

# Module 9 Guided Lab - Creating a Highly Available Environment

The screenshot shows the AWS Management Console interface for creating a highly available environment. The top navigation bar includes tabs for 'Module 9 Guided Lab - Creating' and 'AWS Management Console'. The main content area is titled 'Subnets (10) Info'.

**Subnets (10) Info**

Name	Subnet ID	State	VPC	IPv4 CIDR	IPv6 CIDR
-	subnet-071f3c03c7756f6f2	Available	vpc-03cb07df181d1ef1f	172.31.32.0/20	-
-	subnet-08f4ad94a3c7203cd	Available	vpc-03cb07df181d1ef1f	172.31.48.0/20	-
Public Subnet 1	subnet-02a03700ea45df9b9	Available	vpc-0e94691b870c5ded4   Lab VPC	10.0.0.0/24	-
Private Subnet 2	subnet-09986b364a48cd872	Available	vpc-0e94691b870c5ded4   Lab VPC	10.0.4.0/23	-
-	subnet-0c1f14e8da2d042b0	Available	vpc-03cb07df181d1ef1f	172.31.64.0/20	-
-	subnet-0b114f4f3251356bc	Available	vpc-03cb07df181d1ef1f	172.31.16.0/20	-
Public Subnet 2	subnet-06bb80e20201549938	Available	vpc-0e94691b870c5ded4   Lab VPC	10.0.1.0/24	-
Private Subnet 1	subnet-0ab59bdb1f48354d3	Available	vpc-0e94691b870c5ded4   Lab VPC	10.0.2.0/23	-
-	subnet-05bc21a1f679bdc3	Available	vpc-03cb07df181d1ef1f	172.31.0.0/20	-
-	subnet-0d51febf2948c5425	Available	vpc-03cb07df181d1ef1f	172.31.80.0/20	-

**subnet-02a03700ea45df9b9 / Public Subnet 1**

**Details**

Subnet ID	Subnet ARN	State	IPv4 CIDR
subnet-02a03700ea45df9b9	arn:aws:ec2:us-east-1:712497188631:subnet/subnet-02a03700ea45df9b9	Available	10.0.0.0/24
Available IPv4 addresses	249	Availability Zone	use1-az1
Network border group	us-east-1	Route table	rtb-0b5aafc6919d963ec   Public Route Table
Default subnet	No	Auto-assign IPv6 address	No
Customer-owned IPv4 pool	Yes	IPv4 CIDR reservations	-
IPv6-only	No	Resource name DNS A record	Disabled
DNS64	IP name	IPv6 CIDR reservations	-

Screenshot of the AWS Management Console showing the VPC Management Console interface.

The top navigation bar shows tabs for "Module 9 Guided Lab - Creating", "AWS Management Console", and "VPC Management Console".

The main content area displays the configuration for a subnet:

IPv6-only	No	Hostname type	IP name	Resource name DNS A record	Resource name DNS AAAA record
DNS64	Disabled			Disabled	Disabled
		Owner	712497188631		

Below the table, there are tabs for "Flow logs", "Route table" (selected), "Network ACL", "CIDR reservations", "Sharing", and "Tags".

A message box indicates: "You can now check network connectivity with Reachability Analyzer" with a "Run Reachability Analyzer" button.

The "Route table" section shows the route table configuration:

**Route table: rtb-0b5aafc6919d963ec / Public Route Table**

Routes (2)
Destination: 10.0.0.0/16 Target: local
Destination: 0.0.0.0/0 Target: igw-090b58e4fa0a9782d

Buttons for "Edit route table association" and "Cookie preferences" are visible.

The bottom navigation bar shows tabs for "Module 9 Guided Lab - Creating", "AWS Management Console", and "VPC Management Console".

The sidebar on the left lists various VPC components under "Virtual private cloud": Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, Carrier gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, and Endpoint services.

The bottom navigation bar also includes links for "Feedback", "Language selection", "Privacy", "Terms", and "Cookie preferences".

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Second screenshot (Network ACL section):

The top navigation bar shows tabs for "Module 9 Guided Lab - Creating", "AWS Management Console", and "VPC Management Console".

The main content area displays the configuration for a Network ACL:

**Network ACL: acl-06fcbd008fc87d7a7**

Inbound rules (2)
Rule number: 100 Type: All traffic Protocol: All Port range: All Source: 0.0.0.0/0 Allow/Deny: Allow
Rule number: * Type: All traffic Protocol: All Port range: All Source: 0.0.0.0/0 Allow/Deny: Deny

**Outbound rules (2)**

Outbound rules (2)
Rule number: 100 Type: All traffic Protocol: All Port range: All Destination: 0.0.0.0/0 Allow/Deny: Allow
Rule number: * Type: All traffic Protocol: All Port range: All Destination: 0.0.0.0/0 Allow/Deny: Deny

Buttons for "Edit network ACL association" and "Cookie preferences" are visible.

The bottom navigation bar shows tabs for "Module 9 Guided Lab - Creating", "AWS Management Console", and "VPC Management Console".

The sidebar on the left lists various VPC components under "Virtual private cloud": Your VPCs, Subnets, Route tables, Internet gateways, Egress-only internet gateways, Carrier gateways, DHCP option sets, Elastic IPs, Managed prefix lists, Endpoints, and Endpoint services.

The bottom navigation bar also includes links for "Feedback", "Language selection", "Privacy", "Terms", and "Cookie preferences".

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Screenshot of the AWS Management Console showing the VPC Management Service.

### Security Groups (4) Info

Name	Security group ID	Security group name	VPC ID	Description	Owner
Inventory-App	sg-06fdc18baf522086	Inventory-App	vpc-0e94691b870c5ded4	Enable access to App	712497188631
Inventory-DB	sg-047bda13178f994ec	Inventory-DB	vpc-0e94691b870c5ded4	Enable access to MySQL	712497188631
-	sg-04d5f1922c150b29	default	vpc-0e94691b870c5ded4	default VPC security gr...	712497188631
-	sg-0bca5c6f8fb0b032b4	default	vpc-03cb07df181d1ef1f	default VPC security gr...	712497188631

### Details

Security group name	Inventory-DB	Security group ID	sg-047bda13178f994ec	Description	VPC ID
Owner	712497188631	Inbound rules count	1 Permission entry	Outbound rules count	1 Permission entry

### Inbound rules (1/1)

Name	Security group rule...	IP version	Type	Protocol	Port range
-	sgr-06d5063d80bcec4ce	IPv4	MySQL/Aurora	TCP	3306

Module 9 Guided Lab - Create | AWS Management Console | VPC Management Console | VPC Management Console | VPC Management Console | + | - | X

us-east-1.console.aws.amazon.com/vpc/home?region=us-east-1#SecurityGroup:groupId=sg-047bda13178f994ec

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VPC dashboard EC2 Global View New Filter by VPC: Select a VPC

Virtual private cloud Your VPCs Subnets Route tables Internet gateways Egress-only internet gateways Carrier gateways DHCP option sets Elastic IPs Managed prefix lists Endpoints Endpoint services

Details

Security group name	Inventory-DB	Security group ID	sg-047bda13178f994ec	Description	Enable access to MySQL	VPC ID	vpc-0e94691b870c5ded
Owner	712497188631	Inbound rules count	1 Permission entry	Outbound rules count	1 Permission entry		

Inbound rules Outbound rules Tags

You can now check network connectivity with Reachability Analyzer Run Reachability Analyzer

Outbound rules (1/1)

Name	Security group rule...	IP version	Type	Protocol	Port range
-	sgr-03cf68e76226d571	IPv4	All traffic	All	All

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Screenshot of the AWS Management Console showing the EC2 Load Balancers page. The left sidebar shows various services like Dedicated Hosts, Scheduled Instances, Capacity Reservations, Images, AMIs, AMI Catalog, Elastic Block Store, Volumes, Snapshots, Lifecycle Manager, Network & Security, Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces, and Load Balancing. Under Load Balancing, Load Balancers is selected. The main content area displays a message: "You do not have any load balancers in this region." A "Create Load Balancer" button is visible at the top.

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**Load balancer types:**

- Application Load Balancer** Info: Diagram shows traffic from a client (HTTP) hitting an Application Load Balancer (ALB), which then routes traffic to Lambda functions or Amazon API Gateway endpoints via HTTPS.
- Network Load Balancer** Info: Diagram shows traffic from a client (TCP, UDP) hitting a Network Load Balancer (NLB) within a VPC. The NLB then routes traffic to Lambda functions, Amazon API Gateway, or Amazon EC2 instances via TCP, UDP, or TLS.
- Gateway Load Balancer** Info: Diagram shows traffic from a client hitting a Gateway Load Balancer (GWLB), which then routes traffic to third-party virtual appliances via TCP, UDP, or TLS.

Choose an Application Load Balancer when you need a flexible feature set for your applications with HTTP and HTTPS traffic.

Choose a Network Load Balancer when you need ultra-high performance, TLS offloading at scale, centralized certificate deployment, and support for AWS Lambda.

Choose a Gateway Load Balancer when you need to deploy and manage a fleet of third-party virtual appliances that support GENEVE.

Choose application load balancer

**Internal**  
An internal load balancer routes requests from clients to targets using private IP addresses.

**IP address type** **Info**  
Select the type of IP addresses that your subnets use.

**IPv4**  
Recommended for internal load balancers.

**Dualstack**  
Includes IPv4 and IPv6 addresses.

**Network mapping** **Info**  
The load balancer routes traffic to targets in the selected subnets, and in accordance with your IP address settings.

**VPC** **Info**  
Select the virtual private cloud (VPC) for your targets. Only VPCs with an internet gateway are enabled for selection. The selected VPC cannot be changed after the load balancer is created. To confirm the VPC for your targets, view your target groups [\[?\]](#)

Lab VPC  
vpc-0d94691870c5ded4  
IPv4: 10.0.0.0/16

**Mappings** **Info**  
Select at least two Availability Zones and one subnet per zone. The load balancer routes traffic to targets in these Availability Zones only. Availability Zones that are not supported by the load balancer or the VPC are not available for selection.

us-east-1a

us-east-1b

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**Internal**  
Select the virtual private cloud (VPC) for your targets. Only VPCs with an internet gateway are enabled for selection. The selected VPC cannot be changed after the load balancer is created. To confirm the VPC for your targets, view your target groups [\[?\]](#)

Lab VPC  
vpc-0e94691b870c5ded4  
IPv4: 10.0.0.0/16

**Mappings** **Info**  
Select at least two Availability Zones and one subnet per zone. The load balancer routes traffic to targets in these Availability Zones only. Availability Zones that are not supported by the load balancer or the VPC are not available for selection.

us-east-1a

**Subnet**

subnet-02a03700ea45df9b9	Public Subnet 1
subnet-02a03700ea45df9b9	Public Subnet 1 <input checked="" type="checkbox"/>
subnet-0ab59bdb1f48354d3	Private Subnet 1

Assigned by AWS

us-east-1b

**Security groups** **Info**  
A security group is a set of firewall rules that control the traffic to your load balancer.

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Screenshot of the AWS Management Console showing the creation of a Load Balancer (ALB) in the us-east-1 region. The 'Mappings' step is displayed, where two subnets from the VPC are selected:

- us-east-1a:** Subnet subnet-02a03700ea45df9b9 (Public Subnet 1)
- us-east-1b:** Subnet subnet-09986b364a48cd872 (Private Subnet 2)

A warning message states: "The subnet for your internet-facing load balancer must have a route to an internet gateway. You can update the subnet's route table in the VPC Console."  
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Screenshot of the AWS Management Console showing the creation of a Security Group in the us-east-1 region. The 'Basic details' step is displayed:

- Security group name:** Inventory-LB
- Description:** Enable web access to load balancer
- VPC:** vpc-0e94691b870c5ded4

The 'Inbound rules' section shows: "This security group has no inbound rules."

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Screenshot of the AWS Management Console showing the creation of a Security Group (Inventory-LB) in the N. Virginia region.

The top navigation bar shows several open tabs including "Module 9 Guided", "AWS Management", "Load balancers", "EC2 Management", "VPC Management", and "CreateSecurityGroup".

The main content area displays the "Inbound rules" and "Outbound rules" sections for the new security group.

**Inbound rules:**

Type	Protocol	Port range	Source	Description - optional
HTTP	TCP	80	Anywhere	0.0.0.0/0
HTTPS	TCP	443	Anywhere	0.0.0.0/0

**Add rule** button is visible.

**Outbound rules:**

Type	Protocol	Port range	Destination	Description - optional
All traffic	All	All	Custom	0.0.0.0/0

A success message box is displayed: "Security group (sg-05e3ee7581ea18ffb | Inventory-LB) was created successfully".

The "Details" tab is selected, showing the following information:

Security group name	Security group ID	Description	VPC ID
Inventory-LB	sg-05e3ee7581ea18ffb	Enable web access to load balancer	vpc-0e94691b870c5ded4

Owner: 712497188631

Inbound rules count: 2 Permission entries

Outbound rules count: 1 Permission entry

Actions dropdown is available.

Bottom status bar: "You can now check network connectivity with Reachability Analyzer" and "Run Reachability Analyzer" button.

The subnet for your internet-facing load balancer must have a route to an internet gateway. You can update the subnet's route table in the VPC.

**IPv4 settings**

Security Group	ID
Inventory-App	sg-06fdc18bafe522086
VPC: vpc-0e94691b870c5ded4	
Inventory-LB	sg-05e3ee7581ea18ffb
VPC: vpc-0e94691b870c5ded4	
Inventory-DB	sg-047bda13178f994ec
VPC: vpc-0e94691b870c5ded4	
default	sg-04d5f19226c150b29
VPC: vpc-0e94691b870c5ded4	

Select up to 5 security groups

Create new security group

**Listeners and routing** Info

A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer routes requests to its registered targets.

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## Create target group

**Listeners and routing** Info

A listener is a process that checks for connection requests using the port and protocol you configure. The rules that you define for a listener determine how the load balancer routes requests to its registered targets.

**Listener HTTP:80**

Protocol	Port	Default action
HTTP	: 80	Forward to <a href="#">Select a target group</a>

**Add listener tag**

You can add up to 50 more tags.

**Add listener**

**Add-on services - optional**

Additional AWS services can be integrated with this load balancer at launch. You can also add these and other services after your load balancer is created by reviewing the "Integrated Services" tab for the selected load balancer.

<https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateTargetGroup:protocol=HTTP:vpc=0e94691b870c5ded4>

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Screenshot of the AWS CloudFormation console showing the creation of a new stack named "Module 9 GUI".

The "Outputs" tab is selected, displaying the following output:

Output Key	Output Value
GUI_Endpoint	http://Module9GUI-20221114T144452Z-1qjwv3t3f3o3r.us-east-1.elb.amazonaws.com

The "Outputs" tab includes a "Description" section with the text: "The URL of the CloudFront distribution that hosts the static files for the application." and a "Last Updated" timestamp of "11/12/2022 3:08 PM".

The "Outputs" tab also features a "Create New Stack" button.

Module 9 Gu... AWS Manage... Load balance... Target group... EC2 Manager... VPC Manage... VPC Manage... +

← → C us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateLBWizardSuccess:loadBalancerArn=arn:aws:elasticloadbalancingus-east-1:712497188...

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Successfully created load balancer: **Inventory-LB**  
Note: It might take a few minutes for your load balancer to be fully set up and ready to route traffic. Targets will also take a few minutes to complete the registration process and pass initial health checks.

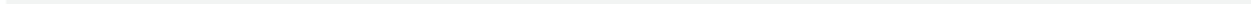
EC2 > Load balancers > Inventory-LB > Create Application Load Balancer

### Create Application Load Balancer

**Suggested next steps**

- Review, customize, or enable attributes for your load balancer and listeners using the **Description** and **Listeners** tabs within **Inventory-LB**.
- Discover other services that you can integrate with your load balancer. Visit the **Integrated services** tab within **Inventory-LB**.

**View load balancer**



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Module 9 Gu... AWS Manage... EC2 Manager... Target group... EC2 Manager... VPC Manage... VPC Manage... +

← → C us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LoadBalancers:search=Inventory-LB:sort=loadBalancerName

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**Create Load Balancer** Actions ▾

search : Inventory-LB Add filter

Name	DNS name	State	VPC ID	Availability Zones	Type	Create
Inventory-LB	Inventory-LB-67679115.us-e...	Provisioning	vpc-0e94691b870c5ded4	us-east-1a, us-east-1b	application	Never

Load balancer: **Inventory-LB**

Description Listeners Monitoring Integrated services Tags

Basic Configuration

Name Inventory-LB



Screenshot of the AWS Management Console showing the EC2 Instances page.

The browser address bar shows: `us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#Instances:`

The AWS sidebar navigation includes:

- New EC2 Experience
- EC2 Dashboard
- EC2 Global View
- Events
- Tags
- Limits
- Instances
  - Instances (New)
  - Instance Types
  - Launch Templates
  - Spot Requests
  - Savings Plans
  - Reserved Instances (New)
  - Dedicated Hosts
  - Scheduled Instances
  - Capacity Reservations
- Images
  - AMIs (New)
  - AMI Catalog

The main content area displays the "Instances (1) Info" table:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 D
Web Server 1	i-01429b8e9097907c4	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a	ec2-44-204-2

A modal window titled "Select an instance" is open, listing the instance "Web Server 1".

The Actions menu for the selected instance is open, showing options like:

- Connect
- View details
- Manage instance state
- Instance settings
- Networking
- Security
- Create image
- Create template from instance
- Launch more like this
- Monitor and troubleshoot

The instance details page for "Web Server 1" (i-01429b8e9097907c4) is shown, with the Details tab selected. Key information includes:

- Instance ID: i-01429b8e9097907c4 (Web Server 1)
- Public IPv4 address: 44.204.246.187 | [open address](#)
- Private IPv4 addresses: 10.0.0.89
- Public IPv4 DNS: ec2-44-204-246-187.compute-1.amazonaws.com | [open](#)
- IPv6 address: -
- Instance state: Running

The browser status bar at the bottom shows: Waiting for us-east-1.console.aws.amazon.com... © 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences 92°F Mostly sunny ENG 3:11 PM US 11/12/2022

Screenshot of the AWS Management Console showing the process of creating an Amazon Machine Image (AMI) from an EC2 instance.

**Create Image Info**

An image (also referred to as an AMI) defines the programs and settings that are applied when you launch an EC2 instance. You can create an image from the configuration of an existing instance.

**Instance ID**  
i-01429b8e9097907c4 (Web Server 1)

**Image name**  
Web Server AMI

**Image description - optional**  
Lab AMI for Web Server

**No reboot**  
 Enable

**Instance volumes**

Volume type	Device	Snapshot	Size	Volume type	IOPS	Throughput	Delete on termination	Encrypted
EBS	/dev/...	Create new snapshot from...	8	EBS General Purpose S...	100		<input checked="" type="checkbox"/> Enable	<input type="checkbox"/> Enable

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**Amazon Machine Images (AMIs) (1) Info**

Owned by me  Find AMI by attribute or tag

Clear filters

Name	AMI ID	AMI name	Source	Owner	Visibility
-	ami-044820cf4eb7a4a24	Web Server AMI	712497188631/Web Server AMI	712497188631	Private

**Select an AMI**

Waiting for us-east-1.prod.pr.analytics.console.aws.a2z.com... [Unified Settings](#)

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Screenshot of the AWS Management Console showing the EC2 Launch Configurations page.

The browser address bar shows: us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#LaunchConfigurations:

The left sidebar navigation includes:

- AMIs
- Elastic Block Store
- Network & Security
- Load Balancing
- Auto Scaling

The main content area displays a message about the deprecation of launch configurations:

① Recommendation to not use launch configurations  
Amazon EC2 Auto Scaling no longer adds support for new EC2 features to launch configurations and will stop supporting new EC2 instance types after December 31, 2022. We recommend that customers using launch configurations migrate to launch templates. For more information, see the documentation.

The "Launch configurations (0)" table has columns: Name, AMI ID, Instance type, and Creation time. A message below the table states: "No launch configurations found in this region." A "Create launch configuration" button is present.

The "Select a launch configuration above" section is empty.

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Screenshot of the AWS Management Console showing the Create launch configuration page.

The browser address bar shows: us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#CreateLaunchConfiguration:

The left sidebar navigation includes:

- EC2
- Launch configurations

The main content area displays the "Create launch configuration" form:

⚠ Instead of using launch configurations to create your EC2 Auto Scaling groups, we recommend that you use launch templates and make use of the Auto Scaling guidance option. For more information on migrating launch configurations and using launch templates, see the documentation.

**Launch configuration name**  
Name: Inventory-LC

**Amazon machine image (AMI)**  
AMI: Web Server AMI

**Instance type**

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Screenshot of the AWS CloudFormation console showing the creation of a new stack. The user is currently in the 'Choose instance type' step.

**Choose instance type**

Instance type	vCPUs	Memory (GiB)	Storage (GB)	EBS optimized available	Network performance
t3.2xlarge	8	32	EBS Only	Yes	Up to 5 Gigabit
t3.xlarge	4	16	EBS Only	Yes	Up to 5 Gigabit
t3.large	2	8	EBS Only	Yes	Up to 5 Gigabit
t3.medium	2	4	EBS Only	Yes	Up to 5 Gigabit
<b>t3.micro</b>	2	1	EBS Only	Yes	Up to 5 Gigabit
t3.nano	2	0.5	EBS Only	Yes	Up to 5 Gigabit
t3.small	2	2	EBS Only	Yes	Up to 5 Gigabit

**Instance type** [Info](#)

**Additional configuration - optional**

- Purchasing option [Info](#)  Request Spot Instances
- IAM instance profile [Info](#)
- Monitoring [Info](#)  Enable EC2 instance detailed monitoring within CloudWatch

[Close](#) [Choose](#)

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**Instance type** [Info](#)

t2.micro (1 vCPUs, 1 GiB, EBS Only) [Choose instance type](#)

**Additional configuration - optional**

- Purchasing option [Info](#)  Request Spot Instances
- IAM instance profile [Info](#)
- Monitoring [Info](#)  Enable EC2 instance detailed monitoring within CloudWatch
- EBS-optimized instance  Launch as EBS-optimized instance

[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

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Screenshot of the AWS Management Console showing the creation of a Launch Configuration.

**Metadata version:** Info

**Metadata response hop limit:** Info

**User data:** Info  
 As text  
 As file  

```
# Turn on web server
chkconfig httpd on
service httpd start
```

 Input is already base64 encoded

**IP address type:** Info  
 Only assign a public IP address to instances launched in a subnet with auto-assign public IP enabled (default)  
 Assign a public IP address to every instance.  
 Do not assign a public IP address to any instances.  
Note: this option only affects instances launched into an Amazon VPC

**Info:** 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.

**Feedback:** Looking for language selection? Find it in the new Unified Settings.

**Services:** Services Search [Alt+S]

**Security groups:**

Security group ID	Name	VPC ID	Description
<input checked="" type="checkbox"/> sg-06fdc18bafe522086	Inventory-App	vpc-0e94691b870c5ded4	Enable access to App
<input type="checkbox"/> sg-05e3ee7581ea18ffbb	Inventory-LB	vpc-0e94691b870c5ded4	Enable web access to load balancer
<input type="checkbox"/> sg-047bda13178f994ec	Inventory-DB	vpc-0e94691b870c5ded4	Enable access to MySQL
<input type="checkbox"/> sg-04d5f19226c150b29	default	vpc-0e94691b870c5ded4	default VPC security group
<input type="checkbox"/> sg-0bca5c6f8f0b032b4	default	vpc-05cb07df181d1ef1f	default VPC security group

**Key pair (login):** Info

**Feedback:** Looking for language selection? Find it in the new Unified Settings.

The screenshot shows the AWS CloudWatch Metrics console. A metric named "Inventory" is selected, showing a single data point at time 0 with a value of 1. The chart has a single series labeled "Inventory".

The screenshot shows the AWS CloudWatch Metrics console. A metric named "Inventory" is selected, showing a single data point at time 0 with a value of 1. The chart has a single series labeled "Inventory".

Screenshot of the AWS Auto Scaling Step 1: Choose launch template or configuration page.

The left sidebar shows steps 1 through 7:

- Step 1: Choose launch template or configuration
- Step 2: Choose instance launch options
- Step 3 (optional): Configure advanced options
- Step 4 (optional): Configure group size and scaling policies
- Step 5 (optional): Add notifications
- Step 6 (optional): Add tags
- Step 7: Review

The main content area is titled "Choose launch template or configuration" and contains the following fields:

- Name:** Auto Scaling group name (Input field: "Inventory-ASG")

Must be unique to this account in the current Region and no more than 255 characters.
- Launch configuration:** Info (Link to "Switch to launch template")

A warning message: Instead of using launch configurations to create your EC2 Auto Scaling groups, we recommend that you use launch templates and make use of the Auto Scaling guidance option. For more information on migrating launch configurations and using launch templates, see the documentation.
- Launch configuration:** Info (Link to "Switch to launch template")

Launch configuration: Choose a launch configuration that contains the instance-level settings, such as the Amazon Machine Image (AMI), instance type, key pair, and security groups.

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Screenshot of the AWS Auto Scaling Step 2: Choose instance launch options page.

The left sidebar shows steps 2 through 7.

The main content area is titled "Network" and contains the following fields:

- VPC:** Choose the VPC that defines the virtual network for your Auto Scaling group.

vpc-0e94691b870c5ded4 (Lab VPC)  
10.0.0.0/16
- Create a VPC:** Link to create a new VPC.
- Availability Zones and subnets:** Define which Availability Zones and subnets your Auto Scaling group can use in the chosen VPC.

Select Availability Zones and subnets

  - us-east-1a | subnet-0ab59bdb1f48354d3 (Private Subnet 1)  
10.0.2.0/23
  - us-east-1b | subnet-09986b364a48cd872 (Private Subnet 2)  
10.0.4.0/23
- Create a subnet:** Link to create a new subnet.

Buttons at the bottom: Cancel, Previous, Skip to review, Next.

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AWS Module | AWS Lambda | Create Auto Scaling Group | Images | Target Groups | EC2 Metrics | VPC Metrics | VPC Metrics | VPC Metrics | Dan | + | - | X

← → C us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1&redirectFrom=asg#CreateAutoScalingGroup:launchConfigurationName=Inventory-LC

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aws Services Search [Alt+S]

Choose instance launch options Load balancing - optional Info

Step 3 (optional) Configure advanced options

Step 4 (optional) Configure group size and scaling policies

Step 5 (optional) Add notifications

Step 6 (optional) Add tags

Step 7 Review

Load balancing - optional

Use the options below to attach your Auto Scaling group to an existing load balancer, or to a new load balancer that you define.

No load balancer Traffic to your Auto Scaling group will not be fronted by a load balancer.

Attach to an existing load balancer Choose from your existing load balancers.

Attach to a new load balancer Quickly create a basic load balancer to attach to your Auto Scaling group.

Attach to an existing load balancer

Select the load balancers that you want to attach to your Auto Scaling group.

Choose from your load balancer target groups This option allows you to attach Application, Network, or Gateway Load Balancers.

Choose from Classic Load Balancers

Existing load balancer target groups

Only instance target groups that belong to the same VPC as your Auto Scaling group are available for selection.

Select target groups

Inventory-App | HTTP Application Load Balancer: Inventory-LB

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← → C us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1&redirectFrom=asg#CreateAutoScalingGroup:launchConfigurationName=Inventory-LC

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N. Virginia v vocabs/user221147=Nwe\_Nwe\_Htay\_Win @ 7124-9718-8631

aws Services Search [Alt+S]

Health checks - optional

Health check type Info

EC2 Auto Scaling automatically replaces instances that fail health checks. If you enabled load balancing, you can enable ELB health checks in addition to the EC2 health checks that are always enabled.

EC2  ELB

Health check grace period

The amount of time until EC2 Auto Scaling performs the first health check on new instances after they are put into service.

90 seconds

Additional settings - optional

Monitoring Info

Enable group metrics collection within CloudWatch

Default instance warmup Info

The amount of time that CloudWatch metrics for new instances do not contribute to the group's aggregated instance metrics, as their usage data is not reliable yet.

Enable default instance warmup

Screenshot of the AWS Auto Scaling Group creation wizard Step 4: Configure group size and scaling policies.

**Group size - optional**

Specify the size of the Auto Scaling group by changing the desired capacity. You can also specify minimum and maximum capacity limits. Your desired capacity must be within the limit range.

Desired capacity: 2

Minimum capacity: 2

Maximum capacity: 2

**Scaling policies - optional**

Choose whether to use a scaling policy to dynamically resize your Auto Scaling group to meet changes in demand.

Target tracking scaling policy  
Choose a desired outcome and leave it to the scaling policy to add and remove capacity as needed to achieve that outcome.

None

Screenshot of the AWS Auto Scaling Group creation wizard Step 6: Add tags.

**Add tags**

Add tags to help you search, filter, and track your Auto Scaling group across AWS. You can also choose to automatically add these tags to instances when they are launched.

**Tags (1)**

Key	Value - optional	Tag new instances
Name	Inventory-App	<input checked="" type="checkbox"/>

**Add tag**

49 remaining

Cancel Previous Next

Screenshot of the AWS Auto Scaling Group creation wizard Step 7: Review.

Screenshot of the AWS CloudFormation console showing the creation of a new stack named "Inventory-ASG".

**Step 1: Set Parameters**

Parameter Name	Type	Value
DesiredCapacity	Number	2
MinCapacity	Number	2
MaxCapacity	Number	2
Region	String	us-east-1

**Step 2: Add Resources**

- Inventory-ASG**: Auto Scaling Group
  - Launch Configuration: Inventory-LC
  - Health Check Type: EC2
  - 冷却时间 (Cooldown): 60
  - 最小实例数 (Min Size): 2
  - 最大实例数 (Max Size): 2
  - 冷却时间 (Cooldown): 60

**Step 3: Add Notifications**

No notifications defined.

**Step 4: Add Tags**

Key	Value	Tag new instances
Name	Inventory-App	Yes

**Step 5: Add instance scale-in protection**

Enable instance protection from scale in.

**Step 6: Create Auto Scaling group**

**Feedback:** Looking for language selection? Find it in the new Unified Settings.

**EC2 Auto Scaling Groups**

Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Available
Inventory-ASG	Inventory-LC	0	Updating capacity...	2	2	2	us-east-1...

**Success Message:** Inventory-ASG created successfully. Group metrics collection is enabled.

Screenshot of the AWS Management Console showing the EC2 Security Groups page. The left sidebar shows navigation links for Dedicated Hosts, Scheduled Instances, Capacity Reservations, Images (AMIs New, AMI Catalog), Elastic Block Store (Volumes, Snapshots, Lifecycle Manager), Network & Security (Security Groups, Elastic IPs, Placement Groups, Key Pairs, Network Interfaces), and Load Balancing (Load Balancers, Target Groups New). The main content area displays a table of security groups:

Name	Security group ID	Security group name	VPC ID	Description	Owner
Inventory-App	sg-06fdc18bafe522086	Inventory-App	vpc-0e94691b870c5ded4	Enable access to App	712497188631
-	sg-05e3ee7581ea18ffb	Inventory-LB	vpc-0e94691b870c5ded4	Enable web access to I...	712497188631
Inventory-DB	sg-047bda13178f94ec	Inventory-DB	vpc-0e94691b870c5ded4	Enable access to MySQL	712497188631
-	sg-04d5f19226c150b29	default	vpc-0e94691b870c5ded4	default VPC security gr...	712497188631
-	sg-0bca5c6f8f0b032b4	default	vpc-03cb07df181d1ef1f	default VPC security gr...	712497188631

The selected security group is "sg-06fdc18bafe522086 - Inventory-App". The details page shows the following information:

- Feedback:** Looking for language selection? Find it in the new Unified Settings.
- Location:** us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-06fdc18bafe522086
- Owner:** N. Virginia
- Details:** sg-06fdc18bafe522086 - Inventory-App
- Actions:** Create security group, Edit inbound rules, Delete security group, View logs.

The "Edit inbound rules" page shows the following content:

Inbound rules [Info](#)

This security group has no inbound rules.

Add rule

Cancel [Preview changes](#) [Save rules](#)

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Inbound rules [Info](#)

Inbound rules control the incoming traffic that's allowed to reach the instance.

Security group rule ID	Type <a href="#">Info</a>	Protocol <a href="#">Info</a>	Port range <a href="#">Info</a>	Source <a href="#">Info</a>	Description - optional <a href="#">Info</a>
-	HTTP	TCP	80	Custom	<input type="text" value="sg"/> <a href="#">X</a>

[Add rule](#)

Security Groups

- Inventory-App | sg-06fdc18bafe522086
- Inventory-App
- Inventory-LB | sg-05e3ee7581ea18ffb
- Inventory-D | sg-047bda13178f994ec
- Inventory-DB
- default | sg-04d5f19226c150b29

[Cancel](#) [Preview changes](#) [Save rules](#)

Select inventory-lab

Screenshot of the AWS Management Console showing the 'Edit inbound rules' page for a security group. The URL is <https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#ModifyInboundSecurityGroupRules:securityGroupId=sg-06fdc18bafe522086>.

The page displays an 'Inbound rules' table with one rule listed:

Security group rule ID	Type	Protocol	Port range	Source	Description - optional
-	HTTP	TCP	80	Custom	Traffic from load balancer sg-05e3ee7581ea18ffb

Buttons at the bottom include 'Add rule', 'Cancel', 'Preview changes', and 'Save rules'.

Screenshot of the AWS Management Console showing the 'Details' page for a security group named 'Inventory-App'. The URL is <https://us-east-1.console.aws.amazon.com/ec2/home?region=us-east-1#SecurityGroup:group-id=sg-06fdc18bafe522086>.

The 'Details' section shows:

Security group name	Security group ID	Description	VPC ID
Inventory-App	sg-06fdc18bafe522086	Enable access to App	vpc-0e94691b870c5ded4

The 'Inbound rules' tab is selected, showing one rule:

Name	Security group rule ID	Type	Protocol	Port range
sgr-0b7c018d43a48c45a	-	HTTP	TCP	80

A message at the top says: 'You can now check network connectivity with Reachability Analyzer' with a 'Run Reachability Analyzer' button.

Screenshot of the AWS Management Console showing the Security Groups page. The left sidebar shows the navigation menu with 'Security Groups' selected under 'Network & Security'. The main content area displays a table of security groups:

Name	Security group ID	Security group name	VPC ID	Description	Owner
-	sg-05e3ee7581ea18ffb	Inventory-LB	vpc-0e94691b870c5ded4	Enable web access to ...	712497188631
-	sg-06fdc18bafe522086	Inventory-App	vpc-0e94691b870c5ded4	Enable access to App	712497188631
<input checked="" type="checkbox"/> Inventory-DB	sg-047bda13178f994ec	Inventory-DB	vpc-0e94691b870c5ded4	Enable access to MySQL	712497188631
-	sg-04d5f19226c150b29	default	vpc-0e94691b870c5ded4	default VPC security gr...	712497188631
-	sg-0bca5c6f8fb032b4	default	vpc-03cb07df181d1ef1f	default VPC security gr...	712497188631

The selected security group is 'Inventory-DB' (sg-047bda13178f994ec). Below the table, a modal window titled 'sg-047bda13178f994ec - Inventory-DB' shows the inbound rules configuration. The 'Type' dropdown is set to 'MySQL/Aurora'. The 'Protocol' dropdown is set to 'TCP'. The 'Port range' dropdown is set to '3306'. The 'Source' dropdown is set to 'Custom'. A search bar shows 'Q sg'. A dropdown menu lists several security groups:

- Inventory-LB | sg-05e3ee7581ea18ffb
- Inventory-App | sg-06fdc18bafe522086
- Inventory-App | sg-047bda13178f994ec
- Inventory-DB | sg-047bda13178f994ec
- default | sg-04d5f19226c150b29

Buttons at the bottom of the modal include 'Cancel', 'Preview changes', and 'Save rules'.

## Choose inventory app

The screenshot shows the AWS CloudWatch Metrics interface. At the top, there are tabs for 'Metrics' (selected), 'Logs', 'CloudWatch Metrics Insights', and 'CloudWatch Metrics Metrics Insights'. Below the tabs, there's a search bar and a 'Create new metric' button. The main content area displays a table of metrics with columns: Metric Name, Namespace, Unit, and Last Value. One row is highlighted in blue, showing 'AWS/CloudWatch Metrics' with a value of '1'. At the bottom, there are buttons for 'Edit' and 'Delete'.

Refresh target tab

Screenshot of the AWS Management Console showing the Target Groups and Load Balancers sections.

### Target groups (1/1) Info

**Target group: Inventory-App**

**Registered targets (3)**

Instance ID	Name	Port	Zone	Health status	Health status details
i-06509aa697be6dbae	Inventory-App	80	us-east-1a	draining	Target deregistration is in progress
i-0c547856b0738612a	Inventory-App	80	us-east-1b	healthy	
i-02ececccd10717347c	Inventory-App	80	us-east-1a	healthy	

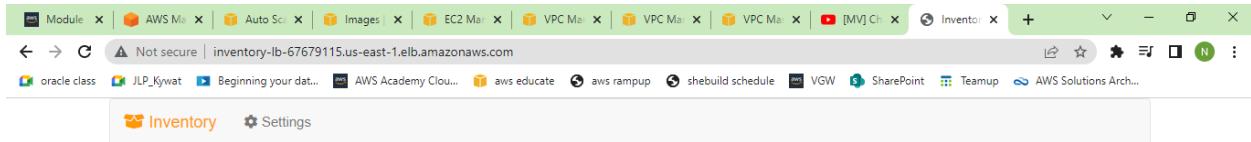
### Create Load Balancer

**Load balancer: Inventory-LB**

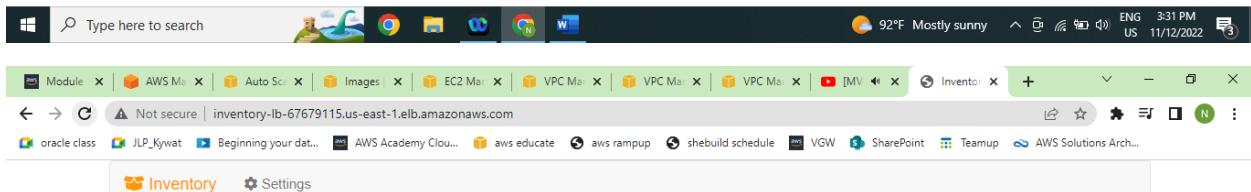
**Basic Configuration**

Name	Inventory-LB
ARN	arn:aws:elasticloadbalancing:us-east-1:712497188631:loadbalancer/app/Inventory-LB/ba7dd275b512988e
DNS name	Inventory-LB-67679115.us-east-1.elb.amazonaws.com <a href="#">Copied</a>
State	Active
Type	application
Scheme	internet-facing
IP address type	ipv4

Copy this



This page was generated by instance **i-02eccc10717347c** in Availability Zone **us-east-1a**.



This page was generated by instance **i-0c547856b0738612a** in Availability Zone **us-east-1b**.



AZ changes whenever it is refreshed. Check it out.

Choose whatever instance

The screenshot shows the AWS EC2 Instances page. The left sidebar includes links for EC2 Dashboard, EC2 Global View, Events, Tags, Limits, Instances (selected), Instance Types, Launch Templates, Spot Requests, Savings Plans, Reserved Instances, Dedicated Hosts, Scheduled Instances, Capacity Reservations, and Images. The main content area displays a table of instances:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 D
Inventory-App	i-0c547856b0738612a	Running	t2.micro	2/2 checks passed	No alarms	us-east-1b	-
Inventory-App	i-02eccc010717347c	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a	-
Inventory-App	i-06509aa697be6dbae	Terminated	t2.micro	-	No alarms	us-east-1a	-
Web Server 1	i-01429b8e0907907c4	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a	ec2-44-204-2

The instance **Inventory-App** (i-0c547856b0738612a) is highlighted. The details pane for this instance shows:

- Details tab selected.
- Security, Networking, Storage, Status checks, Monitoring, and Tags tabs.
- Instance summary: Instance ID (i-0c547856b0738612a (Inventory-App)), Public IPv4 address (-), Private IPv4 addresses (10.0.5.35), Public IPv4 DNS (-).
- Instance state: Running.

At the bottom, the status bar shows: Waiting for us-east-1.prod.pr.analytics.console.aws.a2z.com... © 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences 92°F Mostly sunny ENG 3:32 PM US 11/12/2022

## Terminate it

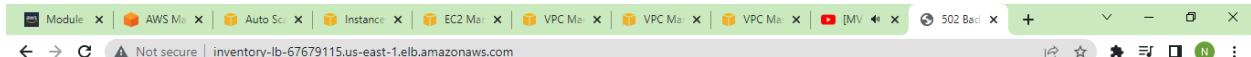
The screenshot shows the AWS EC2 Instances page with the same layout as the previous one. The left sidebar and instance table are identical. The main content area shows the 'Actions' dropdown menu for the selected instance:

- Stop instance
- Start instance
- Reboot instance
- Hibernate instance
- Terminate instance (highlighted)

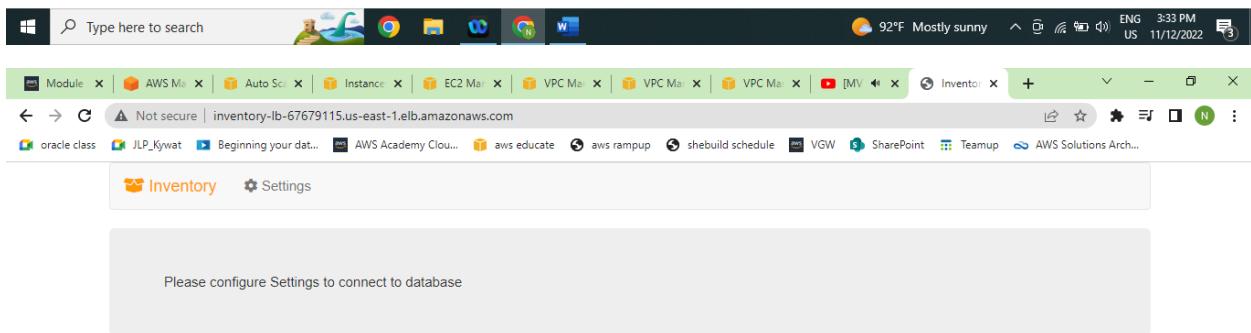
The instance **Inventory-App** (i-0c547856b0738612a) is still selected. The details pane for this instance shows:

- Details tab selected.
- Security, Networking, Storage, Status checks, Monitoring, and Tags tabs.
- Instance summary: Instance ID (i-0c547856b0738612a (Inventory-App)), Public IPv4 address (-), Private IPv4 addresses (10.0.5.35), Public IPv4 DNS (-).
- Instance state: Running.

At the bottom, the status bar shows: Feedback Looking for language selection? Find it in the new Unified Settings. © 2022, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences 92°F Mostly sunny ENG 3:33 PM US 11/12/2022



## 502 Bad Gateway



This page was generated by instance i-02eccc10717347c in Availability Zone us-east-1a.



RDS

AWS Module 9 GUI | AWS Management Console | Auto Scaling | Instances | EC2 | RDS Management | VPC Manager | YouTube | Inventory System | + | - | X

← → C us-east-1.console.aws.amazon.com/rds/home?region=us-east-1#

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Amazon RDS

Dashboard Databases Query Editor Performance insights Snapshots Exports in Amazon S3 Automated backups Reserved instances Proxies Subnet groups Parameter groups Option groups Custom engine versions Events Event subscriptions

Try the new Amazon RDS Multi-AZ deployment option for MySQL and PostgreSQL. For your Amazon RDS for MySQL and PostgreSQL workloads, improve transactional commit latencies by 2x, experience faster failover typically less than 35 seconds, and get read scalability with two readable standby DB instances by deploying the Multi-AZ DB cluster. Learn more

Create database Or, Restore Multi-AZ DB Cluster from Snapshot

Resources Refresh

You are using the following Amazon RDS resources in the US East (N. Virginia) region (used/quotas)

DB Instances (1/40)	Allocated storage (0.005 TB/100 TB)	Parameter groups (1)
DB Clusters (0/40)	Increase DB instances limit	Default (1) Custom (0/100)
Reserved instances (0/40)	Option groups (1)	Default (1) Custom (0/20)
Snapshots (0)	Subnet groups (1/50)	Supported platforms VPC Default network vpc-03cb07df181d1ef1f
Manual		
DB Cluster (0)		
DB Instance (0)		
Automated		
DB Cluster (0)		
DB Instance (0)		

Recommended for you

Build RDS Operational Tasks Watch how to enable users to perform common tasks such as snapshots or restart DB instances in Amazon RDS. Learn more

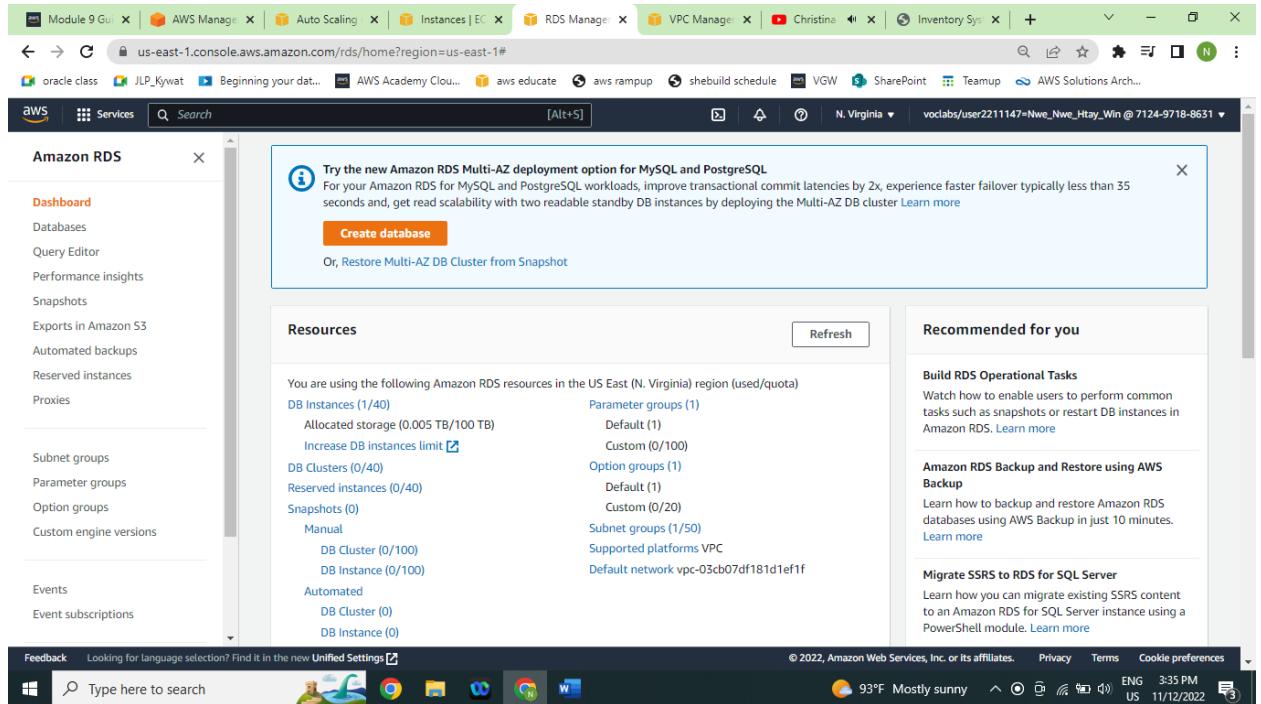
Amazon RDS Backup and Restore using AWS Backup Learn how to backup and restore Amazon RDS databases using AWS Backup in just 10 minutes. Learn more

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Windows Type here to search 93°F Mostly sunny ENG 3:35 PM US 11/12/2022



Screenshot of the AWS RDS console showing the 'Databases' section. A single database named 'inventory-db' is listed, which is an MySQL Community instance in us-east-1a, db.t3.micro, and available.

**Databases**

DB identifier	Role	Engine	Region & AZ	Size	Status	CPU
inventory-db	Instance	MySQL Community	us-east-1a	db.t3.micro	Available	

**Storage aut-scaling** Info  
Provides dynamic scaling support for your database's storage based on your application's needs.  
 Enable storage aut-scaling  
Enabling this feature will allow the storage to increase after the specified threshold is exceeded.

**Availability & durability**

Multi-AZ deployment [Info](#)  
 Create a standby instance (recommended for production usage)  
Creates a standby in a different Availability Zone (AZ) to provide data redundancy, eliminate I/O freezes, and minimize latency spikes during system backups.  
 Do not create a standby instance

**Connectivity**

Network type [Info](#)  
To use dual-stack mode, make sure that you associate an IPv6 CIDR block with a subnet in the VPC you specify.  
 IPv4  
Your resources can communicate only over the IPv4 addressing protocol.  
 Dual-stack mode  
Your resources can communicate over IPv4, IPv6, or both.

The screenshot shows the 'Instance configuration' section of the AWS RDS console. On the left, a sidebar lists various RDS management options like Dashboard, Databases, Query Editor, and Storage. The main area is titled 'Instance configuration' and contains two tabs: 'DB instance class' and 'Storage'. Under 'DB instance class', the 'Burstable classes (includes t classes)' option is selected, and the 'db.t3.small' class is chosen, which has 2 vCPUs, 2 GiB RAM, and a network speed of 2,085 Mbps. There is also a checkbox for 'Include previous generation classes'. Under 'Storage', the 'Allocated storage' is set to 10 GiB, with a note that the minimum value is 5 GiB and the maximum is 16,384 GiB. The storage type is set to 'General Purpose SSD (gp2)'. The bottom of the screen shows the Windows taskbar with various pinned icons and system status information.

Scale up instance

Screenshot of the AWS RDS Modify DB Instance page:

**Amazon RDS**

- Dashboard
- Databases**
- Query Editor
- Performance insights
- Snapshots
- Exports in Amazon S3
- Automated backups
- Reserved instances
- Proxies
- Subnet groups
- Parameter groups
- Option groups
- Custom engine versions
- Events
- Event subscriptions

**DB instance class**: db.t3.micro    **Allocated storage**: 5 GiB    **Multi-AZ deployment**: No    **Current state**: db.t3.small    **Allocated storage**: 10 GiB

**Schedule modifications**

When to apply modifications:
  Apply during the next scheduled maintenance window  
 Current maintenance window: November 16, 2022 15:04 - 15:34 UTC+6.5
  Apply immediately  
 The modifications in this request and any pending modifications will be asynchronously applied as soon as possible, regardless of the maintenance window setting for this database instance.

**Potential performance impact when converting to Multi-AZ**  
 Your DB instance can experience a significant performance impact during and after converting to a Multi-AZ deployment. The impact is greater on DB instances with large amounts of storage and write-intensive workloads. We don't recommend this conversion on a production DB instance.

Cancel    Back    **Modify DB instance**

**NAT gateways (1/1)**

Name	NAT gateway ID	Connectivity...	State	State message	Elastic IP address	Private IP
nat-00a37f944866947cc	nat-00a37f944866947cc	Public	Available	-	52.73.108.60	10.0.0.55

**Details**

NAT gateway ID: nat-00a37f944866947cc    Connectivity type: Public    State: Available    State message: -

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Screenshot of the AWS Management Console showing the creation of a NAT gateway.

**NAT gateway nat-03e85c7e01bf231f6 was created successfully.**

**nat-03e85c7e01bf231f6**

Details		Info	
NAT gateway ID <a href="#">nat-03e85c7e01bf231f6</a>	Connectivity type Public	State <a href="#">Pending</a>	State message -
NAT gateway ARN <a href="#">arn:aws:ec2:us-east-1:712497188631:natgateway/nat-03e85c7e01bf231f6</a>	Elastic IP address -	Private IP address -	Network interface ID -
VPC <a href="#">vpc-0e94691b870c5ded4 / Lab VPC</a>	Subnet <a href="#">subnet-09986b364a48cd872 / Private Subnet 2</a>	Created <a href="#">Saturday, November 12, 2022 at 15:40:06 GMT+6:30</a>	Deleted -

**Monitoring** **Tags**

**Create route table**

A route table specifies how packets are forwarded between the subnets within your VPC, the internet, and your VPN connection.

**Route table settings**

Name - *optional*  
Create a tag with a key of 'Name' and a value that you specify.

VPC  
The VPC to use for this route table.

**Tags**  
A tag is a label that you assign to an AWS resource. Each tag consists of a key and an optional value. You can use tags to search and filter your resources or track your AWS costs.

Key  Value - *optional*

**Feedback** Looking for language selection? Find it in the new [Unified Settings](#).

Screenshot of the AWS VPC Manager showing a successful creation of a Private Route Table.

**Route table rtb-0e1c9dfa3a13f7498 | Private Route Table 2 was created successfully.**

**rtb-0e1c9dfa3a13f7498 / Private Route Table 2**

You can now check network connectivity with Reachability Analyzer

**Details**

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-0e1c9dfa3a13f7498	No	-	-
VPC	Owner ID		
vpc-0e94691b870c5ded4   Lab VPC	712497188631		

**Routes (1)**

Edit routes

**Edit routes**

Destination	Target	Status	Propagated
10.0.0.0/16	local	Active	No
0.0.0.0/0	nat-03e85c7e01bf231f6	-	No

Add route

Cancel Preview Save changes

Screenshot of the AWS VPC Management Console showing the successful update of a route table.

**Route Table Details:**

Route table ID	Main	Explicit subnet associations	Edge associations
rtb-0e1c9dfa3a13f7498	No	-	-
VPC	Owner ID	vpc-0e94691b870c5ded4   Lab VPC	712497188631

**Edit Subnet Associations:**

Available subnets (1/4)

Name	Subnet ID	IPv4 CIDR	IPv6 CIDR	Route table ID
Public Subnet 1	subnet-02a03700ea45df9b9	10.0.0.0/24	-	rtb-0b5aafc6919d963ec / Public Route Table
<input checked="" type="checkbox"/> Private Subnet 2	subnet-09986b364a48cd872	10.0.4.0/23	-	rtb-082196bfcfd93fa3fc / Private Route Table 1
Public Subnet 2	subnet-06b80e20201549938	10.0.1.0/24	-	rtb-0b5aafc6919d963ec / Public Route Table
Private Subnet 1	subnet-0ab59bdb1f48354d3	10.0.2.0/23	-	rtb-082196bfcfd93fa3fc / Private Route Table 1

Selected subnets:

- subnet-09986b364a48cd872 / Private Subnet 2

Buttons: Cancel, Save associations