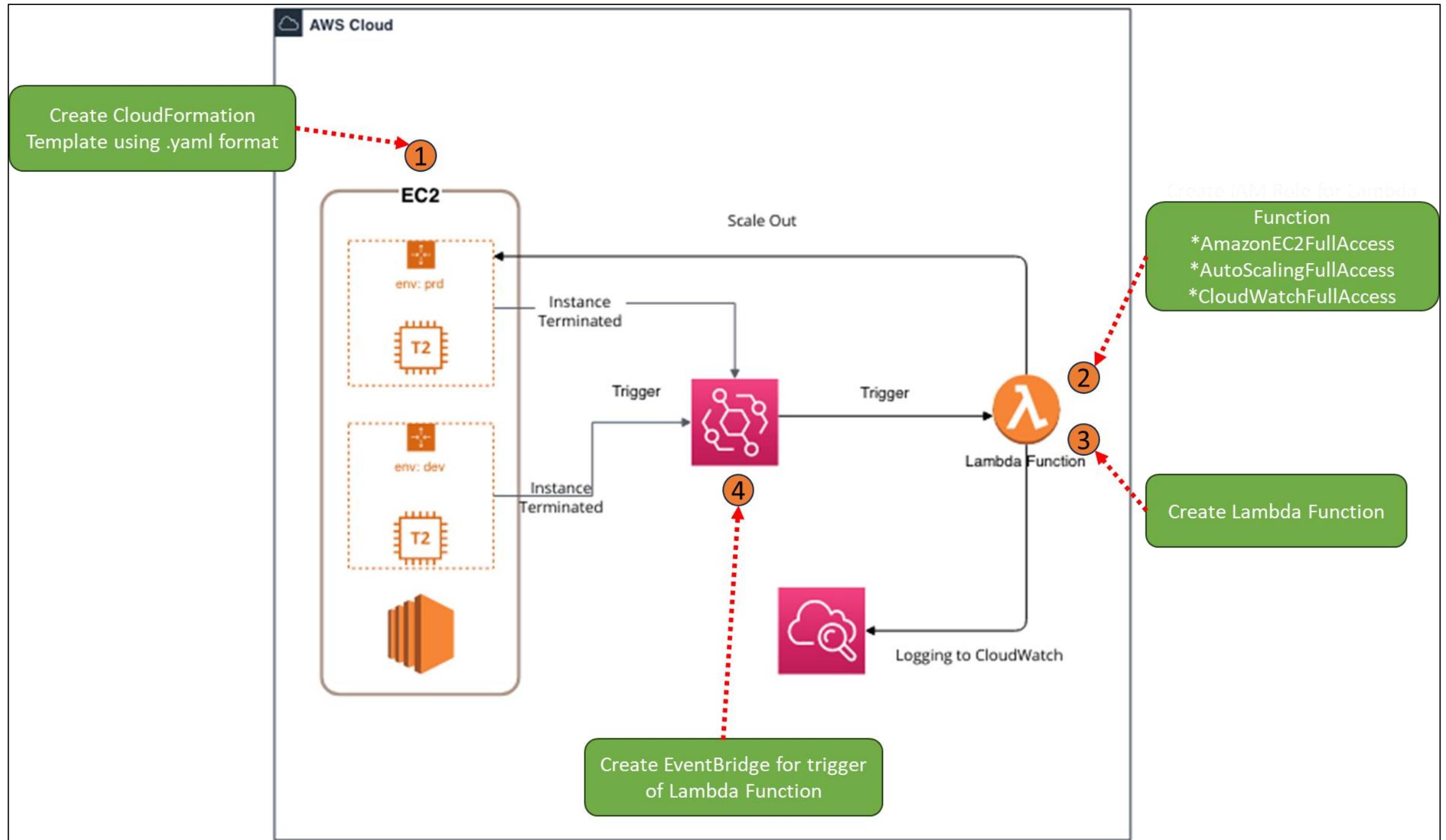


# Project - Auto-Remediation



# Create CloudFormation Template

AWS Services Search [Alt+S] N. Virginia

Console Home EC2 IAM RDS DynamoDB ElastiCache VPC CloudFormation S3 Elastic Kubernetes Service EFS Route 53 Elastic Beanstalk CloudWatch Lambda API Gateway CloudFront Amazon EventBridge

CloudFormation Stacks (0) StackSets Exports Designer Registry Public extensions Activated extensions Publisher Spotlight New Feedback

CloudFormation > Stacks

Stacks (0)

Filter status Active View nested

Stack name Status Created time Description

No stacks  
No stacks to display

Create stack View getting started guide

The screenshot shows the AWS CloudFormation service interface. The top navigation bar includes links for various AWS services like EC2, S3, and Lambda. The 'CloudFormation' tab is selected. On the left, a sidebar has 'Stacks' highlighted. The main content area displays a table with columns for Stack name, Status, Created time, and Description. A message indicates 'No stacks' and 'No stacks to display'. At the bottom right of this area is a large orange 'Create stack' button, which is also highlighted with an orange arrow pointing towards it from the left.

Step 1

[Create stack](#)

Step 2

[Specify stack details](#)

Step 3

[Configure stack options](#)

Step 4

[Review](#)

## Create stack

### Prerequisite - Prepare template

#### Prepare template

Every stack is based on a template. A template is a JSON or YAML file that contains configuration information about the AWS resources you want to include in the stack.

 Template is ready Use a sample template Create template in Designer

### Specify template

A template is a JSON or YAML file that describes your stack's resources and properties.

#### Template source

Selecting a template generates an Amazon S3 URL where it will be stored.

 Amazon S3 URL Upload a template file

#### Upload a template file

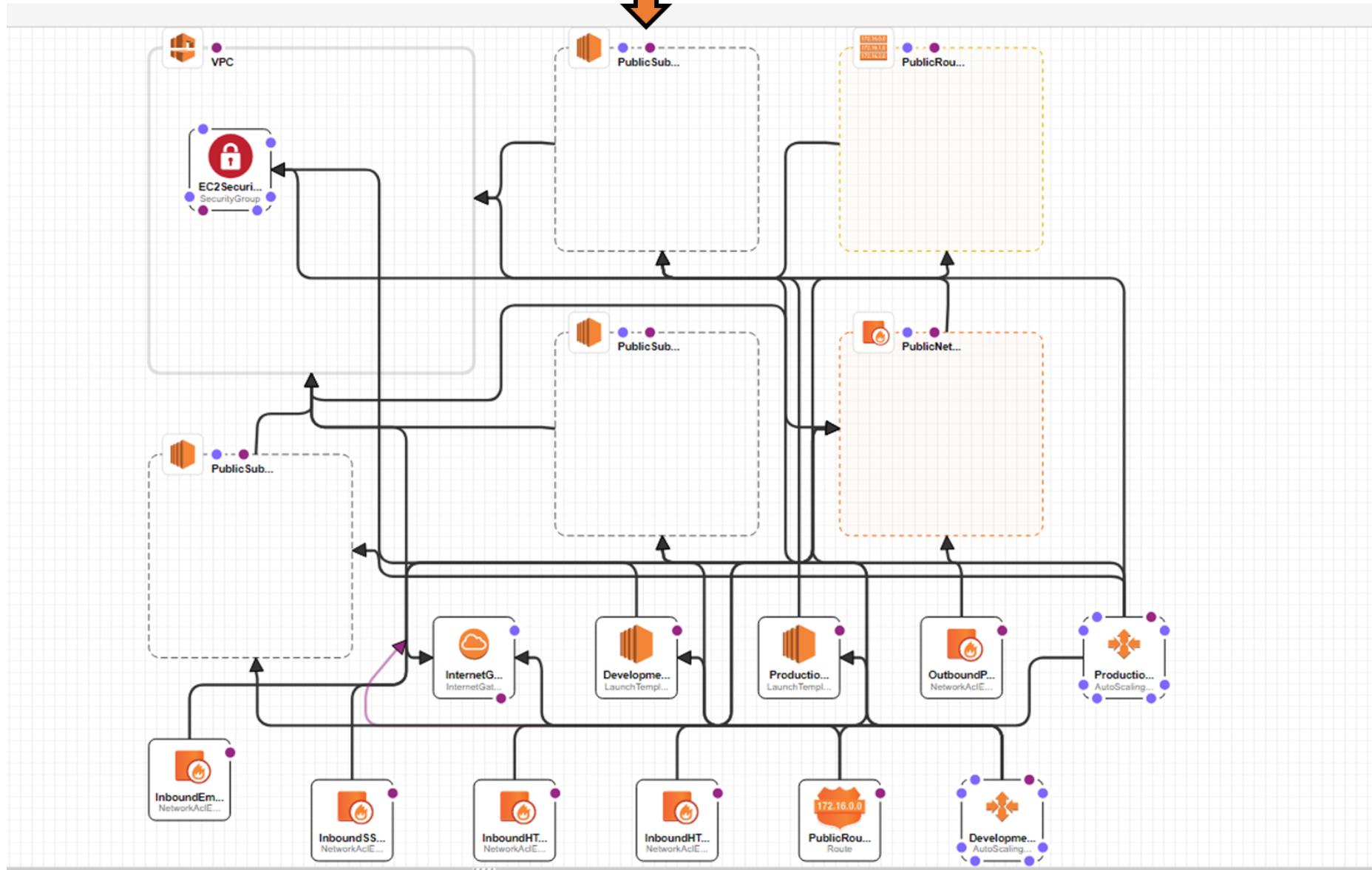
cfn-ASG-change.yml

X

JSON or YAML formatted file

S3 URL: <https://s3.us-east-1.amazonaws.com/cf-templates-jbefz9bdboao-us-east-1/2023-09-23T200332.798Zxpa-cfn-ASG-change.yml>[View in Designer](#)[Cancel](#)[Next](#)

## View in Designer



Stacks (1)

Filter status Active View nested

Filter by stack name

Events (1) < 1 >

Stacks

ASG-Changing  
2023-09-23 23:09:24 UTC+0300  
CREATE\_COMPLETE



## ASG-Changing

Delete Update Stack actions ▾ Create stack ▾Stack info Events Resources Outputs Parameters Template Change sets

Events (77)

Search events

Timestamp	Logical ID	Status	Status reason
2023-09-23 23:10:13 UTC+0300	ASG-Changing	<span>✓ CREATE_COMPLETE</span>	-
2023-09-23 23:10:12 UTC+0300	InboundSSHPublicNetworkAclEntry	<span>✓ CREATE_COMPLETE</span>	-
2023-09-23 23:10:12 UTC+0300	InboundHTTPSPublicNetworkAclEntry	<span>✓ CREATE_COMPLETE</span>	-
2023-09-23 23:10:12 UTC+0300	OutboundPublicNetworkAclEntry	<span>✓ CREATE_COMPLETE</span>	-
2023-09-23 23:10:12 UTC+0300	InboundEmphemeralPublicNetworkAclEntry	<span>✓ CREATE_COMPLETE</span>	-
2023-09-23 23:10:12 UTC+0300	InboundHTTPPPublicNetworkAclEntry	<span>✓ CREATE_COMPLETE</span>	-
2023-09-23 23:10:12 UTC+0300	PublicSubnetNetworkAclAssociation	<span>✓ CREATE_COMPLETE</span>	-
2023-09-23 23:10:02 UTC+0300	PublicRoute	<span>✓ CREATE_COMPLETE</span>	-
2023-09-23 23:10:01 UTC+0300	PublicRoute	<span>ⓘ CREATE_IN_PROGRESS</span>	Resource creation Initiated
2023-09-23 23:10:00 UTC+0300	PublicRoute	<span>ⓘ CREATE_IN_PROGRESS</span>	-
2023-09-22 22:00:50 UTC+0200	GatewayToInternet	<span>✓ CREATE_COMPLETE</span>	-

Auto Scaling groups (2) Info

C Launch configurations Launch templates Actions Create Auto Scaling group

Search your Auto Scaling groups < 1 > ⚙️

<input type="checkbox"/>	Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availability Zones
<input type="checkbox"/>	DevelopmentAutoScalingGroup	development_template   Version 1	1	-	1	0	1	us-east-1a, us-east-1b, us-east-1c
<input type="checkbox"/>	ProductionAutoscalingGroup	production_template   Version 1	1	-	1	0	1	us-east-1a, us-east-1b, us-east-1c



Sole Home EC2 IAM RDS DynamoDB ElastiCache VPC CloudFormation S3 Elastic Kubernetes Service EFS Route 53 Elastic Beanstalk CloudWatch Lambda API Gateway CloudFront Amazon EventBridge Cloud9 Sim

New EC2 Experience Tell us what you think X Instances (1/2) Info Find instance by attribute or tag (case-sensitive)

Dashboard Global View its Instances Instances Instance Types Search Templates Requests Savings Plans Reserved Instances Dedicated Hosts Capacity Reservations Catalog Block Store Images Checkshots Cycle Manager Work & Security Identity Groups Static IPs IMDSv2 Optional

**Production-Instance**

**Development-Instance**

Cancel Save

Details Security Networking Storage Status checks Monitoring Tags

Instance summary Info

Value	Description
Instance ID	i-03b9db51c46946747
IPv6 address	-
Hostname type	IP name: ip-10-1-2-157.ec2.internal
Answer private resource DNS name	-
Auto-assigned IP address	-
IAM Role	-
IMDSv2	Optional
Public IPv4 address	-
Private IP DNS name (IPv4 only)	ip-10-1-2-157.ec2.internal
Instance type	t2.micro
VPC ID	vpc-0843796993f43eefaa
Subnet ID	subnet-09bf7e8b6ec3dd3ce
Private IPv4 addresses	10.1.2.157
Public IPv4 DNS	-
Elastic IP addresses	-
AWS Compute Optimizer finding	Opt-in to AWS Compute Optimizer for recommendations.   Learn more
Auto Scaling Group name	DevelopmentAutoScalingGroup

Connect Instance state Actions Launch instances

The screenshot shows the AWS CloudFormation and VPC consoles side-by-side.

**CloudFormation Console:**

- Stacks (1):** A single stack named "ASG-Changing" is listed, showing a status of **CREATE\_COMPLETE**.
- Resources (25):** A table listing 25 resources, all in **CREATE\_COMPLETE** status. These include various EC2 Route Tables, Subnets, and Network ACLs.

**VPC Console:**

- Your VPCs (1/4):** A list of VPCs. One VPC, "myVPC2" (VPC ID: `vpc-0c9abf35a3d9a1b4a`), is highlighted with a red box and has an orange arrow pointing to it from the left sidebar.
- Details for VPC `vpc-0843796993f43eefa`:** Shows basic details like VPC ID, State (Available), and CIDR ranges (10.1.0.0/16).

**Left Sidebar:**

- Console Home
- EC2
- IAM
- RDS
- DynamoDB
- ElastiCache
- VPC
- CloudFormation

**Filter by VPC:**

- Select a VPC

**Virtual private cloud:**

- Your VPCs **New** (highlighted with a red box)
- Subnets
- Route tables
- Internet gateways
- Egress-only internet gateways
- Carrier gateways
- DHCP option sets
- Elastic IPs
- Managed prefix lists
- Endpoints
- Endpoint services
- NAT gateways
- Peering connections

# Creating IAM Role for Lambda Function

**Identity and Access Management (IAM)**

Search IAM

Dashboard

Access management

- User groups
- Users
- Roles**
- Policies
- Identity providers
- Account settings

Access reports

- Access analyzer
- Archive rules
- Analyzers
- Settings
- Credential report
- Organization activity
- Service control policies (SCPs)

Related consoles

- IAM Identity Center
- AWS Organizations

IAM > Roles

**Roles (36) Info**

An IAM role is an identity you can create that has specific permissions with credentials that are valid for short durations. Roles can be assumed by entities that you trust.

Search

<input type="checkbox"/>	Role name	▲ Trusted entities	Last activity
<input type="checkbox"/>	<a href="#">AWSCloud9SSMAccessRole</a>	AWS Service: ec2, <a href="#">and 1 more...</a>	13 days ago
<input type="checkbox"/>	<a href="#">AWSDataLifecycleManagerDefaultRole</a>	AWS Service: dlm	-
<input type="checkbox"/>	<a href="#">AWSServiceRoleForAmazonElasticFileSystem</a>	AWS Service: elasticfilesystem (Service-Linked)	30 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForAPIGateway</a>	AWS Service: ops.apigateway (Service-Linked)	-
<input type="checkbox"/>	<a href="#">AWSServiceRoleForApplicationAutoScaling_DynamoDBTable</a>	AWS Service: dynamodb.application	4 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForAutoScaling</a>	AWS Service: autoscaling (Service-Linked)	20 minutes ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForAWSCloud9</a>	AWS Service: cloud9 (Service-Linked)	13 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForBackup</a>	AWS Service: backup (Service-Linked)	14 hours ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForCloudWatchEvents</a>	AWS Service: events (Service-Linked)	11 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForConfig</a>	AWS Service: config (Service-Linked)	8 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForElastiCache</a>	AWS Service: elasticache (Service-Linked)	32 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForElasticLoadBalancing</a>	AWS Service: elasticloadbalancing (Service-Linked)	4 days ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForGlobalAccelerator</a>	AWS Service: globalaccelerator (Service-Linked)	-
<input type="checkbox"/>	<a href="#">AWSServiceRoleForRDS</a>	AWS Service: rds (Service-Linked Role)	1 hour ago
<input type="checkbox"/>	<a href="#">AWSServiceRoleForSupport</a>	AWS Service: support (Service-Linked)	-

**Create role**

1 2 > 

Step 1

Select trusted entity

Step 2

Add permissions

Step 3

Name, review, and create

## Select trusted entity Info

### Trusted entity type

#### AWS service

Allow AWS services like EC2, Lambda, or others to perform actions in this account.

#### AWS account

Allow entities in other AWS accounts belonging to you or a 3rd party to perform actions in this account.

#### Web identity

Allows users federated by the specified external web identity provider to assume this role to perform actions in this account.

#### SAML 2.0 federation

Allow users federated with SAML 2.0 from a corporate directory to perform actions in this account.

#### Custom trust policy

Create a custom trust policy to enable others to perform actions in this account.

### Use case

Allow an AWS service like EC2, Lambda, or others to perform actions in this account.

#### Service or use case

Lambda

Choose a use case for the specified service.

#### Use case

##### Lambda

Allow Lambda to call AWS services on your behalf.

Cancel

Next



Step 1

[Select trusted entity](#)

Step 2

[Add permissions](#)

Step 3

[Name, review, and create](#)

## Name, review, and create

### Role details

#### Role name

Enter a meaningful name to identify this role.

Maximum 64 characters. Use alphanumeric and '+=@\_-.' characters.

#### Description

Add a short explanation for this role.

Maximum 1000 characters. Use alphanumeric and '+=@\_-.' characters.

### Step 1: Select trusted entities

[Edit](#)

#### Trust policy

```
1  {
2      "Version": "2012-10-17",
3      "Statement": [
4          {
5              "Effect": "Allow",
6              "Action": [
7                  "sts:AssumeRole"
8              ],
9              "Principal": {
10                  "Service": [
11                      "lambda.amazonaws.com"
12                  ]
13              }
14          }
15      ]
16 }
```

## Step 2: Add permissions

[Edit](#)

### Permissions policy summary

Policy name	Type	Attached as
<a href="#">AmazonEC2FullAccess</a>	AWS managed	Permissions policy
<a href="#">AutoScalingFullAccess</a>	AWS managed	Permissions policy
<a href="#">CloudWatchFullAccess</a>	AWS managed	Permissions policy

## Step 3: Add tags

### Add tags - optional Info

Tags are key-value pairs that you can add to AWS resources to help identify, organize, or search for resources.

No tags associated with the resource.

[Add new tag](#)

You can add up to 50 more tags.

[Cancel](#)[Previous](#)[Create role](#)

# Creating Lambda Function

AWS Lambda X[Dashboard](#)[Applications](#)[\*\*Functions\*\*](#)[▼ Additional resources](#)[Code signing configurations](#)[Layers](#)[Replicas](#)[▼ Related AWS resources](#)[Step Functions state machines](#)Create function [Info](#)AWS Serverless Application Repository applications have moved to [Create application](#). Author from scratch

Start with a simple Hello World example.

 Use a blueprint

Build a Lambda application from sample code and configuration presets for common use cases.

 Container image

Select a container image to deploy for your function.

## Basic information

## Function name

Enter a name that describes the purpose of your function.

Use only letters, numbers, hyphens, or underscores with no spaces.

Runtime [Info](#)

Choose the language to use to write your function. Note that the console code editor supports only Node.js, Python, and Ruby.

Architecture [Info](#)

Choose the instruction set architecture you want for your function code.

 x86\_64 arm64Permissions [Info](#)

By default, Lambda will create an execution role with permissions to upload logs to Amazon CloudWatch Logs. You can customize this default role later when adding triggers.

[▼ Change default execution role](#)

## Execution role

Choose a role that defines the permissions of your function. To create a custom role, go to the [IAM console](#).

- Create a new role with basic Lambda permissions
- Use an existing role
- Create a new role from AWS policy templates

## Existing role

Choose an existing role that you've created to be used with this Lambda function. The role must have permission to upload logs to Amazon CloudWatch Logs.

[► Advanced settings](#)[Cancel](#)[Create function](#)



## asg-change-lambda\_function

Throttle

Copy ARN

Actions ▾

### Function overview Info



+ Add trigger

+ Add destination

#### Description

Last modified  
1 minute ago

#### Function ARN

arn:aws:lambda:us-east-1:835642848432:function:asg-change-lambda\_function

#### Function URL Info

Code Test Monitor Configuration Aliases Versions

### Code source Info

Upload from ▾

File Edit Find View Go Tools Window

Test

Deploy

Changes not deployed



Go to Anything (Ctrl-P)

lambda\_function

Environment Var



Environment

asg-change-lambda  
lambda\_function.py

lambda\_function

```
1 # importing modules
2 import logging
3 import boto3
4 import json
5
6 # Creating an object
7 logger = logging.getLogger()
8
9 # Setting the threshold of logger to INFO
10 logger.setLevel(logging.INFO)
11
12 # ASG boto3 client creation
13 asg_client = boto3.client("autoscaling")
14
15 original_desired_capacity = "1"
16
17
18 def lambda_handler(event, context):
19     # Parsing incoming event data.
20     autoscaling_group_name = event["detail"]["AutoScalingGroupName"]
21     event_description = event["detail-type"]
```

Code source [Info](#)

File Edit Find View Go Tools Window Test Deploy Changes not deployed Upload from ▾

Environment Go to Anything (Ctrl-P) lambda\_function Environment Vari +

asg-change-lambda λ lambda\_function.py

```
1 # importing modules
2 import logging
3 import boto3
4 import json
5
6 # Creating an object
7 logger = logging.getLogger()
8
9 # Setting the threshold of logger to INFO
10 logger.setLevel(logging.INFO)
11
12 # ASG boto3 client creation
13 asg_client = boto3.client("autoscaling")
14
15 original_desired_capacity = "1"
16
17
18 def lambda_handler(event, context):
19     # Parsing incoming event data.
20     autoscaling_group_name = event["detail"]["AutoScalingGroupName"]
21     event_description = event["detail-type"]
22
23     # logging the event name and ASG name
24     logger.info(
25         f"We have just received notice that the Autoscaling Group '{autoscaling_group_name}' has just received an {event_description} event."
26     )
27
28     # Getting ASG details
29     asg_details = asg_client.describe_auto_scaling_groups(
30         AutoScalingGroupNames=[
31             autoscaling_group_name,
32         ],
33     )
34     asg_environment_tags = asg_details["AutoScalingGroups"][0]["Tags"]
35     new_min_size = asg_details["AutoScalingGroups"][0]["MinSize"]
36     new_max_size = asg_details["AutoScalingGroups"][0]["MaxSize"]
37     new_desired_size = asg_details["AutoScalingGroups"][0]["DesiredCapacity"]
```

73:18 Python Spaces: 4

Code properties [Info](#)



# Creating EventBridge for trigger of the Lambda Function

**Important Message**

If you have existing cross account event bus targets that do not have an IAM role configured, we recommend adding IAM roles to grant users access to resources in another account and set organization boundaries using Service Control Policies (SCPs) to determine who can send and receive events from accounts in your organization. You can attach IAM roles using EventBridge [PutTarget](#) calls. To learn more about permissions for cross account event bus targets, please refer to our [documentation](#).

Developer resources

Learn

Sandbox

Quick starts

Buses

Event buses

**Rules**

Global endpoints

Archives

Replays

Pipes

Pipes **New**

Scheduler

Schedules

Schedule groups

Integration

Partner event sources

API destinations

Schema registry

Schemas

[Amazon EventBridge](#) > Rules

## Rules

A rule watches for specific types of events. When a matching event occurs, the event is routed to the targets associated with the rule. A rule can be associated with one or more targets.

### Select event bus

#### Event bus

Select or enter event bus name

default

**Rules (0)** Find rules

Delete

Enable

Edit

CloudFormation Template

Create rule



Name

Status

Type

ARN

No rules

No rules to display.

Create rule



Step 1

Define rule detail

Step 2

[Build event pattern](#)

Step 3

Select target(s)

Step 4 - optional

Configure tags

Step 5

Review and create

## Define rule detail Info

### Rule detail

Name

asg-change-eventbridge-rule

Maximum of 64 characters consisting of numbers, lower/upper case letters, .,-,\_.

Description - optional

asg-change-eventbridge-rule

Event bus Info

Select the event bus this rule applies to, either the default event bus or a custom or partner event bus.

default

Enable the rule on the selected event bus

Rule type Info

Rule with an event pattern

A rule that runs when an event matches the defined event pattern. EventBridge sends the event to the specified target.

Schedule

A rule that runs on a schedule

Cancel

Next



Step 1

[Define rule detail](#)

Step 2

**Build event pattern**

Step 3

Select target(s)

Step 4 - optional

Configure tags

Step 5

Review and create

## Build event pattern Info

### Event source

#### Event source

Select the event source from which events are sent.

AWS events or EventBridge partner events

Events sent from AWS services or EventBridge partners.

Other

Custom events or events sent from more than one source, e.g. events from AWS services and partners.

All events

All events sent to your account.

### Sample event - optional

You don't have to select or enter a sample event, but it's recommended so you can reference it when writing and testing the event pattern, or filter criteria.

You can reference the sample event when you write the event pattern, or use the sample event to test if it matches the event pattern. Find a sample event, enter your own, or edit a sample event below. [Learn more about the required fields in a sample event.](#) 

#### Sample event type

AWS events

EventBridge partner events

Enter my own

#### Sample events

Filter by event source and type or by keyword.

Select



### Creation method

Method

Use schema  
Use an Amazon EventBridge schema to generate the event pattern.

Use pattern form  
Use a template provided by EventBridge to create an event pattern.

Custom pattern (JSON editor)  
Write an event pattern in JSON.

### Event pattern Info

Event source  
AWS service or EventBridge partner as source

AWS services

AWS service

Event type  
The type of events as the source of the matching pattern

Instance Launch and Terminate

Event Type Specification 1

Any instance event

Specific instance event(s)

Specific instance event(s)

Event Type Specification 2

Any group name

Specific group name(s)

Specific group name(s)

Event pattern  
Event pattern, or filter to match the events

```
1 {
2   "source": ["aws.autoscaling"],
3   "detail-type": ["EC2 Instance Terminate Successful"],
4   "detail": {
5     "AutoScalingGroupName": ["ProductionAutScalingGroup"]
6   }
7 }
```

Cancel

```
1 {
2   "source": ["aws.autoscaling"],
3   "detail-type": ["EC2 Instance Terminate Successful"],
4   "detail": {
5     "AutoScalingGroupName": ["ProductionAutScalingGroup"]
6   }
7 }
```

Step 1

[Define rule detail](#)

Step 2

[Build event pattern](#)

Step 3

**Select target(s)**

Step 4 - optional

[Configure tags](#)

Step 5

[Review and create](#)

## Select target(s)



### Permissions

Note: When using the EventBridge console, EventBridge will automatically configure the proper permissions for the selected targets. If you're using the AWS CLI, SDK, or CloudFormation, you'll need to configure the proper permissions.

### Target 1

#### Target types

Select an EventBridge event bus, EventBridge API destination (SaaS partner), or another AWS service as a target.

- EventBridge event bus
- EventBridge API destination
- AWS service

Select a target | [Info](#)

Select target(s) to invoke when an event matches your event pattern or when schedule is triggered (limit of 5 targets per rule)

Lambda function

Function

asg-change-lambda\_function

▶ Configure version/alias

▶ Additional settings

Add another target

Cancel

Skip to Review and create

Previous

Next



Step 1

[Define rule detail](#)

Step 2

[Build event pattern](#)

Step 3

[Select target\(s\)](#)

Step 4 - optional

[Configure tags](#)

Step 5

Review and create

## Configure tags - *optional* [Info](#)

### 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.

No tags associated with the resource.

[Add new tag](#)

You can add 50 more tags.

[Cancel](#)

[Previous](#)

[Next](#)



Step 1

[Define rule detail](#)

Step 2

[Build event pattern](#)

Step 3

[Select target\(s\)](#)

Step 4 - optional

[Configure tags](#)

Step 5

[Review and create](#)

## Review and create

### Step 1: Define rule detail

Edit

#### Define rule detail

Rule name	Status	Event bus
asg-change-eventbridge-rule	<input checked="" type="checkbox"/> Enabled	default
Description	Rule type	
asg-change-eventbridge-rule	Standard rule	

### Step 2: Build event pattern

Edit

#### Event pattern Info

```
1 {
2   "source": ["aws.autoscaling"],
3   "detail-type": ["EC2 Instance Terminate Successful"],
4   "detail": {
5     "AutoScalingGroupName": ["ProductionAutoscalingGroup"]
6   }
7 }
```

 Copy

### Step 3: Select target(s)

Edit

#### Targets

Details	Target Name	Type	Arn	Input	Role
▼	asg-change-lambda_function	Lambda function	arn:aws:lambda:us-east-1:835642848432:function:asg-change-lambda_function	Matched event	-

Input to target: Matched event

Additional parameters: --

Dead-letter queue (DLQ): -

### Step 4: Configure tag(s)

Edit

#### Tags (0)

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
No tags associated with this resource.	

Cancel

Previous

Create rule



## Rules

A rule watches for specific types of events. When a matching event occurs, the event is routed to the targets associated with the rule. A rule can be associated with one or more targets.

### Select event bus

#### Event bus

Select or enter event bus name

default

### Rules (1/1)

[Delete](#) [Disable](#) [Edit](#) [CloudFormation Template](#) [Create rule](#)

Find rules

Any status

< 1 ... >

<input checked="" type="checkbox"/>	Name	Status	Type	ARN
<input checked="" type="checkbox"/>	asg-change-eventbridge-rule	Enabled	Standard	arn:aws:events:us-east-1:835642848432:rule/asg-change-eventbridge-rule

## asg-change-lambda\_function

### ▼ Function overview [Info](#)



EventBridge (CloudWatch Events)

trigger

+ Add trigger

+ Add destination

Description

Last modified

2 minutes ago

Function ARN

arn:aws:lambda:us-east-1:action

Function URL [Info](#)

Code

Test

Monitor

Configuration

Aliases

Versions

# Testing Project

EC2 > Auto Scaling groups

Auto Scaling groups (1/2) [Info](#)

Search your Auto Scaling groups

Launch configurations Launch templates Actions Create Auto Scaling group

< 1 > ⚙

Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availability Zones
<input type="checkbox"/> DevelopmentAutoScalingGroup	development_template   Version 1	1	-	1	0	1	us-east-1a, us-east-1b, us-east-1c
<input checked="" type="checkbox"/> ProductionAutoscalingGroup	production_template   Version 1	1	-	1	0	1	us-east-1a, us-east-1b, us-east-1c

Auto Scaling group: ProductionAutoscalingGroup

Details Activity Automatic scaling Instance management Monitoring Instance refresh

Group details

Auto Scaling group name: ProductionAutoscalingGroup Desired capacity: 1 Status: - Amazon Resource Name (ARN): arn:aws:autoscaling:us-east-1:835642848432:autoScalingGroup:f1b52222-721c-46d5-811a-60ba4b82b4b6:autoScalingGroupName/ProductionAutoscalingGroup

Date created: Sat Sep 23 2023 23:09:53 GMT+0300 (GMT+03:00) Minimum capacity: 0

Maximum capacity: 1

**Edit**

Group size

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: 0

Minimum capacity: 0

Maximum capacity: 1

Cancel Update

The screenshot shows the AWS Auto Scaling Groups console. At the top, there's a navigation bar with 'EC2 > Auto Scaling groups'. Below it is a search bar and a table listing two Auto Scaling groups: 'DevelopmentAutoScalingGroup' and 'ProductionAutoscalingGroup'. The 'ProductionAutoscalingGroup' row is selected, indicated by a red border. An orange arrow points from the 'Edit' button in the 'Group details' section to a modal dialog titled 'Group size'. Inside the dialog, another orange arrow points from the 'Update' button at the bottom right back to the 'Edit' button on the main page. The 'Group size' dialog contains fields for 'Desired capacity' (set to 0), 'Minimum capacity' (set to 0), and 'Maximum capacity' (set to 1). The 'Update' button is highlighted with a red box.

Auto Scaling groups (1/2) [Info](#)

Launch configurations

Launch templates

Actions

Create Auto Scaling group

 Search your Auto Scaling groups

&lt; 1 &gt;

Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availability Zones
<input checked="" type="checkbox"/> ProductionAutoscalingGroup	production_template   Version 1	1	Updating capacity...	0	0	1	us-east-1a, us-east-1b, us-east-1c
<input type="checkbox"/> DevelopmentAutoScalingGroup	development_template   Version 1	1	-	1	0	1	us-east-1a, us-east-1b, us-east-1c

## Auto Scaling group: ProductionAutoscalingGroup

 Instances (2) [Info](#) Find instance by attribute or tag (case-sensitive)

Connect

Instance state

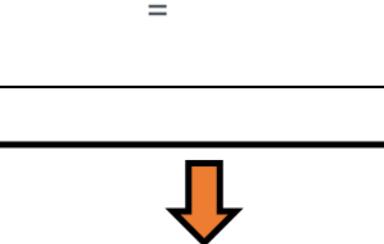
Actions

Launch instan

&lt; 1

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input type="checkbox"/> Production-Instance	i-00c3b53261965d894	Shutting-down	t2.micro	-	No alarms +	us-east-1b	-
<input type="checkbox"/> Development-Instance	i-03b9db51c46946747	Running	t2.micro	2/2 checks passed	No alarms +	us-east-1c	-

Select an instance



**CloudWatch** X

Favorites and recents ▶

Dashboards

Alarms △ 0 ○ 0 ⏪ 0

In alarm

All alarms

Billing

Logs

**Log groups**

Live Tail [New](#)

Logs Insights

Metrics

X-Ray traces

Events

Rules

Event Buses

Application monitoring

Insights

Customize

CloudWatch > Log groups

**Log groups (1/10)**

By default, we only load up to 10000 log groups.

Filter log groups or try prefix search  Exact match

< 1 > ⌂

Log group	Data protection	Sensitive data count	Retention	Metric filters	Contributor Insights	Sub
/aws/lambda/RandomCityGenerator	-	-	Never expire	-	-	-
<b>/aws/lambda/asg-change-lambda_function</b>	-	-	Never expire	-	-	-
/aws/lambda/lambda-2_function	-	-	Never expire	-	-	-
/aws/lambda/lambda-3_function	-	-	Never expire	-	-	-
/aws/lambda/lambda_APIGateway_func	-	-	Never expire	-	-	-
/aws/lambda/lambda_func_2	-	-	Never expire	-	-	-
/aws/lambda/lambda_func_3	-	-	Never expire	-	-	-
/aws/lambda/start_instance_lambda_func	-	-	Never expire	-	-	-
/aws/lambda/stop_instance_lambda_function	-	-	Never expire	-	-	-
/var/log/messages	-	-	Never expire	-	-	-

## /aws/lambda/asg-change-lambda\_function

[Actions ▾](#)[View in Logs Insights](#)[Start tailing](#)[Search log group](#)

## ▼ Log group details

ARN	Stored bytes	Contributor Insights rules
<a href="#">arn:aws:logs:us-east-1:835642848432:log-group:/aws/lambda/asg-change-lambda_function:*</a>	-	-
Creation time	Metric filters	KMS key ID
1 minute ago	0	-
Retention	Subscription filters	Data protection
Never expire	0	-
		Sensitive data count
		-

[Log streams](#)[Tags](#)[Metric filters](#)[Subscription filters](#)[Contributor Insights](#)[Data protection](#)

## Log streams (1/1)

 Filter log streams or try prefix search Exact match  Show expired [Info](#)< 1 >[Delete](#)[Create log stream](#)[Search all log streams](#) Log stream 2023/09/23/[\$LATEST]d92cb4414cf84db781d9e294bf15c2ee[Last event time](#)

2023-09-24 00:13:53 (UTC+03:00)



**CloudWatch** X

Favorites and recents ►

Dashboards

Alarms ▲ 0 ○ 0 ⊖ 0

In alarm

All alarms

Billing

Logs

**Log groups**

Live Tail New Logs Insights

Metrics

X-Ray traces

Events

Rules

Event Buses

Application monitoring

Insights

Settings

Getting Started

What's new New

Filter events

Clear 1m 30m 1h 12h Custom Local Display ▾

Timestamp	Message
No older events at this moment. <a href="#">Retry</a>	
▶ 2023-09-24T00:13:52.353+03:00	INIT_START Runtime Version: python:3.7.v33 Runtime Version ARN: arn:aws:lambda:us-east-1::runtime:c79020dc6d432f5c5813f57b9fb123709a3b308ebe16846e17a088344e835164
▶ 2023-09-24T00:13:52.682+03:00	[INFO] 2023-09-23T21:13:52.682Z Found credentials in environment variables.
▶ 2023-09-24T00:13:52.770+03:00	START RequestId: 063c426d-f162-4f56-86cd-f9ca9f097d32 Version: \$LATEST
▼ 2023-09-24T00:13:52.771+03:00	[INFO] 2023-09-23T21:13:52.771Z 063c426d-f162-4f56-86cd-f9ca9f097d32 We have just received notice that the Autoscaling Group `ProductionAutoscalingGroup` has just received an EC2 Inst...
	[INFO] 2023-09-23T21:13:52.771Z 063c426d-f162-4f56-86cd-f9ca9f097d32 We have just received notice that the Autoscaling Group `ProductionAutoscalingGroup` has just received an EC2 Instance Terminate Successful event. <a href="#">Copy</a>
▼ 2023-09-24T00:13:53.060+03:00	[INFO] 2023-09-23T21:13:53.019Z 063c426d-f162-4f56-86cd-f9ca9f097d32 Detected desired capacity was set to: 0
	[INFO] 2023-09-23T21:13:53.019Z 063c426d-f162-4f56-86cd-f9ca9f097d32 Detected desired capacity was set to: 0 <a href="#">Copy</a>
▶ 2023-09-24T00:13:53.060+03:00	[INFO] 2023-09-23T21:13:53.060Z 063c426d-f162-4f56-86cd-f9ca9f097d32 Detected min size was set to: 0
▼ 2023-09-24T00:13:53.060+03:00	[INFO] 2023-09-23T21:13:53.060Z 063c426d-f162-4f56-86cd-f9ca9f097d32 Detected max size was set to: 1
	[INFO] 2023-09-23T21:13:53.060Z 063c426d-f162-4f56-86cd-f9ca9f097d32 Detected max size was set to: 1 <a href="#">Copy</a>
▶ 2023-09-24T00:13:53.152+03:00	[INFO] 2023-09-23T21:13:53.152Z 063c426d-f162-4f56-86cd-f9ca9f097d32 Production autoscaling group detected. Checking updated capacity status.
▼ 2023-09-24T00:13:53.153+03:00	[INFO] 2023-09-23T21:13:53.152Z 063c426d-f162-4f56-86cd-f9ca9f097d32 Resetting ProductionAutoscalingGroup to baseline capacity of 1. <a href="#">Copy</a>
	[INFO] 2023-09-23T21:13:53.152Z 063c426d-f162-4f56-86cd-f9ca9f097d32 Resetting ProductionAutoscalingGroup to baseline capacity of 1. <a href="#">Copy</a>
▶ 2023-09-24T00:13:53.361+03:00	END RequestId: 063c426d-f162-4f56-86cd-f9ca9f097d32
▶ 2023-09-24T00:13:53.361+03:00	REPORT RequestId: 063c426d-f162-4f56-86cd-f9ca9f097d32 Duration: 591.09 ms Billed Duration: 592 ms Memory Size: 128 MB Max Memory Used: 72 MB Init Duration: 416.00 ms
No newer events at this moment. <a href="#">Auto retry paused.</a> <a href="#">Resume</a>	
Back to top	

Screenshot of the AWS Auto Scaling console showing two Auto Scaling groups: DevelopmentAutoScalingGroup and ProductionAutoscalingGroup.

The ProductionAutoscalingGroup is selected, indicated by a red box around its row. Its Desired capacity is set to 1. The table shows the following details:

Name	Launch template/configuration	Instances	Status	Desired capacity	Min	Max	Availability Zones
DevelopmentAutoScalingGroup	development_template   Version 1	1	-	1	0	1	us-east-1a, us-east-1b, us-east-1c
ProductionAutoscalingGroup	production_template   Version 1	1	-	1	0	1	us-east-1a, us-east-1b, us-east-1c

Below the table, a message indicates "1 Auto Scaling group selected".

A large black arrow points from the "Desired capacity" column of the ProductionAutoscalingGroup row down to the "Instances" section of the page.

The "Instances" section displays three instances:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ..
Production-Instance	i-00c3b53261965d894	Terminated	t2.micro	-	No alarms	us-east-1b	-	-
Development-Instance	i-03b9db51c46946747	Running	t2.micro	2/2 checks passed	No alarms	us-east-1c	-	-
-	i-03bac4af12d4afe56	Running	t2.micro	Initializing	No alarms	us-east-1a	-	-

The "Running" instance (i-03bac4af12d4afe56) is highlighted with a red box. A smaller red box highlights the "Running" status in the third row of the table above.

Below the instances, a message says "Select an instance".