
AWS Elastic Beanstalk Web Application

Topic : PHP Web Application

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Amazon Web Services (AWS)
Training Content

Tutorial

1 Introduction

This step-by-step guide will help you get a sample PHP application up and running with AWS Elastic Beanstalk (EB). EB supports other languages besides PHP, such as Java, .NET, Node.JS, Python, Ruby, Docker, and Go, but the focus of this tutorial will be on PHP (other languages will follow the same process). You will first configure your EB application, then setup your EB environment where your application will be launched into.

1.1 Launch AWS Elastic Beanstalk

Navigate to the AWS management console Then type in "elastic beanstalk" in the search bar and press Enter.

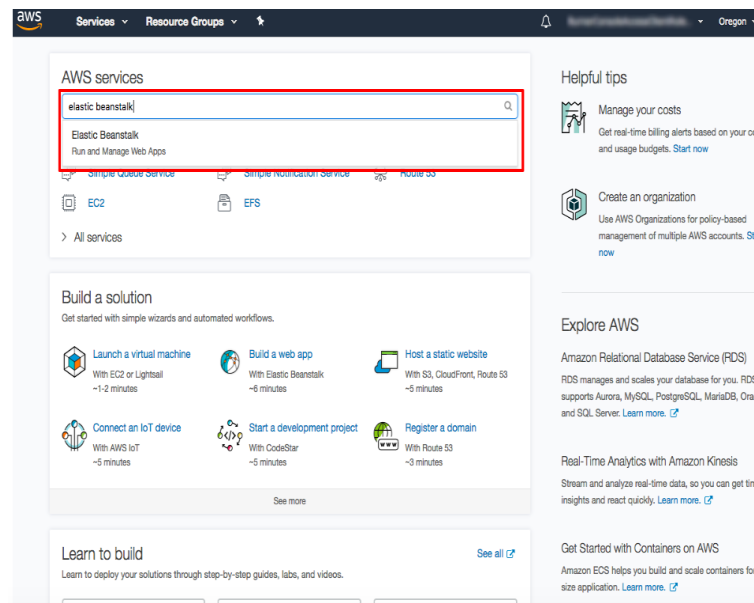


Figure 1: AWS Management Console

1.2 Create a New Application

Now that you're in the AWS Elastic Beanstalk dashboard, click on Create New Application to create and configure your application.

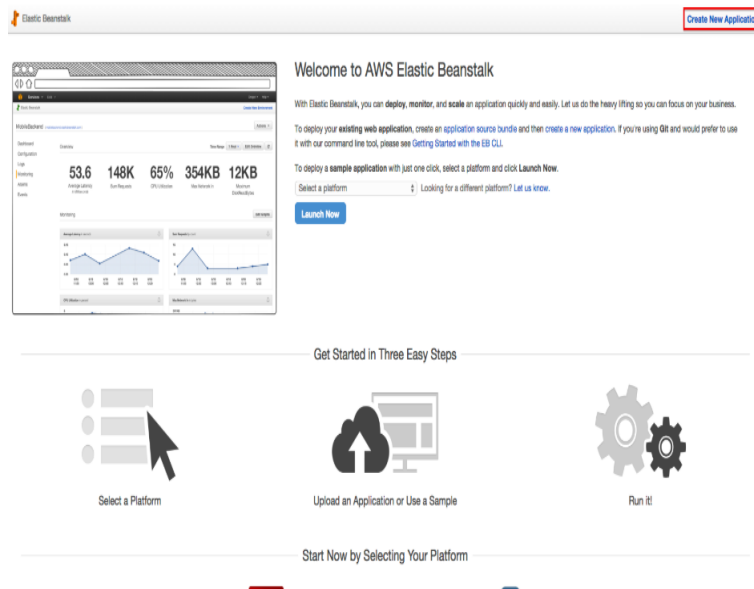
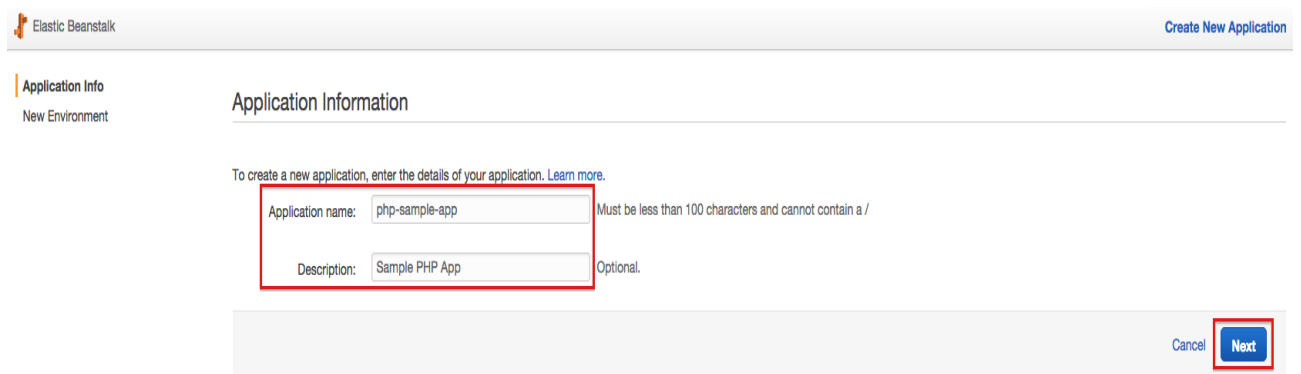


Figure 2: Create new application

1.3 Configure your Application

Fill out the Application name with php-sample-app and Description field with Sample PHP App. Click Next to continue.



Elastic Beanstalk [Create New Application](#)

Application Info
New Environment

Application Information

To create a new application, enter the details of your application. [Learn more.](#)

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

Description: Optional.

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

Figure 3: Choose application language

2 Configure your Environment

Create a web server environment for our sample PHP application. Click on Create web server.

Elastic Beanstalk php-sample-app Create New Environment

Application Info
New Environment

New Environment

AWS 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
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

Figure 4: Configure web server environment

Click on Select a platform next to Predefined configuration, then select PHP. Next, click on the drop-down menu next to Environment type, then select Single instance.

Note: an "instance" is referring to Amazon's Elastic Compute Cloud (EC2) compute service. A "single instance" means we will be using one virtual server to deploy our application into.

Elastic Beanstalk php-sample-app Create New Environment

Application Info
New Environment
Environment Type

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 2015.09 v2.0.4. [Change platform version.](#)

Environment type: Single instance [Learn more](#)

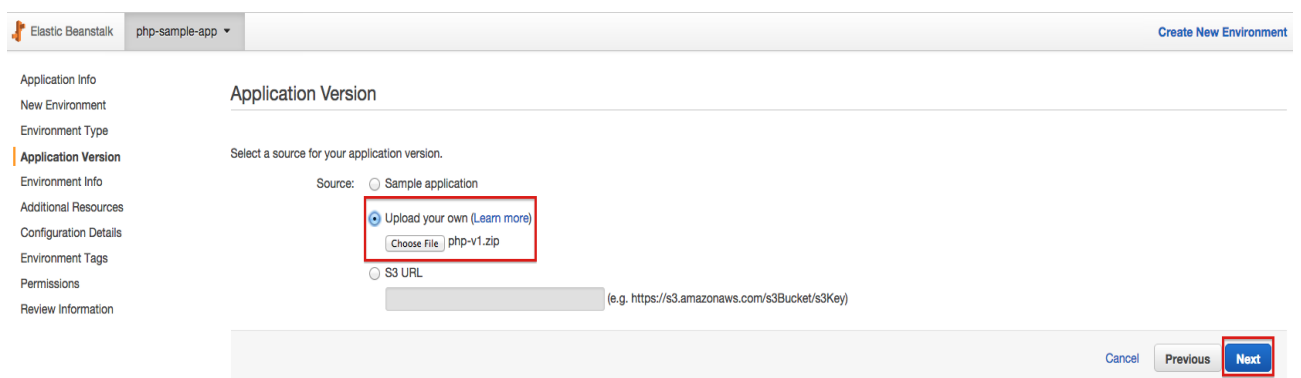
Cancel Previous **Next**

Figure 5: Push Operation in Stack

Under Source, select the Upload your own option, then click Choose File to select the sample php-v1.zip file we downloaded earlier.

Before moving on, double click on the php-v1.zip file that you downloaded to your local machine to view the contents within. This will help you better understand what your zip file should look like when working with your own PHP application. PHP does not enforce a strict file structure for applications; flat file structure will work fine.

Click Next to continue.



The screenshot shows the Elastic Beanstalk console interface for configuring an application version. The left sidebar lists navigation options: Application Info, New Environment, Environment Type, Application Version (highlighted), Environment Info, Additional Resources, Configuration Details, Environment Tags, Permissions, and Review Information. The main content area is titled 'Application Version' and contains the instruction 'Select a source for your application version.' Below this, there are three radio button options for the source: 'Sample application', 'Upload your own (Learn more)' (which is selected), and 'S3 URL'. Under the 'Upload your own' option, there is a 'Choose File' button and the filename 'php-v1.zip'. At the bottom right, there are three buttons: 'Cancel', 'Previous', and 'Next' (which is highlighted with a red box).

Figure 6: Upload PHP zip file

Fill in the values for Environment name with phpSampleApp-env. For Environment URL, fill in a globally unique value since this will be your public-facing URL; we will use phpsampleapp-env in this tutorial, so please choose something different from this one.

Lastly, fill Description with Sample PHP App. For the Environment URL, make sure to click Check availability to make sure that the URL is not taken. Click Next to continue.

Elastic Beanstalk php-sample-app Create New Environment

Application Info
New Environment
Environment Type
Application Version
Environment Info
Additional Resources
Configuration Details
Environment Tags
Permissions
Review Information

Environment Information

Enter your environment information. [Learn more.](#)

Environment name:

Environment URL: [Check availability](#)

Description: Optional: 200 character maximum

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

Figure 7: Environment parameters to fill out

Check the box next to Create this environment inside a VPC. Click Next to continue.

Elastic Beanstalk php-sample-app Create New Environment

Application Info
New Environment
Environment Type
Application Version
Environment Info
Additional Resources
Configuration Details
Environment Tags
VPC Configuration
Permissions
Review Information

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](#)

Figure 8: Environment parameters to fill out

On the Configuration Details step, you can set configuration options for the instances in your stack. For this tutorial, you don't need to change anything. Click Next.

On the Environment Tags step, you can tag all the resources in your stack. For this tutorial, you don't need to tag any resources but can if you would like. Click Next.

On the VPC Configuration step, select the first AZ listed by checking the box under the EC2 column. Your list of AZs may look different than the one shown as Regions can have different number of AZs. Click Next.

Elastic Beanstalk php-sample-app Create New Environment

Application Info
New Environment
Environment Type
Application Version
Environment Info
Additional Resources
Configuration Details
Environment Tags
VPC Configuration
Permissions
Review Information

VPC Configuration

Select the VPC to use when creating your environment. [Learn more.](#)
VPC: vpc-ad5ef2c8 (10.0.0.0/16) Refresh [↻](#)
☒ Associate Public IP Address

Select the subnets for EC2 instances in your Availability Zone.

AZ	Subnet	EC2
us-west-2a		
us-west-2b		
us-west-2c	subnet-839154da (10.0.0.0/24)	<input checked="" type="checkbox"/>

VPC security group: vpc_getting_started--sg-c51d Refresh [↻](#)

Cancel Previous **Next**

Figure 9: Configure details and VPC Configuration

At the Permissions step, leave everything to their default values, then click Next to continue. Then review your environment configuration on the next screen and then click Launch to deploy your application.

Note: Launching your application may take a few minutes.

3 Accessing your Elastic Beanstalk Application

Go back to the main Elastic Beanstalk dashboard page by clicking on Elastic Beanstalk. When your application successfully launched, your application's environment, phpSampleApp-env, will show up as a green box. Click on phpSampleApp-env, which is the green box.

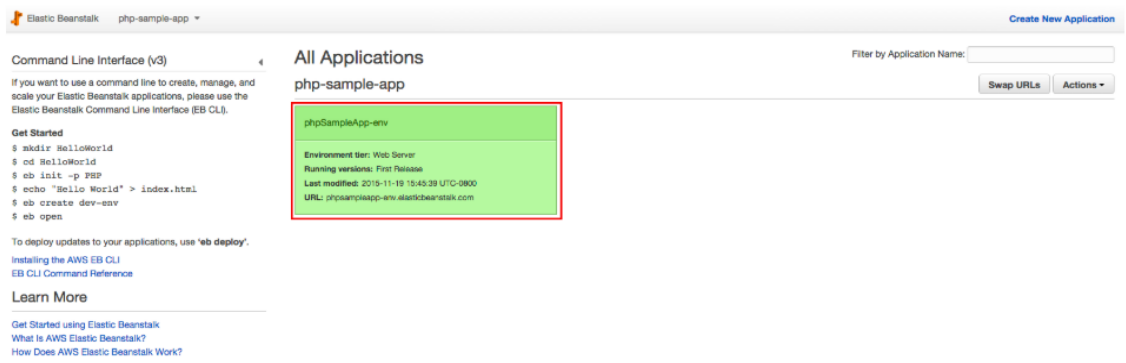


Figure 10: Accessing phpSampleApp-env application

At the top of the page, you should see a URL field, with a value that contains the Environment URL you specified. Click on this URL field, and you should see a Congratulations page.

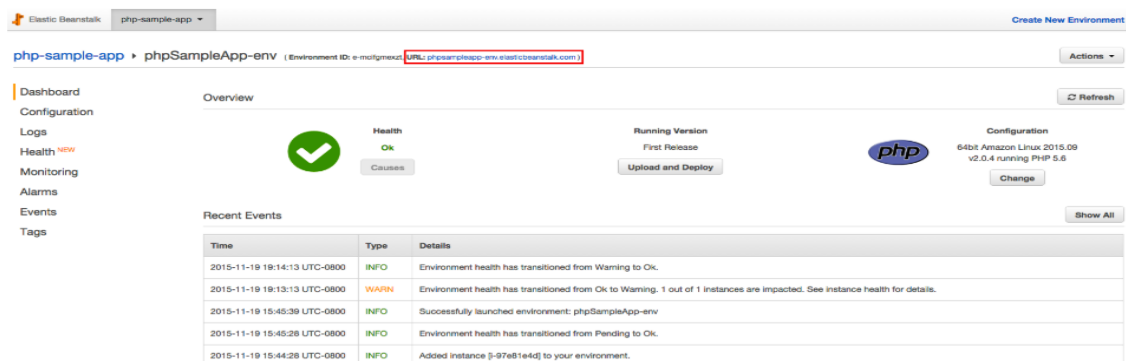


Figure 11: Elastic Beanstalk Dashboard status

Congratulations! You have successfully launched a sample PHP application using AWS Elastic Beanstalk.

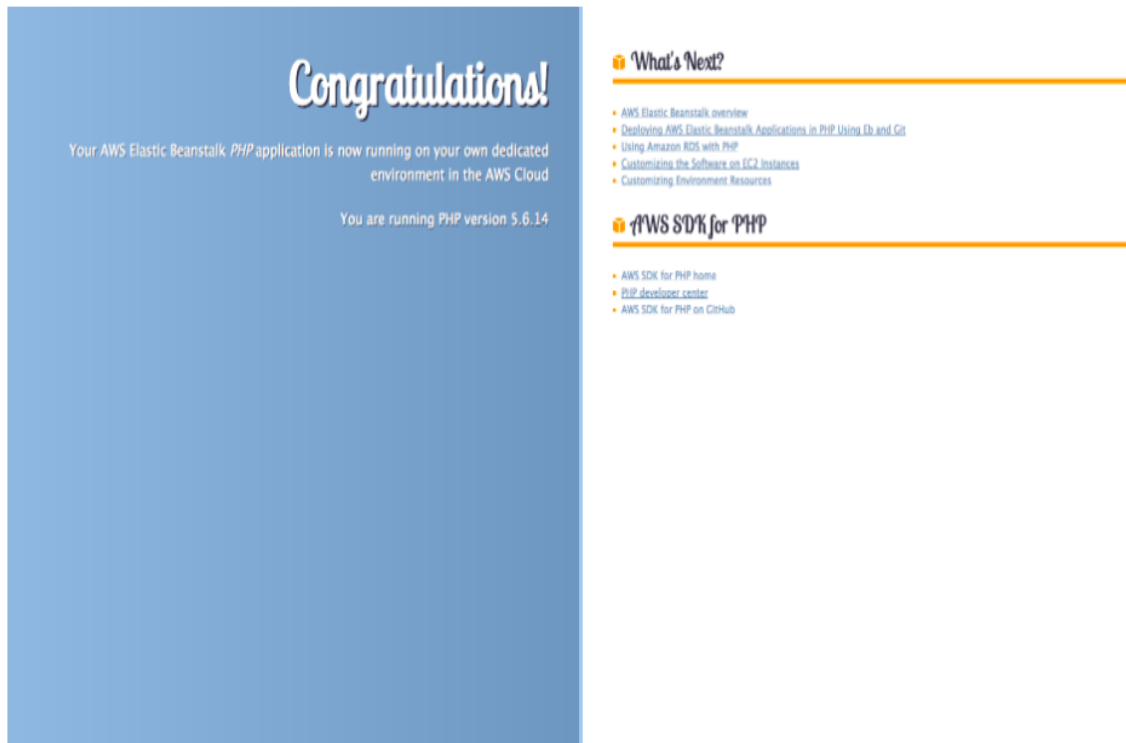


Figure 12: Elastic Beanstalk PHP Application

Thank You ...