

**Exp 2**

**Aim:** To Build Your Application using AWS CodeBuild and Deploy on S3 / SEBS using AWS CodePipeline, deploy Sample Application on EC2 instance using AWS CodeDeploy.

## Configure environment [Info](#)

### Environment tier [Info](#)

Amazon Elastic Beanstalk has two types of environment tiers to support different types of web applications.

☒ **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](#)

### Application information [Info](#)

Application name

Maximum length of 100 characters.

► **Application tags (optional)**

## Service access

IAM roles, assumed by Elastic Beanstalk as a service role, and EC2 instance profiles allow Elastic Beanstalk to create and manage your environment. Both the IAM role and instance profile must be attached to IAM managed policies that contain the required permissions. [Learn more](#)

### Service role

☐ Create and use new service role

☒ Use an existing service role

#### Existing service roles

Choose an existing IAM role for Elastic Beanstalk to assume as a service role. The existing IAM role must have the required IAM managed policies.



### EC2 key pair

Select an EC2 key pair to securely log in to your EC2 instances. [Learn more](#)



### EC2 instance profile

Choose an IAM instance profile with managed policies that allow your EC2 instances to perform required operations.



[View permission details](#)

Set up networking, database, and tags - optional

Virtual Private Cloud (VPC)

VPC

Launch your environment in a custom VPC instead of the default VPC. You can create a VPC and subnets in the VPC management console.  
[Learn more](#)

vpc-0da5a3d9b481e2d7b | (172.31.0.0/16)

Create custom VPC

Review

Step 1: Configure environment

Environment information

Environment tier

Web server environment

Environment name

Application1-env

Platform

arn:aws:elasticbeanstalk:us-east-1::platform/PHP 8.3 running on 64bit Amazon Linux 2023/4.3.1

Application name

Application1

Application code

Sample application

Step 2: Configure service access

Service access

Configure the service role and EC2 instance profile that Elastic Beanstalk uses to manage your environment. Choose an EC2 key pair to securely log in to your EC2 instances.

Service role

arn:aws:iam::011528263337:role/ser vice-role/AWSCloud9SSMAccessRole

EC2 instance profile

AWSCloud9SSMInstanceProfile

Ignore health check	Instance replacement	
false	false	
Platform software		
Lifecycle	Log streaming	Allow URL fopen
false	Deactivated	On
Display errors	Document root	Max execution time
Off	-	60
Memory limit	Zlib output compression	Proxy server
256M	Off	nginx
Logs retention	Rotate logs	Update level
7	Deactivated	minor
X-Ray enabled		
Deactivated		
Environment properties		

Environment successfully launched.

Elastic Beanstalk > Environments > Application1-env

Application1-env

Environment overview

Health

Warning

Domain

Application1-env.eba-gepbwhy.us-east-1.elasticbeanstalk.com

Environment ID

e-bh58uih5ab

Application name

Application1

Platform

Change version

Platform

PHP 8.3 running on 64bit Amazon Linux 2023/4.3.1

Running version

-

Platform state

Supported

Actions

Upload and deploy

## Choose pipeline settings [Info](#)

Step 1 of 5


### Pipeline settings

#### Pipeline name

Enter the pipeline name. You cannot edit the pipeline name after it is created.

No more than 100 characters

#### Pipeline type

 You can no longer create V1 pipelines through the console. We recommend you use the V2 pipeline type with improved release safety, pipeline triggers, parameterized pipelines, and a new billing model.

#### Execution mode

Choose the execution mode for your pipeline. This determines how the pipeline is run.

☐ Superseded

A more recent execution can overtake an older one. This is the default.

☒ Queued (Pipeline type V2 required)

### Service role

☒ New service role

Create a service role in your account

☐ Existing service role


Choose an existing service role from your account

### Role name

Type your service role name

☒ Allow AWS CodePipeline to create a service role so it can be used with this new pipeline

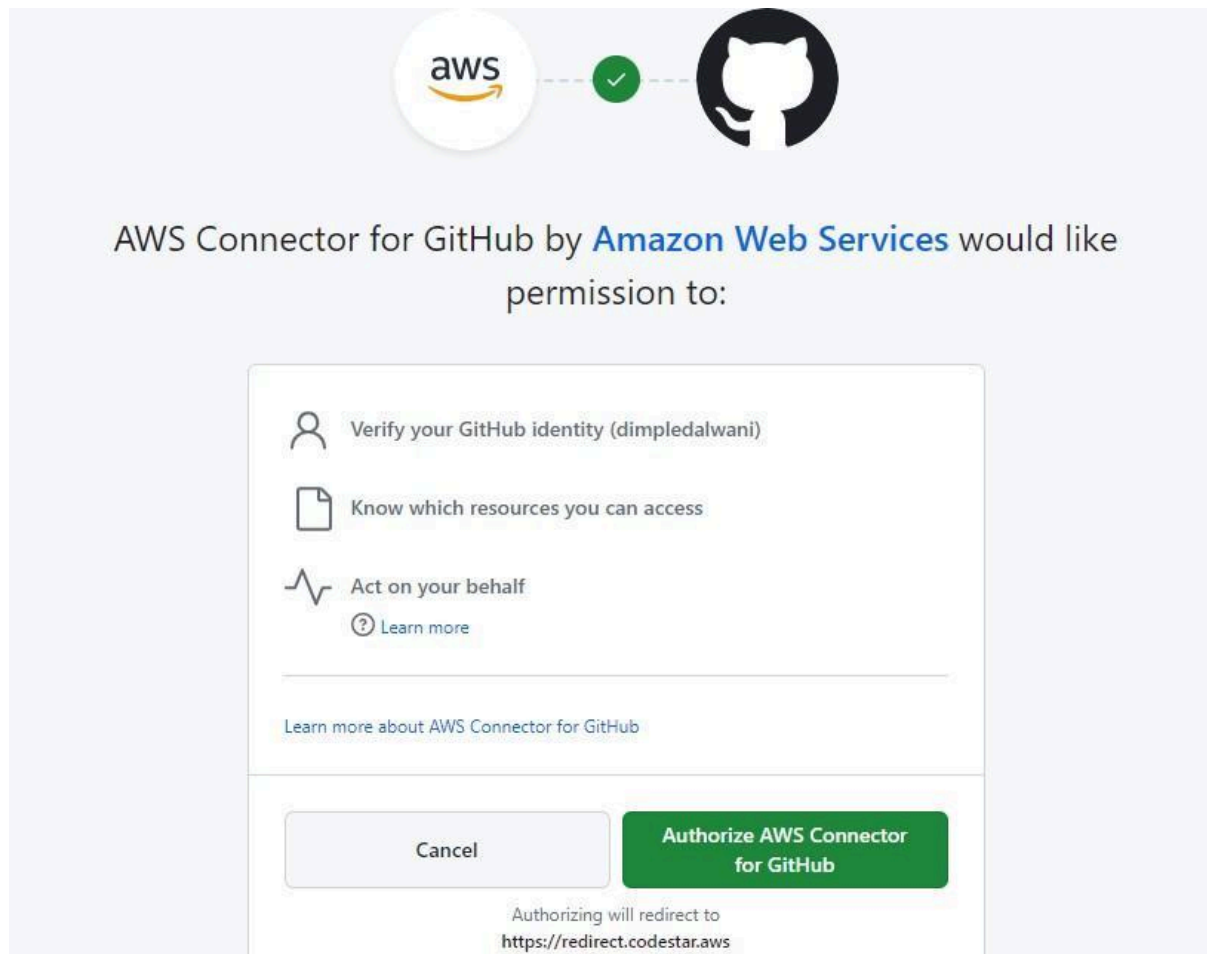
### Variables

You can add variables at the pipeline level. You can choose to assign the value when you start the pipeline. Choosing this option requires pipeline type V2. [Learn more](#) 

No variables defined at the pipeline level in this pipeline.

Add variable

You can add up to 50 variables.



## Install AWS Connector for GitHub

Install on your personal account dimpledalwani



for these repositories:

☒ **All repositories**

This applies to all current *and* future repositories owned by the resource owner.  
Also includes public repositories (read-only).

☐ **Only select repositories**

Select at least one repository.  
Also includes public repositories (read-only).

with these permissions:

- ✓ **Read** access to issues and metadata
- ✓ **Read and write** access to administration, code, commit statuses, pull requests, and repository hooks

**Install**

[Cancel](#)

Next: you'll be directed to the GitHub App's site to complete setup.

arn:aws:codeconnections:us-east-1:011528263337:connection/be7ab482-33 X

 or 

Connect to GitHub

Ready to connect

Your GitHub connection is ready for use.

Repository name

Choose a repository in your GitHub account.

Q

dimpledalwani/aws-codepipeline-s3-codedeploy-linux

X

You can type or paste the group path to any project that the provided credentials can access. Use the format 'group/subgroup/project'.

Default branch

Default branch will be used only when pipeline execution starts from a different source or manually started.

Q

master

X

master

Choose the output artifact format.

☒

CodePipeline default

AWS CodePipeline uses the default zip format for artifacts in the pipeline. Does not include Git metadata about the repository.

☐

Full clone

AWS CodePipeline passes metadata about the repository that allows subsequent actions to do a full Git clone. Only supported for AWS CodeBuild actions.

THOSE WHOSE PROJECT

Skip build stage

X

Your pipeline will not include a build stage. Are you sure you want to skip this stage?

Cancel

Skip







...

Deploy

i

In progress

Pipeline execution ID: [db5e3336-41cc-486c-82b2-23dbf5ba2a13](#)

Deploy

[AWS Elastic Beanstalk](#) 

...

In progress - [Just now](#)

View details

[8be52cba](#) 

Source: Adding template

# pipeline1

Notify ▼

Edit

Stop execution

Clone pipeline

Release change

Pipeline type: V2 Execution mode: QUEUED

✔ Source Succeeded

Pipeline execution ID: [db5e3336-41cc-486c-82b2-23dbf5ba2a13](#)

Source

[GitHub \(Version 2\)](#)

✔ Succeeded - 1 minute ago

[8be52cba](#)

View details

[8be52cba](#) Source: Adding template

Succeeded

Pipeline execution ID: [db5e3336-41cc-486c-82b2-23dbf5ba2a13](#)

Start rollback

Deploy

[AWS Elastic Beanstalk](#)

Succeeded - Just now

View details

[8be52cba](#) Source: Adding template

Applications (1) [Info](#)

Actions ▾

Create application

Filter results matching the display value

< 1 >

Application name ▲	Environments	Date created ▼	Last modified ▼
<div><div></div><div><a href="#">Application1</a></div></div>	<a href="#">Application1-env</a>	August 9, 2024 20:11:10 (...)	August 9, 2024 20:11:10 (...)

Congratulations!

You have successfully created a pipeline that retrieved this source application from an Amazon S3 bucket and deployed it to three Amazon EC2 instances using AWS CodeDeploy.

For next steps, read the [AWS CodePipeline Documentation](#).