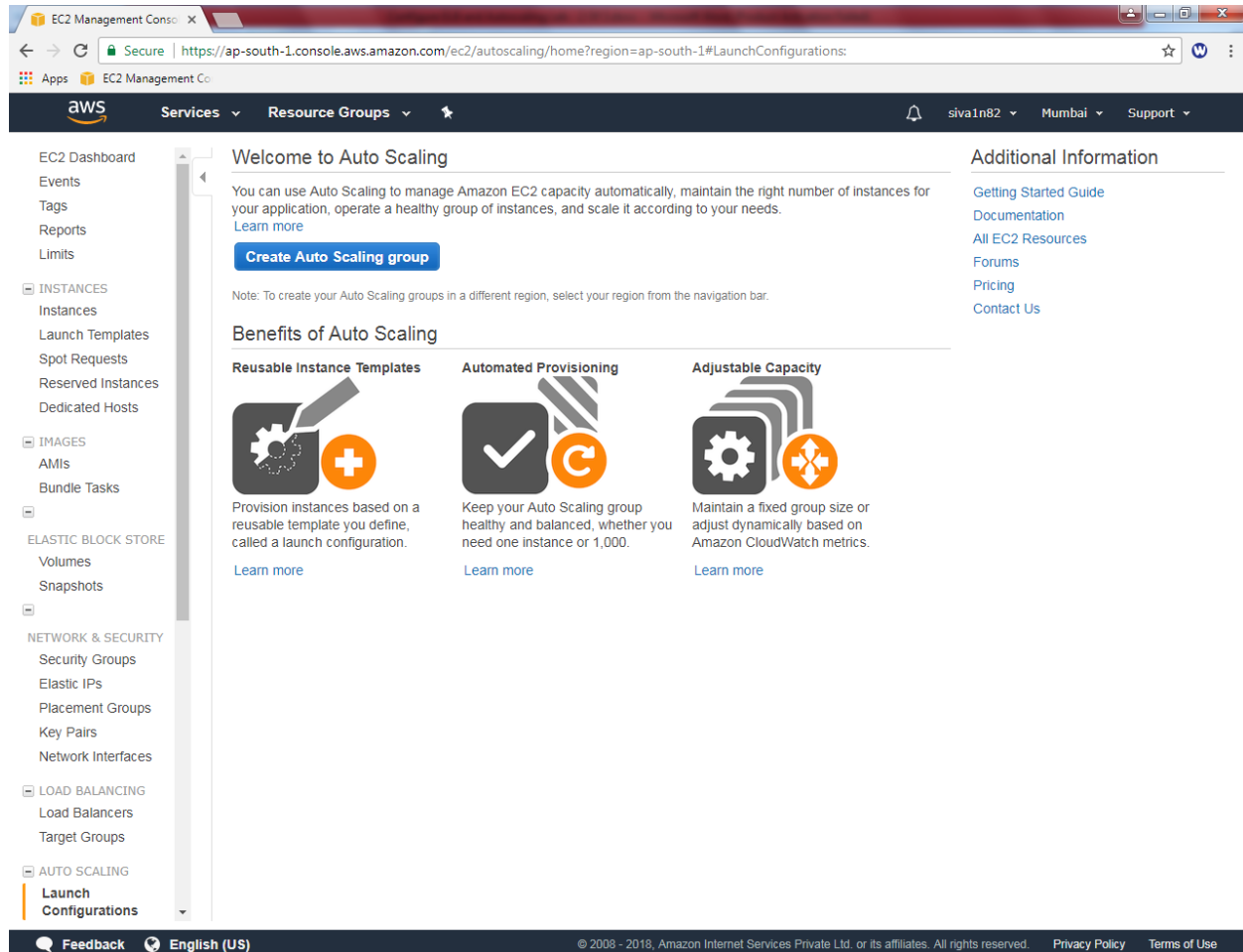


Configure ELB and Autoscaling Lab – 3 of 3

Note: Before configure autoscaling group, you need to stop the all linux webserver.

In EC2-Dashboard, click Launch configurations under “Auto Scaling”.




Click “create auto scaling group”.

The screenshot shows the AWS Management Console interface for creating an Auto Scaling group. The browser address bar displays the URL: `https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateAutoScalingGroup:source=`. The console header includes the AWS logo, navigation tabs for 'Services' and 'Resource Groups', and user information for 'siva1n82' in the 'Mumbai' region.

Create Auto Scaling Group Cancel and Exit

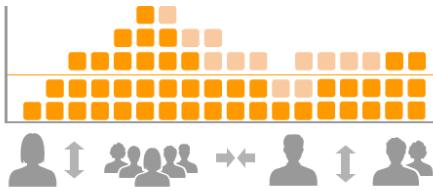
To create an Auto Scaling group, you will first need to choose a template that your Auto Scaling group will use when it launches instances for you, called a launch configuration. Choose a launch configuration or create a new one, and then apply it to your group.

Later, if you want to use a different template, you can create another launch configuration and apply it to this group, even if you already have instances running in it. Using this method, you can update the software that your group uses when it launches new instances.



Step 1: Create launch configuration

First, define a template that your Auto Scaling group will use to launch instances.
You can change your group's launch configuration at any time.



Step 2: Create Auto Scaling group

Next, give your group a name and specify how many instances you want to run in it.
Your group will maintain this number of instances, and replace any that become unhealthy or impaired.
You can optionally configure your group to adjust in capacity according to demand, in response to Amazon CloudWatch metrics.

Cancel Create launch configuration

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Click “Create Launch configuration”.

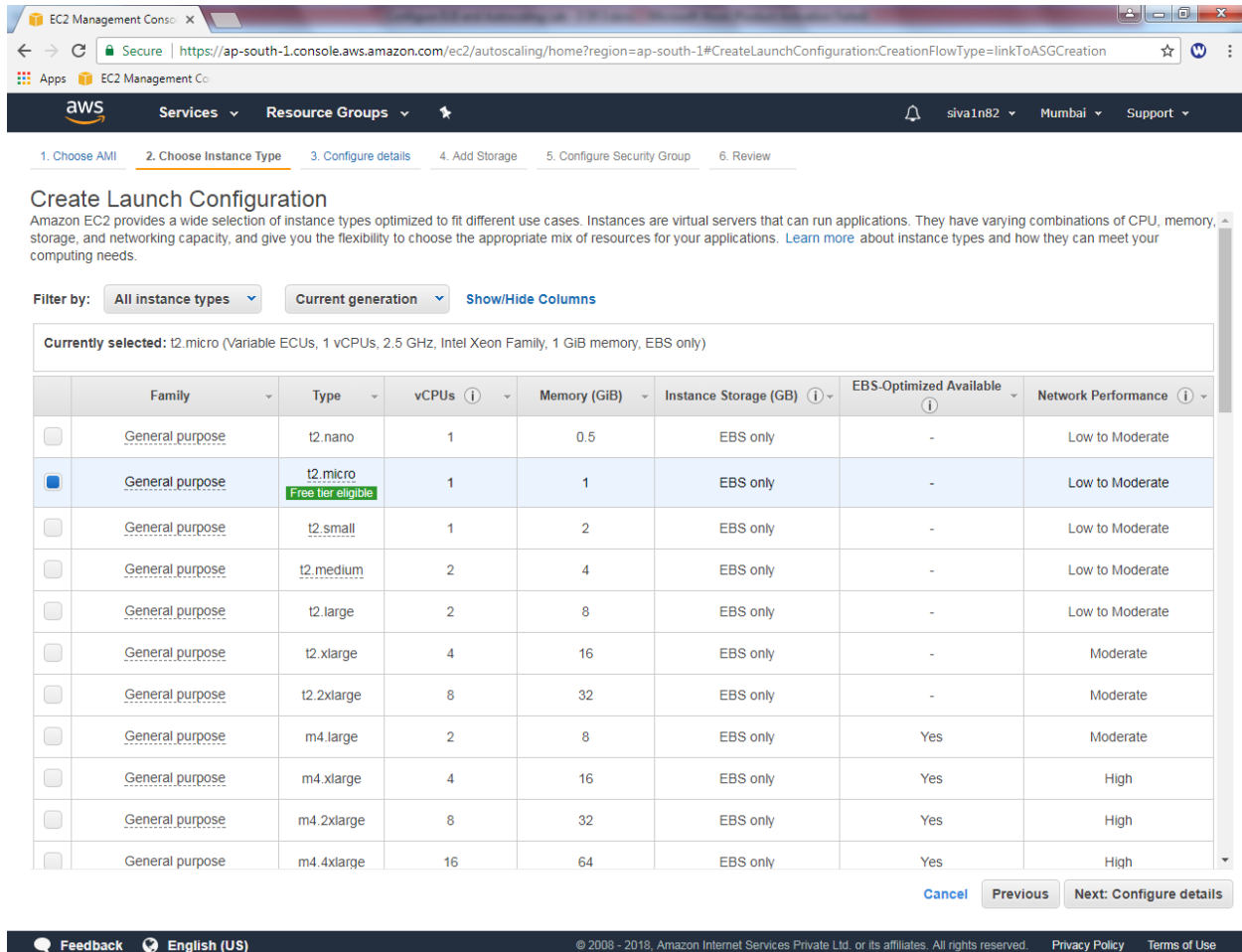
Click “My AMIs” and select

The screenshot shows the AWS Management Console interface for creating a launch configuration. The breadcrumb trail indicates the current step is '1. Choose AMI'. The main heading is 'Create Launch Configuration', with a 'Cancel and Exit' link. Below the heading, a descriptive text states: '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.'

The 'Choose AMI' section includes a 'Quick Start' tab and a search bar labeled 'Search my AMIs'. The 'My AMIs' tab is active, displaying a list of AMIs. The first AMI is 'Sansbound webserver - ami-6d075602', which is highlighted. It includes a Linux logo, the name 'Sansbound webserver - ami-6d075602', the description 'ELB Testing', and details: 'Root device type: ebs', 'Virtualization type: hvm', and 'Owner: 297111308396'. A blue 'Select' button is visible next to the AMI. The left sidebar shows filters for 'Ownership' (Owned by me, Shared with me), 'Architecture' (32-bit, 64-bit), and 'Root device type' (EBS, Instance store).

The footer of the console shows 'Feedback', 'English (US)', and copyright information: '© 2008 - 2018, Amazon Internet Services Private Ltd. or its affiliates. All rights reserved. Privacy Policy Terms of Use'.

Select “t2.micro”



The screenshot shows the AWS Management Console interface for creating a launch configuration. The 't2.micro' instance type is selected, and the 'Free tier eligible' badge is visible. The table below lists various instance types and their specifications.

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

Buttons: Cancel, Previous, Next: Configure details

Click “Next”.

Create Launch Configuration,

Name : SansbundAutoscaling

The screenshot shows the AWS Management Console interface for creating a new Launch Configuration. The browser address bar displays the URL: `https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateLaunchConfiguration:CreationFlowType=linkToASGCreation`. The console header includes the AWS logo, navigation tabs for Services and Resource Groups, and user information (siva1n82, Mumbai). The main content area is titled 'Create Launch Configuration' and features a progress bar with six steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure details (active), 4. Add Storage, 5. Configure Security Group, and 6. Review. Below the progress bar, the 'Configure details' section includes four fields: 'Name' (SansbundAutoscaling), 'Purchasing option' (Request Spot Instances), 'IAM role' (None), and 'Monitoring' (Enable CloudWatch detailed monitoring). A 'Learn more' link is provided under the Monitoring section. An 'Advanced Details' section is collapsed. A blue information box states: 'Later, if you want to use a different launch configuration, you can create a new one and apply it to any Auto Scaling group. Existing launch configurations cannot be edited.' At the bottom right, there are four buttons: 'Cancel', 'Previous', 'Skip to review' (highlighted in blue), and 'Next: Add Storage'. The footer contains a 'Feedback' link, 'English (US)' language selection, copyright information (© 2008 - 2018, Amazon Internet Services Private Ltd.), and links to 'Privacy Policy' and 'Terms of Use'.

EC2 Management Console

Secure | <https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateLaunchConfiguration:CreationFlowType=linkToASGCreation>

Apps EC2 Management Console

Services Resource Groups

siva1n82 Mumbai Support

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

Create Launch Configuration

Name (i) SansbundAutoscaling

Purchasing option (i) ☐ Request Spot Instances

IAM role (i) None

Monitoring (i) ☐ Enable CloudWatch detailed monitoring
[Learn more](#)

► Advanced Details

Later, if you want to use a different launch configuration, you can create a new one and apply it to any Auto Scaling group. Existing launch configurations cannot be edited.

Cancel Previous **Skip to review** Next: Add Storage

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Click "Next".

Leave settings as default and click "Next".

EC2 Management Console

Secure | <https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateLaunchConfiguration:CreationFlowType=linkToASGCreation>

Apps EC2 Management Co

aws Services Resource Groups

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

Create Launch Configuration

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.
<https://docs.aws.amazon.com/console/ec2/launchinstance/storage> about storage options in Amazon EC2.

Volume Type ⓘ	Device ⓘ	Snapshot ⓘ	Size (GiB) ⓘ	Volume Type ⓘ	IOPS ⓘ	Throughput ⓘ	Delete on Termination ⓘ	Encrypted ⓘ
Root	/dev/xvda	snap-0142ccf52ee41e2eb	8	General Purpose (SSD)	100 / 3000	N/A	<input checked="" type="checkbox"/>	No

[Add New Volume](#)

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

[Cancel](#) [Previous](#) [Skip to review](#) [Next: Configure Security Group](#)

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Select "ELB-Sec-Group".

The screenshot shows the AWS Management Console interface for the 'Create Launch Configuration' wizard, specifically step 5: 'Configure Security Group'. The breadcrumb navigation at the top indicates the steps: 1. Choose AMI, 2. Choose Instance Type, 3. Configure details, 4. Add Storage, 5. Configure Security Group, and 6. Review. The main heading is 'Create Launch Configuration'. Below it, a paragraph explains that a security group is a set of firewall rules that control traffic. It then provides instructions on how to assign a security group, with two radio button options: 'Create a new security group' (which is selected) and 'Select an existing security group'. Below these options is a table listing existing security groups. The table has columns for 'Security Group ID', 'Name', 'VPC ID', 'Description', and 'Actions'. The security group 'sg-437e8b28' with the name 'ELB-Sec-Group' is selected. Below the table, there is a section for 'Inbound rules for sg-437e8b28 Selected security groups: sg-437e8b28.' which contains a table of inbound rules. The rules table has columns for 'Type', 'Protocol', 'Port Range', and 'Source'. It lists two rules: HTTP (TCP, Port 80, Source 0.0.0.0/0) and SSH (TCP, Port 22, Source 0.0.0.0/0). At the bottom right of the wizard, there are three buttons: 'Cancel', 'Previous', and 'Review'. The footer of the console shows 'Feedback', 'English (US)', and copyright information for Amazon Internet Services Private Ltd.

EC2 Management Console | <https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateLaunchConfiguration:CreationFlowType=linkToASGCreation>

Services Resource Groups

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

Create Launch Configuration

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 ID	Name	VPC ID	Description	Actions
<input type="checkbox"/> sg-6a3ed501	default	vpc-09fe2261	default VPC security group	Copy to new
<input type="checkbox"/> sg-a44c63cc	default	vpc-a655a2ce	default VPC security group	Copy to new
<input checked="" type="checkbox"/> sg-437e8b28	ELB-Sec-Group	vpc-09fe2261	ELB-Sec-Group	Copy to new
<input type="checkbox"/> sg-3c846c57	Evening_Sec_Group	vpc-a655a2ce	Evening_Sec_Group	Copy to new
<input type="checkbox"/> sg-e4f8108f	Linux-Sec-group	vpc-a655a2ce	Linux-Sec-group	Copy to new
<input type="checkbox"/> sg-a61bf0cd	Mumbai_Linux_Sec_Group	vpc-09fe2261	Mumbai_Linux_Sec_Group	Copy to new
<input type="checkbox"/> sg-3b7d9350	Testing_Sec_Group	vpc-a655a2ce	Testing_Sec_Group	Copy to new

Inbound rules for sg-437e8b28 Selected security groups: sg-437e8b28.

Type	Protocol	Port Range	Source
HTTP	TCP	80	0.0.0.0/0
SSH	TCP	22	0.0.0.0/0

[Cancel](#) [Previous](#) [Review](#)

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Click “Review”.

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

Create Launch Configuration

Review the details of your launch configuration. You can go back to edit the details of each section before you finish.

Improve security of instances launched using your launch configuration, SansbundAutoscaling. Your security group, ELB-Sec-Group, is open to the world.

Your instances may be accessible from any IP address. We recommend that you update your security group rules to allow access from known IP addresses only. You can also open additional ports in your security group to facilitate access to the application or service you're running, e.g., HTTP (80) for web servers. [Edit security groups](#)

AMI Details [Edit AMI](#)

Sansbund webserver - ami-6d075602
 ELB Testing
 Root device type: ebs / Virtualization Type: hvm

Instance Type [Edit instance type](#)

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

Launch configuration details [Edit details](#)

Name: SansbundAutoscaling
 Purchasing option: On demand
 EBS Optimized: No
 Monitoring: No
 IAM role: None
 Tenancy: Shared tenancy (multi-tenant hardware)
 Kernel ID: Use default

[Cancel](#) [Previous](#) [Create launch configuration](#)

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Click "Create Launch configuration".

While launch the instance, it asks select existing key pair or create a new key pair.

I will choose "Choose an existing key pair".

Select the "siva_vpc" key pair.

Click "I acknowledge" check box.

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

A key pair consists of a **public key** that AWS stores, and a **private key file** that you store. Together, they allow you to connect to your instance securely. For Windows AMIs, the private key file is required to obtain the password used to log into your instance. For Linux AMIs, the private key file allows you to securely SSH into your instance.

Note: The selected key pair will be added to the set of keys authorized for this instance. Learn more about [removing existing key pairs from a public AMI](#).

Choose an existing key pair ▼

Select a key pair

siva_vpc ▼

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

Cancel

Create launch configuration

Click “create Launch configuration”.

Now it's creating Auto scaling group,

Group name : Autoscaling

Group size : **2 instances**

Network : Select Sansbound_VPC_Mumbai

Subnet : **click the subnet box then only the subnet details will be shown**

EC2 Management Console

Secure | <https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateAutoScalingGroup:source=lc:launchConfigurationName=Sansbu...>

Apps EC2 Management Console

Services Resource Groups

1. Configure Auto Scaling group details 2. Configure scaling policies 3. Configure Notifications 4. Configure Tags 5. Review

Create Auto Scaling Group [Cancel and Exit](#)

Launch Configuration *i* SansbundAutoscaling

Group name *i* Autoscaling

Group size *i* Start with 2 instances

Network *i* vpc-09fe2261 (10.0.0.0/16) | Sansbound_VPC_Mumbai [Create new VPC](#)

Subnet *i* subnet-07d1c44a(10.0.2.0/24) | Sansbound_Mumbai_Public_subnet | ap-south-1b [Create new subnet](#)

⚠ No public IP addresses will be assigned

None of the instances in this Auto Scaling group will be assigned a public IP address because you have not chosen to launch in your default VPC and subnet.

You can ensure a public IP address is assigned to instances launched with this configuration by selecting only default subnets of your default VPC.

[Learn more](#) about IP addressing in an Amazon VPC.

Advanced Details

[Cancel](#) [Next: Configure scaling policies](#)

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Click “Next”.

Select “Use scaling policies”

Scale between 2 and 6 instances (Minimum 2 and maximum 6 instances).

The screenshot shows the AWS Management Console interface for creating an Auto Scaling Group. The browser address bar indicates the URL: `https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateAutoScalingGroup:source=lc:launchConfigurationName=Sansbu...`. The console header shows the user is logged in as 'siva1n82' in the 'Mumbai' region. The navigation bar includes 'Services' and 'Resource Groups'. The wizard progress bar shows five steps: 1. Configure Auto Scaling group details, 2. Configure scaling policies (current step), 3. Configure Notifications, 4. Configure Tags, and 5. Review.

Create Auto Scaling Group

You can optionally add scaling policies if you want to adjust the size (number of instances) of your group automatically. A scaling policy is a set of instructions for making such adjustments in response to an Amazon CloudWatch alarm that you assign to it. In each policy, you can choose to add or remove a specific number of instances or a percentage of the existing group size, or you can set the group to an exact size. When the alarm triggers, it will execute the policy and adjust the size of your group accordingly. [Learn more](#) about scaling policies.

☐ Keep this group at its initial size

☒ Use scaling policies to adjust the capacity of this group

Scale between and instances. These will be the minimum and maximum size of your group.

Scale Group Size

Name:

Metric type:

Target value:

Instances need: seconds to warm up after scaling

Disable scale-in: ☐

[Scale the Auto Scaling group using step or simple scaling policies](#) ⓘ

At the bottom of the wizard, there are buttons for 'Cancel', 'Previous', 'Review' (highlighted in blue), and 'Next: Configure Notifications'.

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Click “Scale the auto scaling group using step or simple scaling policies”.

In Increase group size, click “add new alarm”

EC2 Management Console

Secure | <https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateAutoScalingGroup:source=lc:launchConfigurationName=Sansbu...>

Apps EC2 Management Console

Services Resource Groups

1. Configure Auto Scaling group details 2. Configure scaling policies 3. Configure Notifications 4. Configure Tags 5. Review

Create Auto Scaling Group

You can optionally add scaling policies if you want to adjust the size (number of instances) of your group automatically. A scaling policy is a set of instructions for making such adjustments in response to an Amazon CloudWatch alarm that you assign to it. In each policy, you can choose to add or remove a specific number of instances or a percentage of the existing group size, or you can set the group to an exact size. When the alarm triggers, it will execute the policy and adjust the size of your group accordingly. [Learn more](#) about scaling policies.

☐ Keep this group at its initial size

☒ Use scaling policies to adjust the capacity of this group

Scale between and instances. These will be the minimum and maximum size of your group.

Increase Group Size

Name:

Execute policy when: [Add new alarm](#)

Take the action: instances

[Add step](#)

Instances need: seconds to warm up after each step

[Create a simple scaling policy](#)

Decrease Group Size

Name:

Execute policy when: [Add new alarm](#)

Take the action: instances

[Add step](#)

[Cancel](#) [Previous](#) [Review](#) [Next: Configure Notifications](#)

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While creating alarm,

Uncheck the “send a notification to” checkbox.

When average of CPU utilization is $\geq 80\%$ one instance will be created.

Create Alarm

You can use CloudWatch alarms to be notified automatically whenever metric data reaches a level you define.
To edit an alarm, first choose whom to notify and then define when the notification should be sent.

☐ Send a notification to: No SNS topics found...

Whenever: Average of CPU Utilization

Is: \geq 80 Percent

For at least: 1 consecutive period(s) of 5 Minutes

Name of alarm: awsec2-Autoscaling-CPU-Utilization

CPU Utilization Percent

Cancel Create Alarm

Click “Create Alarm”

In Decrease group size, click “add new alarm”

The screenshot shows the AWS Management Console interface for creating an Auto Scaling Group. The page is titled "Create Auto Scaling Group" and includes a progress bar with five steps: 1. Configure Auto Scaling group details, 2. Configure scaling policies (active), 3. Configure Notifications, 4. Configure Tags, and 5. Review.

Below the progress bar, the "Increase Group Size" policy is configured with the following details:

- Name:** Increase Group Size
- Execute policy when:** awsec2-Autoscaling-CPU-Utilization breaches the alarm threshold: CPUUtilization >= 80 for 300 seconds for the metric dimensions AutoScalingGroupName = Autoscaling
- Take the action:** Add 1 instances when 80 <= CPUUtilization < +infinity
- Instances need:** 300 seconds to warm up after each step

Below the "Increase Group Size" policy, the "Decrease Group Size" policy is configured with the following details:

- Name:** Decrease Group Size
- Execute policy when:** No alarm selected (with a yellow highlight on the "Add new alarm" button)
- Take the action:** Remove 0 instances

At the bottom of the console, there are buttons for "Cancel", "Previous", "Review", and "Next: Configure Notifications".

While creating alarm,

Uncheck the "send a notification to" checkbox.

When average of CPU utilization is <= 20 % one instance will be deleted.

Create Alarm

You can use CloudWatch alarms to be notified automatically whenever metric data reaches a level you define.

To edit an alarm, first choose whom to notify and then define when the notification should be sent.

☐ Send a notification to: No SNS topics found...

Whenever: Average of CPU Utilization

Is: <= 20 Percent

For at least: 1 consecutive period(s) of 5 Minutes

Name of alarm: awsec2-Autoscaling-High-CPU-Utilization

CPU Utilization Percent

Cancel Create Alarm

Click “Create Alarm”.

In Increase Group size

Add 1 instance when 80 %

Remove 1 instance when 20 %

EC2 Management Console

Secure | <https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateAutoScalingGroup:source=lc;launchConfigurationName=Sansbu...>

Apps EC2 Management Co

Services Resource Groups

1. Configure Auto Scaling group details 2. Configure scaling policies 3. Configure Notifications 4. Configure Tags 5. Review

Create Auto Scaling Group

Scale between and instances. These will be the minimum and maximum size of your group.

Increase Group Size

Name:

Execute policy when: [awsec2-Autoscaling-CPU-Utilization](#) [Edit](#) [Remove](#)
breaches the alarm threshold: CPUUtilization >= 80 for 300 seconds
for the metric dimensions AutoScalingGroupName = Autoscaling

Take the action: **Add** instances when <= CPUUtilization < +infinity
[Add step](#) ⓘ

Instances need: seconds to warm up after each step

[Create a simple scaling policy](#) ⓘ

Decrease Group Size

Name:

Execute policy when: [awsec2-Autoscaling-High-CPU-Utilization](#) [Edit](#) [Remove](#)
breaches the alarm threshold: CPUUtilization <= 20 for 300 seconds
for the metric dimensions AutoScalingGroupName = Autoscaling

Take the action: **Remove** instances when >= CPUUtilization > -infinity
[Add step](#) ⓘ

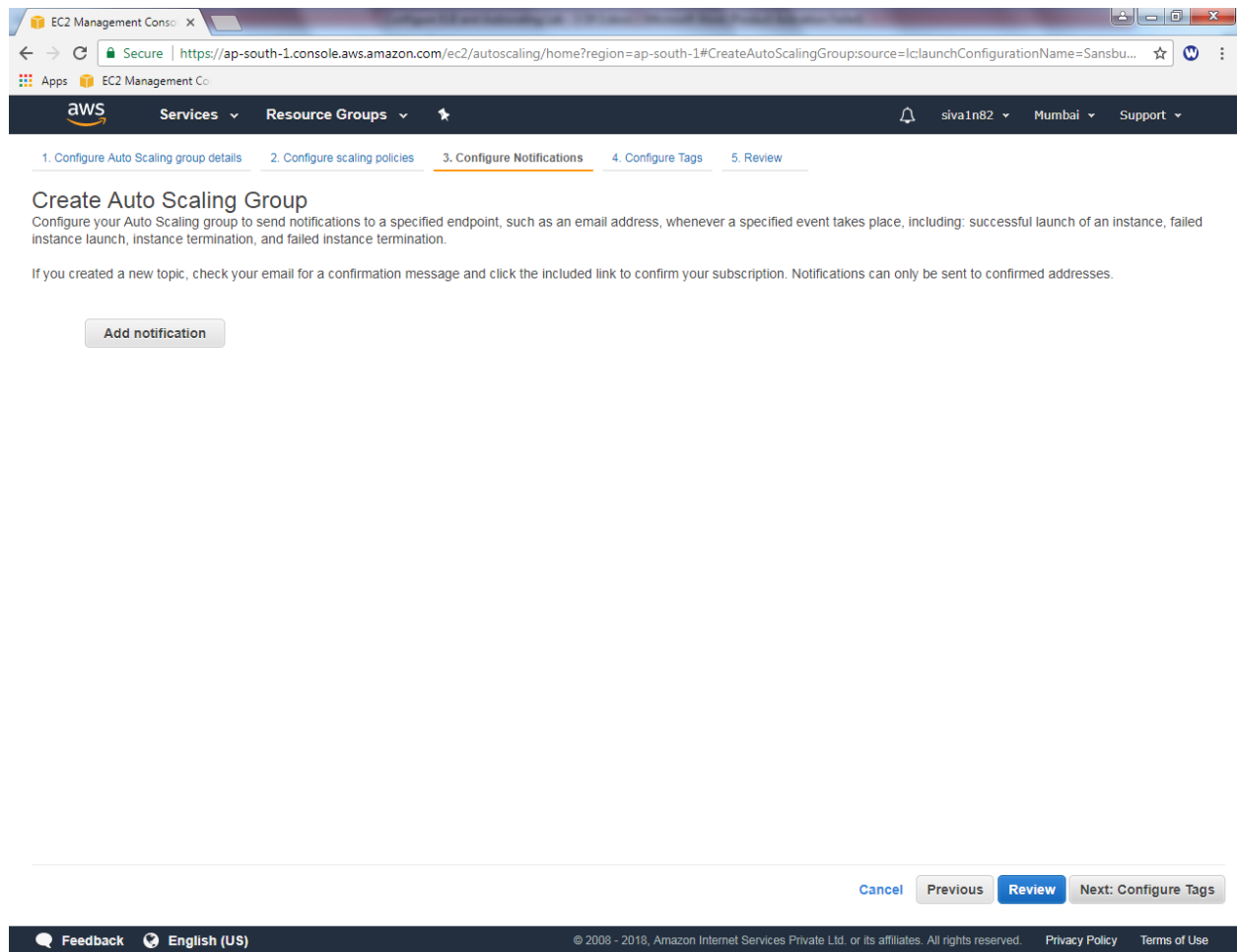
[Create a simple scaling policy](#) ⓘ

[Cancel](#) [Previous](#) [Review](#) [Next: Configure Notifications](#)

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Click “Next”.

Leave default setting and click “Next”.



While creating auto scaling group, key as name and value as “Webserver”.

EC2 Management Console

Secure | <https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateAutoScalingGroup:source=lc:launchConfigurationName=Sansbu...>

Apps EC2 Management Co

aws Services Resource Groups

1. Configure Auto Scaling group details 2. Configure scaling policies 3. Configure Notifications 4. Configure Tags 5. Review

Create Auto Scaling Group

A tag consists of a case sensitive key-value pair that you can use to identify your group. For example, you could define a tag with Key = Environment and Value = Production. You can optionally choose to apply these tags to instances in the group when they launch. [Learn more](#).

Key	Value	Tag New Instances ⓘ
Name	webservel	<input checked="" type="checkbox"/>

[Add tag](#) 49 remaining

[Cancel](#) [Previous](#) [Review](#)

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Click “Review”.

EC2 Management Console

Secure | <https://ap-south-1.console.aws.amazon.com/ec2/autoscaling/home?region=ap-south-1#CreateAutoScalingGroup:source=lc:launchConfigurationName=Sansbu...>

Apps EC2 Management Console

Services Resource Groups

1. Configure Auto Scaling group details 2. Configure scaling policies 3. Configure Notifications 4. Configure Tags 5. Review

Create Auto Scaling Group

Please review your Auto Scaling group details. You can go back to edit changes for each section. Click **Create Auto Scaling group** to complete the creation of an Auto Scaling group.

▼ Auto Scaling Group Details [Edit details](#)

Group name	Autoscaling
Group size	2
Minimum Group Size	2
Maximum Group Size	6
Subnet(s)	subnet-07d1c44a
Health Check Grace Period	300
Detailed Monitoring	No
Instance Protection	None

▼ Scaling Policies [Edit scaling policies](#)

Increase Group Size	With alarm = awsec2-Autoscaling-CPU-Utilization; Add 1 instances and 300 seconds for instances to warm up
Decrease Group Size	With alarm = awsec2-Autoscaling-High-CPU-Utilization; Remove 1 instances

▼ Notifications [Edit notifications](#)

▼ Tags [Edit tags](#)

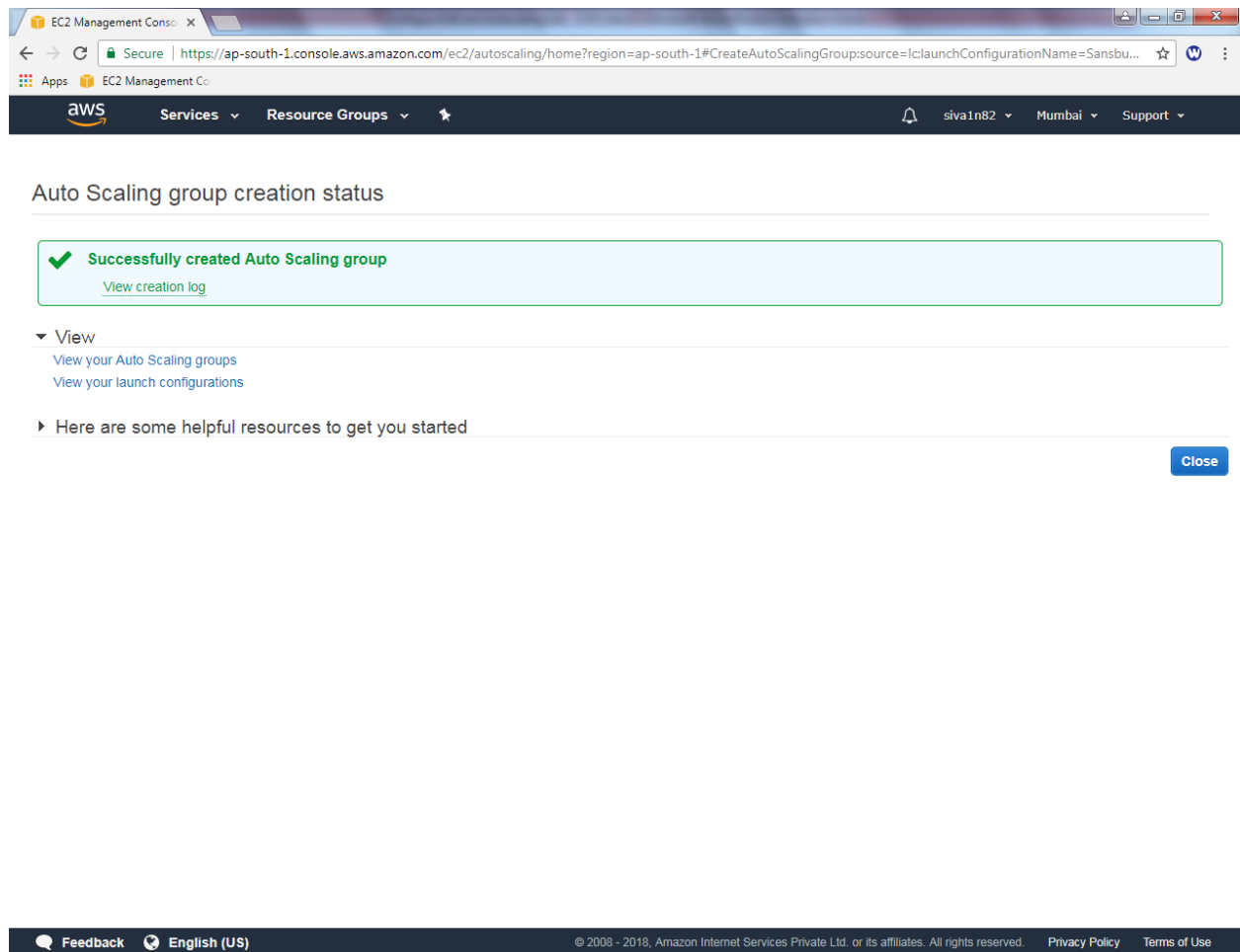
Name	webserver	tag new instances
------	-----------	-------------------

[Cancel](#) [Previous](#) [Create Auto Scaling group](#)

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Click “Create Auto Scaling Group”.

Now the Auto scaling group has been created successfully.



Now we able to see 2 instances are created by auto scaling group.

EC2 Management Console

Services Resource Groups

Create Auto Scaling group Actions

Filter: Filter Auto Scaling groups... 1 to 1 of 1 Auto Scaling Groups

Name	Launch Configuration	Instances	Desired	Min	Max	Availability Zones	Default Cooldown	Health Check
Autoscaling	SansboundAutoscaling	2	2	2	6	ap-south-1b	300	300

Auto Scaling Group: Autoscaling

Details Activity History Scaling Policies Instances Monitoring Notifications Tags Scheduled Actions Lifecycle Hooks

Launch Configuration SansboundAutoscaling

Launch Template

Launch Template Version

Load Balancers

Target Groups

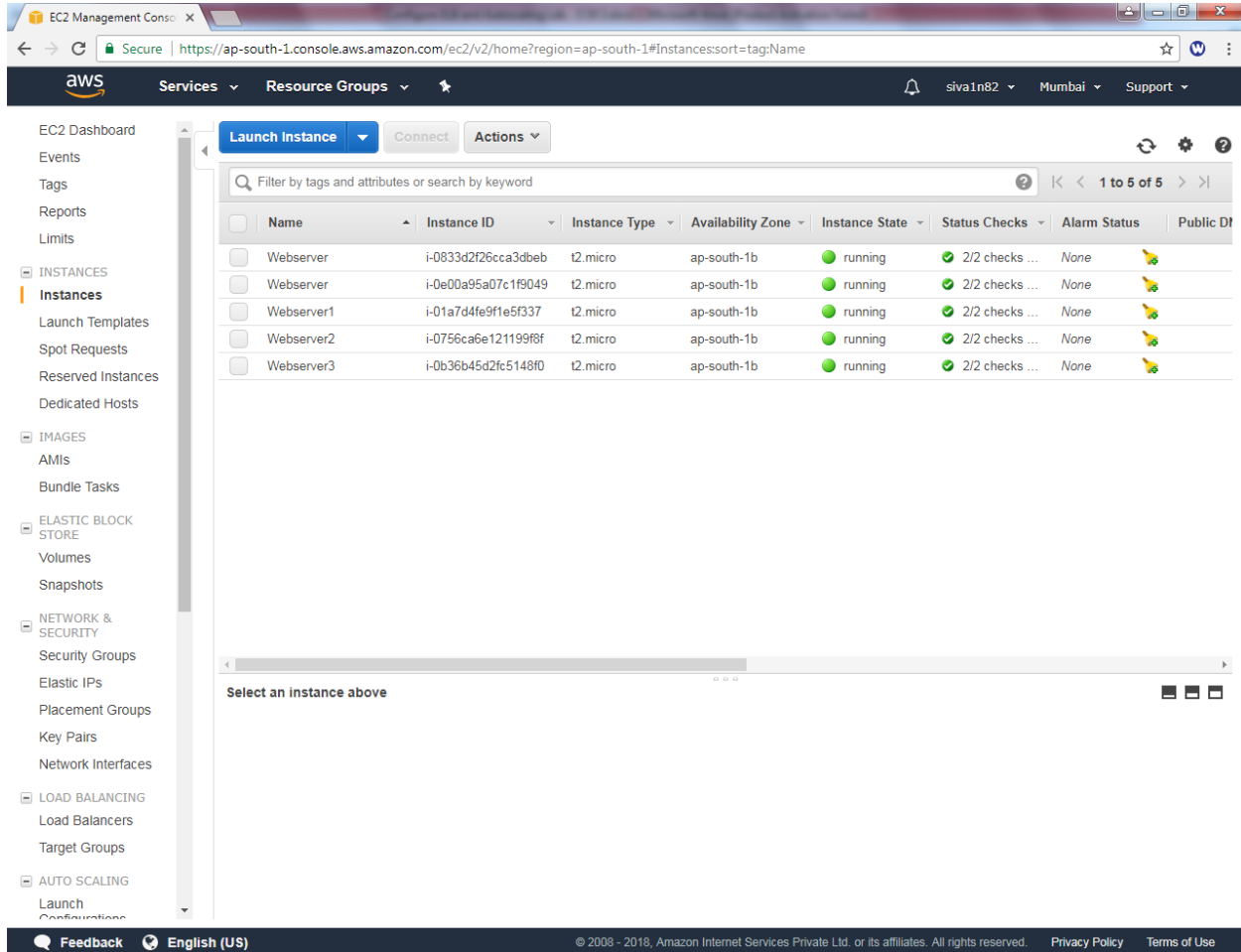
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Click “Instances”, you can able to see that two instances in a initializing state. Please upto 2/2 status checks.

The screenshot shows the AWS Management Console for the 'ap-south-1' region. The 'Instances' page is active, displaying a table of EC2 instances. The table has columns for Name, Instance ID, Instance Type, Availability Zone, Instance State, Status Checks, Alarm Status, and Public DNS. There are five instances listed, all of which are in the 'running' state. The first two instances are in the 'initializing' status, while the last three are in the '2/2 checks passed' status.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS
Webserver	i-0833d2f26cca3dbeb	t2.micro	ap-south-1b	running	Initializing	None	
Webserver	i-0e00a95a07c1f9049	t2.micro	ap-south-1b	running	Initializing	None	
Webserver1	i-01a7d4fe9f1e5f337	t2.micro	ap-south-1b	running	2/2 checks passed	None	
Webserver2	i-0756ca6e121199f8f	t2.micro	ap-south-1b	running	2/2 checks passed	None	
Webserver3	i-0b36b45d2fc5148f0	t2.micro	ap-south-1b	running	2/2 checks passed	None	

We can able to see 5 instances are in 2/2 status checks. Out of 5 servers only 2 servers are in Auto scale group which is in the name of “webserver”.



The screenshot shows the AWS Management Console for the EC2 service. The left sidebar contains a navigation menu with categories like INSTANCES, IMAGES, ELASTIC BLOCK STORE, NETWORK & SECURITY, LOAD BALANCING, and AUTO SCALING. The 'INSTANCES' section is expanded, showing options like Launch Templates, Spot Requests, Reserved Instances, and Dedicated Hosts. The main content area displays a table of EC2 instances. The table has columns for Name, Instance ID, Instance Type, Availability Zone, Instance State, Status Checks, Alarm Status, and Public IP. There are 5 instances listed, all in a 'running' state with 2/2 status checks passed. The instances are named 'Webserver', 'Webserver', 'Webserver1', 'Webserver2', and 'Webserver3'. The top bar shows the AWS logo and navigation tabs like 'Launch Instance', 'Connect', and 'Actions'. The bottom bar shows the feedback and language settings.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public IP
Webserver	i-0833d2f26cca3dbeb	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver	i-0e00a95a07c1f9049	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver1	i-01a7d4fe9f1e5f337	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver2	i-0756ca6e1211998f	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver3	i-0b36b45d2fc5148fd	t2.micro	ap-south-1b	running	2/2 checks ...	None	

Select instance, Instance state → Stop.

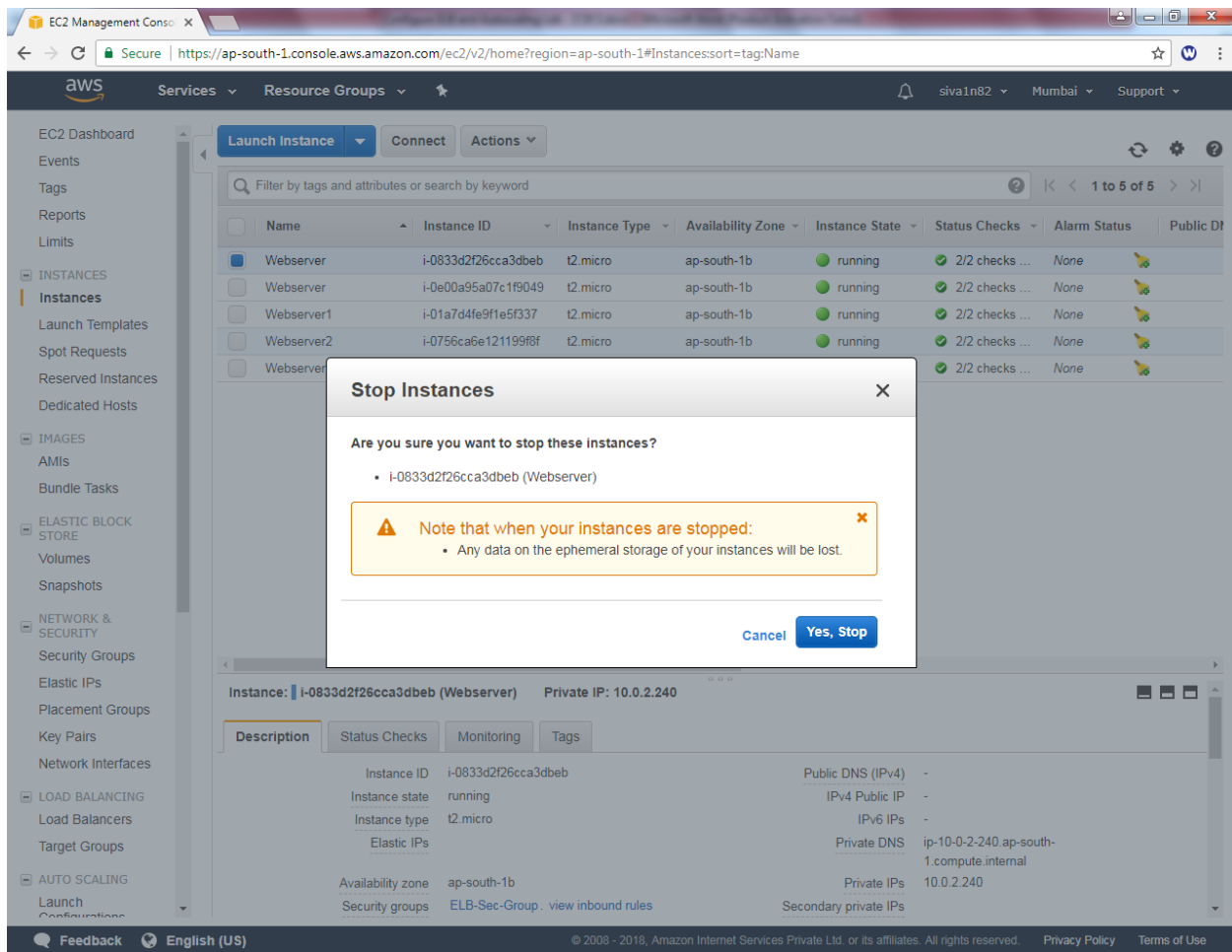
The screenshot shows the AWS Management Console for the EC2 service. The left sidebar contains navigation links for various AWS services. The main content area displays a table of EC2 instances. A context menu is open over the first instance, 'Webserver', with the 'Instance State' option selected, showing a sub-menu with 'Stop' highlighted. Below the table, the details for instance 'i-0833d2f26cca3d3beb' are displayed, including its state as 'running'.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public IP
Webserver	i-0833d2f26cca3d3beb	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver	i-0833d2f26cca3d3beb	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver1	i-0833d2f26cca3d3beb	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver2	i-0833d2f26cca3d3beb	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver3	i-0833d2f26cca3d3beb	t2.micro	ap-south-1b	running	2/2 checks ...	None	

Instance: i-0833d2f26cca3d3beb (Webserver) Private IP: 10.0.2.240

Description	Status Checks	Monitoring	Tags
Instance ID	i-0833d2f26cca3d3beb	Public DNS (IPv4)	-
Instance state	running	IPv4 Public IP	-
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	ip-10-0-2-240.ap-south-1.compute.internal
Availability zone	ap-south-1b	Private IPs	10.0.2.240
Security groups	ELB-Sec-Group. view inbound rules	Secondary private IPs	

Click “Yes, stop”.



It's getting "stop"

The screenshot shows the AWS Management Console interface for the EC2 service. The left sidebar contains navigation links for various AWS services. The main content area displays a table of EC2 instances. One instance, 'Webserver', is selected, and its details are shown in a modal window below the table.

EC2 Dashboard

Instances

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public IP
Webserver	i-0833d2f26cca3dbeb	t2.micro	ap-south-1b	stopping	2/2 checks ...	None	
Webserver	i-0e00a95a07c1f9049	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver1	i-01a7d4fe9f1e5f337	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver2	i-0756ca6e121199f6f	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver3	i-0b36b45d2fc5148f0	t2.micro	ap-south-1b	running	2/2 checks ...	None	

Instance: i-0833d2f26cca3dbeb (Webserver) Private IP: 10.0.2.240

Description

Property	Value
Instance ID	i-0833d2f26cca3dbeb
Instance state	stopping
Instance type	t2.micro
Elastic IPs	
Availability zone	ap-south-1b
Security groups	ELB-Sec-Group, view inbound rules
Public DNS (IPv4)	-
IPv4 Public IP	-
IPv6 IPs	-
Private DNS	ip-10-0-2-240.ap-south-1.compute.internal
Private IPs	10.0.2.240
Secondary private IPs	

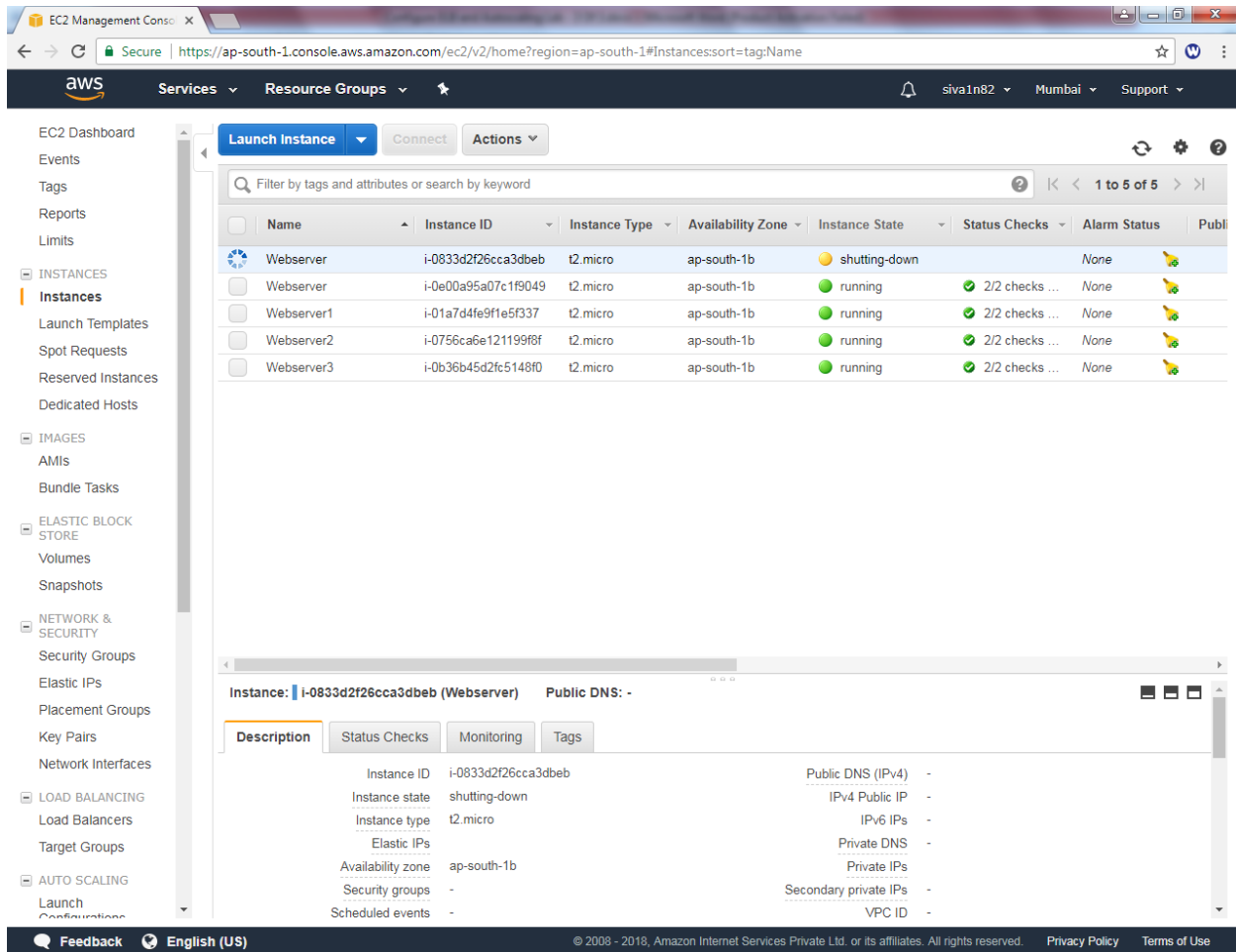
It's in stopped state now.

The screenshot displays the AWS Management Console for the 'ap-south-1' region. The left sidebar shows the navigation menu with categories like INSTANCES, IMAGES, ELASTIC BLOCK STORE, NETWORK & SECURITY, LOAD BALANCING, and AUTO SCALING. The 'Instances' section is selected, showing a list of five EC2 instances. The first instance, 'Webserver' (ID: i-0833d2f26cca3dbeb), is highlighted and its state is 'stopped'. Below the list, the details for this instance are shown, including its private IP (10.0.2.240) and various DNS settings.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS
Webserver	i-0833d2f26cca3dbeb	t2.micro	ap-south-1b	stopped	2/2 checks ...	None	
Webserver	i-0e00a95a07c1f9049	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver1	i-01a7d4fe9f1e5f337	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver2	i-0756ca6e1211998f	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver3	i-0b36b45d2fc5148f0	t2.micro	ap-south-1b	running	2/2 checks ...	None	

Instance: i-0833d2f26cca3dbeb (Webserver)		Private IP: 10.0.2.240
Description		
Instance ID	i-0833d2f26cca3dbeb	Public DNS (IPv4)
Instance state	stopped	IPv4 Public IP
Instance type	t2.micro	IPv6 IPs
Elastic IPs		Private DNS
Availability zone	ap-south-1b	ip-10-0-2-240.ap-south-1.compute.internal
Security groups	ELB-Sec-Group. view inbound rules	Private IPs
		10.0.2.240
		Secondary private IPs

Now it's moved to shutting down state.



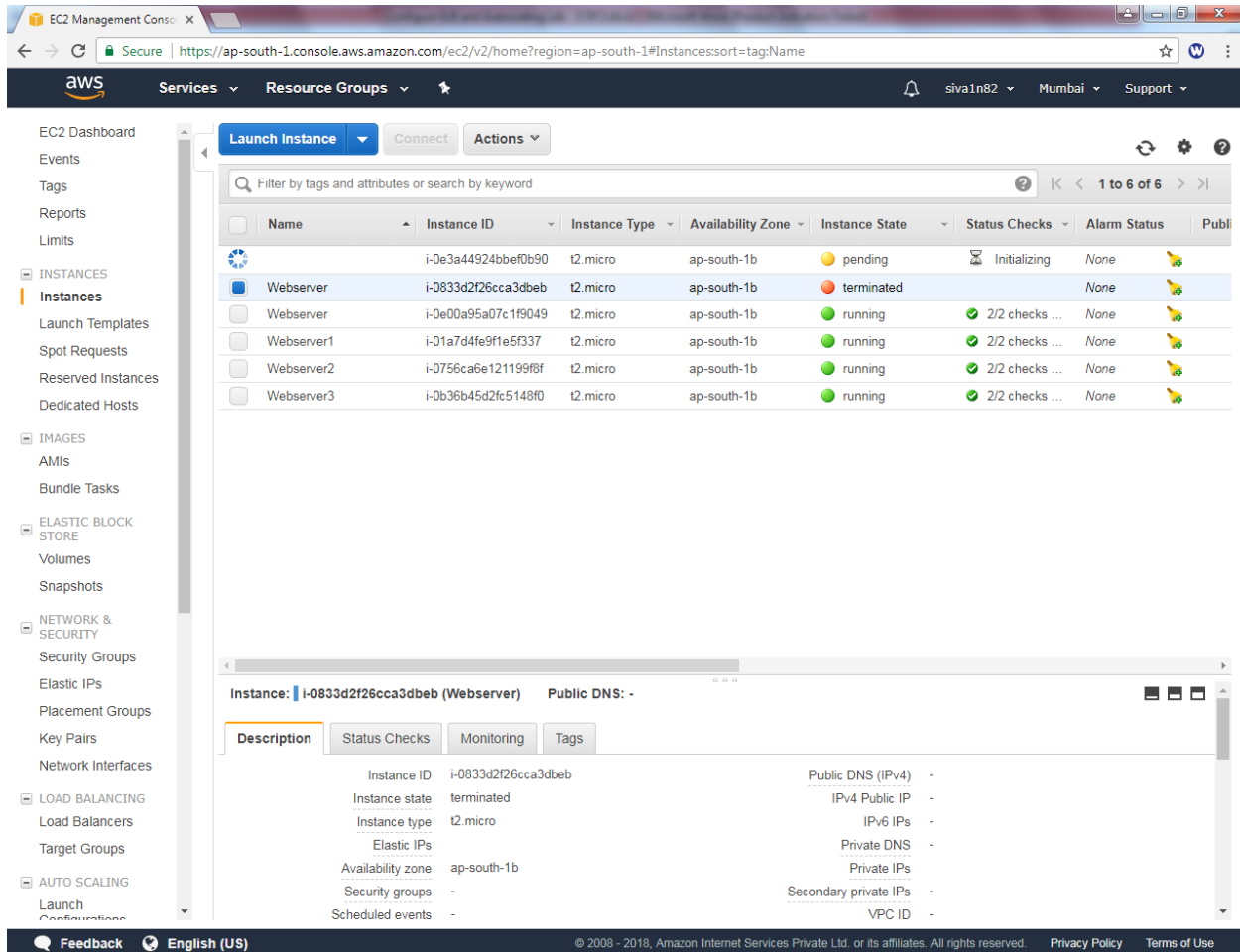
The screenshot displays the AWS Management Console for the EC2 service. The left sidebar shows the navigation menu with categories like INSTANCES, IMAGES, ELASTIC BLOCK STORE, NETWORK & SECURITY, LOAD BALANCING, and AUTO SCALING. The main content area shows a list of EC2 instances. The instance 'Webserver' with ID 'i-0833d2f26cca3dbeb' is highlighted, and its state is 'shutting-down'. Below the list, the details for this instance are shown, including its Instance ID, Instance state, Instance type, Elastic IPs, Availability zone, Security groups, and Scheduled events.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public IP
Webserver	i-0833d2f26cca3dbeb	t2.micro	ap-south-1b	shutting-down	2/2 checks ...	None	-
Webserver	i-0e00a95a07c1f9049	t2.micro	ap-south-1b	running	2/2 checks ...	None	-
Webserver1	i-01a7d4fe9f1e5f337	t2.micro	ap-south-1b	running	2/2 checks ...	None	-
Webserver2	i-0756ca6e121199f8f	t2.micro	ap-south-1b	running	2/2 checks ...	None	-
Webserver3	i-0b36b45d2fc5148f0	t2.micro	ap-south-1b	running	2/2 checks ...	None	-

Instance: **i-0833d2f26cca3dbeb (Webserver)** Public DNS: -

Description	
Instance ID	i-0833d2f26cca3dbeb
Instance state	shutting-down
Instance type	t2.micro
Elastic IPs	-
Availability zone	ap-south-1b
Security groups	-
Scheduled events	-
Public DNS (IPv4)	-
IPv4 Public IP	-
IPv6 IPs	-
Private DNS	-
Private IPs	-
Secondary private IPs	-
VPC ID	-

Now stopped instance has been terminated and creating new instance.



The screenshot shows the AWS Management Console interface for the EC2 service. The left sidebar contains navigation links for various AWS services, with 'Instances' highlighted under the 'INSTANCES' section. The main content area displays a table of EC2 instances. The table has columns for Name, Instance ID, Instance Type, Availability Zone, Instance State, Status Checks, Alarm Status, and Public IP. One instance, 'Webserver' with ID 'i-0833d2f26cca3dbeb', is in the 'terminated' state. Below the table, the details for the selected instance are shown, including its description, status checks, monitoring, and tags.

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public IP
Webserver	i-0833d2f26cca3dbeb	t2.micro	ap-south-1b	terminated	Initializing	None	
Webserver	i-0e00a95a07c1f9049	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver1	i-01a7d4fe9f1e5f337	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver2	i-0756ca6e121199f8f	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver3	i-0b36b45d2fc5148f0	t2.micro	ap-south-1b	running	2/2 checks ...	None	

Instance: **i-0833d2f26cca3dbeb (Webserver)** Public DNS: -

Description	Status Checks	Monitoring	Tags
Instance ID	i-0833d2f26cca3dbeb	Public DNS (IPv4)	-
Instance state	terminated	IPv4 Public IP	-
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	-
Availability zone	ap-south-1b	Private IPs	-
Security groups	-	Secondary private IPs	-
Scheduled events	-	VPC ID	-

Now 2 instances in Autoscaling group and other 3 instances member of Loadbalancer is up.

EC2 Management Console

Filter by tags and attributes or search by keyword

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public IP
Webserver	i-0833d2f26cca3dbeb	t2.micro	ap-south-1b	terminated		None	
Webserver	i-0e00a95a07c1f9049	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver	i-0e3a44924bbef0b90	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver1	i-01a7d4fe9f1e5f337	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver2	i-0756ca6e121199f8f	t2.micro	ap-south-1b	running	2/2 checks ...	None	
Webserver3	i-0b36b45d2fc5148f0	t2.micro	ap-south-1b	running	2/2 checks ...	None	

Instance: **i-0833d2f26cca3dbeb (Webserver)** Public DNS: -

Description	Status Checks	Monitoring	Tags
Instance ID	i-0833d2f26cca3dbeb	Public DNS (IPv4)	-
Instance state	terminated	IPv4 Public IP	-
Instance type	t2.micro	IPv6 IPs	-
Elastic IPs		Private DNS	-
Availability zone	ap-south-1b	Private IPs	-
Security groups	-	Secondary private IPs	-
Scheduled events	-	VPC ID	-

Click “Edit Instances”

The screenshot shows the AWS Management Console interface for the 'Load Balancers' section. The left-hand navigation pane lists various AWS services, with 'Load Balancers' highlighted under the 'LOAD BALANCING' category. The main content area displays the configuration for a specific Load Balancer named 'SansboundELB'. The 'Instances' tab is selected, showing a table of instances currently associated with the load balancer. A yellow box highlights the 'Edit Instances' button. Below the instances table, there is an 'Edit Availability Zones' section showing the current configuration for the 'ap-south-1b' availability zone.

Load balancer: SansboundELB

Connection Draining: Enabled, 300 seconds ([Edit](#))

Edit Instances

Instance ID	Name	Availability Zone	Status	Actions
i-0756cae121199f8f	Webserver2	ap-south-1b	InService ⓘ	Remove from Load Balancer
i-0b36b45d2fc5148f0	Webserver3	ap-south-1b	InService ⓘ	Remove from Load Balancer
i-01a7d4fe9f1e5f337	Webserver1	ap-south-1b	InService ⓘ	Remove from Load Balancer

Edit Availability Zones

Availability Zone	Subnet ID	Subnet CIDR	Instance Count	Healthy?	Actions
ap-south-1b	subnet-07d1c44a	10.0.2.0/24	3	Yes	-

Need to add remaining two instances into Loadbalancer.

Add and Remove Instances

The table below lists all your running EC2 Instances. Check the boxes in the Select column to add those instances to this load balancer.

Warning: Unchecking instances and clicking save will remove these instances from your load balancer.

Add or Remove Instances

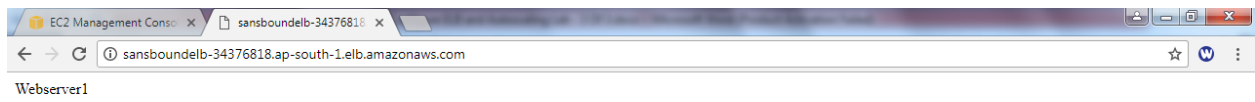
<input type="checkbox"/>	Instance	Name	State	Security groups	Zone	Subnet ID	Subnet CIDR
<input checked="" type="checkbox"/>	i-0756ca6e121199f8f	Webserver2	running	ELB-Sec-Group	ap-south-1b	subnet-07d1c44a	10.0.2.0/24
<input checked="" type="checkbox"/>	i-0b36b45d2fc5148f0	Webserver3	running	ELB-Sec-Group	ap-south-1b	subnet-07d1c44a	10.0.2.0/24
<input checked="" type="checkbox"/>	i-01a7d4fe9f1e5f337	Webserver1	running	ELB-Sec-Group	ap-south-1b	subnet-07d1c44a	10.0.2.0/24
<input checked="" type="checkbox"/>	i-0e3a44924bbef0b90	Webserver	running	ELB-Sec-Group	ap-south-1b	subnet-07d1c44a	10.0.2.0/24
<input checked="" type="checkbox"/>	i-0e00a95a07c1f9049	Webserver	running	ELB-Sec-Group	ap-south-1b	subnet-07d1c44a	10.0.2.0/24

Availability Zone Distribution
5 instances in ap-south-1b

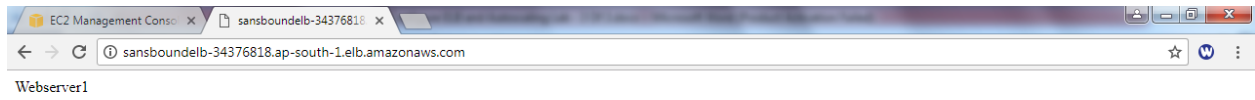
[Cancel](#) [Save](#)

Click “Save”. Wait for 1-2 minutes to refresh the session. If exact output not comes please fresh the browser until the output comes. After that you will get output.

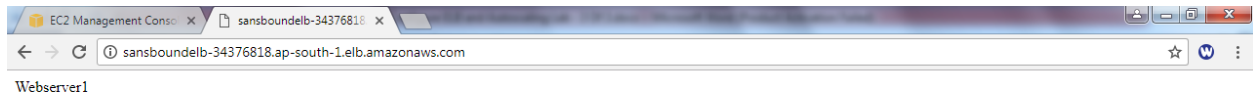
Webserver1



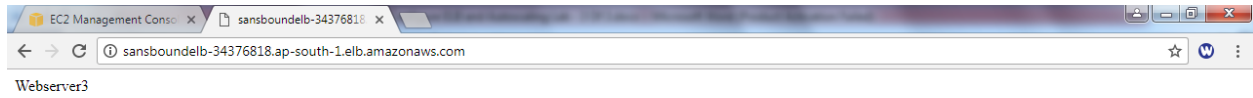
Webserver1



Webserver1



Webserver3



Webserver2

