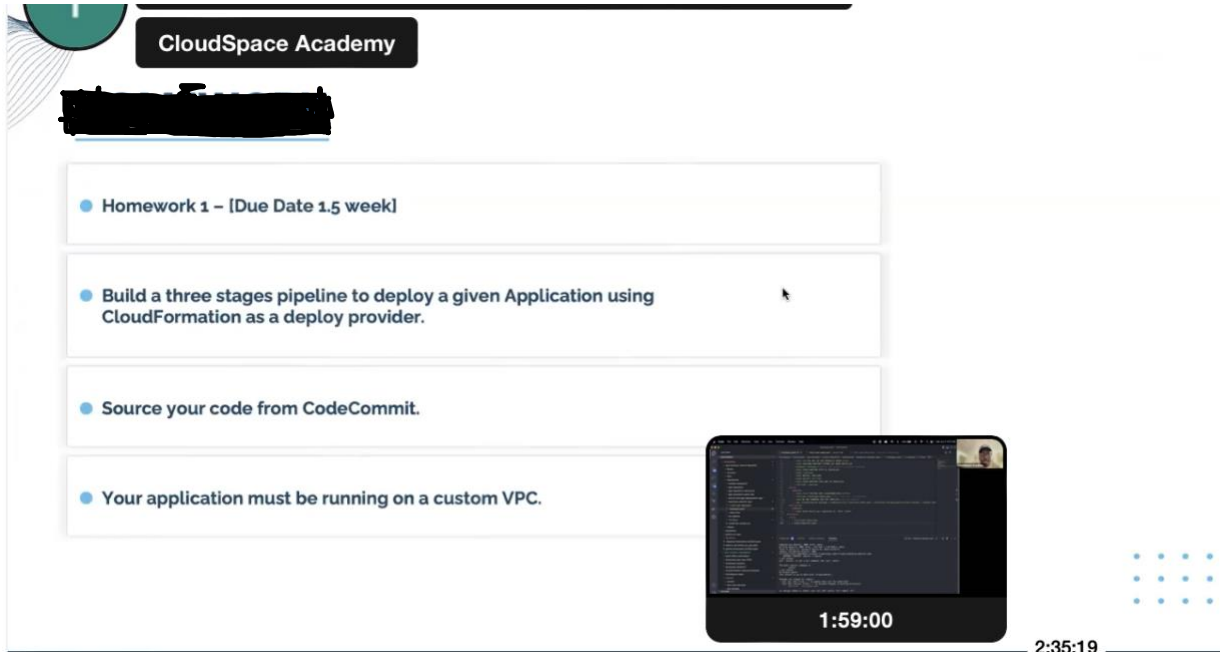


Project: Built 3 stage CICD Pipeline: Test in US-East-1 and deploy US-West-1 as Production Environment



CloudSpace Academy

Homework 1 – [Due Date 1.5 week]

- Build a three stages pipeline to deploy a given Application using CloudFormation as a deploy provider.
- Source your code from CodeCommit.
- Your application must be running on a custom VPC.

1:59:00

2:35:19

```
ec2-user@ip-10-0-0-40 ~]$ ls -l
total 4
-rw-r--r-- 1 ec2-user ec2-user 1266 Jun  4 08:23 ec2-user.yml
ec2-user@ip-10-0-0-40 ~]$ cfn-lint ec2-user.yml
ec2-user@ip-10-0-0-40 ~]$
```

```

sh-5.2$ sudo su - ec2-user
Last login: Sun Jun  4 16:13:17 UTC 2023 on pts/0
[ec2-user@ip-10-0-0-40 ~]$ ls
ec2-user.yml
[ec2-user@ip-10-0-0-40 ~]$ aws cloudformation package ec2-user.yml --s3-bucket testenv-s3bucket --output-template-file outputdeploytemplate.yml

usage: aws [options] <command> [<subcommand> [<subcommand> ...] [parameters]]
To see help text, you can run:

    aws help
    aws <command> help
    aws <command> <subcommand> help

aws: error: the following arguments are required: --template-file

[ec2-user@ip-10-0-0-40 ~]$ aws cloudformation package --template-file ec2-user.yml --s3-bucket testenv-s3bucket --output-template-file outputdeploytemplate.yml

Successfully packaged artifacts and wrote output template to file outputdeploytemplate.yml.
Execute the following command to deploy the packaged template
aws cloudformation deploy --template-file /home/ec2-user/outputdeploytemplate.yml --stack-name <YOUR STACK NAME>
[ec2-user@ip-10-0-0-40 ~]$

```

```

sh-5.2$ sudo su - ec2-user
Last login: Sun Jun  4 16:13:17 UTC 2023 on pts/0
[ec2-user@ip-10-0-0-40 ~]$ ls
ec2-user.yml
[ec2-user@ip-10-0-0-40 ~]$ aws cloudformation package ec2-user.yml --s3-bucket testenv-s3bucket --output-template-file outputdeploytemplate.yml

usage: aws [options] <command> [<subcommand> [<subcommand> ...] [parameters]]
To see help text, you can run:

    aws help
    aws <command> help
    aws <command> <subcommand> help

aws: error: the following arguments are required: --template-file

[ec2-user@ip-10-0-0-40 ~]$ aws cloudformation package --template-file ec2-user.yml --s3-bucket testenv-s3bucket --output-template-file outputdeploytemplate.yml

Successfully packaged artifacts and wrote output template to file outputdeploytemplate.yml.
Execute the following command to deploy the packaged template
aws cloudformation deploy --template-file /home/ec2-user/outputdeploytemplate.yml --stack-name <YOUR STACK NAME>
[ec2-user@ip-10-0-0-40 ~]$ ls
ec2-user.yml  outputdeploytemplate.yml
[ec2-user@ip-10-0-0-40 ~]$

```

MypipelineTestEnvi

🔔 Notify ▼

Edit

Stop execution

Clone pipeline

Release change

✔ Source Succeeded

Pipeline execution ID: cf1b0603-cc5d-4860-af7e-b203c93101a3

Source ⓘ

AWS CodeCommit

✔ Succeeded - 2 minutes ago

17d65b0d

17d65b0d Source: nnnnnnnn

✔

✔

✔

↓

Disable transition

✔ Build Succeeded

Pipeline execution ID: cf1b0603-cc5d-4860-af7e-b203c93101a3

Build ⓘ

AWS CodeBuild

Build



AWS CodeBuild

✔ Succeeded - 1 minute ago

[Details](#)

17d65b0d Source: nnnnnnnn



Disable transition



✔ **Deploy** Succeeded

Pipeline execution ID: [cf1b0603-cc5d-4860-af7e-b203c93101a3](#)

Deploy



AWS CloudFormation [↗](#)

✔ Succeeded - Just now

[Details](#) [↗](#)

17d65b0d Source: nnnnnnnn

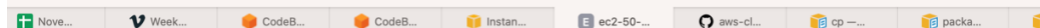
```
1 [Container] 2023/06/07 06:23:04 Waiting for agent ping
2 [Container] 2023/06/07 06:23:05 Waiting for DOWNLOAD_SOURCE
3 [Container] 2023/06/07 06:23:06 Phase is DOWNLOAD_SOURCE
4 [Container] 2023/06/07 06:23:06 CODEBUILD_SRC_DIR=/codebuild/output/src263406981/src
5 [Container] 2023/06/07 06:23:06 YAML location is /codebuild/output/src263406981/src/buildspec.yml
6 [Container] 2023/06/07 06:23:06 No commands found for phase name: install
7 [Container] 2023/06/07 06:23:06 Setting HTTP client timeout to higher timeout for S3 source
8 [Container] 2023/06/07 06:23:06 Processing environment variables
9 [Container] 2023/06/07 06:23:06 Selecting 'python' runtime version '3.8' based on manual
  selections...
10 [Container] 2023/06/07 06:23:06 Running command echo "Installing Python version 3.8 ..."
11 Installing Python version 3.8 ...
12
13 [Container] 2023/06/07 06:23:06 Running command pyenv global $PYTHON_38_VERSION
14
15 [Container] 2023/06/07 06:23:07 Moving to directory /codebuild/output/src263406981/src
16 [Container] 2023/06/07 06:23:08 Configuring ssm agent with target id: codebuild:9e411e9b-71f0-4da8-
  a00c-5b142ce52dc5
17 [Container] 2023/06/07 06:23:08 Successfully updated ssm agent configuration
18 [Container] 2023/06/07 06:23:08 Registering with agent
19 [Container] 2023/06/07 06:23:08 Phases found in YAML: 4
20 [Container] 2023/06/07 06:23:08 POST_BUILD: 1 commands
21 [Container] 2023/06/07 06:23:08 INSTALL: 0 commands
22 [Container] 2023/06/07 06:23:08 PRE_BUILD: 9 commands
23 [Container] 2023/06/07 06:23:08 BUILD: 4 commands
24 [Container] 2023/06/07 06:23:08 Phase complete: DOWNLOAD_SOURCE State: SUCCEEDED
25 [Container] 2023/06/07 06:23:08 Phase context status code: Message:
26 [Container] 2023/06/07 06:23:08 Entering phase INSTALL
27 [Container] 2023/06/07 06:23:08 Phase complete: INSTALL State: SUCCEEDED
28 [Container] 2023/06/07 06:23:08 Phase context status code: Message:
29 [Container] 2023/06/07 06:23:08 Entering phase PRE_BUILD
30 [Container] 2023/06/07 06:23:08 Running command echo ==== WE ARE IN THE PREBUILT PHASE ====
31 ==== WE ARE IN THE PREBUILT PHASE ====
32
33 [Container] 2023/06/07 06:23:08 Running command echo CHECKING IF PYTHON HAS BEEN INSTALLED
34 CHECKING IF PYTHON HAS BEEN INSTALLED
35
```

```
36 [Container] 2023/06/07 06:23:08 Running command python --version
37 Python 3.8.16
38
39 [Container] 2023/06/07 06:23:09 Running command echo CHECK WHETHER PIP3 IS INSTALLED
40 CHECK WHETHER PIP3 IS INSTALLED
41
42 [Container] 2023/06/07 06:23:09 Running command pip3 --version
43 pip 21.1.2 from /root/.pyenv/versions/3.8.16/lib/python3.8/site-packages/pip (python 3.8)
44
45 [Container] 2023/06/07 06:23:24 Running command echo INSTALL CFN-LINT
46 INSTALL CFN-LINT
47
48 [Container] 2023/06/07 06:23:24 Running command pip3 install cfn-lint
49 Requirement already satisfied: cfn-lint in /root/.pyenv/versions/3.8.16/lib/python3.8/site-packages
  (0.77.0)
50 Requirement already satisfied: sarif-om~=1.0.4 in /root/.pyenv/versions/3.8.16/lib/python3.8/site-
  packages (from cfn-lint) (1.0.4)
51 Requirement already satisfied: junit-xml~=1.9 in /root/.pyenv/versions/3.8.16/lib/python3.8/site-
  packages (from cfn-lint) (1.9)
52 Requirement already satisfied: jsonschema<5,>=3.0 in
  /root/.pyenv/versions/3.8.16/lib/python3.8/site-packages (from cfn-lint) (3.2.0)
53 Requirement already satisfied: sympy>=1.0.0 in /root/.pyenv/versions/3.8.16/lib/python3.8/site-
  packages (from cfn-lint) (1.11.1)
54 Requirement already satisfied: pyyaml>5.4 in /root/.pyenv/versions/3.8.16/lib/python3.8/site-
  packages (from cfn-lint) (5.4.1)
55 Requirement already satisfied: jsonpatch in /root/.pyenv/versions/3.8.16/lib/python3.8/site-
  packages (from cfn-lint) (1.32)
56 Requirement already satisfied: jschema-to-python~=1.2.3 in
  /root/.pyenv/versions/3.8.16/lib/python3.8/site-packages (from cfn-lint) (1.2.3)
57 Requirement already satisfied: networkx<4,>=2.4 in /root/.pyenv/versions/3.8.16/lib/python3.8/site-
  packages (from cfn-lint) (3.1)
58 Requirement already satisfied: aws-sam-translator>=1.64.0 in
  /root/.pyenv/versions/3.8.16/lib/python3.8/site-packages (from cfn-lint) (1.64.0)
59 Requirement already satisfied: regex in /root/.pyenv/versions/3.8.16/lib/python3.8/site-packages
  (from cfn-lint) (2023.3.23)
60 Requirement already satisfied: typing-extensions<5,>=4.4 in
  /root/.pyenv/versions/3.8.16/lib/python3.8/site-packages (from aws-sam-translator>=1.64.0->cfn-
  lint) (4.4.0)
61 Requirement already satisfied: pydantic~=1.8 in /root/.pyenv/versions/3.8.16/lib/python3.8/site-
  packages (from aws-sam-translator>=1.64.0->cfn-lint) (1.10.7)
```

```

80 [Container] 2023/06/07 06:23:33 Running command echo CHECK WHETHER CFN-LINT IS INSTALLED
81 CHECK WHETHER CFN-LINT IS INSTALLED
82
83 [Container] 2023/06/07 06:23:33 Running command cfn-lint --version
84 cfn-lint 0.77.0
85
86 [Container] 2023/06/07 06:23:56 Phase complete: PRE_BUILD State: SUCCEEDED
87 [Container] 2023/06/07 06:23:56 Phase context status code: Message:
88 [Container] 2023/06/07 06:23:56 Entering phase BUILD
89 [Container] 2023/06/07 06:23:56 Running command echo ==== TESTING OUR CLOUDFORMATION TEMPLATE ====
90 ==== TESTING OUR CLOUDFORMATION TEMPLATE ====
91
92 [Container] 2023/06/07 06:23:56 Running command cfn-lint ec2-user.yml
93
94 [Container] 2023/06/07 06:24:00 Running command echo WE ARE RUNNING OUR CFN TEMPLATE
95 WE ARE RUNNING OUR CFN TEMPLATE
96
97 [Container] 2023/06/07 06:24:00 Running command aws cloudformation package --template-file ec2-
  user.yml --s3-bucket mydeployactifct-bucket --output-template-file outputdeploytemplate.yml
98
99 Successfully packaged artifacts and wrote output template to file outputdeploytemplate.yml.
100 Execute the following command to deploy the packaged template
101 aws cloudformation deploy --template-file
  /codebuild/output/src263406981/src/outputdeploytemplate.yml --stack-name <YOUR STACK NAME>
102
103 [Container] 2023/06/07 06:24:06 Phase complete: BUILD State: SUCCEEDED
104 [Container] 2023/06/07 06:24:06 Phase context status code: Message:
105 [Container] 2023/06/07 06:24:06 Entering phase POST_BUILD
106 [Container] 2023/06/07 06:24:06 Running command echo **** Build was completed at `date` ****
107 buildspect.yml ec2-user.yml outputdeploytemplate.yml Build was completed at Wed Jun 7 06:24:06 UTC
  2023 buildspect.yml ec2-user.yml outputdeploytemplate.yml
108
109 [Container] 2023/06/07 06:24:06 Phase complete: POST_BUILD State: SUCCEEDED
110 [Container] 2023/06/07 06:24:06 Phase context status code: Message:
111 [Container] 2023/06/07 06:24:06 Expanding base directory path: .
112 [Container] 2023/06/07 06:24:06 Assembling file list
113 [Container] 2023/06/07 06:24:06 Expanding .
114 [Container] 2023/06/07 06:24:06 Expanding file paths for base directory .
115 [Container] 2023/06/07 06:24:06 Assembling file list
116 [Container] 2023/06/07 06:24:06 Expanding ec2-user.yml
117 [Container] 2023/06/07 06:24:06 Expanding outputdeploytemplate.yml

```



welcome to our test environment in us-east-1.

Edit: Build

Edit stage

Build



AWS CodeBuild

+ Add stage

Edit: Deploy

Cancel

Delete

Done

+ Add action group

Deploy-Test



AWS CloudFormation



Approval-stage



Manual approval



Deploy-Prod



AWS CloudFormation



+ Add action

+ Add action group

✓ **Deploy** Succeeded

Pipeline execution ID: [7f476f19-6b25-4f6b-badf-84a75c56c9d0](#)

Deploy-Test ⓘ

[AWS CloudFormation](#) 

✓ Succeeded - 2 minutes ago

[Details](#) 



Approval-step ⓘ

Manual approval

✓ Approved - 1 minute ago

[View details](#)



Deploy-Prod ⓘ

☹ [AWS CloudFormation](#) 

✓ Succeeded - Just now

[Details](#) 



CloudFormation > Stacks >
CFN-DeployArtifack

Stacks (1)

Filter by stack name

Active View nested

Stacks

CFN-DeployArtifack
2023-06-15 17:32:23 UTC-0400
CREATE_COMPLETE

Events (11)

Search events

Timestamp	Logical ID	Status	Status reason
2023-06-15 17:33:19 UTC-0400	CFN-DeployArtifack	CREATE_COMPLETE	-
2023-06-15 17:33:18 UTC-0400	WebServerEIP	CREATE_COMPLETE	-
2023-06-15 17:33:01 UTC-0400	WebServerEIP	CREATE_IN_PROGRESS	Resource creation Initiated
2023-06-15 17:33:00 UTC-0400	WebServerEIP	CREATE_IN_PROGRESS	-
2023-06-15 17:32:59 UTC-0400	EC2Instance	CREATE_COMPLETE	-
2023-06-15 17:32:38 UTC-0400	VPC	CREATE_COMPLETE	-
2023-06-15 17:32:27 UTC-0400	EC2Instance	CREATE_IN_PROGRESS	Resource creation Initiated
2023-06-15 17:32:27 UTC-0400	VPC	CREATE_IN_PROGRESS	Resource creation Initiated

54.241.228.11 x 54.241.228.11 x +

Not Secure | 54.241.228.11

welcome to our test and Prod environment in us-west-1.