



## 27. 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.

Then choose Create New Application to create a new one.

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

The screenshot shows the 'Application Information' form. It has two input fields: 'Application name' with the value 'wordpress' and 'Description' with the value 'wordpress'. The 'Application name' field is highlighted with a green circle and a callout bubble that says 'Specify a Name'. The 'Description' field is highlighted with an orange circle and a callout bubble that says 'Add a Description'. Below the fields are 'Cancel' and 'Next' buttons. The 'Next' button is highlighted with a red box and a blue arrow pointing to it.

**Application Information**

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

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.

The screenshot shows the 'New Environment' page. It has two main sections: 'Web Server Environment' and 'Worker Environment\*'. The 'Web Server Environment' section has a 'Create web server' button highlighted with a red box. A callout bubble that says 'select Create web server' points to this button. The 'Worker Environment\*' section has a 'Create worker' button. At the bottom are 'Cancel' and 'Done' buttons.

**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.](#)

[Create web server](#)

**Worker Environment\***

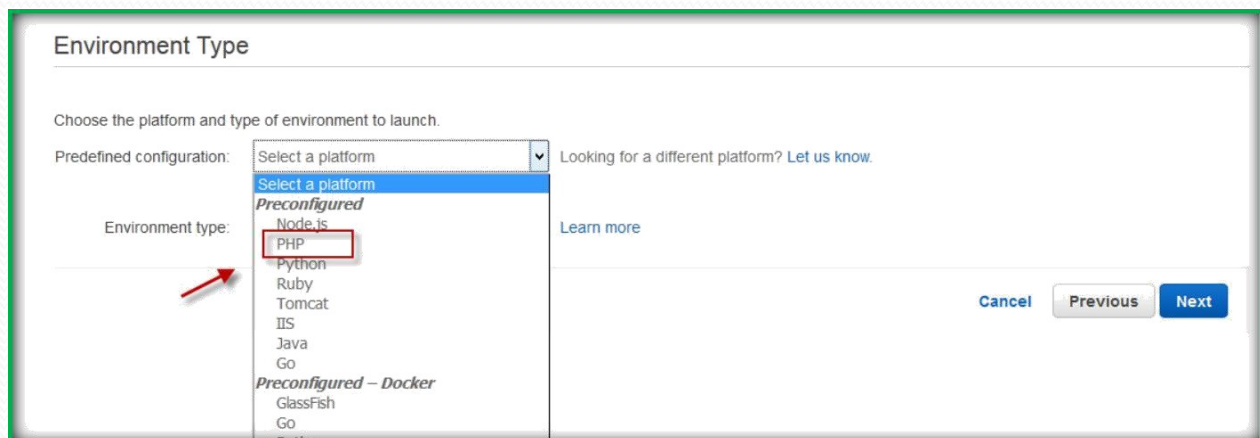
Provides resources for an AWS Elastic Beanstalk worker application in either a single instance or load-balancing, auto scaling environment. [Learn more.](#)

[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

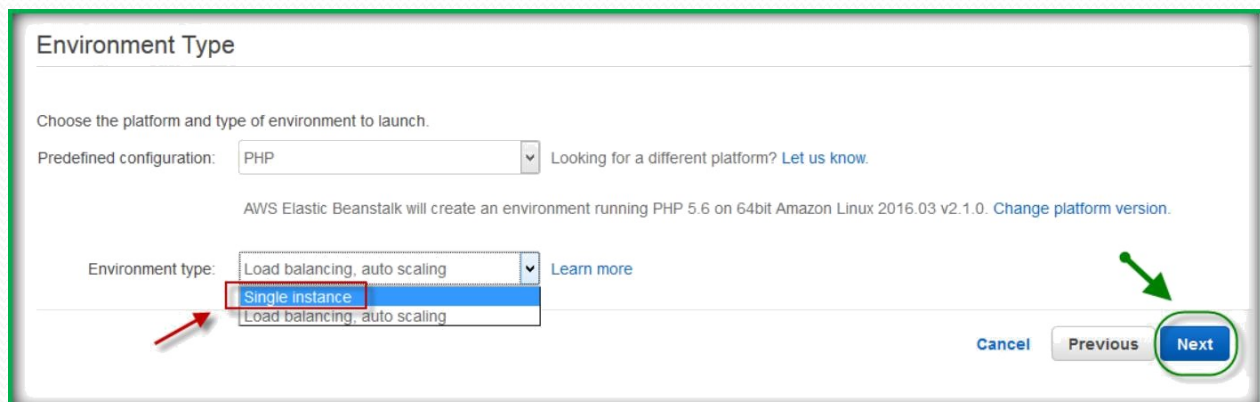
Choose the platform and type of environment to launch.

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

Environment type: Load balancing, auto scaling 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: PHP 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: Load balancing, auto scaling Learn more

Cancel Previous Next

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

The screenshot shows the 'Application Version' form. Under 'Source', the 'Upload your own' option is selected and highlighted with an orange circle. The 'Browse...' button is also highlighted. The 'S3 URL' option is unselected. At the bottom right, the 'Next' button is highlighted in blue.

Once uploaded, choose Next.

This screenshot shows the 'Application Version' form after a file has been uploaded. The 'Browse...' button is now labeled 'wordpress.zip' and is circled in red. A green arrow points from a pink box labeled 'Uploaded file will be shown here' to the file name. The 'Next' button at the bottom right is also circled in red and highlighted in blue.

You can see the status of application uploading.

This screenshot shows the 'Application Version' form during the upload process. The 'Browse...' button is labeled 'wordpress.zip'. Below the 'S3 URL' field, a progress bar is shown with the text 'Uploading application version...' and is highlighted with an orange circle. A green arrow points to this progress bar. The 'Next' button at the bottom right is highlighted in blue.

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

Enter your environment information.

**Add a name**

Environment name:

Environment URL:

**Check availability**

Description:

**Add description**

**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](#)

**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.

Key pair:  [Refresh](#)

**Choose Key pair**

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:  GIB

Specify root volume size, then choose Next.

Root Volume (Boot Device)

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:  [Refresh](#)

DB engine:

DB engine version:

Instance class:

Allocated storage:    
You must specify a value from 5 GB to 1024 GB.

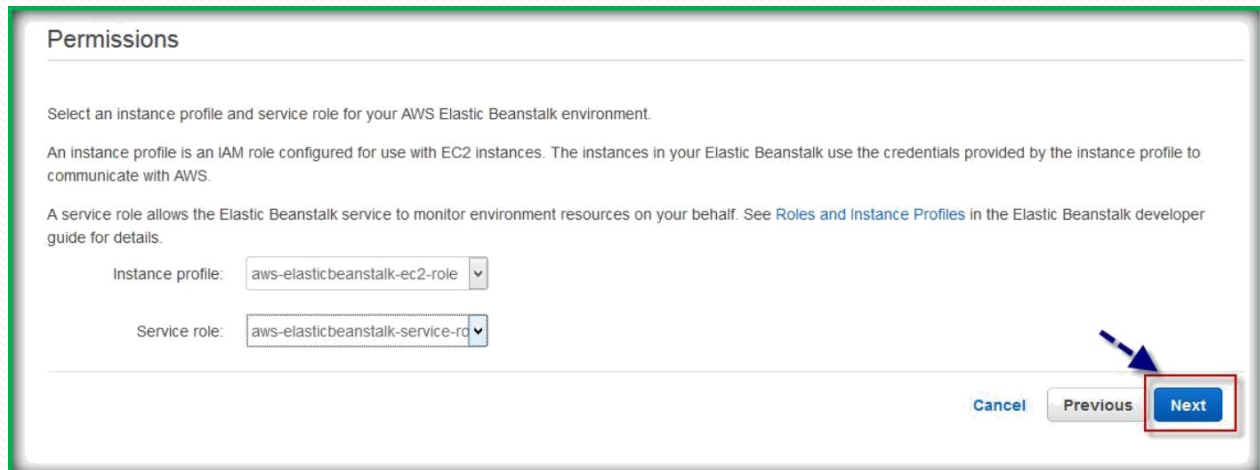
Username:

Password:

Retention setting:   
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:

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.

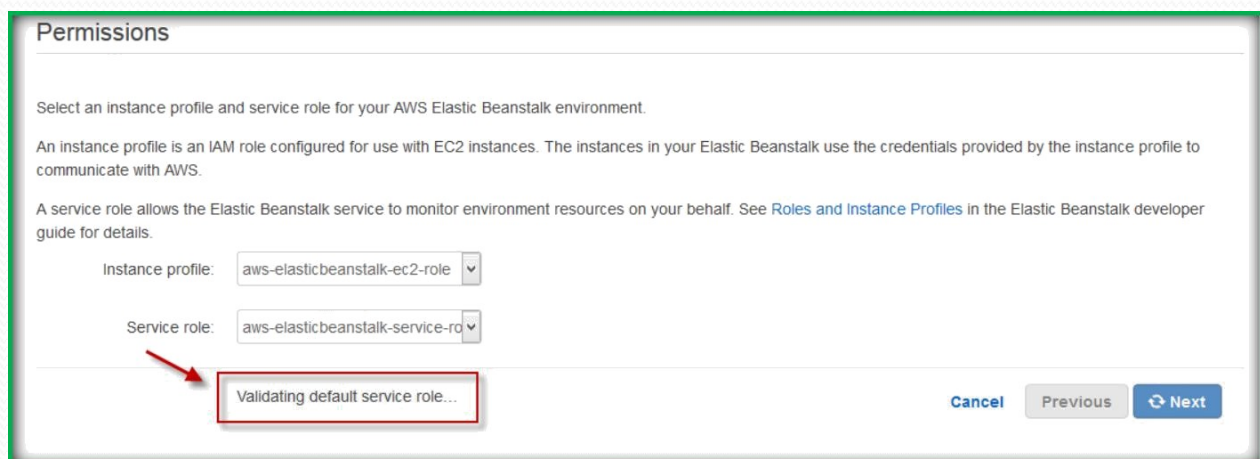
A service role allows the Elastic Beanstalk service to monitor environment resources on your behalf. See [Roles](#) and [Instance Profiles](#) in the Elastic Beanstalk developer guide for details.

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

CancelPreviousLaunch

You can see that; application will start creating.

All Applications > wordpress > wordpress ( Environment ID: e-2a3j25jb3, 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-2a3jl25jb3 )

URL: [wordpress.ap-southeast-1.elasticbeanstalk.com](https://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