

# DevOps CI/CD Pipeline

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Apple Seeds

## Overview

In this project, I will create a Continuous Integration/Continuous Delivery pipeline using AWS, and then use that pipeline to deploy a new version of my website automatically. I will implement this with AWS CodeStar, CodeCommit, CodeBuild, CodeDeploy, and CodePipeline.

## Goals

### 1. Create a CI/CD Pipeline

I will use AWS services to create and deploy a static HTML website with a CI/CD pipeline.

### 2. Deploy a New Version of a Website using a CI/CD Pipeline

Automatically deploy a new version of the test website using the CI/CD pipeline that was created earlier.

Success

You have successfully created aws-codestar-service-role. Allow a few moments for the changes to take effect.

Step 1

Choose a project template

Step 2

Set up your project

Step 3

Review

Choose a project template

Templates

Filter by AWS service, application type, and programming language.

<

1

2

3

4

5

6

>

HTML

Application type

Static website

AWS service

AWS EC2

Runs on virtual servers that you manage

Python (Flask)

Application type

Web service

AWS service

AWS EC2

Runs on virtual servers that you manage

Python (Flask)

Application type

Web service

AWS service

AWS Elastic Beanstalk

Runs in a managed application environment

Express.js

Application type

Express.js

Application type

Java Spring

Application type

Step 2

Set up your project

Step 3

Review

Project template

Application framework

HTML

Application type

Static website

AWS service

AWS EC2

Step 2: Set up your project

Project details

Project name

CI-CD Pipeline

Project ID

ci-cd-pipeline

Project repository

Repository provider

AWS CodeCommit

Repository name

CI-CD-Pipeline

Repository description

-

EC2 Configuration

Instance type

t2.micro

VPC

vpc-0692909a2d2f7c038

Subnet

subnet-027add66908a76883

Key pair

pipeline

CodeStar > Projects > ci-cd-pipeline

CI-CD Pipeline

View application

Overview

IDE

Repository

Pipeline

Monitoring

Issues

Next steps

Dismiss

Develop with AWS Cloud9

The AWS Cloud9 cloud-based IDE is fully integrated into AWS developer tools and ready to use in seconds.

Set up AWS Cloud9

Develop with other IDEs

We also have integrations with Visual Studio, Eclipse, and the command line interface.

Set up other IDEs

Track Issues

Add issue tracking to your development workflow.

Set up issue tracking

Add people to your project

Add team members to this project with IAM users.

Add team members

▼ Project activity

Edit

Waiting for project to provision

Project resources

Info

Type	Name	ARN
AWS IAM	policy/CodeStar_ci-cd-pipeline_PermissionsBoundary	arn:aws:iam::562682080554:policy/CodeStar_ci-cd-pipeline_PermissionsBoundary
AWS IAM	role/CodeStarWorker-ci-cd-pipeline-WebApp	arn:aws:iam::562682080554:role/CodeStarWorker-ci-cd-pipeline-WebApp
AWS IAM	role/CodeStarWorker-ci-cd-pipeline-CloudFormation	arn:aws:iam::562682080554:role/CodeStarWorker-ci-cd-pipeline-CloudFormation
AWS IAM	role/CodeStarWorker-ci-cd-pipeline-ToolChain	arn:aws:iam::562682080554:role/CodeStarWorker-ci-cd-pipeline-ToolChain
AWS CodePipeline	ci-cd-pipeline-Pipeline	arn:aws:codepipeline:us-east-1:562682080554:ci-cd-pipeline-Pipeline
AWS CodeDeploy	deploymentgroup/ci-cd-pipeline/ci-cd-pipeline-Env	arn:aws:codedeploy:us-east-1:562682080554:deploymentgroup:ci-cd-pipeline/ci-cd-pipeline-Env
AWS CodeDeploy	application/ci-cd-pipeline	arn:aws:codedeploy:us-east-1:562682080554:application:ci-cd-pipeline
AWS CodeCommit	CI-CD-Pipeline	arn:aws:codecommit:us-east-1:562682080554:CI-CD-Pipeline
AWS CodeBuild	project/ci-cd-pipeline	arn:aws:codebuild:us-east-1:562682080554:project/ci-cd-pipeline
AWS CloudFormation	stack/awscodestar-ci-cd-pipeline/3b0e47e0-5536-11ed-8ca0-0e4d2b65f34b	arn:aws:cloudformation:us-east-1:562682080554:stack/awscodestar-ci-cd-pipeline/3b0e47e0-5536-11ed-8ca0-0e4d2b65f34b
Amazon S3	aws-codestar-us-east-1-562682080554-ci-cd-pipeline-pipe	arn:aws:s3:::aws-codestar-us-east-1-562682080554-ci-cd-pipeline-pipe

Home

About

Services

Contact

Congratulations!

You just created an HTML5 web application

Designed and developed with in Seattle

```
31 c-12.8,2-13.3-6.4-18-6.3c-4.3,0.1-5.7,5.8-13.3,3.9c-8.4-2.1-9.1-8.8-12.5-11c-3
32 c1.1-2.3-1.3-5.6,2.4-9.4c5.8-6,10.4-2.1,13.3-3.9c3.4-2.1,2-10,14.1-10.2c11-0.2
33 c9.6,4.9,6,10.3,8.6,13.3c3.3,3.7,14.9,1.2,14.9,14.1C343.1,312.5,329.8,310.3,32
34 <path class="path" fill="none" stroke="#FFFFFF" stroke-width="2" stroke-miterlimit="10" d="M18.4,229.5c0-13.5,12.1-10.8,15.6-14.7
35 c2.8-3.2-1-8.8,9-13.9c7.9-4.1,9.7,1,13.1,0.8c4.5-0.3,3.3-6.7,14.7-6.6c12.7,0.2
36 c3.8,4,1.3,7.4,2.5,9.8c2.2,4.4,14.7,0.9,14.7,13.9c0,12.2-13.5,8.3-17.2,10.6c-3
37 c-5-0.1-5.5,8.6-18.8,6.6c-12.3-1.9-12.3-9.1-16.4-12.3C32.2,242.1,18.4,244.4,18
38 <path class="path" fill="none" stroke="#FFFFFF" stroke-width="2" stroke-miterlimit="10" d="M215.8,398.8c0-13.5,12.1-10.8,15.6-14.7
39 c2.8-3.2-1-8.8,9-13.9c7.9-4.1,9.7,1,13.1,0.8c4.5-0.3,3.3-6.7,14.7-6.6c12.7,0.2
40 c3.8,4,1.3,7.4,2.5,9.8c2.2,4.4,14.7,0.9,14.7,13.9c0,12.2-13.5,8.3-17.2,10.6c-3
41 c-5-0.1-5.5,8.6-18.8,6.6c-12.3-1.9-12.3-9.1-16.4-12.3C229.7,411.3,215.8,413.6,
42 </svg>
43
44 </div>
45 </div>
46
47 <header>
48 <nav class="website-nav">
49 <ul>
50 <li><a class="home-link" href="https://aws.amazon.com/">Home</a></li>
51 <li><a href="https://aws.amazon.com/what-is-cloud-computing/">About</a></li>
52 <li><a href="https://aws.amazon.com/solutions/">Services</a></li>
53 <li><a href="https://aws.amazon.com/contact-us/">Contact</a></li>
54 </ul>
55 </nav>
56 </header>
57
58 <div class="message">
59 <a class="twitter-link" href="https://twitter.com/home/?status=I%20created%20a%20project%20with%20AWS%20CodeStar!%20%23AWS%20%23AWSCodeStar%20https%3A%2F%2Faws.amaz
60 <div class="text">
61 <h1>DevOps Is AWESOME!</h1>
62 <h2>Just Deployed My First Static Website Using CI-CD Pipeline!!!</h2>
63 </div>
64 </div>
65 </div>
66
67 <footer>
68 <p class="footer-contents">Designed and developed with
69 <a href="https://aws.amazon.com/careers/devtools-jobs/">♥</a> in Seattle.
70 </p>
71 </footer>
72
73 <script src="js/set-background.js"></script>
74 </body>
75
76 </html>
77
```

```
54 </ul>
55 </nav>
56 </header>
57
58 <div class="message">
59 <a class="twitter-link" href="https://twitter.com/home/?status=I%20created%20a%20project%20with%20AWS%20CodeStar!%20%23AWS%20%23AWSCodeStar%20https%3A%2F%2Faws.amaz
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70 </p>
71 </footer>
72
73 <script src="js/set-background.js"></script>
74 </body>
75
76 </html>
77
```

Commit changes to master

File: CI-CD-Pipeline/webpage/Index.html

Author name

Rani-Nabwani

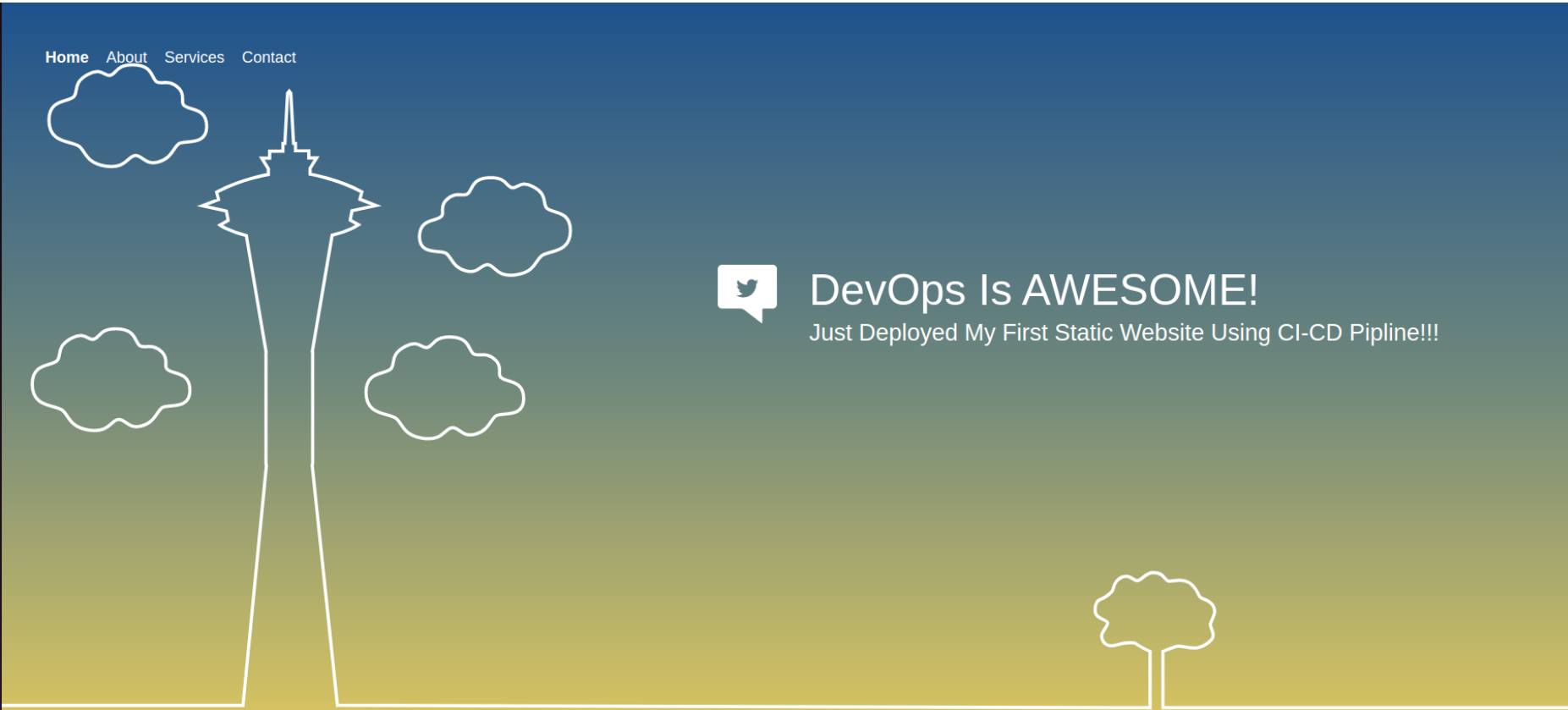
Email address

nivuanl.r@gmail.com

Commit message - optional

A default commit message will be used if you do not provide one.

First commit from CodeDeploy



Pipeline details [Info](#)

Edit [↗](#)

View history [↗](#)

Release change

Pipeline	Most recent action	Status
<a href="#">ci-cd-pipeline-Pipeline</a>	Deploy: Deploy using <a href="#">CodeDeploy</a> 1 minute ago	<a href="#">✔ Succeeded</a>

[✔ Source](#)

ApplicationSource [i](#)

[AWS CodeCommit](#)

[✔ Succeeded](#) - 5 minutes ago

[6fdad2a5](#)

[✔ Build](#)

PackageExport [i](#)

[AWS CodeBuild](#)

[✔ Succeeded](#) - 4 minutes ago

[Details](#)

[✔ Deploy](#)

GenerateChangeSet [i](#)

[AWS CloudFormation](#) [↗](#)

[✔ Succeeded](#) - 3 minutes ago

[Details](#) [↗](#)

↓

ExecuteChangeSet [i](#)

[AWS CloudFormation](#) [↗](#)

[✔ Succeeded](#) - 2 minutes ago

[Details](#) [↗](#)

↓

Deploy [i](#)

[AWS CodeDeploy](#)

[✔ Succeeded](#) - 1 minute ago