

# ELASTIC BEANSTALK





With Elastic Beanstalk, you can quickly deploy and manage applications in the AWS cloud without worrying about the infrastructure that runs those applications. AWS Elastic Beanstalk reduces management complexity without restricting choice or control. You simply upload your application, and Elastic Beanstalk automatically handles the details of capacity provisioning, load balancing, scaling, and application health monitoring.

You can also perform most deployment tasks, such as changing the size of your fleet of Amazon EC2 instances or monitoring your application, directly from the Elastic Beanstalk web interface.

From the Console Home page, choose Elastic Beanstalk under Compute section.




## Amazon Web Services

### Compute


-  **EC2**  
Virtual Servers in the Cloud
-  **EC2 Container Service**  
Run and Manage Docker Containers
-  **Elastic Beanstalk**  
Run and Manage Web Apps
-  **Lambda**  
Run Code in Response to Events

### Storage & Content Delivery

### Developer Tools

-  **CodeCommit**  
Store Code in Private Git Repositories
-  **CodeDeploy**  
Automate Code Deployments
-  **CodePipeline**  
Release Software using Continuous Delivery


### Management Tools

-  **CloudWatch**  
Monitor Resources and Applications


### Internet of Things

-  **AWS IoT**  
Connect Devices to the Cloud

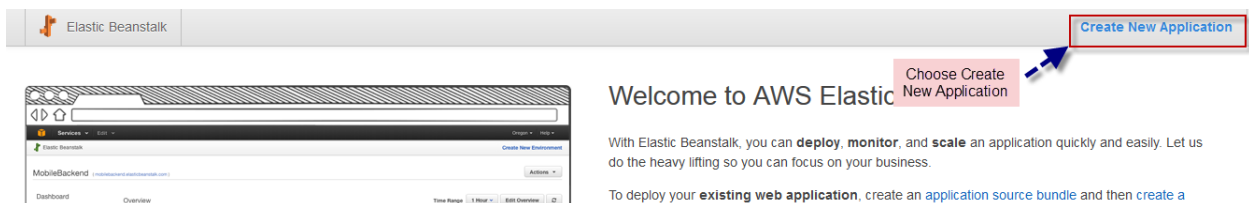
### Game Development

-  **GameLift**  
Deploy and Scale Session-based Multiplayer Games

### Mobile Services

-  **Mobile Hub**  
Build, Test, and Monitor Mobile Apps

Then choose Create New Application to create a new one.



The screenshot shows the AWS Elastic Beanstalk console. At the top, there is a navigation bar with the Elastic Beanstalk logo and a 'Create New Application' button highlighted with a red box. A blue arrow points to this button. Below the navigation bar, the main content area displays 'Welcome to AWS Elastic Beanstalk' and a brief description of the service. A red box highlights the 'Choose Create New Application' link in the text. The left sidebar shows the 'MobileBackend' application selected, with a 'Dashboard' link and an 'Overview' tab.

Specify a name and add description for your application, then choose Next.

### Application Information

To create a new application, enter the details of your application.

Specify a Name

Application name:  Must be less than 100 characters and cannot contain a /

Description:  Optional.

Add a Description

Cancel Next

From the new Environment page, choose Create web server.

### New Environment

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

#### Web Server Environment

Provides resources for an AWS Elastic Beanstalk web server in either a single instance or load-balancing, auto scaling environment. [Learn more.](#)

select Create web server

Create web server

#### Worker Environment\*

Provides resources for an AWS Elastic Beanstalk worker application in either a single instance or load-balancing, auto scaling environment. [Learn more.](#)

Create worker

\* Worker environments require additional permissions to access other AWS services. [Learn more.](#)

Cancel Done

Choose Environment type from the predefined configuration drop down list, I have selected PHP here.

### Environment Type

Choose the platform and type of environment to launch.

Predefined configuration:  Looking for a different platform? [Let us know.](#)

Environment type:

*Preconfigured*

- Node.js
- PHP
- Python
- Ruby
- Tomcat
- IIS
- Java
- Go

*Preconfigured – Docker*

- GlassFish
- Go
- Docker

[Learn more](#)

[Cancel](#) [Previous](#) [Next](#)

Then choose either single instance or Load balancing, auto scaling from environment type drop down list then click on next.

### Environment Type

Choose the platform and type of environment to launch.

Predefined configuration:  Looking for a different platform? [Let us know.](#)

AWS Elastic Beanstalk will create an environment running PHP 5.6 on 64bit Amazon Linux 2016.03 v2.1.0. [Change platform version.](#)

Environment type:

*Single instance*

*Load balancing, auto scaling*

[Learn more](#)

[Cancel](#) [Previous](#) [Next](#)

From application version page, choose Upload your own and upload an application.

## Application Version

Select a source for your application version.

Source: ☐ Sample application

☒ Upload your own ([Learn more](#))

[Browse...](#) No file selected.

☐ S3 URL [No file selected.](#)

(e.g. <https://s3.amazonaws.com/s3Bucket/s3Key>)

[Cancel](#)

[Previous](#)

[Next](#)

Once uploaded, choose Next.

## Application Version

Select a source for your application version.

Source: ☐ Sample application

☒ Upload your own ([Learn more](#))

[Browse...](#) wordpress.zip

Uploaded file will  
shown here

☐ S3 URL

(e.g. <https://s3.amazonaws.com/s3Bucket/s3Key>)

[Cancel](#)

[Previous](#)

[Next](#)

You can see the status of application uploading.

## Application Version

Select a source for your application version.

Source: ☐ Sample application

☒ Upload your own ([Learn more](#))

[Browse...](#) wordpress.zip

☐ S3 URL

(e.g. <https://s3.amazonaws.com/s3Bucket/s3Key>)

Uploading application version...

[Cancel](#)

[Previous](#)

[Next](#)

Specify environment name, and check availability of environment URL, add description, then choose Next.

Enter your environment information.

Environment name:  Add a name

Environment URL:

Check availability Check the specified name for availability

Description:  maximum

Add description Cancel Previous Next

Choose additional Resources which needs to be created with this configuration.  
I choose RDS here, then click on Next.

### Additional Resources

Select additional resources for this environment.

- ☒ Create an RDS DB Instance with this environment [Learn more](#)
- ☐ Create this environment inside a VPC [Learn more](#)

Cancel Previous Next

Specify the Instances specifications.

### Configuration Details

Modify the following settings or click Next to accept the default configuration. [Learn more.](#)

Instance type:

Determines the processing power of the servers in your environment.

Choose Key pair Select a key pair Refresh

Email address:

Optional: Get notified about any major changes to your environment.

Specify an email id and choose monitoring type.

Email address:  Optional: Get notified about any major changes to your environment.

**Health Reporting**

System type:  Determines the health reporting type.

Root Volume (Boot Device)

Select root volume type.

## Root Volume (Boot Device)

Root volume type:

Root volume size:

Volume to attach to instances.

of the root volume.

Specify root volume size, then choose Next.

Root Volume (Boot Device)

check radio button to specify volume size

Root volume type:

Determines the type of storage volume to attach to instances.

Root volume size: ☒ Enables you to specify the size of the root volume.

Number of gibibytes of the root volume attached to each instance. Must be between 10 and 16384 for Provisioned IOPS (SSD) and General Purpose (SSD) root volumes and between 8 and 1024 for other root volumes.

Add Tags if you want to add, then choose Next.

## Environment Tags

You can specify tags (key-value pairs) for your Environment. You can add up to 7 unique key-value pairs for each Environment.

Key (128 characters maximum)	Value (256 characters maximum)
1. <input type="text"/>	<input type="text"/>

7 remaining

[Cancel](#) [Previous](#) [Next](#)

Then Specify all RDS configurations.

## RDS Configuration

Specify your RDS settings. [Learn more.](#)

Snapshot:	<input type="text" value="None"/>	<a href="#">Refresh</a>
DB engine:	<input type="text" value="mysql"/>	
DB engine version:	<input type="text" value="5.6.27"/>	
Instance class:	<input type="text" value="db.t1.micro"/>	
Allocated storage:	<input type="text" value="5"/> GB	You must specify a value from 5 GB to 1024 GB.
Username:	<input type="text" value="root"/>	
Password:	<input type="password" value="••••••••"/>	
Retention setting:	<input type="text" value="Delete"/>	Terminating your environment can permanently delete your Amazon RDS DB instance and all its snapshots, which preserves your data but may incur backup storage charges.
Availability:	<input type="text" value="Single availability zone"/>	

Choose Next to continue to next step.

## Permissions

Select an instance profile and service role for your AWS Elastic Beanstalk environment.

An instance profile is an IAM role configured for use with EC2 instances. The instances in your Elastic Beanstalk use the credentials provided by the instance profile to communicate with AWS.

A service role allows the Elastic Beanstalk service to monitor environment resources on your behalf. See [Roles and Instance Profiles](#) in the Elastic Beanstalk developer guide for details.

Instance profile:

Service role:

[Cancel](#)

[Previous](#)

[Next](#)

It will validate your permissions.

## Permissions

Select an instance profile and service role for your AWS Elastic Beanstalk environment.

An instance profile is an IAM role configured for use with EC2 instances. The instances in your Elastic Beanstalk use the credentials provided by the instance profile to communicate with AWS.

A service role allows the Elastic Beanstalk service to monitor environment resources on your behalf. See [Roles and Instance Profiles](#) in the Elastic Beanstalk developer guide for details.

Instance profile:

Service role:

Validating default service role...

[Cancel](#)

[Previous](#)

[Next](#)

Then finally choose Launch.



### Environment Tags

No settings provided.

### RDS Configuration

DB engine	mysql
Engine version	5.6.27
Instance class	db.t1.micro
Allocated storage	5
Deletion policy	Delete

### Permissions

Service role	aws-elasticbeanstalk-service-role
Instance profile	aws-elasticbeanstalk-ec2-role

Cancel

Previous

Launch

You can see that; application will start creating.

All Applications > wordpress > wordpress (Environment ID: e-2a3jt25jb3, URL: wordpress.ap-southeast-1.elasticbeanstalk.com)

Actions ▾

Dashboard

Configuration

Logs

Health


Monitoring

Alarms

Managed Updates <sup>NEW</sup>

Events

-

 Elastic Beanstalk is launching your environment.  
[View Events](#)

Overview

 Refresh



Health

Grey

[Causes](#)

Running Version

[Upload and Deploy](#)



Configuration

64bit Amazon Linux 2016.03  
v2.1.0 running PHP 5.6

[Change](#)

Once created, Health will come as green, then open the URL to access the application.

All Applications > wordpress > wordpress ( Environment ID: e-2a3jt25jb3 URL: wordpress.ap-southeast-1.elasticbeanstalk.com )

Dashboard

Configuration

Logs

Health

Monitoring

Alarms

Managed Updates <sup>NEW</sup>

Overview



Health

Green

Causes

Open this url to  
access the app

Running Version

First Release

Upload and Deploy



Recent Events