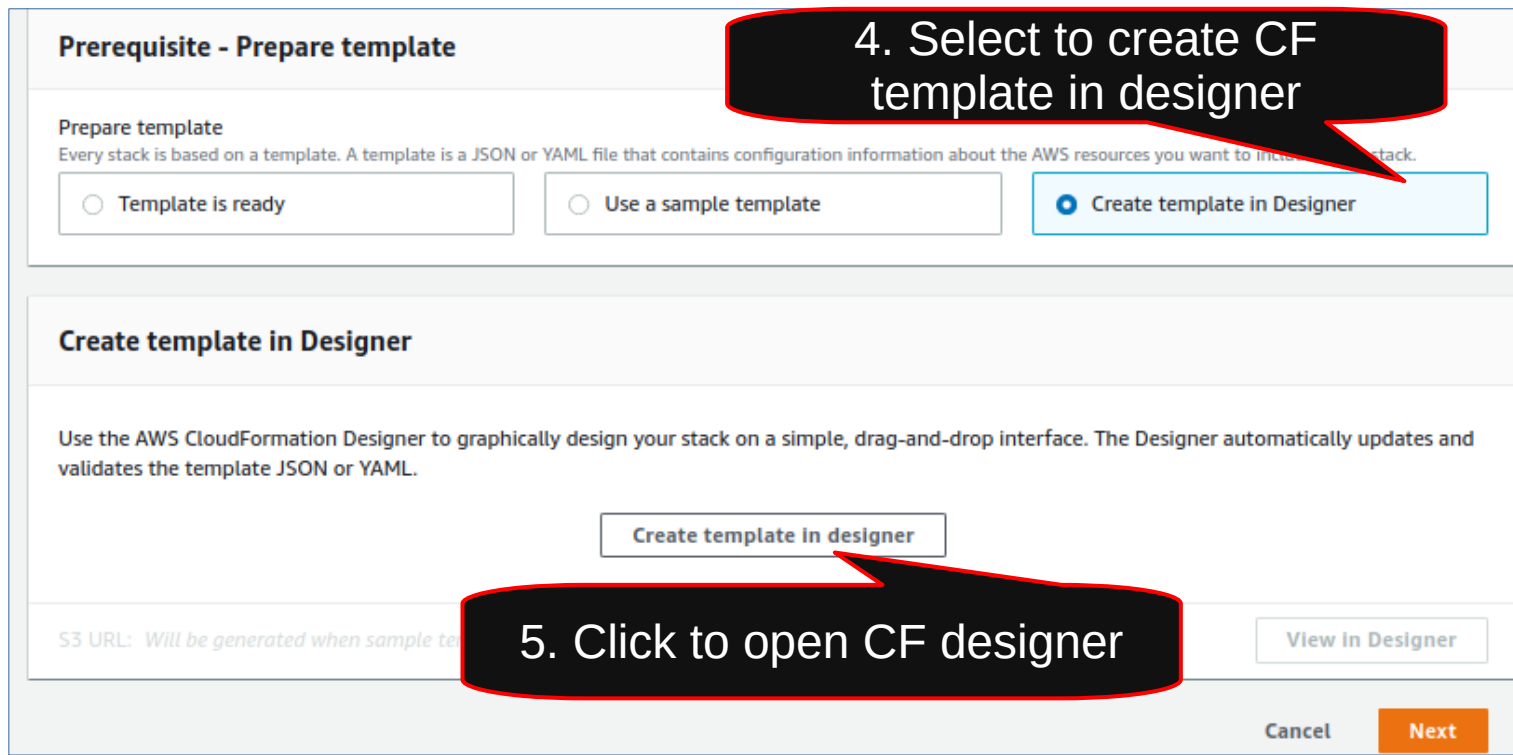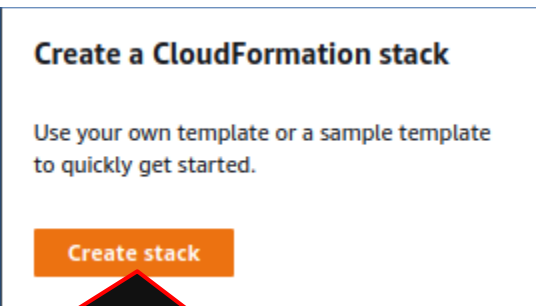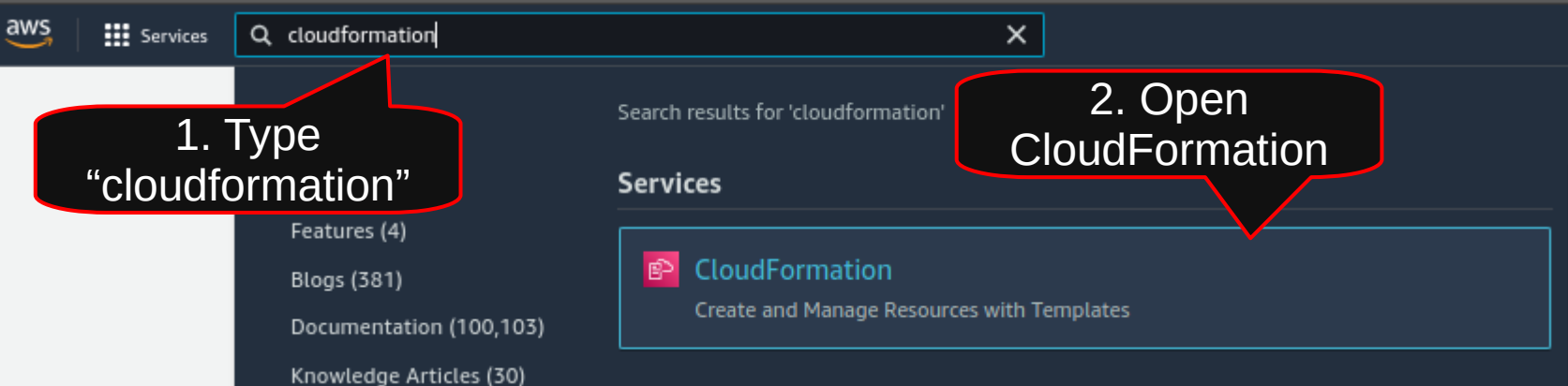# Module 7 – Assignment 1 – Cloudformation

You have been asked to:

1. Create a template which can create an S3 bucket named "Intellipaat<<your-name>>"

2. The template should be able to enable versioning for the bucket created

1. Type "cloudformation"

2. Open CloudFormation

Search results for 'cloudformation'

Services

Features (4)

Blogs (381)

Documentation (100,103)

Knowledge Articles (30)

CloudFormation
Create and Manage Resources with Templates

Create a CloudFormation stack

Use your own template or a sample template to quickly get started.

Create stack

3. Click to create new stack

Prerequisite - Prepare template

4. Select to create CF template in designer

Prepare template
Every stack is based on a template. A template is a JSON or YAML file that contains configuration information about the AWS resources you want to inc[...] stack.

○ Template is ready

○ Use a sample template

● Create template in Designer

Create template in Designer

Use the AWS CloudFormation Designer to graphically design your stack on a simple, drag-and-drop interface. The Designer automatically updates and validates the template JSON or YAML.

Create template in designer

S3 URL: *Will be generated when sample te[...]*

5. Click to open CF designer

View in Designer

Cancel   **Next**

Resource types

- ▾ S3

6. Select S3 from the left-pane

- AccessPoint
- Bucket — 7. Select Bucket
- BucketPolicy

```yaml
1   AWSTemplateFormatVersion: 2010-09-09
2 ▾ Description: >-
3     S3 Bucket created for Module 7 Assignment 1 as per instructions provided in
4     problem statement.
5 ▾ Resources:
6 ▾   intellipaatHariharanNarayanan:
7       Type: 'AWS::S3::Bucket'
8 ▾     Properties:
9         BucketName: m7a1-s3-bucket-intellipaat-hariharan-narayanan
10 ▾       VersioningConfiguration:
11           Status: Enabled
12 ▾     Metadata:
13 ▾       'AWS::CloudFormation::Designer':
14           id: 5a9cef8b-ea06-4a0e-944e-6dc551615c61
15 ▾ Metadata:
16 ▾   'AWS::CloudFormation::Designer':
17 ▾     5a9cef8b-ea06-4a0e-944e-6dc551615c61:
18 ▾       size:
19           width: 60
20           height: 60
21 ▾       position:
22           x: 60
23           'y': 90
24         z: 1
25         embeds: []
```
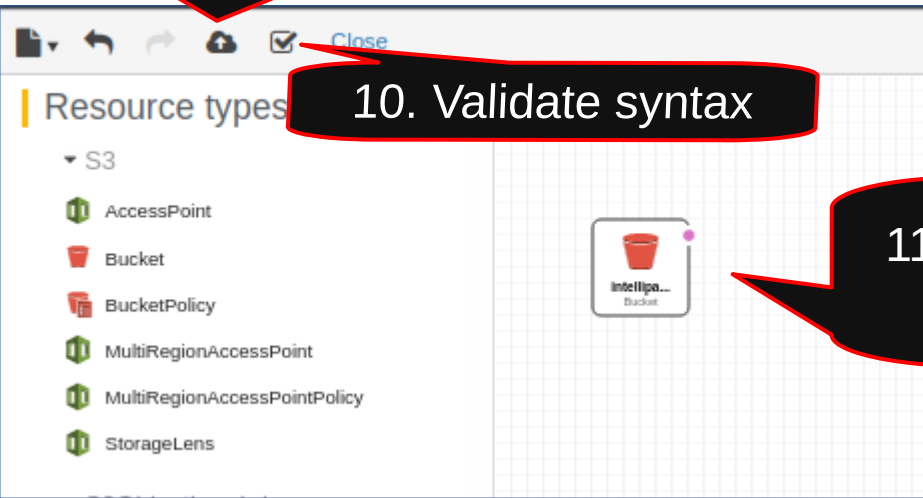
9. Type out the template
Add Description, BucketName,
enable Versioning configuration

8. Type this YAMLconfiguration

12. Create resource

Resource types

10. Validate syntax

- ▾ S3
- AccessPoint
- Bucket
- BucketPolicy
- MultiRegionAccessPoint
- MultiRegionAccessPointPolicy
- StorageLens

11. Verify that S3 bucket is refelcted correctly in Designer window

Intellipa...
Bucket

Prerequisite - Prepare template

Prepare template
Every stack is based on a template. A template is a JSON or YAML file that contains configuration information about the AWS resources you want to include in the stack.

- ● **Template is ready**
- ○ Use a sample template
- ○ Create template in Designer

Specify template
A template is a JSON or YAML file that describes your stack's resources and properties.

Template source
Selecting a template generates an Amazon S3 URL where it will be stored.

- ● **Amazon S3 URL**
- ○ Upload a template file

Amazon S3 URL

https://s3-external-1.amazonaws.com/cf-templates-m8gh53neeb2k-us-east-1/2022014cZ6-new.templates8p8xob7hri

Amazon S3 template URL

S3 URL: https://s3-external-1.amazonaws.com/cf-templates-m8gh53neeb2k-us-east-1/2022014cZ6-new.templates8p8xob7hri

View in Designer

Cancel   **Next**

13. Ensure you are using template created in designer

Specify stack details

Stack name

Stack name

m7a1-s3-bucket

Stack name can include letters (A-Z and a-z), numbers (0-9), and dashes (-).

Parameters
Parameters are defined in your template and allow you to input custom values when you create or update a stack.

No parameters
There are no parameters defined in your template

14. Name the stack

Cancel   Previous   Next

Configure stack options

Tags

You can specify tags (key-value pairs) to apply to resources in your stack. You can add up to 50 unique tags for each stack. Learn more [↗]

| CreatedBy | Hariharan Narayanan | Remove |

Add tag

Permissions

Choose an IAM role to explicitly define how CloudFormation can create, modify, or delete resources in the stack. If you don't choose a role, CloudFormation uses permissions based on your user credentials. Learn more [↗]

IAM role - optional
Choose the IAM role for CloudFormation to use for all operations performed on the stack.

| IAM role name ▼ | Sample-role-name ▼ | Remove |

Stack failure options

Behavior on provisioning failure
Specify the roll back behavior for a stack failure. Learn more [↗]

○ **Roll back all stack resources**
Roll back the stack to the last known stable state.

○ **Preserve successfully provisioned resources**
Preserves the state of successfully provisioned resources, while rolling back failed resources to the last known stable state. Resources without a last known stable state will be deleted upon the next stack operation.

Advanced options

You can set additional options for your stack, like notification options and a stack policy. Learn more [↗]

▶ **Stack policy**
Defines the resources that you want to protect from unintentional updates during a stack update.

▶ **Rollback configuration**
Specify alarms for CloudFormation to monitor when creating and updating the stack. If the operation breaches an alarm threshold, CloudFormation rolls it back. Learn more [↗]

▶ **Notification options**

▶ **Stack creation options**

Cancel   Previous   **Next**

m7a1-s3-bucket

Delete | Update | Stack actions ▼ | Create stack ▼

Events (1)

🔍 Search events

Timestamp		Logical ID	Status	Status reason
2022-01-14 22:35:26 UTC+0530		m7a1-s3-bucket	ⓘ CREATE_IN_PROGRESS	User Initiated

16. Verify that stack is created successfully