

Deploying Elastic Beanstalk Applications with CloudFormation

Elastic Beanstalk Template Snippets

Filter View: All

With Elastic Beanstalk, you can quickly deploy and manage applications in AWS without worrying about the infrastructure that runs those applications. The following sample template can help you describe Elastic Beanstalk resources in your AWS CloudFormation template.

Elastic Beanstalk Sample PHP

The following sample template deploys a sample PHP web application that is stored in an Amazon S3 bucket. The Elastic Beanstalk environment is 64-bit Amazon Linux running PHP 5.3. The environment is also an autoscaling, load-balancing environment, with a minimum of two Amazon EC2 instances and a maximum of six.

```
{ elastic-beanstalk-php-demo.json x
1  {
2      "AWSTemplateFormatVersion": "2010-09-09",
3      "Parameters": {
4          "S3Bucket" : { ...
8      },
9      "S3Key" : { ...
13     }
14 },
15 "Resources": {
16     "sampleApplication": {
17         "Type": "AWS::ElasticBeanstalk::Application",
18         "Properties": { ...
20     }
21 },
22     "sampleApplicationVersion": {
23         "Type": "AWS::ElasticBeanstalk::ApplicationVersion",
24         "Properties": {
25             "ApplicationName": { "Ref": "sampleApplication" },
26             "Description": "AWS ElasticBeanstalk Sample Application Version",
27             "SourceBundle": {
28                 "S3Bucket": { "Ref": "S3Bucket" },
29                 "S3Key": { "Ref": "S3Key" }
30             }
31         }
32     },
33     "sampleConfigurationTemplate": {
34         "Type": "AWS::ElasticBeanstalk::ConfigurationTemplate",
35         "Properties": {
36             "ApplicationName": { "Ref": "sampleApplication" },
37             "Description": "AWS ElasticBeanstalk Sample Configuration Template",
38             "OptionSettings": [ ...
54         ],
55             "SolutionStackName": "64bit Amazon Linux running PHP 5.3"
56         }
57     },
58     "sampleEnvironment": {
59         "Type": "AWS::ElasticBeanstalk::Environment",
60         "Properties": {
61             "ApplicationName": { "Ref": "sampleApplication" },
62             "Description": "AWS ElasticBeanstalk Sample Environment",
63             "TemplateName": { "Ref": "sampleConfigurationTemplate" },
64             "VersionLabel": { "Ref": "sampleApplicationVersion" }
65         }
66     }
67 }
68 }
```

elastic-beanstalk-php-demo.json

index.php

```
1  <!DOCTYPE html>
2  <html>
3  <head>
4      <meta charset="utf-8" />
5      <meta http-equiv="X-UA-Compatible" content="IE=edge">
6      <title>Elastic Beanstalk with CloudFormation</title>
7      <meta name="viewport" content="width=device-width, initial-scale=1">
8      <link rel="stylesheet" type="text/css" media="screen" href="main.css" />
9      <script src="main.js"></script>
10 </head>
11 <body>
12     <?php
13         echo "Heyyo Awesome :)!";
14     ?>
15 </body>
16 </html>
```

```
INBL2-42RG3QD:elastic-beanstalk-php-demo mahtab.alam$ ls -l
total 16
-rw-r--r-- 1 mahtab.alam 26352421 2296 Nov  4 09:25 elastic-beanstalk-php-demo.json
-rw-r--r--@ 1 mahtab.alam 26352421 437 Nov  4 10:36 index.php
INBL2-42RG3QD:elastic-beanstalk-php-demo mahtab.alam$ zip app.zip index.php -v
adding: index.php      (in=437) (out=282) (deflated 35%)
total bytes=437, compressed=282 -> 35% savings
INBL2-42RG3QD:elastic-beanstalk-php-demo mahtab.alam$ aws s3 cp app.zip s3://public-data-assets/ --acl public-read --profile mahtab-sysops
upload: ./app.zip to s3://public-data-assets/app.zip
INBL2-42RG3QD:elastic-beanstalk-php-demo mahtab.alam$
```

CloudFormation

Stacks

Create Stack

Create stack

Select Template

Specify Details

Options

Review

Select Template

Select the template that describes the stack that you want to create. A stack is a group of related resources that you manage as a single unit.

Design a template

Use AWS CloudFormation Designer to create or modify an existing template. [Learn more.](#)

Design template

Choose a template

A template is a JSON/YAML-formatted text file that describes your stack's resources and their properties. [Learn more.](#)

Select a sample template

Upload a template to Amazon S3

Choose file elastic-bean...p-demo.json

Specify an Amazon S3 template URL

Cancel

Next

2

Create stack

Select Template

Specify Details

Options

Review

Specify Details

Specify a stack name and parameter values. You can use or change the default parameter values, which are defined in the AWS CloudFormation template. [Learn more.](#)

Stack name

Parameters

S3Bucket The name of the bucket that contains your packaged source

S3Key The name of the ZIP package

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

Create Stack [Actions](#) [Design template](#) [C](#) [S](#)

Filter: Active [By Stack Name](#) Showing 4 stacks

Stack Name	Created Time	Updated Time	Status	Description
<input type="checkbox"/> awseb-e-yeyzna2xhx-stack	2018-11-04 10:42:27 UTC+0550		CREATE_COMPLETE	AWS Elastic Beanstalk environment (Name: 'eb-a-samp-1GHO6OH8R...
<input checked="" type="checkbox"/> eb-app-cf-demo	2018-11-04 10:42:01 UTC+0550		CREATE_COMPLETE	

Overview Outputs Resources **Events** Template Parameters Tags Stack Policy Change Sets Rollback Triggers

Filter by: Status [Search events](#)

2018-11-04

	Status	Type	Logical ID	Status Reason
10:47:59 UTC+0550	CREATE_COMPLETE	AWS::CloudFormation::Stack	eb-app-cf-demo	
10:47:57 UTC+0550	CREATE_COMPLETE	AWS::ElasticBeanstalk::Environment	sampleEnvironment	
10:42:22 UTC+0550	CREATE_IN_PROGRESS	AWS::ElasticBeanstalk::Environment	sampleEnvironment	Resource creation Initiated
10:42:19 UTC+0550	CREATE_IN_PROGRESS	AWS::ElasticBeanstalk::Environment	sampleEnvironment	
10:42:17 UTC+0550	CREATE_COMPLETE	AWS::ElasticBeanstalk::ConfigurationTemplate	sampleConfigurationTemplate	
10:42:17 UTC+0550	CREATE_IN_PROGRESS	AWS::ElasticBeanstalk::ConfigurationTemplate	sampleConfigurationTemplate	Resource creation Initiated
10:42:16 UTC+0550	CREATE_COMPLETE	AWS::ElasticBeanstalk::ApplicationVersion	sampleApplicationVersion	
10:42:16 UTC+0550	CREATE_IN_PROGRESS	AWS::ElasticBeanstalk::ApplicationVersion	sampleApplicationVersion	Resource creation Initiated
10:42:15 UTC+0550	CREATE_IN_PROGRESS	AWS::ElasticBeanstalk::ApplicationVersion	sampleApplicationVersion	
10:42:15 UTC+0550	CREATE_IN_PROGRESS	AWS::ElasticBeanstalk::ConfigurationTemplate	sampleConfigurationTemplate	
10:42:12 UTC+0550	CREATE_COMPLETE	AWS::ElasticBeanstalk::Application	sampleApplication	
10:42:12 UTC+0550	CREATE_IN_PROGRESS	AWS::ElasticBeanstalk::Application	sampleApplication	Resource creation Initiated
10:42:11 UTC+0550	CREATE_IN_PROGRESS	AWS::ElasticBeanstalk::Application	sampleApplication	
10:42:01 UTC+0550	CREATE_IN_PROGRESS	AWS::CloudFormation::Stack	eb-app-cf-demo	User Initiated

Create Stack [Actions](#) [Design template](#) [C](#) [S](#)

Filter: Active [By Stack Name](#) Showing 4 stacks

Stack Name	Created Time	Updated Time	Status	Description
<input checked="" type="checkbox"/> awseb-e-yeyzna2xhx-stack	2018-11-04 10:42:27 UTC+0550		CREATE_COMPLETE	AWS Elastic Beanstalk environment (Name: 'eb-a-samp-1GHO6OH8R...
<input type="checkbox"/> eb-app-cf-demo	2018-11-04 10:42:01 UTC+0550		CREATE_COMPLETE	

Overview Outputs Resources **Events** Template Parameters Tags Stack Policy Change Sets Rollback Triggers

Filter by: Status [Search events](#)

2018-11-04

	Status	Type	Logical ID	Status Reason
10:45:45 UTC+0550	CREATE_COMPLETE	AWS::CloudFormation::Stack	awseb-e-yeyzna2xhx-stack	
10:45:42 UTC+0550	CREATE_COMPLETE	AWS::CloudFormation::WaitCondition	AWSEBInstanceLaunchWaitCo	
10:44:02 UTC+0550	CREATE_COMPLETE	AWS::CloudWatch::Alarm	AWSEBCloudwatchAlarmHigh	
10:44:02 UTC+0550	CREATE_IN_PROGRESS	AWS::CloudWatch::Alarm	AWSEBCloudwatchAlarmHigh	Resource creation Initiated
10:44:01 UTC+0550	CREATE_IN_PROGRESS	AWS::CloudWatch::Alarm	AWSEBCloudwatchAlarmHigh	
10:44:00 UTC+0550	CREATE_COMPLETE	AWS::CloudWatch::Alarm	AWSEBCloudwatchAlarmLow	
10:44:00 UTC+0550	CREATE_IN_PROGRESS	AWS::CloudWatch::Alarm	AWSEBCloudwatchAlarmLow	Resource creation Initiated
10:44:00 UTC+0550	CREATE_IN_PROGRESS	AWS::CloudWatch::Alarm	AWSEBCloudwatchAlarmLow	
10:43:57 UTC+0550	CREATE_COMPLETE	AWS::AutoScaling::ScalingPolicy	AWSEBAutoScalingScaleUpPol	
10:43:57 UTC+0550	CREATE_IN_PROGRESS	AWS::AutoScaling::ScalingPolicy	AWSEBAutoScalingScaleUpPol	Resource creation Initiated
10:43:56 UTC+0550	CREATE_COMPLETE	AWS::AutoScaling::ScalingPolicy	AWSEBAutoScalingScaleDown	
10:43:56 UTC+0550	CREATE_IN_PROGRESS	AWS::AutoScaling::ScalingPolicy	AWSEBAutoScalingScaleDown	Resource creation Initiated
10:43:56 UTC+0550	CREATE_IN_PROGRESS	AWS::AutoScaling::ScalingPolicy	AWSEBAutoScalingScaleUpPol	

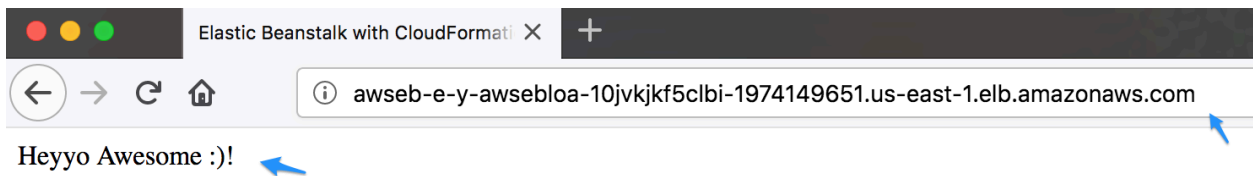
Create Stack Actions Design template

Filter: Active By Stack Name Showing 4 stacks

Stack Name	Created Time	Updated Time	Status	Description
<input checked="" type="checkbox"/> awseb-e-yeyzna2xhx-stack	2018-11-04 10:42:27 UTC+0550		CREATE_COMPLETE	AWS Elastic Beanstalk environment (Name: 'eb-a-samp-1GHO6OH8IR...)
<input type="checkbox"/> eb-app-cf-demo	2018-11-04 10:42:01 UTC+0550		CREATE_COMPLETE	

Overview Outputs Resources Events Template Parameters Tags Stack Policy Change Sets Rollback Triggers

Key	Value	Description	Export Name
AWSEBLoadBalancerURL	http://awseb-e-y-AWSEBLoa-10JVkJKF5CLBI-1974149651.us-east-1.elb.amazonaws.com	The ElasticBeanstalk ELB URL of the website	



Create Load Balancer Actions

Filter by tags and attributes or search by keyword 1 to 1 of 1

Name	DNS name	State	VPC ID	Availability Zones	Type
awseb-e-y-AWSEBLoa-10JVkJKF5CLBI	awseb-e-y-AWSEBLoa-10JVkJKF5CLBI-1974149651.us-east-1.elb.amazonaws.com		vpc-2a011251	us-east-1a, us-east-1c, us-east-1d	classic

Load balancer: awseb-e-y-AWSEBLoa-10JVkJKF5CLBI

Description Instances Health Check Listeners Monitoring Tags Migration

Connection Draining: Disabled (Edit)

Edit Instances

Instance ID	Name	Availability Zone	Status	Actions
i-0d71d553d0fce649d	eb-a-samp-1GHO6OH8IR5DS	us-east-1c	InService ⓘ	Remove from Load Balancer
i-06ce7ec03fb7a77eb	eb-a-samp-1GHO6OH8IR5DS	us-east-1a	InService ⓘ	Remove from Load Balancer

Edit Availability Zones

Availability Zone	Subnet ID	Subnet CIDR	Instance Count	Healthy?	Actions
us-east-1a	subnet-732ef82f	172.31.32.0/20	1	Yes	Remove from Load Balancer
us-east-1c	subnet-d070a0fe	172.31.80.0/20	1	Yes	Remove from Load Balancer
us-east-1d	subnet-3707627d	172.31.16.0/20	0	No (Availability Zone contains no healthy targets)	Remove from Load Balancer

Launch Instance Connect Actions

Filter by tags and attributes or search by keyword

Name	Instance ID	Instance Type	Availability Zone	Instance State	Status Checks	Alarm Status	Public DNS (IPv4)	IPv4 Public IP
eb-a-samp-1GHO6OH8IR5DS	i-06ce7ec03fb7a77eb	t1.micro	us-east-1a	running	2/2 checks ...	None	ec2-34-207-201-39.co...	34.207.201.39
eb-a-samp-1GHO6OH8IR5DS	i-0d71d553d0fce649d	t1.micro	us-east-1c	running	2/2 checks ...	None	ec2-54-84-183-190.co...	54.84.183.190

Instance: i-06ce7ec03fb7a77eb (eb-a-samp-1GHO6OH8IR5DS) Public DNS: ec2-34-207-201-39.compute-1.amazonaws.com

Description	Status Checks	Monitoring	Tags
Instance ID	i-06ce7ec03fb7a77eb		
Instance state	running		
Instance type	t1.micro		
Elastic IPs			
Availability zone	us-east-1a		
Security groups	aws-eb-s-yeyzna2xhx-stack-AWSEBSecurityGroup-1NTHJ6QS2EKB4, view inbound rules, view outbound rules		
Scheduled events	No scheduled events		
AMI ID	amzn-ami-pv-2013.03.1.x86_64-eks (ami-05355a6c)		
Platform	-		
IAM role	-		
Key pair name	-		
Owner	472821263165		
Launch time	November 4, 2018 at 10:43:04 AM UTC+5:30 (less than one hour)		
Termination protection	False		
Lifecycle	normal		
Public DNS (IPv4)	ec2-34-207-201-39.compute-1.amazonaws.com		
IPv4 Public IP	34.207.201.39		
IPv6 IPs	-		
Private DNS	ip-172-31-41-165.ec2.internal		
Private IPs	172.31.41.165		
Secondary private IPs			
VPC ID	vpc-2a011251		
Subnet ID	subnet-732ef82f		
Network interfaces	eth0		
Source/dest. check	True		
T2/T3 Unlimited	-		
EBS-optimized	False		
Root device type	efs		
Root device	/dev/sda1		
Block devices	/dev/sda1		

<https://docs.aws.amazon.com/AWSCloudFormation/latest/UserGuide/quickref-elasticbeanstalk.html>