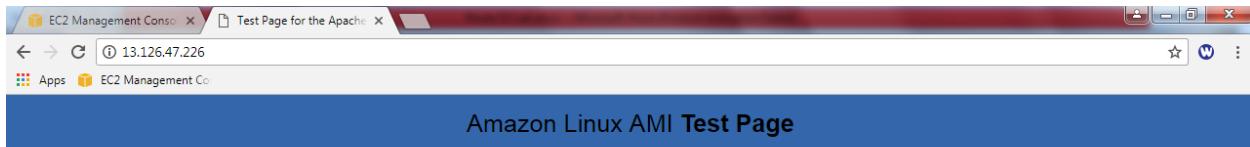


Then click "save".

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.



This page is used to test the proper operation of the Apache HTTP server after it has been installed. If you can read this page, it means that the Apache HTTP server installed at this site is working properly.

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:



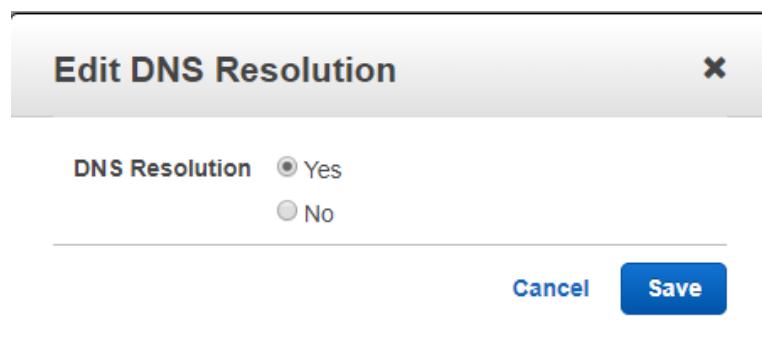
Our Scope is we need to connect the webserver by using Fully Qualified Domain Name (FQDN) from Windows 2016 machine by configuring Route 53. Now we need to configure Route 53.

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. In the main area, a table lists two VPCs: one named 'vpc-a655a2ce' and another named 'Sansbound_VPC'. A context menu is open over the 'Sansbound_VPC' row, with 'Edit DNS Resolution' highlighted in orange. Below the table, there's a summary for 'vpc-4e934526 | Sansbound_VPC' showing details such as VPC ID, State, IPv4 CIDR, IPv6 CIDR, DHCP options set, Route table, Network ACL, Tenancy, DNS resolution, and DNS hostnames. At the bottom, there's a standard Windows taskbar with icons for Start, Task View, File Explorer, and others, along with system status information.

It should be “Yes”.

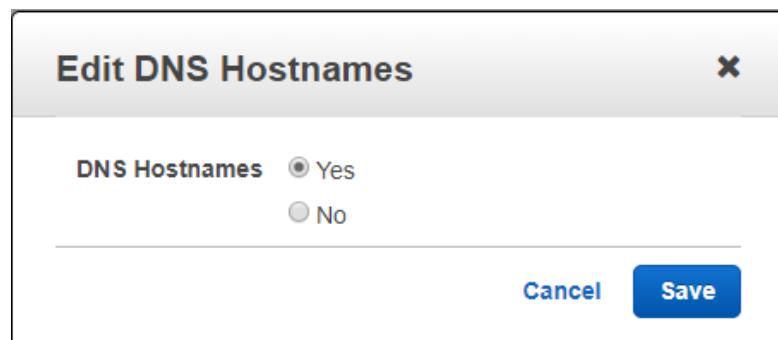


Before going to configure Route 53, we need to ensure below mentioned settings in VPC.

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 table lists two VPCs: 'vpc-a655a2ce' and 'vpc-4e934526'. A context menu is open over the second VPC, listing options: Delete VPC, Edit CIDRs, Create Default VPC, Edit DHCP Options Set, Edit DNS Resolution, Edit DNS Hostnames (which is highlighted in blue), and Create Flow Log. Below the table, a specific VPC ('vpc-4e934526 | Sansbound_VPC') is selected, showing its details: VPC ID, State, IPv4 CIDR, IPv6 CIDR, DHCP options set, Route table, Network ACL, Tenancy, DNS resolution, and DNS hostnames. At the bottom, there's a standard Windows-style taskbar with icons for Start, Task View, File Explorer, Edge, Google Chrome, Word, Excel, and others, along with system status information like date and time.

It should be “Yes”.



Goto Route 53,

The screenshot shows the AWS VPC Management console interface. At the top, there's a navigation bar with tabs for 'VPCs' and 'VPC Management'. Below the navigation bar is a search bar and a 'Services' dropdown menu. The main content area displays a grid of AWS services categorized into groups:

- VPC**: Includes Route 53, EC2, Billing, and Console Home.
- Database**: Includes RDS, DynamoDB, ElastiCache, and Amazon Redshift.
- Migration**: Includes AWS Migration Hub, Application Discovery Service, Database Migration Service, Server Migration Service, and Snowball.
- Networking & Content Delivery**: Includes VPC, CloudFront, Route 53, API Gateway, and Direct Connect. (Route 53 is highlighted with a yellow box.)
- Analytics**: Includes CloudFormation, CloudTrail, Config, OpsWorks, Service Catalog, Systems Manager, Trusted Advisor, Managed Services, Kinesis, QuickSight, Data Pipeline, and AWS Glue.
- Media Services**: Includes Elastic Transcoder, Kinesis Video Streams, MediaConvert, MediaLive, MediaPackage, MediaStore, and MediaTailor.
- Security, Identity & Compliance**: Includes IAM, Cognito, GuardDuty, Inspector, Amazon Macie, AWS Single Sign-On, Certificate Manager, CloudHSM, Directory Service, WAF & Shield, and Artifact.
- Customer Engagement**: Includes Amazon Connect, Pinpoint, and Simple Email Service.
- Business Productivity**: Includes Alexa for Business, Amazon Chime, WorkDocs, and WorkMail.
- Desktop & App Streaming**: Includes WorkSpaces and AppStream 2.0.
- Internet Of Things**: Includes AWS IoT, IoT Device Management, Amazon FreeRTOS, and AWS Greengrass.

At the bottom of the page, there are links for Feedback, English (US), close, Privacy Policy, and Terms of Use.

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 area featuring the Amazon Route 53 logo (a stylized orange 'T' inside a circle) and the text 'Amazon Route 53'. A subtext explains: '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: 'DNS management' (with a monitor icon), 'Traffic management' (with a network icon), 'Availability monitoring' (with a stethoscope icon), and 'Domain registration' (with a globe and cloud icon). Each section has a brief description, a 'Learn More' link, and a 'Get started now' button.

DNS management

Traffic management

Availability monitoring

Domain registration

Route 53 documentation and support

Feedback English (US)

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Click “Create Hosted Zone”.

The screenshot shows the AWS Route 53 Management console. The top navigation bar includes links for 'Route 53 Management' (selected), 'Secure | https://console.aws.amazon.com/route53/home?region=ap-south-1#hosted-zones:', 'AWS Management Console', 'Services' (dropdown), 'Resource Groups' (dropdown), and user information ('siva1n82', 'Global', 'Support'). Below the navigation is a dark header bar with the AWS logo, 'Services' dropdown, 'Resource Groups' dropdown, and a bell icon.

The main content area has a sidebar on the left with the following menu items:

- Dashboard
- Hosted zones** (selected)
- Health checks
- Traffic flow
- Traffic policies
- Policy records
- Domains
- Registered domains
- Pending requests

At the top of the main content area are three buttons: 'Create Hosted Zone' (blue), 'Go to Record Sets' (grey), and 'Delete Hosted Zone' (grey). To the right of these buttons are refresh and help icons.

The central content area features a large icon of a computer monitor with a cloud above it, and a circular arrow indicating data flow. Below the icon is a descriptive text block:

Amazon Route 53 is an authoritative Domain Name System (DNS) service. DNS is the system that translates human-readable domain names (example.com) into IP addresses (192.0.2.0). With authoritative name servers in data centers all over the world, Route 53 is reliable, scalable, and fast.

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](#)

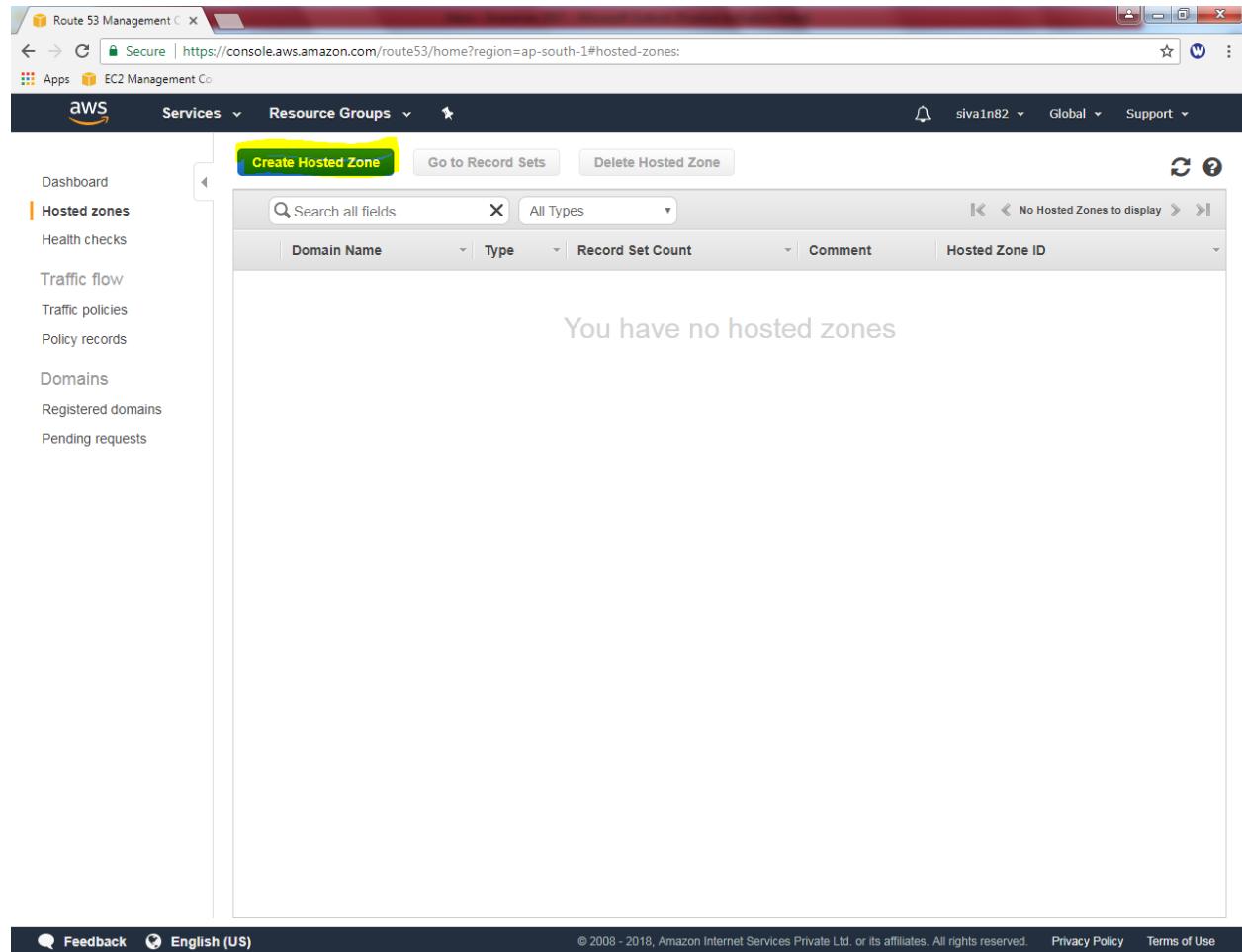
A prominent green 'Create Hosted Zone' button is centered below the descriptive text.

In the bottom right corner of the main content area, there is a callout box with the following text:

Route 53 documentation and support
[Getting started guide](#) | [Route 53 documentation](#)
DNS is the system that translates human-readable domain names (example.com) into IP addresses (192.0.2.8).

At the very bottom of the page are footer links: '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”.



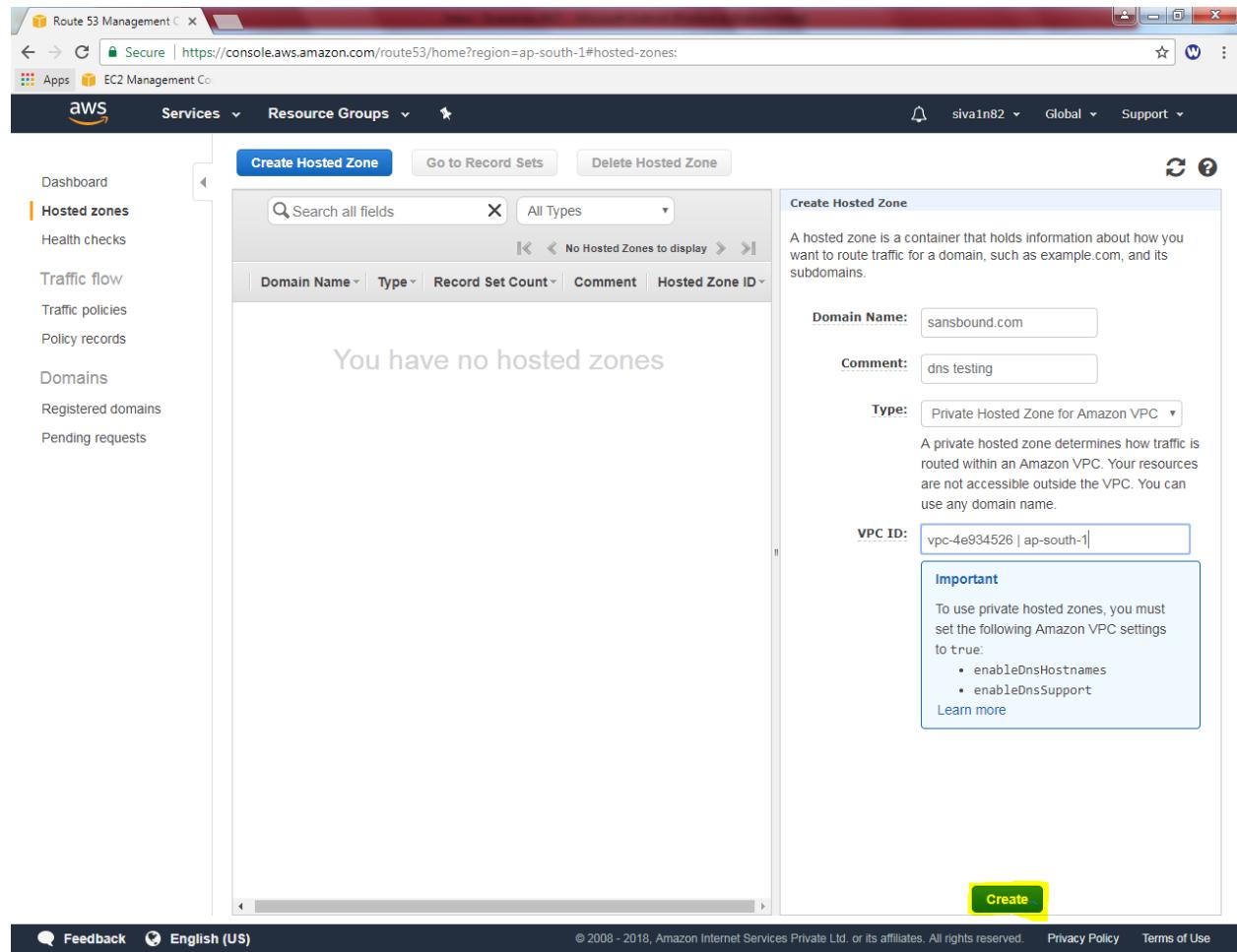
While creating Hosted Zone,

Domain name: sansbound.com

Comment: dns testing

Type: Private Hosted Zone for Amazon VPC

VPC ID: Mumbai



Then click "Yes, create".

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

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. In the left sidebar, under 'Hosted zones', 'sansbund.com' is selected. The main area displays two existing record sets for the domain 'sansbund.com'. On the right, a modal window titled 'Edit Record Set' is open for a new record set. The 'Name' field is set to 'sansbound.com.', the 'Type' is 'NS', and the 'Value' field contains four name server entries: 'ns-1536.awsdns-00.co.uk.', 'ns-0.awsdns-00.com.', 'ns-1024.awsdns-00.org.', and 'ns-512.awsdns-00.net.'. The 'Alias' section is set to 'No'. The 'TTL (Seconds)' is set to 172800. The 'Save Record Set' button is visible at the bottom right of the modal.

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 sidebar with links like Dashboard, Hosted zones, Traffic flow, Domains, and Pending requests. The main area has tabs for Back to Hosted Zones, Create Record Set (which is selected), Import Zone File, Delete Record Set, and Test Record Set. A search bar at the top says 'Record Set Name' with 'aws.sansbound.com.' typed in. Below it, there's a table showing existing records for the domain 'sansbound.com.' under the 'NS' and 'SOA' types. To the right, a 'Create Record Set' form is open. It has fields for 'Name' (set to 'aws'), 'Type' (set to 'A - IPv4 address'), 'Value' (set to '10.0.2.184'), 'TTL (Seconds)' (set to '300'), and 'Routing Policy' (set to 'Simple'). A note below says 'Route 53 responds to queries based only on the values in this record.' At the bottom right of the form is a 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. The left sidebar has a 'Hosted zones' section selected. The main area displays a table of existing record sets for the domain 'sansbound.com.' under the 'Only' tab. A 'Create Record Set' dialog is open on the right, showing fields for a new record set named 'student.sansbound.com.' with type 'A - IPv4 address'. The 'Alias' section is set to 'Yes' with 'aws.sansbound.com.' as the target. The 'Routing Policy' is set to 'Simple'. At the bottom right of the dialog is a 'Create' button.

Name	Type	Value
sansbound.com.	NS	ns-1536.awsdns-00.co.uk. ns-0.awsdns-00.com. ns-1024.awsdns-00.org. ns-512.awsdns-00.net.
sansbound.com.	SOA	ns-1536.awsdns-00.co.uk. awsdns-hostmaster.amazon. ns-1536.awsdns-00.co.uk. awsdns-ns-00.amazon. ns-1536.awsdns-00.co.uk. awsdns-mx-00.amazon. ns-1536.awsdns-00.co.uk. awsdns-ptr-00.amazon.
aws.sansbound.com.	A	10.0.2.184

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

