

AWS Elastic Beanstalk – Getting Started and Exploring Deployment Options

To help you understand how AWS Elastic Beanstalk works, this tutorial walks you through creating, exploring, updating, and deleting an Elastic Beanstalk application. Additionally, you will be performing an immutable environment update.

There is no cost for using Elastic Beanstalk, but the AWS resources that it creates for this tutorial are live (and don't run in a sandbox). You incur the standard usage fees for these resources until you terminate them at the end of this tutorial. The total charges are typically less than a dollar.

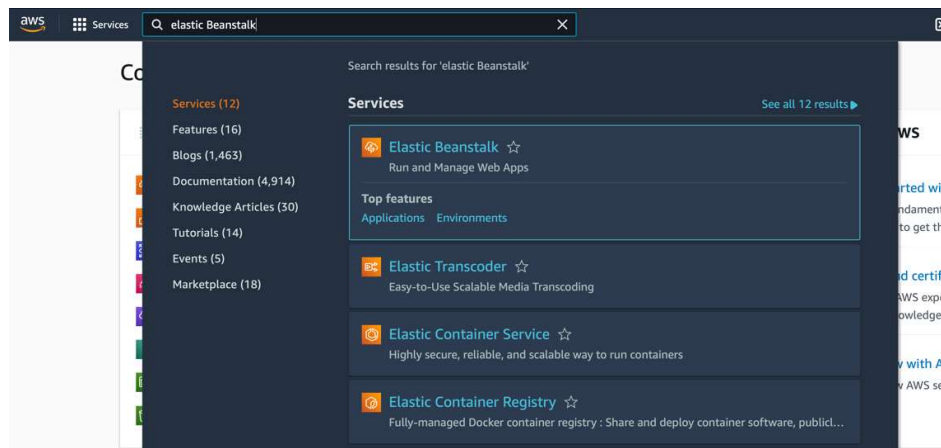
Following are the series of steps:

- Step 1: Create an application and an environment (test)
- Step 2: Explore your environment
- Step 3: Create a new environment (prod) within the same application
- Step 4: Configure your environment (prod)
- Step 5: Perform an immutable environment update
- Step 6: Clean up

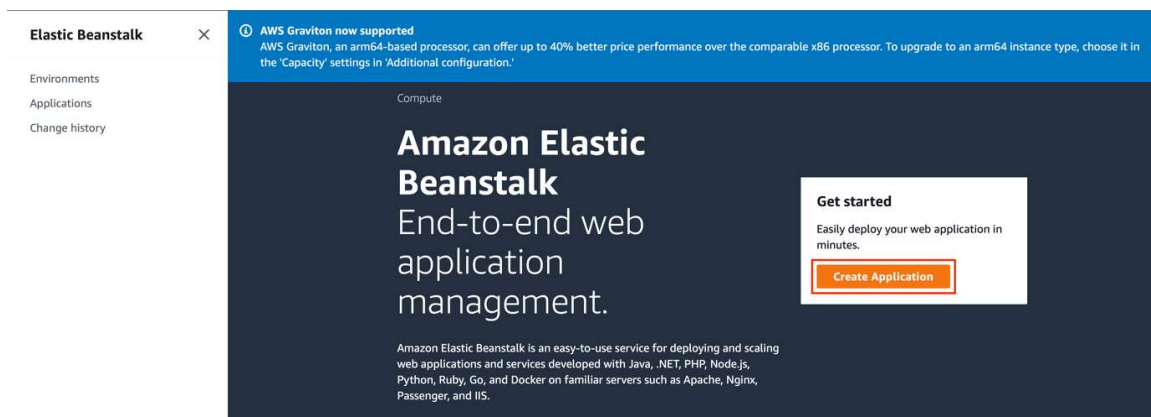
Step 1: Create an application and an environment (test)

In this step, you create a new application starting from a preexisting sample code. Elastic Beanstalk supports platforms for different programming languages, application servers, and Docker containers. You choose a platform when you create the application.

- After logging in to AWS management console, search for Elastic Beanstalk and click it to go to Elastic Beanstalk dashboard.



- Choose **Create Application**.



- Within **Application name**, type a name you want to allocate to this sample application.

Create a web app

Create a new application and environment with a sample application or your own code. By creating an environment, you allow Amazon Elastic Beanstalk to manage Amazon Web Services resources and permissions on your behalf. [Learn more](#)

Application information

Application name

Up to 100 Unicode characters, not including forward slash (/).

- Optionally, you may add application tags. Keep it blank for this hands-on.

Application tags

Apply up to 50 tags. You can use tags to group and filter your resources. A tag is a key-value pair. The key must be unique within the resource and is case-sensitive. [Learn more](#)

Key

Value

Remove tag

Add tag

50 remaining

- For **platform**, select Node.js.

A platform is a combination of an operating system, programming language runtime, web server, application server, and Elastic Beanstalk components. You design and target your web application to a platform. Elastic Beanstalk provides a variety of platforms on which you can build your applications.

Platform

Platform

| |
|------------------------|
| Node.js ▲ |
| .NET Core on Linux |
| .NET on Windows Server |
| Docker |
| GlassFish |
| Go |
| Java |
| Node.js |
| PHP |
| Python |
| Ruby |
| Tomcat |

Upload a source bundle from your computer or copy one from Amazon S3.

- The options like **Platform branch** and **Platform version** will be selected automatically. Keep these parameters to the default values without changing them.

Platform

Platform

Node.js ▼

Platform branch

Node.js 16 running on 64bit Amazon Linux 2 ▼

Platform version

5.5.1 (Recommended) ▼

- For **Application code**, choose **Sample application** and click **Create Application**.

Application code

☒
Sample application
Get started right away with sample code.

☐
Upload your code
Upload a source bundle from your computer or copy one from Amazon S3.

Cancel

Configure more options

Create application

- This will initiate the process to deploy your sample application.

Platform

Platform

Node.js

Platform branch

Node.js 16 running on 64bit Amazon Linux 2

Platform version

5.5.1 (recommended)

Creating application version getting-started-app-source...

Application code

☒
Sample application
Get started right away with sample code.

☐
Upload your code
Upload a source bundle from your computer or copy one from Amazon S3.

Cancel

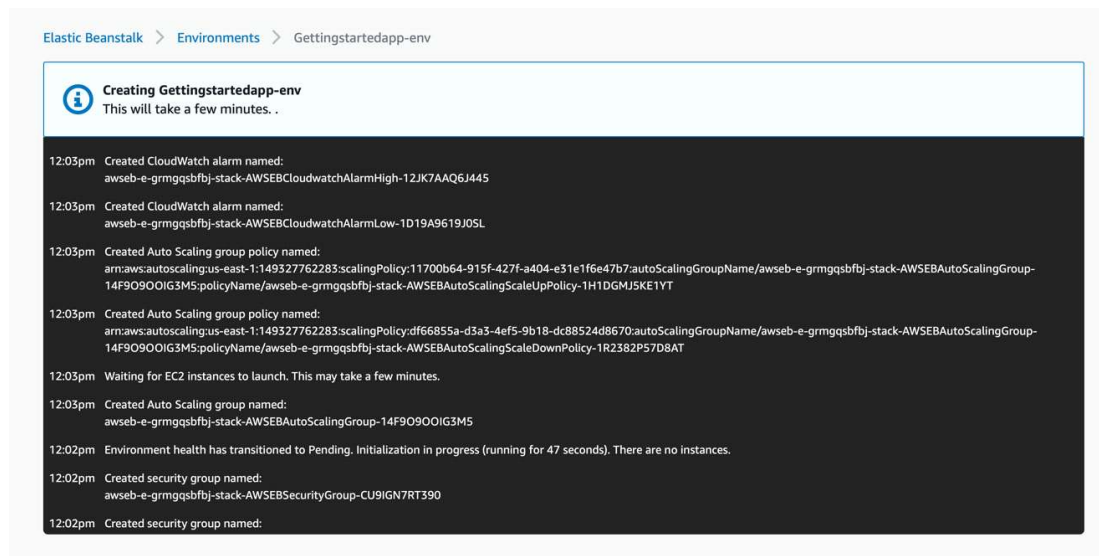
Configure more options

Create application

- To run the example application on AWS resources, Elastic Beanstalk takes the following actions. They take about five minutes to complete.
- Creates an Elastic Beanstalk application named getting-started-app.
- Launches an environment named GettingStartedApp-env with these AWS resources:
 - An Amazon Elastic Compute Cloud (Amazon EC2) instance (virtual machine)
 - An Amazon EC2 security group
 - An Auto Scaling Group
 - An Application Load Balancer

- An Amazon Simple Storage Service (Amazon S3) bucket
- Amazon CloudWatch alarms
- An AWS CloudFormation stack
- A domain name
- Creates a new application version named Sample Application. This is the default Elastic Beanstalk example application file.
- Deploys the code for the sample application to the GettingStartedApp-env environment.

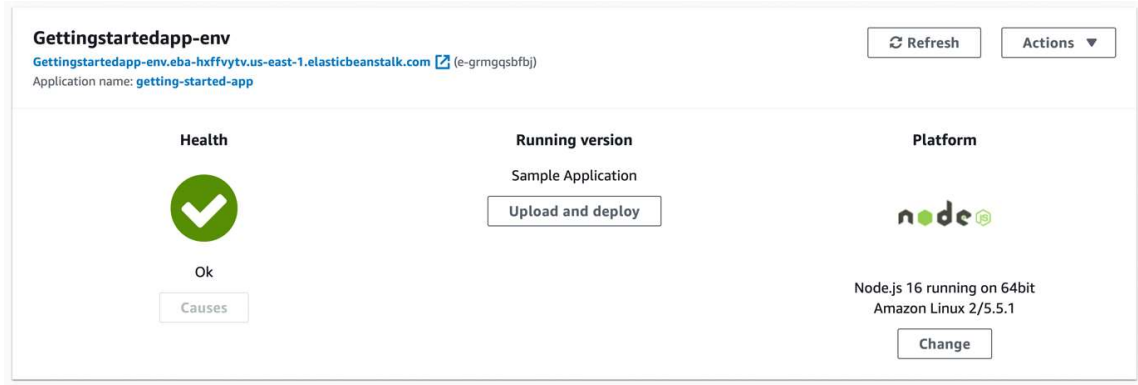
During the environment creation process, the console tracks progress and displays events.



- When all the resources are launched and the EC2 instances running the

application pass health checks, the environment's health changes to Ok.

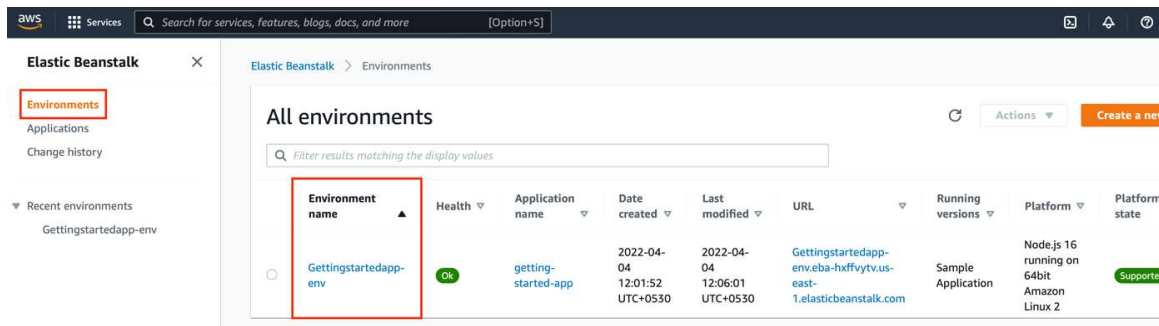
You can now use your web application's website.



Step 2: Explore your environment

To see an overview of your Elastic Beanstalk application's environment, use the environment page in the Elastic Beanstalk console.

- In the navigation pane, choose Environments, and then choose the name of your environment from the list.



The environment overview pane shows top level information about your environment. This includes its name, its URL, its current health status, the name of the currently deployed application version, and the platform version that the application is running on.

Below the overview pane you can see the five most recent environment events.

Elastic Beanstalk

Environments

Applications

Change history

▼ getting-started-app

Application versions

Saved configurations

▼ Gettingstartedapp-env

Go to environment

Configuration

Logs

Health

Monitoring

Alarms

Managed updates

Events

Tags

Recent environments

Gettingstartedapp-env

Elastic Beanstalk > Environments > Gettingstartedapp-env

Gettingstartedapp-env

[Gettingstartedapp-env.eba-hxffyvtv.us-east-1.elasticbeanstalk.com](#)
(e-grmqqbfbj)

Environment URL

Refresh

Application name: getting-started-app

Health

Ok

Causes

Running version

Sample Application

Upload and deploy

Platform

Node.js 16 running on 64bit Amazon Linux 2/5.5.1

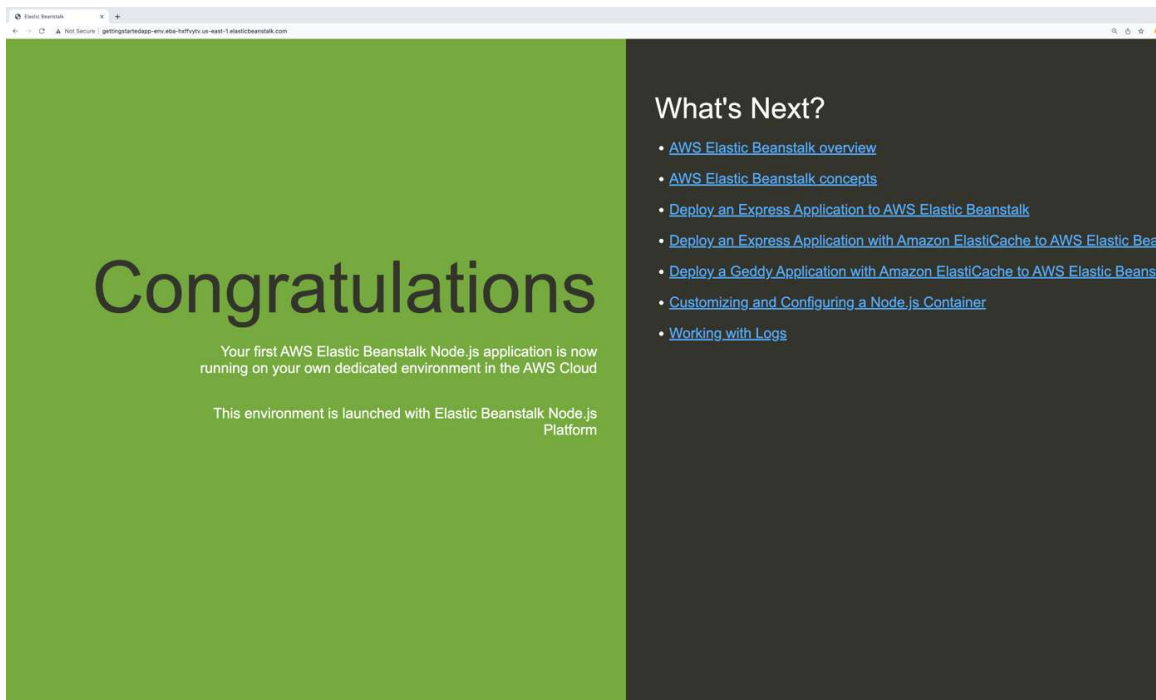
Change

Recent events

| Time | Type | Details |
|------------------------------|------|---|
| 2022-04-04 12:06:50 UTC+0530 | INFO | Environment health has transitioned from Pending to Ok. Initialization completed 11 seconds ago and took 4 minutes. |
| 2022-04-04 12:06:01 UTC+0530 | INFO | Successfully launched environment: Gettingstartedapp-env |
| 2022-04-04 12:06:00 UTC+0530 | INFO | Application available at Gettingstartedapp-env.eba-hxffyvtv.us-east-1.elasticbeanstalk.com. |
| 2022-04-04 12:05:50 UTC+0530 | INFO | Added instance [i-09ea61c4719cdaa47] to your environment. |
| 2022-04-04 12:05:46 UTC+0530 | INFO | Instance deployment completed successfully. |

- The environment's URL is located at the top of the overview, below the environment name. This is the URL of the web application that the environment is running.

Choose this URL to get to the sample application's Congratulations page.

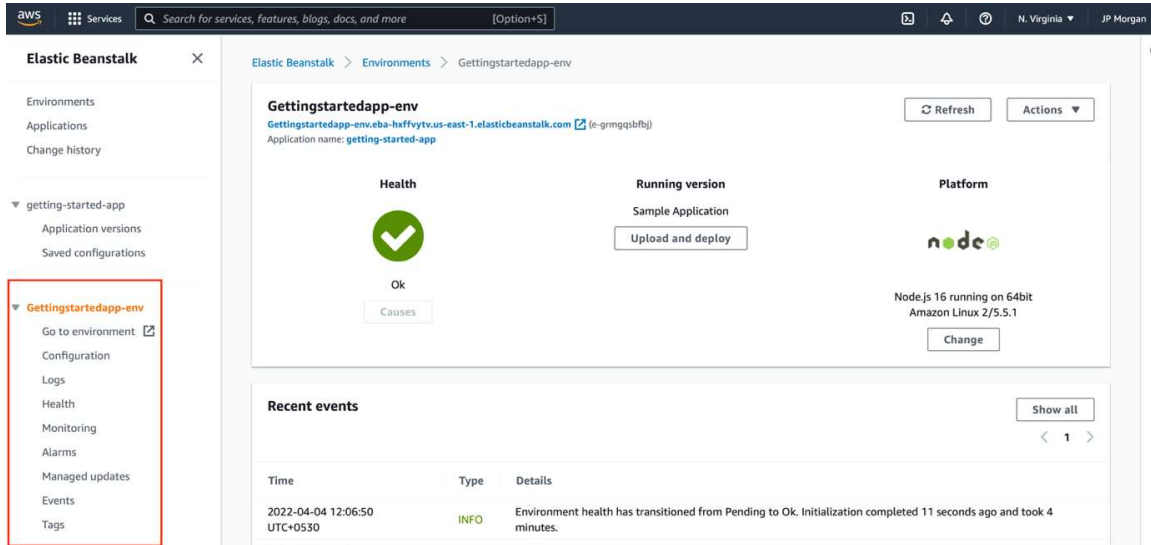


The navigation page on the left side of the console links to other pages that contain more detailed information about your environment and provide access to additional features:

- **Configuration** – Shows the resources provisioned for this environment, such as the Amazon Elastic Compute Cloud (Amazon EC2) instances that host your application. You can configure some of the provisioned resources on this page.
- **Health** – Shows the status of and detailed health information about the Amazon EC2 instances running your application.
- **Monitoring** – Shows statistics for the environment, such as average latency and CPU utilization. You can use this page to create alarms for the metrics

that you are monitoring.

- **Events** – Shows information or error messages from the Elastic Beanstalk service and from other services whose resources this environment uses.
- **Tags** – Shows environment tags and allows you to manage them. Tags are key-value pairs that are applied to your environment.



Step 3: Create a new environment (prod) within the same application

In this step, you will be creating a new environment intended for production use, and additionally explore and configure some advanced options.

- In the navigation pane, choose Applications, and then choose your application's name from the list.

The first screenshot shows the AWS Elastic Beanstalk console with the 'Gettingstartedapp-env' environment selected. The left sidebar shows 'Applications' highlighted. The main content area displays the environment's health as 'Ok', its running version as 'Sample Application', and its platform as 'Node.js 16 running on 64bit Amazon Linux 2/5.5.1'. A 'Causes' button is visible under the health status.

The second screenshot shows the 'All applications' overview page. The 'getting-started-app' application is highlighted with a red box. The table below lists the application details:

| Application name | Environments | Date created | Last modified | ARN |
|---------------------|-----------------------|------------------------------|------------------------------|--|
| getting-started-app | Gettingstartedapp-env | 2022-04-04 12:01:45 UTC+0530 | 2022-04-04 12:01:45 UTC+0530 | arn:aws:elasticbeanstalk:1:149327762283:application:starting-app |

- On the application overview page, choose **Create a new environment**.

The screenshot shows the 'Application 'getting-started-app' environments' page. The 'Create a new environment' button is highlighted with a red box. The table below lists the environment details:

| Environment name | Health | Date created | Last modified | URL | Running versions | Platform | Platform state |
|-----------------------|--------|------------------------------|------------------------------|---|--------------------|--|----------------|
| Gettingstartedapp-env | OK | 2022-04-04 12:01:52 UTC+0530 | 2022-04-04 12:06:01 UTC+0530 | Gettingstartedapp-env.eba-hxffyvtv.us-east-1.elasticbeanstalk.com | Sample Application | Node.js 16 running on 64bit Amazon Linux 2 | Support |

- Next, for environment tier, choose the **Web server environment** or **Worker environment** [tier](#). You can't change an environment's tier after creation.

Elastic Beanstalk ×

Environments
Applications
Change history

▼ getting-started-app
Application versions
Saved configurations

▼ Recent environments
Gettingstartedapp-env

Elastic Beanstalk > Applications > getting-started-app

Select environment tier

Amazon Elastic Beanstalk has two types of environment tiers to support different types of web applications. Web servers are standard applications that listen for and then process HTTP requests, typically over port 80. Workers are specialized applications that have a background processing task that listens for messages on an Amazon SQS queue. Worker applications post those messages to your application by using HTTP.

☒ **Web server environment**
Run a website, web application, or web API that serves HTTP requests.
[Learn more](#)

☐ **Worker environment**
Run a worker application that processes long-running workloads on demand or performs tasks on a schedule.
[Learn more](#)

Cancel **Select**

- Enter a name for the environment. The form provides a generated name. Add keyword *prod* at the end so that this environment can be easily identified as a production environment.

Environment information

Choose the name, subdomain, and description for your environment. These cannot be changed later.

Application name

getting-started-app

Environment name

Gettingstartedapp-env-prod

- Enter a unique domain name for your environment. The default name is the environment's name. You can enter a different domain name. Elastic Beanstalk uses this name to create a unique CNAME for the environment. To check whether the domain name you want is available, choose **Check**

Availability.

Application name

getting-started-app

Environment name

Gettingstartedapp-env-prod

Domain

myprodevn .us-east-1.elasticbeanstalk.com

Check availability

✓ myprodevn.us-east-1.elasticbeanstalk.com is available.

- Enter a description for this environment.

Environment name

Gettingstartedapp-env-prod

Domain

myprodevn .us-east-1.elasticbeanstalk.com

Check availability

✓ myprodevn.us-east-1.elasticbeanstalk.com is available.

Description

This is my production environment.

- For **platform**, select Node.js.

Platform

☒ **Managed platform**
 Platforms published and maintained by Amazon Elastic Beanstalk. [Learn more](#)

☐ **Custom platform**
 Platforms created and owned by you.

Platform

-- Choose a platform -- ▲

- .NET Core on Linux
- .NET on Windows Server
- Docker
- GlassFish
- Go
- Java
- Node.js
- PHP
- Python

Get started right away with sample code.

- The options like **Platform branch** and **Platform version** will be selected automatically. Keep these parameters to the default values without changing them.

Platform

Platform

Node.js ▼

Platform branch

Node.js 16 running on 64bit Amazon Linux 2 ▼

Platform version

5.5.1 (Recommended) ▼

- For **Application code**, choose **Sample application** and click **Configure more options**.

Application code

☒ **Sample application**
 Get started right away with sample code.

☐ **Existing version**
 Application versions that you have uploaded for getting-started-app.
 -- Choose a version -- ▼

☐ **Upload your code**
 Upload a source bundle from your computer or copy one from Amazon S3.

Cancel **Configure more options** Create environment

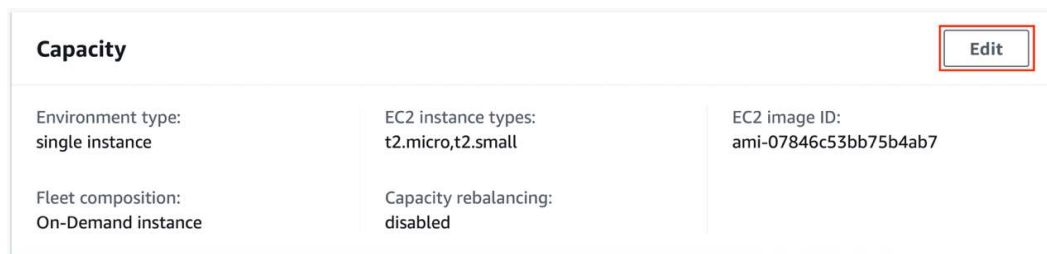
Step 4: Configure your environment (prod)

You can configure your environment to better suit your application. For example, if you have a compute-intensive application, you can change the type of Amazon Elastic Compute Cloud (Amazon EC2) instance that is running your application. To apply configuration changes, Elastic Beanstalk performs an environment update.

Some configuration changes are simple and happen quickly. Some changes require deleting and recreating AWS resources, which can take several minutes. When you change configuration settings, Elastic Beanstalk warns you about potential application downtime.

In this step of a configuration change, you edit your environment's capacity settings. You configure a load-balanced, scalable environment that has between two and four Amazon EC2 instances in its Auto Scaling group, and then you verify that the change occurred. Elastic Beanstalk creates two Amazon EC2 instances. Then, Elastic Beanstalk associates both instances with the environment's load balancer. As a result, your application's responsiveness is improved and its availability is increased.

- In the **Capacity** configuration category, choose **Edit**.



| Capacity | | | Edit |
|--|--|--|------|
| Environment type: single instance | EC2 instance types: t2.micro,t2.small | EC2 image ID: ami-07846c53bb75b4ab7 | |
| Fleet composition: On-Demand instance | Capacity rebalancing: disabled | | |

- In the **Auto Scaling group** section, change **Environment type** to **Load balanced**.

Auto scaling group

Environment type

Load balanced ▲

Single instance

Load balanced

Min 1

Max 1

- In the **Instances** row, change **Max** to **4**, and then change **Min** to **2**.

Auto scaling group

Environment type

Load balanced ▼

Instances

Min 2

Max 4

- Scroll down while accepting other parameters set to their default values and click **Save**.

5 Min

Upper threshold

6000000 Bytes

Lower threshold

2000000 Bytes

Cancel Save

- Once you land back to configuration page, you can easily review the changes made by you.

Capacity

Edit

| | | |
|---|---|--|
| Environment type: load balancing, auto scaling | Fleet composition: On-Demand instances | EC2 image ID: ami-07846c53bb75b4ab7 |
| Availability Zones: Any | EC2 instance types: t2.micro,t2.small | Instances: 2-4 |
| | Capacity rebalancing: disabled | |

- Scroll down and click **Create Environment**.

Tags

Edit

Tags:

none

Cancel

Previous

Create environment

- While your production environment is getting created the console tracks progress and displays events. This will take a few minutes.

Elastic Beanstalk > Environments > Gettingstartedapp-env-prod

?

Creating Gettingstartedapp-env-prod

This will take a few minutes. ..

1:10pm

Added instances [i-0162b08350a0eee14, i-0f22a4c2c7bb335c9] to your environment.

1:10pm

Environment health has transitioned from Pending to Ok. Initialization completed 25 seconds ago and took 3 minutes.

1:10pm

Successfully launched environment: Gettingstartedapp-env-prod

1:10pm

Application available at myprodenv.us-east-1.elasticbeanstalk.com.

1:09pm

Instance deployment completed successfully.

1:09pm

Instance deployment: You didn't specify a Node.js version in the 'package.json' file in your source bundle. The deployment didn't install a specific Node.js version.

1:09pm

Created Load Balancer listener named: am:aws:elasticloadbalancing:us-east-1:149327762283:listener/app/awseb-1VA3U3ZIG830K/e242d107c27ae352/7f90e6986109ded0

1:09pm

Created load balancer named: am:aws:elasticloadbalancing:us-east-1:149327762283:loadbalancer/app/awseb-AWSEB-1VA3U3ZIG830K/e242d107c27ae352

1:08pm

Created CloudWatch alarm named: awseb-e-hndaambgfp-stack-AWSEBCloudwatchAlarmLow-PPGCE7MHAUM4

1:08pm

Created CloudWatch alarm named: awseb-e-hndaambgfp-stack-AWSEBCloudwatchAlarmHigh-JWTNQME620D

1:08pm

Created Auto Scaling group policy named: am:aws:autoscaling:us-east-1:149327762283:scalingPolicy:191894e4-191d-44fe-ae2a-7303de47c881:autoScalingGroupName/awseb-e-hndaambgfp-stack-AWSEBAutoScalingGroup-1ROUJ77OUGT61:policyName/awseb-e-

- Finally, your production environment is created.

Elastic Beanstalk > Environments > Gettingstartedapp-env-prod

Gettingstartedapp-env-prod
 myprodenv-us-east-1.elasticbeanstalk.com (c-hndsaam@glp)
 Application name: [getting-started-app](#)

Health

 Ok
[Causes](#)

Running version
 Sample Application
[Upload and deploy](#)

Platform

 Node.js 16 running on 64bit
 Amazon Linux 2/5.5.1
[Change](#)

Recent events [Show all](#)

| Time | Type | Details |
|------------------------------|------|---|
| 2022-04-06 13:10:48 UTC+0530 | INFO | Environment health has transitioned from Pending to Ok. Initialization completed 25 seconds ago and took 3 minutes. |
| 2022-04-06 13:10:48 UTC+0530 | INFO | Added instances [i-0162b08350a0eee14, i-0f22a4c2c7bb335c9] to your environment. |
| 2022-04-06 13:10:28 UTC+0530 | INFO | Successfully launched environment: Gettingstartedapp-env-prod |
| 2022-04-06 13:10:26 UTC+0530 | INFO | Application available at myprodenv-us-east-1.elasticbeanstalk.com. |
| 2022-04-06 13:09:53 UTC+0530 | INFO | Instance deployment completed successfully. |

- Click **Environments** to navigate back to environments' web page.

Elastic Beanstalk > **Environments** > Gettingstartedapp-env-prod

Gettingstartedapp-env-prod
 myprodenv-us-east-1.elasticbeanstalk.com (c-hndsaam@glp)
 Application name: [getting-started-app](#)

Health

 Ok
[Causes](#)

Running version
 Sample Application
[Upload and deploy](#)

Platform

 Node.js 16 running on 64bit
 Amazon Linux 2/5.5.1
[Change](#)

- Now you can see two environments out of which one is the production one that you just configured and created.

Elastic Beanstalk > Environments

All environments

Filter results matching the display values

Actions Create a new environment

| Environment name | Health | Application name | Date created | Last modified | URL | Running versions | Platform |
|----------------------------|--------|---------------------|------------------------------|------------------------------|---|--------------------|--------------------------------------|
| Gettingstartedapp-env-prod | OK | getting-started-app | 2022-04-06 13:06:31 UTC+0530 | 2022-04-06 13:10:28 UTC+0530 | myprodev.us-east-1.elasticbeanstalk.com | Sample Application | Node.js running 64bit Amazon Linux 2 |
| Gettingstartedapp-env | OK | getting-started-app | 2022-04-04 12:01:52 UTC+0530 | 2022-04-04 12:06:01 UTC+0530 | Gettingstartedapp-env.eba-hxffyvtv.us-east-1.elasticbeanstalk.com | Sample Application | Node.js running 64bit Amazon Linux 2 |

Step 5: Perform an immutable environment update

Immutable environment updates are an alternative to [rolling updates](#). Immutable environment updates ensure that configuration changes that require replacing instances are applied efficiently and safely. If an immutable environment update fails, the rollback process requires only terminating an Auto Scaling group. A failed rolling update, on the other hand, requires performing an additional rolling update to roll back the changes.

To perform an immutable environment update, Elastic Beanstalk creates a second, temporary Auto Scaling group behind your environment's load balancer to contain the new instances. First, Elastic Beanstalk launches a single instance with the new configuration in the new group. This instance serves traffic alongside all of the instances in the original Auto Scaling group that are running the previous configuration.

When the first instance passes health checks, Elastic Beanstalk launches additional instances with the new configuration, matching the number of instances running in the original Auto Scaling group. When all the new instances pass health checks, Elastic Beanstalk transfers them to the original Auto Scaling group and terminates the temporary Auto Scaling group and old instances.

In this step, you will be pushing the immutable update to your production environment.

- Choose your production environment.

Elastic Beanstalk > Environments

All environments

Filter results matching the display values

| Environment name | Health | Application name | Date created | Last modified | URL | Running versions | Platform |
|----------------------------|--------|---------------------|------------------------------|------------------------------|---|--------------------|--------------------------------------|
| Gettingstartedapp-env-prod | Ok | getting-started-app | 2022-04-06 13:06:31 UTC+0530 | 2022-04-06 13:10:28 UTC+0530 | myprodenv.us-east-1.elasticbeanstalk.com | Sample Application | Node.js running 64bit Amazon Linux 2 |
| Gettingstartedapp-env | Ok | getting-started-app | 2022-04-04 12:01:52 UTC+0530 | 2022-04-04 12:06:01 UTC+0530 | Gettingstartedapp-env.eba-hxffyvtv.us-east-1.elasticbeanstalk.com | Sample Application | Node.js running 64bit Amazon Linux 2 |

- Click on the production environment URL to access the sample website.


Elastic Beanstalk > Environments > Gettingstartedapp-env-prod

Gettingstartedapp-env-prod

myprodenv.us-east-1.elasticbeanstalk.com (e-hndaambgfp)

Application name: getting-started-app

Health



Ok


Causes

Running version

Sample Application

Upload and deploy

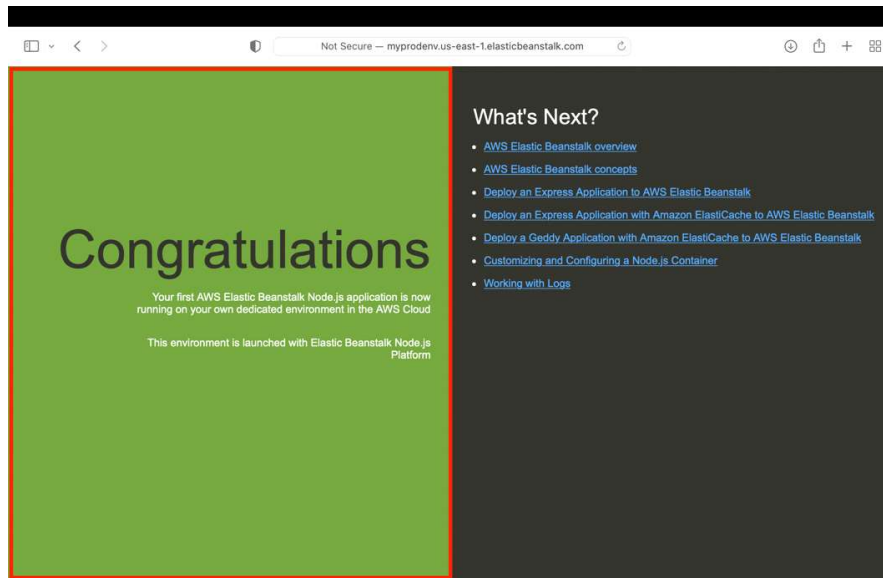
Platform



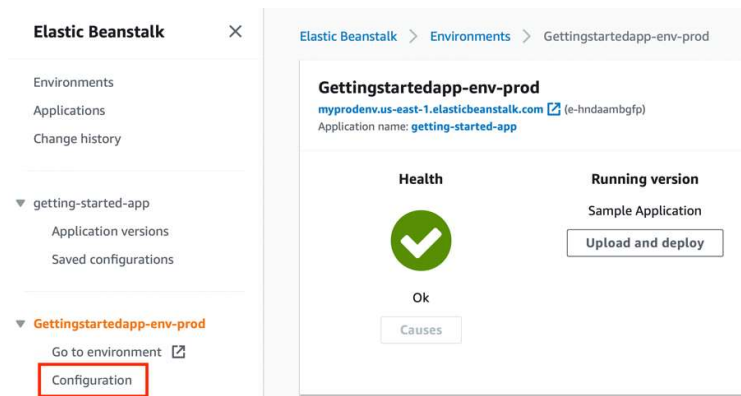
Node.js 16 running on 64bit Amazon Linux 2/5.5.1

Change

- You will be able to see the following sample website with green coloured column on the left. After pushing the immutable update this will be changed to blue.



- In the navigation pane, choose **Configuration** under your production environment.



- In the **Rolling updates and deployments** configuration category, choose **Edit**.

The screenshot shows the AWS Elastic Beanstalk console configuration page. The left sidebar contains navigation links: Environments, Applications, Change history, getting-started-app (expanded), Application versions, Saved configurations, Gettingstartedapp-env-prod (expanded), Go to environment, Configuration (highlighted), Logs, Health, Monitoring, Alarms, Managed updates, Events, and Tags. The main content area shows configuration details for 'getting-started-app' and 'Gettingstartedapp-env-prod'. The 'Rolling updates and deployments' section is highlighted with a red box, showing settings: Batch size: 100%, Command timeout: 600, Deployment policy: All at once, Healthy threshold: Ok, Ignore health check: disabled, Rolling updates: disabled. Other sections include Load balancer, Security, and Monitoring.

- In the **Configuration Updates** section, set **Rolling update** type to **Immutable**.

The screenshot shows the 'Modify rolling updates and deployments' form. The title is 'Modify rolling updates and deployments'. Under 'Application deployments', it says 'Choose how Amazon Elastic Beanstalk propagates source code changes and software configuration updates. [Learn more](#)'. The 'Deployment policy' dropdown menu is open, showing options: Immutable (selected), All at once, Rolling, Rolling with additional batch, Immutable, and Traffic splitting.

- As you have chosen Immutable deployment option, defining the batch size is irrelevant in this case. Skip this step and scroll down the page.

Batch size:

☒ Percentage

☐ Fixed

100 % of instances at a time

Traffic split

% to new application version

Traffic splitting evaluation time

minutes

- For this deployment scenario there is no requirement to change and apply **Configuration updates** settings. Skip this step and scroll down the page.

Configuration updates

Changes to virtual machine settings and VPC configuration trigger rolling updates to replace the instances in your environment without downtime. [Learn more](#)

Rolling update type

Disabled

Batch size

1

The maximum number of instances to replace in each phase of the update.

Minimum capacity

1

The minimum number of instances to keep in service at all times.

Pause time

hh:mm:ss

Pause the update for up to an hour between each batch.

- The **Deployment preferences** section contains options related to health checks.
- **Ignore health check** – Prevents a deployment from rolling back when a batch fails to become healthy within the **Command timeout**.
- **Healthy threshold** – Lowers the threshold at which an instance is considered healthy during rolling deployments, rolling updates, and immutable updates.
- **Command timeout** – The number of seconds to wait for an instance to become healthy before canceling the deployment or, if **Ignore health check** is set, to continue to the next batch.

Accept the default values here and click **Apply**.

Deployment preferences
Customize health check requirements and deployment timeouts.

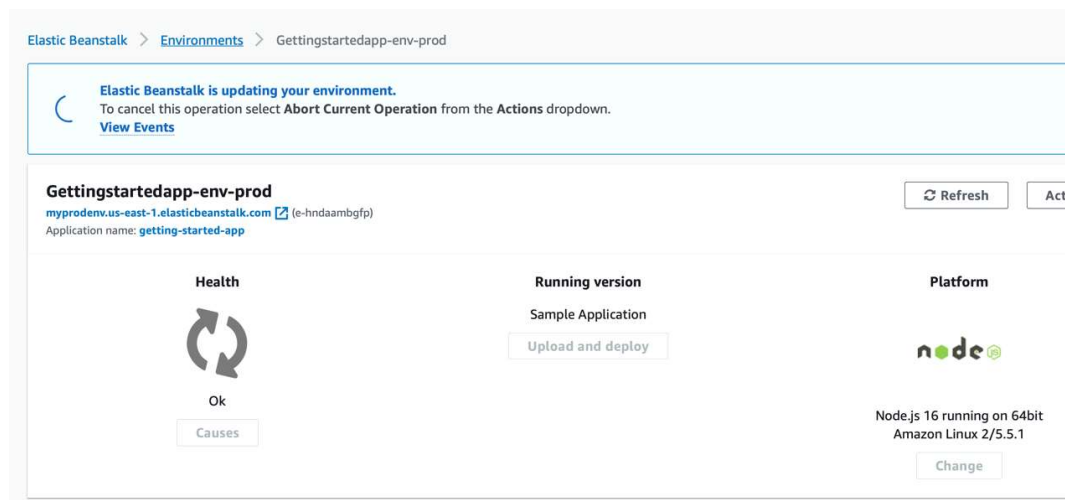
Ignore health check
False
Don't fail deployments due to health check failures.

Healthy threshold
Ok
Lower the threshold for an instance in a batch to pass health checks during an update or deployment.

Command timeout
600
Change the amount of time in seconds that Amazon Elastic Beanstalk allows an instance to complete deployment commands.

Cancel Continue **Apply**

- Thereafter, Elastic Beanstalk will start updating your environment.



- After the update is completed, you will be pushing the new version of your web application. You can deploy a new version at any time, as long as no other update operations are in progress on your environment.

Click the following link to download the application source bundle:

<https://tinyurl.com/4x5rfam8>

- On the environment overview page, choose **Upload and deploy**.


Elastic Beanstalk > Environments > Gettingstartedapp-env-prod

Gettingstartedapp-env-prod

[myprodenv.us-east-1.elasticbeanstalk.com](#) (e-hndaambgfp)
Application name: **getting-started-app**

Refresh Actions

Health



Ok


Causes

Running version

Sample Application

Upload and deploy

Platform



Node.js 16 running on 64bit
Amazon Linux 2/5.5.1

Change

- Choose **Choose file**, and then upload the [application source bundle](#) that you downloaded.

Upload and deploy

To deploy a previous version, go to the [Application Versions](#) page.

Upload application

Choose file

Version label

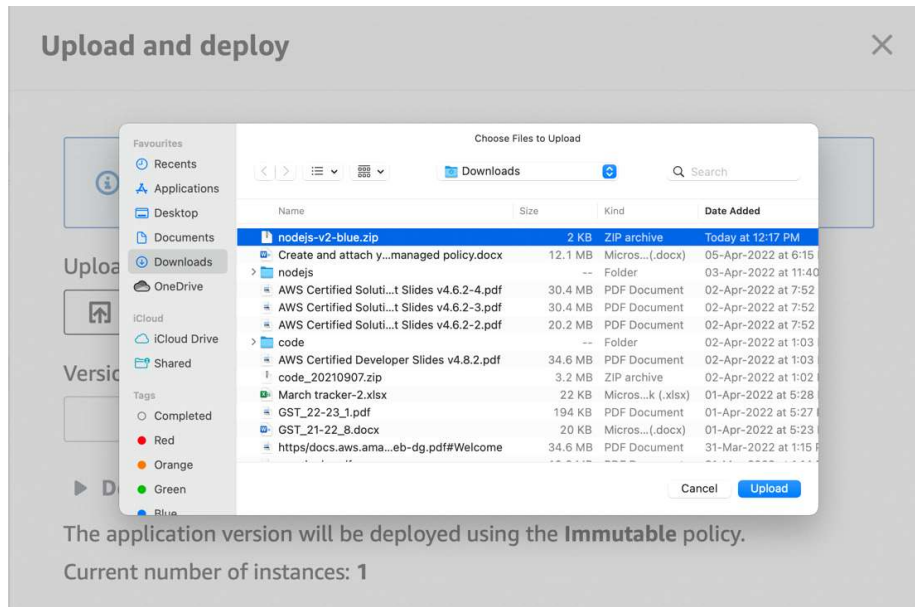
► Deployment Preferences

The application version will be deployed using the **Immutable** policy.

Current number of instances: **1**

Cancel Deploy

Ensure that the entire ZIP folder is selected for uploading.



- The console automatically fills in the **Version label** with a new unique label. If you type in your own version label, ensure that it's unique.

Upload and deploy

To deploy a previous version, go to the [Application Versions](#) page.

Upload application

Choose file

File name : **nodejs-v2-blue.zip**

Version label

Sample Application-1-BlueVersion

► **Deployment Preferences**

The application version will be deployed using the **Immutable** policy.


Current number of instances: 2

Cancel


Deploy


- Choose **Deploy**.

Upload and deploy ×

 To deploy a previous version, go to the [Application Versions](#) page.


Upload application

 Choose file

File name : **nodejs-v2-blue.zip** 

Version label

Sample Application-1-BlueVersion

 **Deployment Preferences**

The application version will be deployed using the **Immutable** policy.

Current number of instances: **2**

Cancel

Deploy

- While Elastic Beanstalk deploys your file to your Amazon EC2 instances, you can view the deployment status on the environment's overview.

Gettingstartedapp-env-prod

myprodenv.us-east-1.elasticbeanstalk.com (e-hndaambgfp)

Application name: getting-started-app

Refresh

Actions

Health

Ok

Causes

Running version

Sample Application

Upload and deploy

Platform

Node.js 16 running on 64bit Amazon Linux 2/5.5.1

Change

Recent events

Show all

< 1 >

| Time | Type | Details |
|------------------------------|------|--|
| 2022-04-07 13:49:51 UTC+0530 | INFO | Created temporary auto scaling group awseb-e-hndaambgfp-immutable-stack-AWSEBAutoScalingGroup-1W10BR6SUR6BY. |
| 2022-04-07 13:49:19 UTC+0530 | INFO | Immutable deployment policy enabled. Launching one instance with the new settings to verify health. |
| 2022-04-07 13:49:10 UTC+0530 | INFO | Environment update is starting. |
| 2022-04-07 13:44:57 UTC+0530 | INFO | Environment update completed successfully. |
| 2022-04-07 13:43:56 UTC+0530 | INFO | Environment update is starting. |

While the application version is updated, the Environment Health status is grey. When the deployment is complete, Elastic Beanstalk performs an application health check. When the application responds to the health check, it's considered healthy and the status returns to green. The environment overview shows the new Running Version—the name you provided as the Version label.

- Click on the environment URL to access the new version of your website.

Gettingstartedapp-env-prod

myprodenv.us-east-1.elasticbeanstalk.com (e-hndaambgfp)

Application name: getting-started-app

Refresh

Actions

Health

Ok

Causes

Running version

Sample Application

Upload and deploy

Platform

Node.js 16 running on 64bit Amazon Linux 2/5.5.1

Change

Recent events

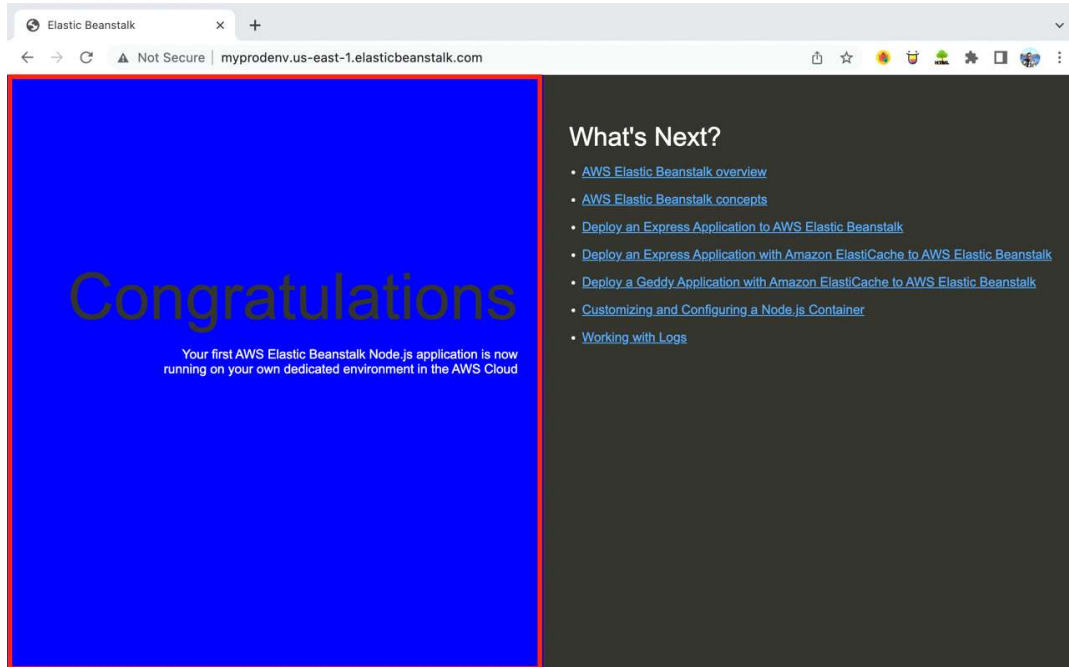
Show all

< 1 >

| Time | Type | Details |
|------------------------------|------|---|
| 2022-04-07 14:04:29 UTC+0530 | INFO | Environment health has transitioned from Info to Ok. Application update completed 46 seconds ago and took 14 minutes. |
| 2022-04-07 14:04:12 UTC+0530 | INFO | Environment update completed successfully. |
| 2022-04-07 14:04:12 UTC+0530 | INFO | New application version was deployed to running EC2 instances. |
| 2022-04-07 14:02:29 UTC+0530 | INFO | Removed instance [i-0f22a4c2c7bb335c9] from your environment. |
| 2022-04-07 13:59:29 UTC+0530 | INFO | Removed instance [i-0162b08350a0eee14] from your environment. |

- This is the expected outcome of the immutable update. The green colored

column of your web page is now changed to blue.



Step 6: Clean up

Congratulations! You have successfully deployed a sample application to the AWS Cloud, created a new environment while modifying its configuration, and uploaded a new version by pushing an immutable environment update.

To ensure that you're not charged for any services you aren't using, delete all application versions and terminate the environment. This also deletes the AWS resources that the environment created for you.

- In the navigation pane, choose **Applications**.

Elastic Beanstalk

Environments

Applications

Change history

▼ getting-started-app

Application versions

Saved configurations

▼ Gettingstartedapp-env-prod

Go to environment

Configuration

Elastic Beanstalk > Environments > Gettingstartedapp-env-prod

Gettingstartedapp-env-prod

myprodenv.us-east-1.elasticbeanstalk.com

Application name: getting-started-app

Refresh

Actions

Health

Ok

Causes

Running version

Sample Application-1-BlueVersion

Upload and deploy

Platform

Node.js 16 running on 64bit Amazon Linux 2/5.5.1

Change

- Select the application you've deployed, go to **Actions**, and click **Delete Application**.

Elastic Beanstalk

Environments

Applications

Change history

▼ Recent environments

Gettingstartedapp-env-prod

Gettingstartedapp-env

Elastic Beanstalk > Applications

All applications

Filter results matching the display values

Actions

Create a new application

Create environment

Delete application

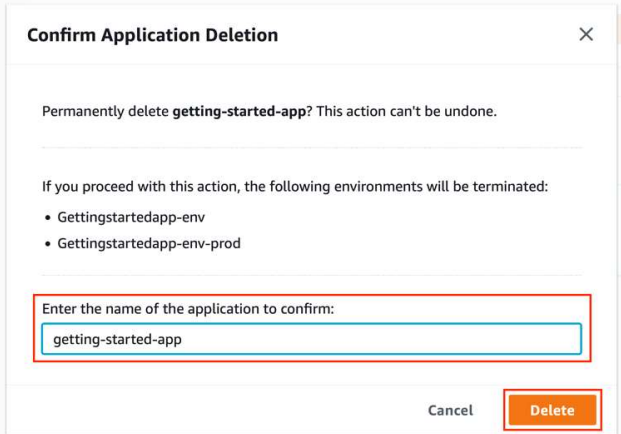
View application versions

View saved configurations

Restore terminated environment

| Application name | Environments | Date created |
|---------------------|---|------------------------------|
| getting-started-app | Gettingstartedapp-env Gettingstartedapp-env-prod | 2022-04-04 12:01:45 UTC+0530 |

- Once prompted, enter the name of the application, and click **Delete**.



A screenshot of a 'Confirm Application Deletion' dialog box. The title bar says 'Confirm Application Deletion' with a close button. The main text asks: 'Permanently delete **getting-started-app**? This action can't be undone.' Below this, it states: 'If you proceed with this action, the following environments will be terminated:' followed by a bulleted list: '• Gettingstartedapp-env' and '• Gettingstartedapp-env-prod'. A text input field is labeled 'Enter the name of the application to confirm:' and contains the text 'getting-started-app'. At the bottom right are 'Cancel' and 'Delete' buttons. A red rectangle highlights the input field and the 'Delete' button.

Confirm Application Deletion

Permanently delete **getting-started-app**? This action can't be undone.

If you proceed with this action, the following environments will be terminated:

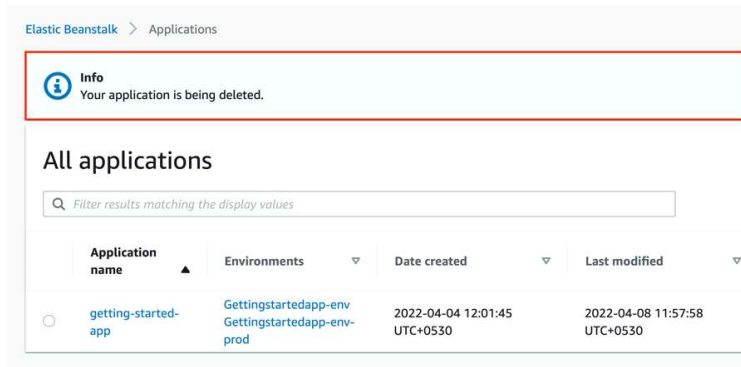
- Gettingstartedapp-env
- Gettingstartedapp-env-prod

Enter the name of the application to confirm:

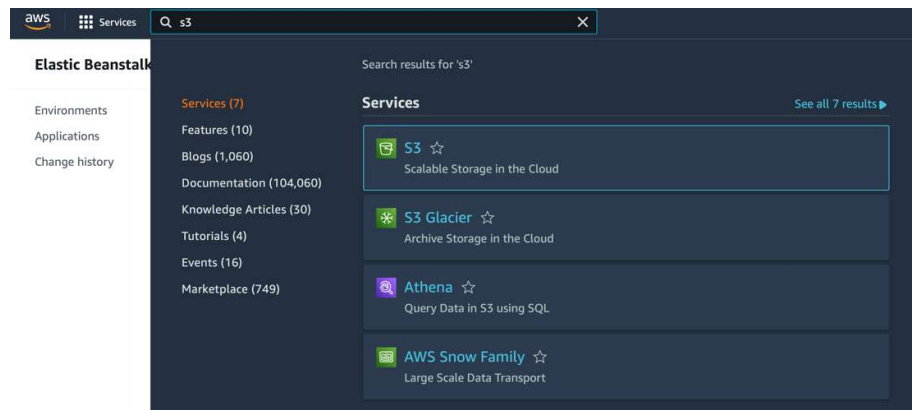
getting-started-app

Cancel Delete

- This will initiate the application deletion process. Consequently, both environments and resources like EC2 instances, Load Balancers and Auto Scaling groups etc. (excluding S3 bucket) will get terminated or removed permanently.



- To delete Amazon S3 bucket, enter keyword **S3** in search menu bar.



- Click **Buckets** to retrieve the list of Amazon S3 buckets.

Amazon S3 ×

Buckets

Access Points
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
Access analyzer for S3

Block Public Access settings for this account

▼ **Storage Lens**
Dashboards
AWS Organizations settings

Feature spotlight 🔔

► AWS Marketplace for S3

Account snapshot
Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

[View Storage Lens dashboard](#)

Buckets (15) [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

| Name | AWS Region | Access | Creation date |
|---|---|-------------------------------|---|
| aws-cloudtrail-logs-149327762283-3832e881 | Asia Pacific (Singapore) ap-southeast-1 | Bucket and objects not public | March 12, 2022, 22:38:58 (UTC+05:30) |
| aws-cloudtrail-logs-149327762283-8f8c2a3f | US East (N. Virginia) us-east-1 | Bucket and objects not public | March 24, 2022, 08:50:36 (UTC+05:30) |
| cf-templates-fh7vaans86ec-us-east-1 | US East (N. Virginia) us-east-1 | Objects can be public | March 1, 2022, 07:21:20 (UTC+05:30) |
| demo-s3-bucket-iampolicy-1 | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 5, 2022, 12:36:26 (UTC+05:30) |
| demo-s3-bucket-iampolicy-2 | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 5, 2022, 12:36:38 (UTC+05:30) |
| elasticbeanstalk-ap-south-1-149327762283 | Asia Pacific (Mumbai) ap-south-1 | Objects can be public | March 25, 2022, 08:06:08 (UTC+05:30) |
| elasticbeanstalk-us-east-1-149327762283 | US East (N. Virginia) us-east-1 | Objects can be public | March 31, 2022, 13:45:50 (UTC+05:30) |
| intel-demo-iam-first | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 6, 2022, 08:32:15 (UTC+05:30) |
| intel-demo-iam-second | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 6, 2022, 08:32:41 (UTC+05:30) |
| intel-demo-s3bucket-first | US East (N. Virginia) us-east-1 | Objects can be public | February 24, 2022, 07:44:18 (UTC+05:30) |
| intel-demo-s3bucket-second | US East (N. Virginia) us-east-1 | Bucket and objects not public | February 24, 2022, 07:44:42 (UTC+05:30) |

- Select the S3 bucket linked with your Elastic Beanstalk application and click **Empty** to remove all the environments' data.

Buckets (15) [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

[Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

| Name | AWS Region | Access | Creation date |
|---|---|-------------------------------|---|
| aws-cloudtrail-logs-149327762283-3832e881 | Asia Pacific (Singapore) ap-southeast-1 | Bucket and objects not public | March 12, 2022, 22:38:58 (UTC+05:30) |
| aws-cloudtrail-logs-149327762283-8f8c2a3f | US East (N. Virginia) us-east-1 | Bucket and objects not public | March 24, 2022, 08:50:36 (UTC+05:30) |
| cf-templates-fh7vaans86ec-us-east-1 | US East (N. Virginia) us-east-1 | Objects can be public | March 1, 2022, 07:21:20 (UTC+05:30) |
| demo-s3-bucket-iampolicy-1 | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 5, 2022, 12:36:26 (UTC+05:30) |
| demo-s3-bucket-iampolicy-2 | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 5, 2022, 12:36:38 (UTC+05:30) |
| elasticbeanstalk-ap-south-1-149327762283 | Asia Pacific (Mumbai) ap-south-1 | Objects can be public | March 25, 2022, 08:06:08 (UTC+05:30) |
| elasticbeanstalk-us-east-1-149327762283 | US East (N. Virginia) us-east-1 | Objects can be public | March 31, 2022, 13:45:50 (UTC+05:30) |
| intel-demo-iam-first | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 6, 2022, 08:32:15 (UTC+05:30) |
| intel-demo-iam-second | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 6, 2022, 08:32:41 (UTC+05:30) |
| intel-demo-s3bucket-first | US East (N. Virginia) us-east-1 | Objects can be public | February 24, 2022, 07:44:18 (UTC+05:30) |
| intel-demo-s3bucket-second | US East (N. Virginia) us-east-1 | Bucket and objects not public | February 24, 2022, 07:44:42 (UTC+05:30) |
| myawsbucket-intel | US East (N. Virginia) us-east-1 | Bucket and objects not public | March 24, 2022, 07:13:48 (UTC+05:30) |
| myawsbucket-intel-mumbai | Asia Pacific (Mumbai) ap-south-1 | Objects can be public | March 5, 2022, 20:43:23 (UTC+05:30) |

- To confirm deletion, type *permanently delete* in the text input field, and click **Empty**.

Empty bucket Info

- Emptying the bucket deletes all objects in the bucket and cannot be undone.
- Objects added to the bucket while the empty bucket action is in progress might be deleted.
- To prevent new objects from being added to this bucket while the empty bucket action is in progress, you might need to update your bucket policy to stop objects from being added to the bucket.

[Learn more](#)

If your bucket contains a large number of objects, creating a lifecycle rule to delete all objects in the bucket might be a more efficient way of emptying your bucket. [Learn more](#)

[Go to lifecycle rule configuration](#)

Permanently delete all objects in bucket "elasticbeanstalk-us-east-1-149327762283"?

To confirm deletion, type *permanently delete* in the text input field.

Cancel **Empty**

- Once the bucket is emptied, click **Exit**.

Successfully emptied bucket "elasticbeanstalk-ap-south-1-149327762283"
View details below. If you want to delete this bucket, use the delete bucket configuration.

Empty bucket: status

The details below are no longer available after you navigate away from this page.

Summary

| | | |
|---|----------------------|------------------|
| Source | Successfully deleted | Failed to delete |
| s3://elasticbeanstalk-ap-south-1-149327762283 | 1 object | 0 objects |

Failed to delete (0)

Find objects by name

| Name | Prefix | Version ID | Type | Last modified | Size | Error |
|----------------------------|--------|------------|------|---------------|------|-------|
| No failed object deletions | | | | | | |

Cancel **Exit**

- You will be landed back to the S3 buckets list. Click on the same S3 bucket we just emptied.

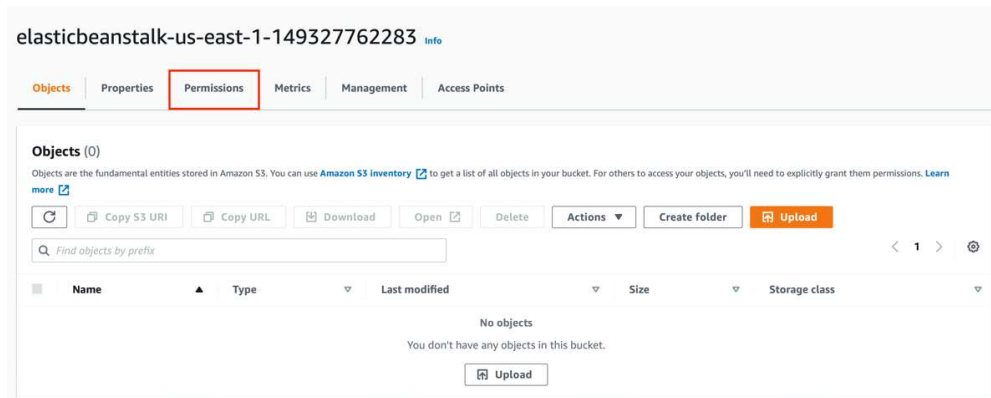
Buckets (15) Info

Buckets are containers for data stored in S3. [Learn more](#)

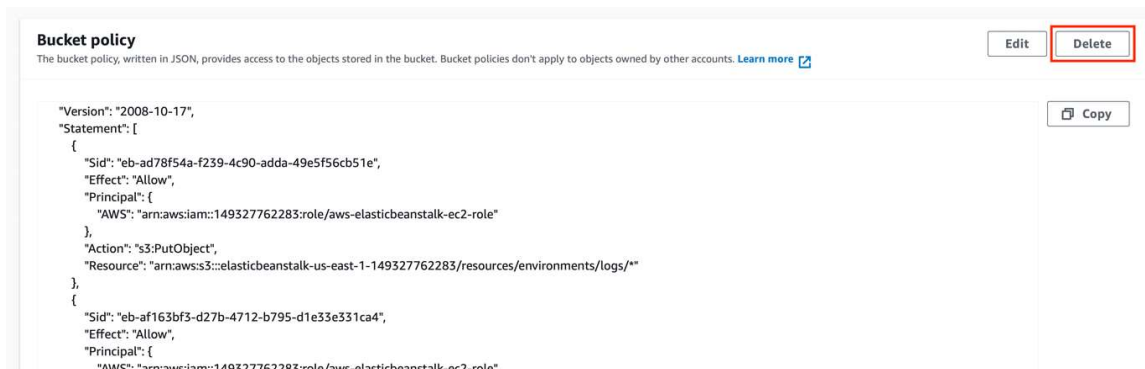
Find buckets by name

| Name | AWS Region | Access | Creation date |
|--|---|-------------------------------|---|
| aws-cloudtrail-logs-149327762283-3832e881 | Asia Pacific (Singapore) ap-southeast-1 | Bucket and objects not public | March 12, 2022, 22:38:58 (UTC+05:30) |
| aws-cloudtrail-logs-149327762283-8f8c2a3f | US East (N. Virginia) us-east-1 | Bucket and objects not public | March 24, 2022, 08:50:36 (UTC+05:30) |
| cf-templates-fh7vaans86ec-us-east-1 | US East (N. Virginia) us-east-1 | Objects can be public | March 1, 2022, 07:21:20 (UTC+05:30) |
| demo-s3-bucket-iam-policy-1 | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 5, 2022, 12:36:26 (UTC+05:30) |
| demo-s3-bucket-iam-policy-2 | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 5, 2022, 12:36:38 (UTC+05:30) |
| elasticbeanstalk-ap-south-1-149327762283 | Asia Pacific (Mumbai) ap-south-1 | Objects can be public | March 25, 2022, 08:06:08 (UTC+05:30) |
| elasticbeanstalk-us-east-1-149327762283 | US East (N. Virginia) us-east-1 | Objects can be public | March 31, 2022, 13:45:50 (UTC+05:30) |
| intel-demo-iam-first | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 6, 2022, 08:32:15 (UTC+05:30) |
| intel-demo-iam-second | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 6, 2022, 08:32:41 (UTC+05:30) |
| intel-demo-s3bucket-first | US East (N. Virginia) us-east-1 | Objects can be public | February 24, 2022, 07:44:18 (UTC+05:30) |
| intel-demo-s3bucket-second | US East (N. Virginia) us-east-1 | Bucket and objects not public | February 24, 2022, 07:44:42 (UTC+05:30) |
| myawsbucket-intel | US East (N. Virginia) us-east-1 | Bucket and objects not public | March 24, 2022, 07:13:48 (UTC+05:30) |
| myawsbucket-intel-mumbai | Asia Pacific (Mumbai) ap-south-1 | Objects can be public | March 5, 2022, 20:43:23 (UTC+05:30) |
| myawsbucket-intel-virginia | US East (N. Virginia) us-east-1 | Objects can be public | March 5, 2022, 20:37:41 (UTC+05:30) |
| vodafone-project-s3-bucket | US East (N. Virginia) us-east-1 | Objects can be public | February 23, 2022, 12:01:30 (UTC+05:30) |

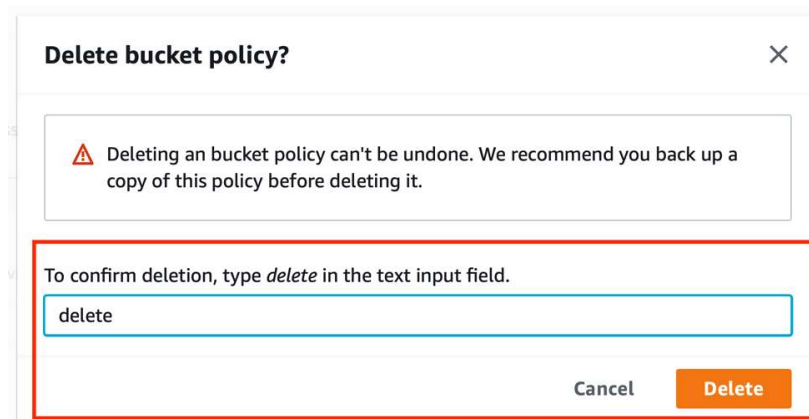
- Go to **Permissions**.



- Scroll down while looking for **Bucket policy** and click **Delete**.



- To confirm deletion, type *delete* in the text input field and click **Delete**. This will ensure that you can remove your S3 bucket without any restriction.



- Click **Buckets** to go back and access the buckets' list.

Amazon S3 > **Buckets** > elasticbeanstalk-us-east-1-149327762283

elasticbeanstalk-us-east-1-149327762283 [Info](#)


Objects | Properties | **Permissions** | Metrics | Management | Access Points

Permissions overview

Access
Objects can be public

Block public access (bucket settings)

Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to all your S3 buckets and objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

Block all public access
 Off
 ▶ Individual Block Public Access settings for this bucket

- Select the S3 bucket now and click **Delete**.

Buckets (15) [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

| Name | AWS Region | Access | Creation date |
|--|---|-------------------------------|---|
| aws-cloudtrail-logs-149327762283-3832e881 | Asia Pacific (Singapore) ap-southeast-1 | Bucket and objects not public | March 12, 2022, 22:38:58 (UTC+05:30) |
| aws-cloudtrail-logs-149327762283-8f8c2a3f | US East (N. Virginia) us-east-1 | Bucket and objects not public | March 24, 2022, 08:50:36 (UTC+05:30) |
| cf-templates-fh7vaans86ec-us-east-1 | US East (N. Virginia) us-east-1 | Objects can be public | March 1, 2022, 07:21:20 (UTC+05:30) |
| demo-s3-bucket-iampolicy-1 | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 5, 2022, 12:36:26 (UTC+05:30) |
| demo-s3-bucket-iampolicy-2 | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 5, 2022, 12:36:38 (UTC+05:30) |
| elasticbeanstalk-ap-south-1-149327762283 | Asia Pacific (Mumbai) ap-south-1 | Objects can be public | March 25, 2022, 08:06:08 (UTC+05:30) |
| elasticbeanstalk-us-east-1-149327762283 | US East (N. Virginia) us-east-1 | Objects can be public | March 31, 2022, 13:45:50 (UTC+05:30) |
| intel-demo-iam-first | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 6, 2022, 08:32:15 (UTC+05:30) |
| intel-demo-iam-second | US East (N. Virginia) us-east-1 | Bucket and objects not public | April 6, 2022, 08:32:41 (UTC+05:30) |
| intel-demo-s3bucket-first | US East (N. Virginia) us-east-1 | Objects can be public | February 24, 2022, 07:44:18 (UTC+05:30) |

- To confirm deletion, enter the name of the bucket in the text input field and click **Delete Bucket**.

Amazon S3 > Buckets > elasticbeanstalk-us-east-1-149327762283 > Delete bucket

Delete bucket [Info](#)

⚠

- Deleting a bucket cannot be undone.
- Bucket names are unique. If you delete a bucket, another AWS user can use the name.
- To delete a bucket created with AWS Elastic Beanstalk, you might first need to delete the bucket policy.

[Learn more](#)

Delete bucket "elasticbeanstalk-us-east-1-149327762283"?

To confirm deletion, enter the name of the bucket in the text input field.

Cancel **Delete bucket**

- Finally, the bucket will be deleted successfully.

Successfully deleted bucket "elasticbeanstalk-us-east-1-149327762283"

Amazon S3 > Buckets

Account snapshot

Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

[View Storage Lens dashboard](#)

Buckets (14) [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

[Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

| Name | AWS Region | Access | Creation date |
|---|---|---|--------------------------------------|
| aws-cloudtrail-logs-149327762283-3832e881 | Asia Pacific (Singapore) ap-southeast-1 | Bucket and objects not public | March 12, 2022, 22:38:58 (UTC+05:30) |
| aws-cloudtrail-logs-149327762283-8f8c2a3f | US East (N. Virginia) us-east-1 | Bucket and objects not public | March 24, 2022, 08:50:36 (UTC+05:30) |