

## Lesson 09 Demo 05

### Updating an Existing Stack

**Objective:** To demonstrate the process of updating an existing stack, focusing on deleting an S3 bucket

**Tools required:** AWS Management Console

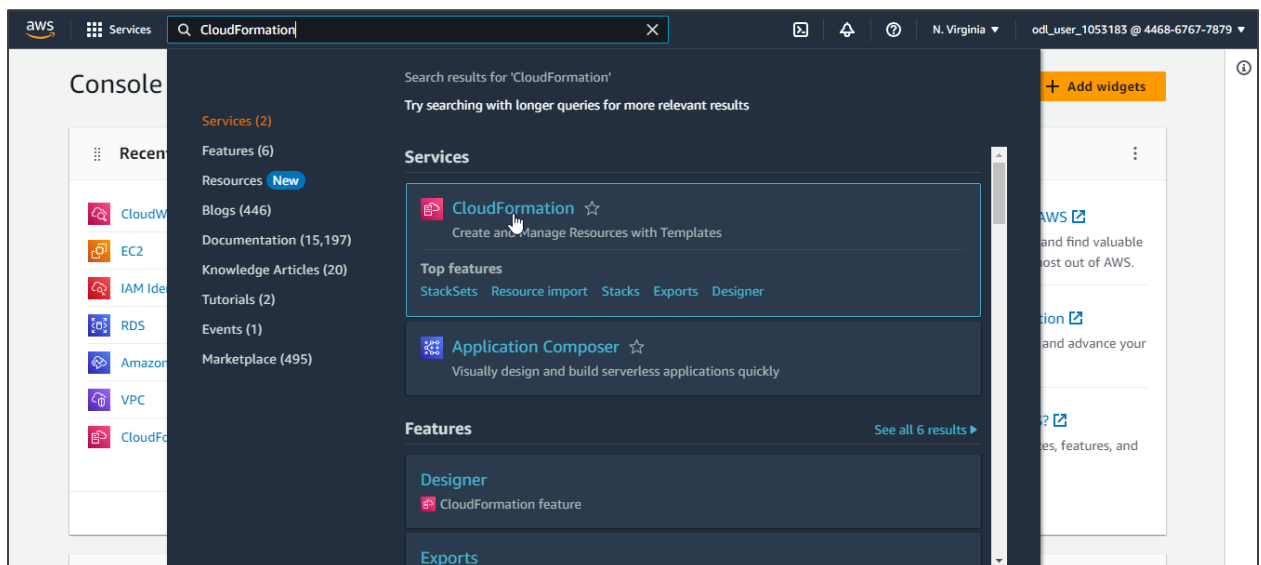
**Prerequisites:** None

Steps to be followed:

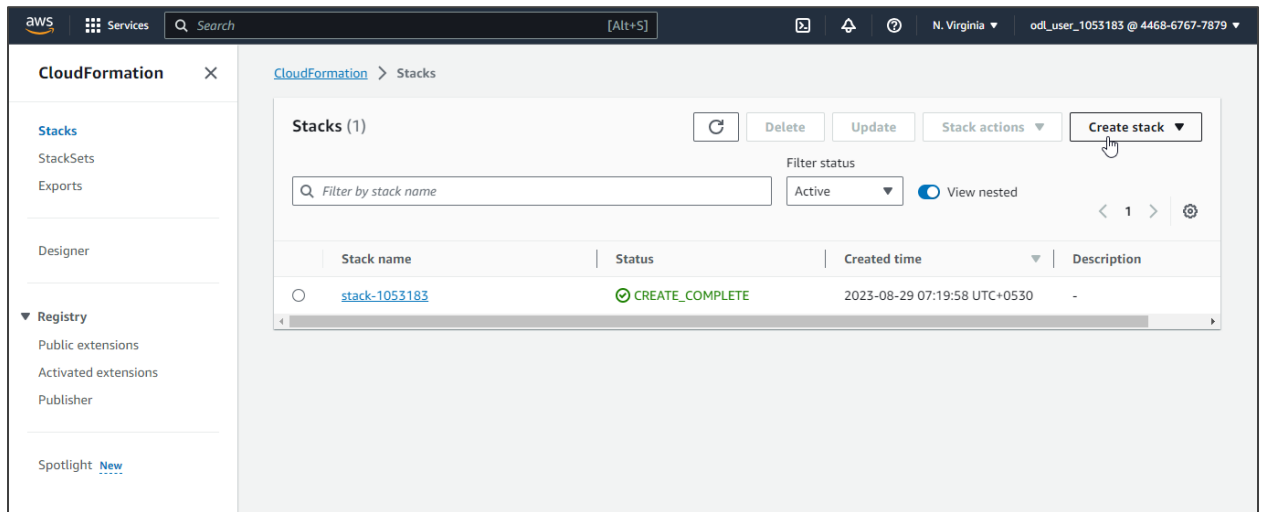
1. Create an S3 Bucket stack using CloudFormation
2. Delete an S3 Bucket from the stack

#### Step 1: Create an S3 Bucket stack using CloudFormation

1.1 Go to the AWS Management Console and search for **CloudFormation**

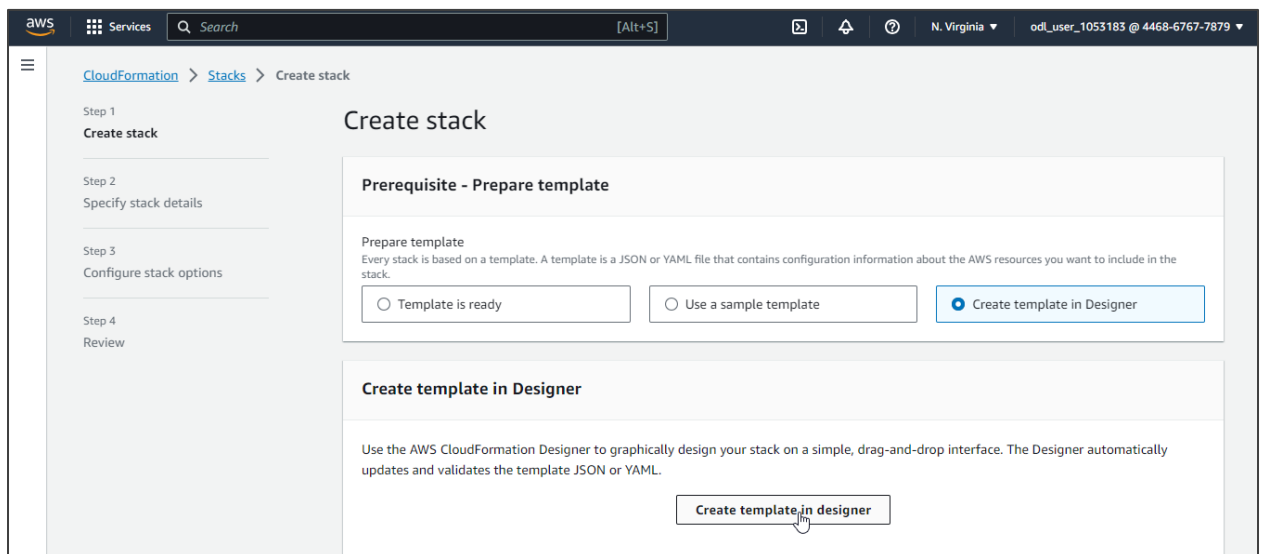


## 1.2 In the CloudFormation Management Console, click on **Create stack**



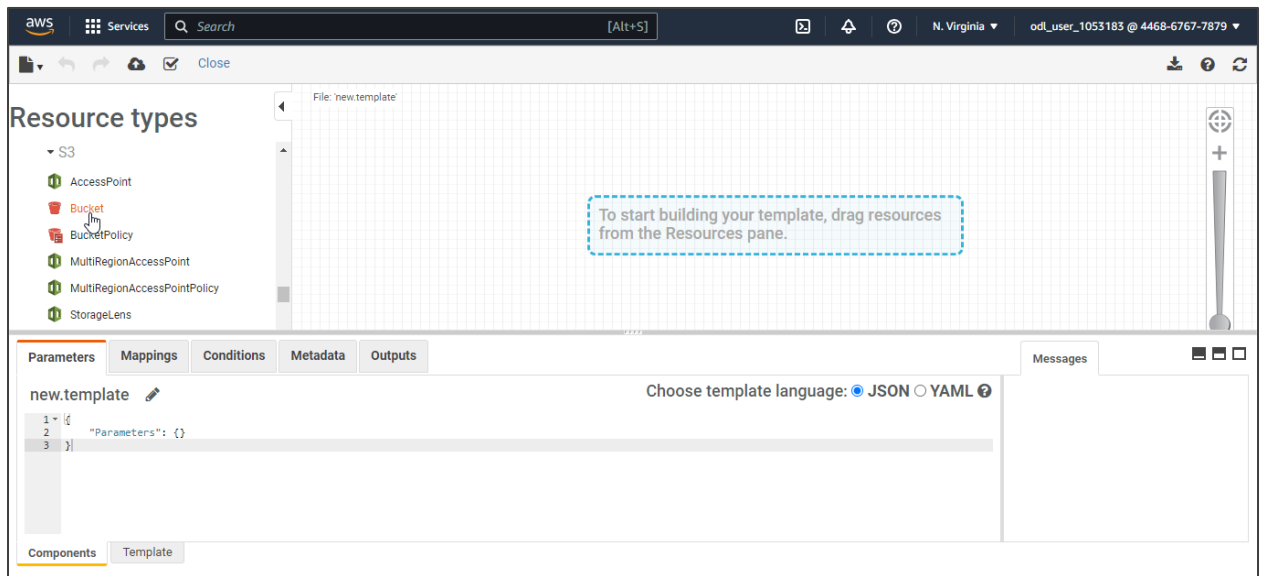
## 1.3 In the **Create stack** console, perform the following:

- Choose **Create template in Designer** in the Specify template section
- Click on **Create template in Designer**

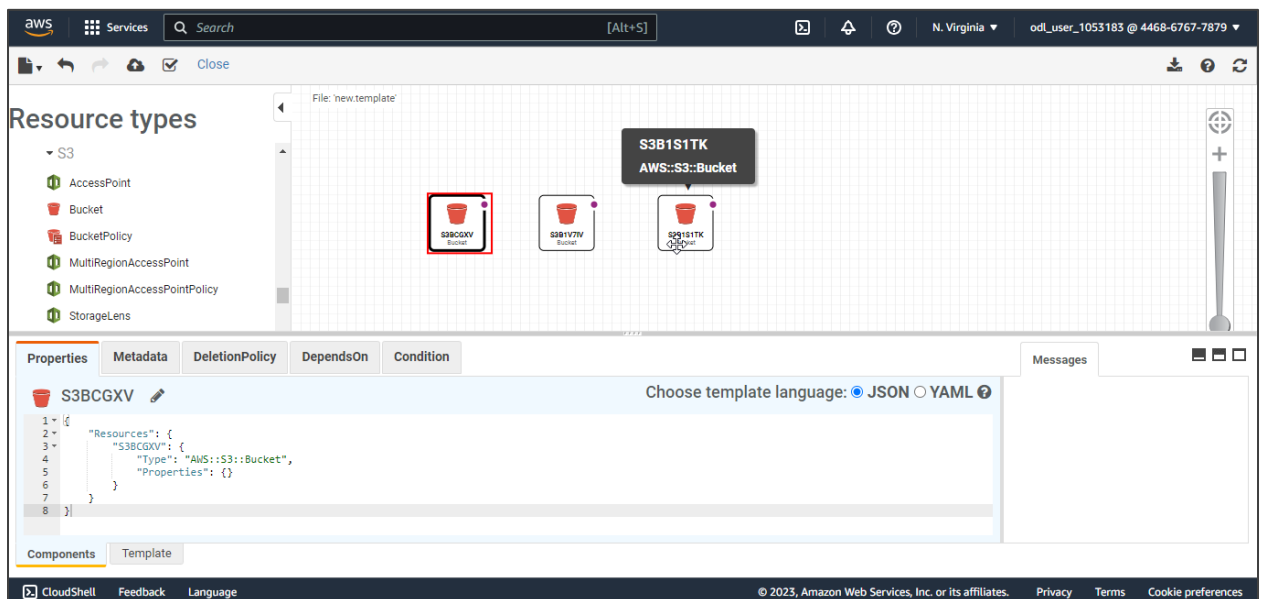


#### 1.4 In the Template designer:

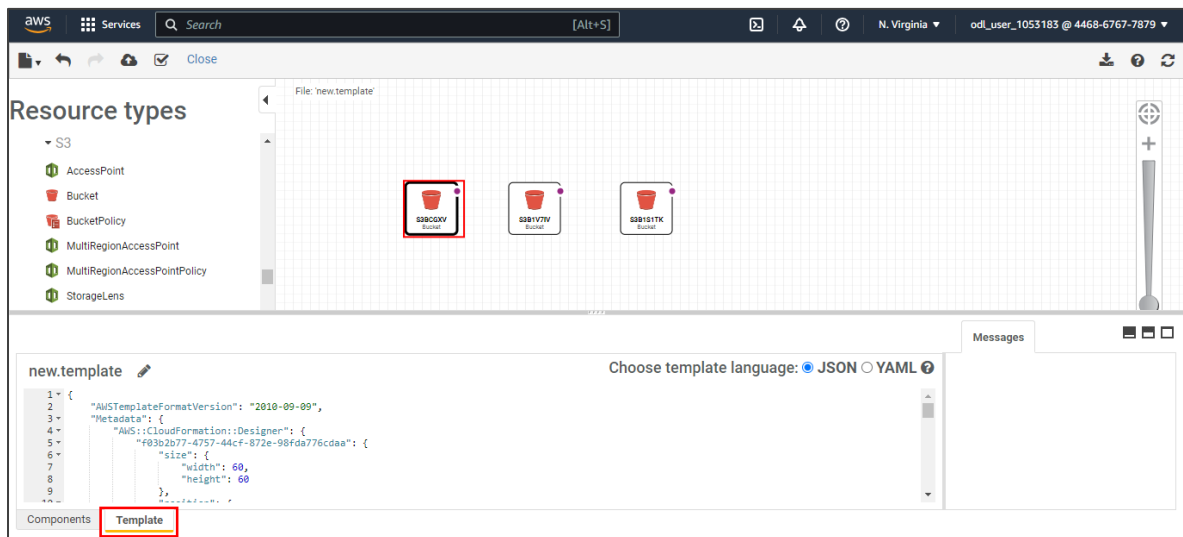
- Under **Resource types**, select **S3**, and click **Bucket**



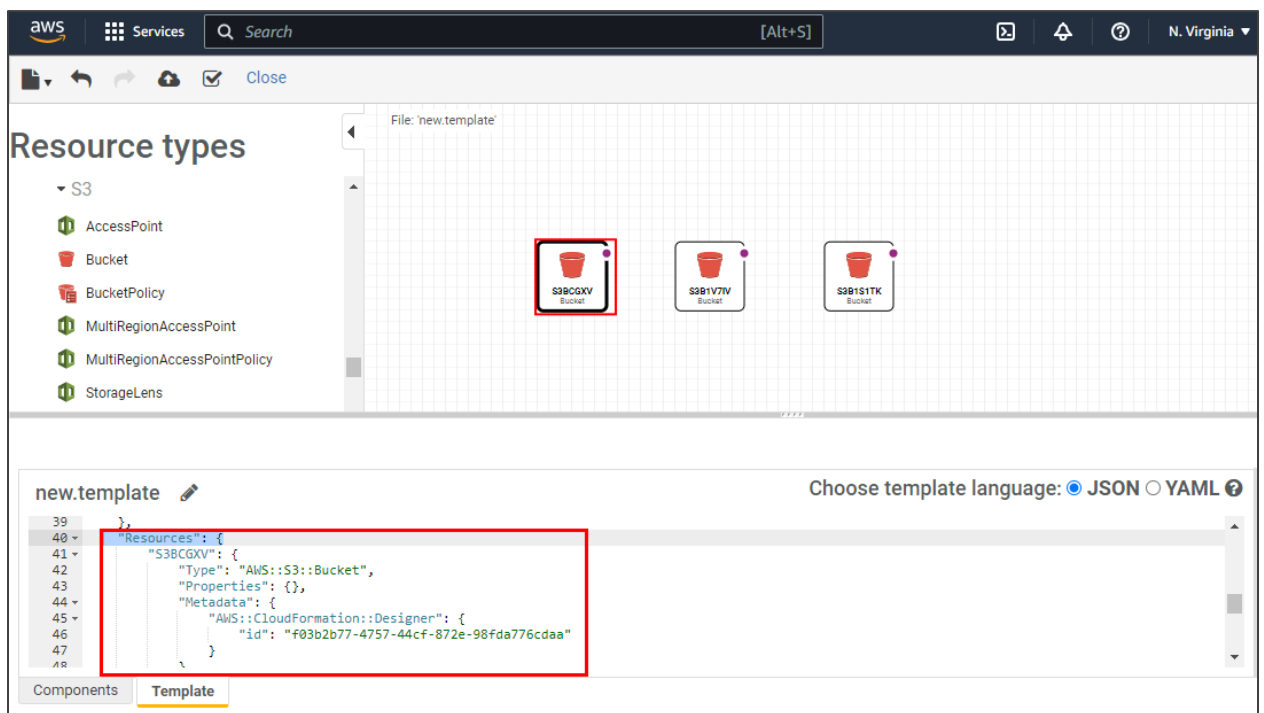
- Drag three **Buckets** from the **Resource** pane to the right pane



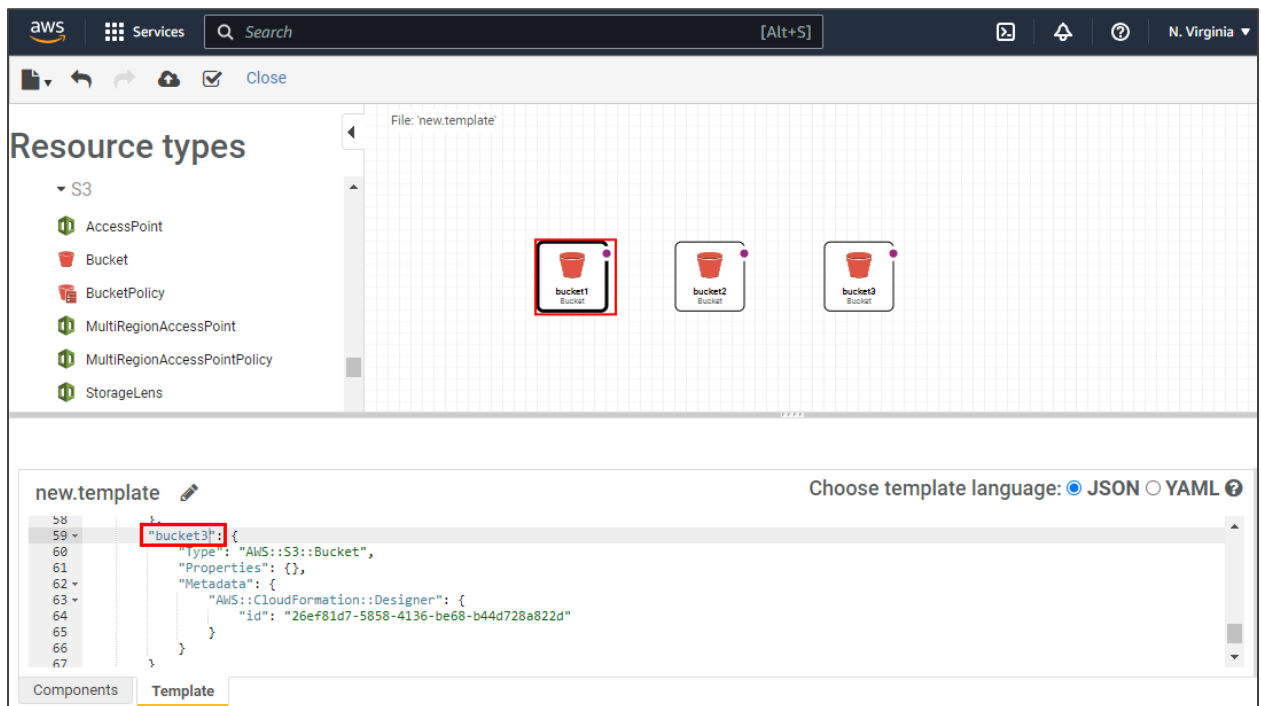
- Go to the Template tab on the lower pane of the Template designer



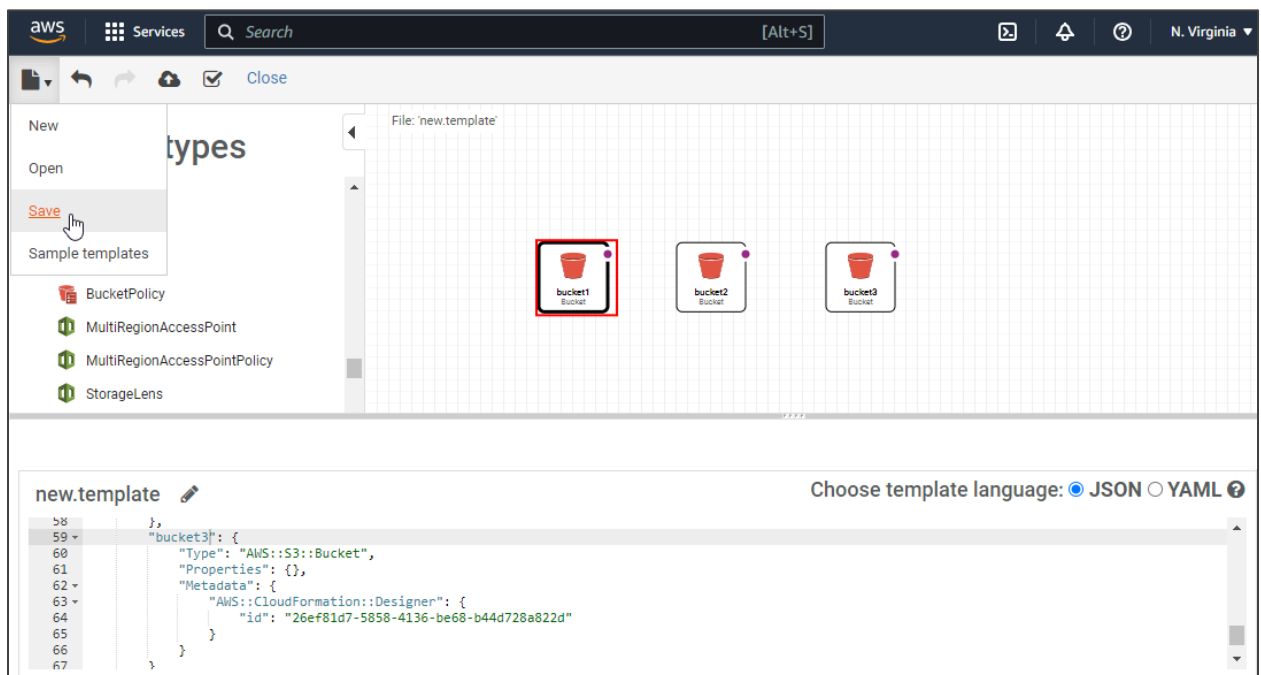
### 1.5 Edit the names of the buckets in the Resources section of the template

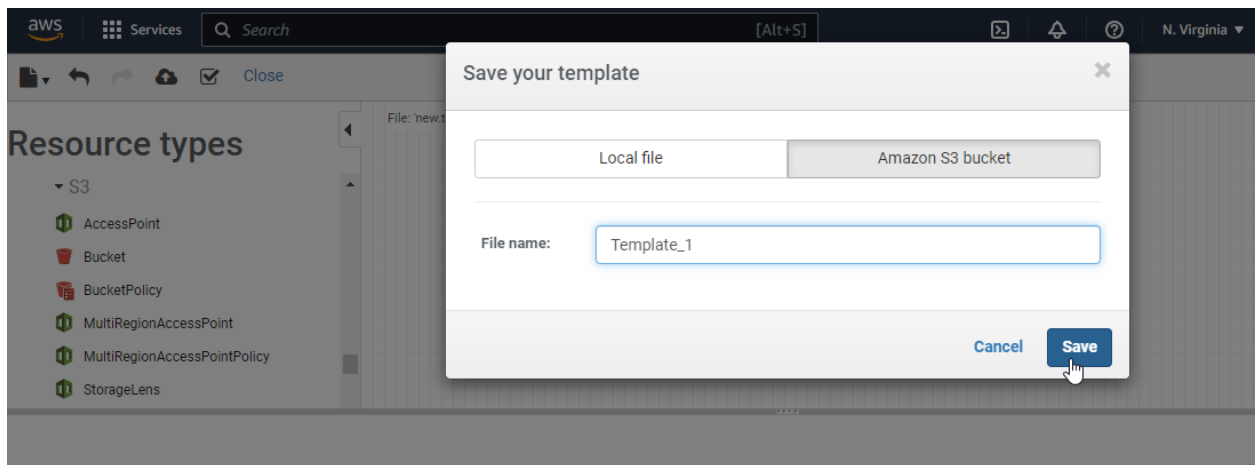


## 1.6 Enter arbitrary names for the first, second, and third buckets

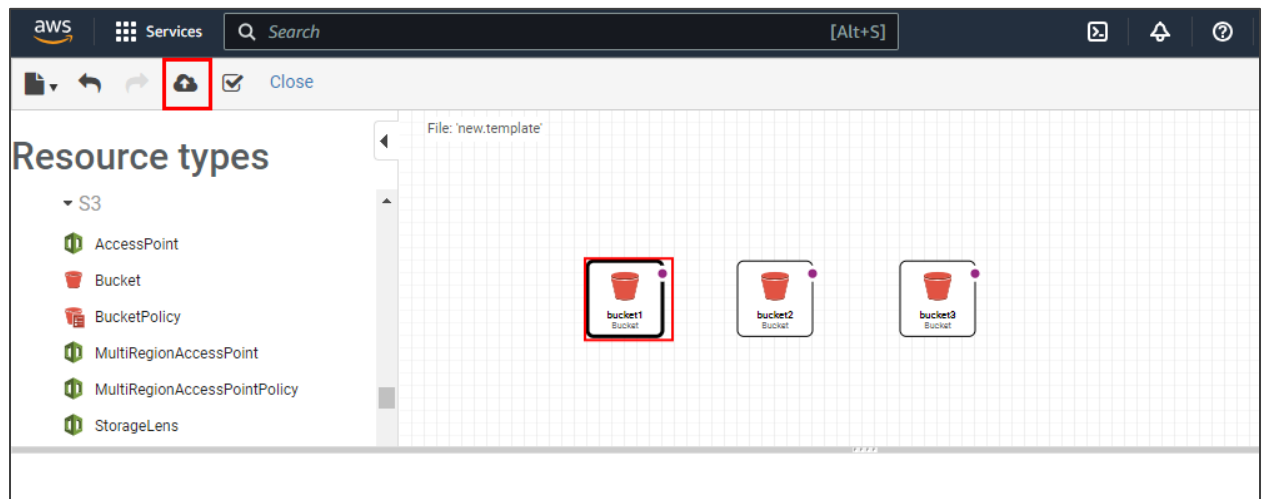


## 1.7 Save the template





1.8 Click on the **Upload icon** and upload the template



1.9 You will be redirected to the **Create stack** window. Now, click **Next**.

**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-1qcvyq8i7kvyja-us-east-1/2023241rwN-new.templatehq42stxaem  
Amazon S3 template URL.

S3 URL: https://s3-external-1.amazonaws.com/cf-templates-1qcvyq8i7kvyja-us-east-1/2023241rwN-new.templatehq42stxaem [View in Designer](#)

Cancel **Next**

1.10 In the **Specify stack details** section, enter an arbitrary name for the stack. Then, click **Next**.

[CloudFormation](#) > [Stacks](#) > Create stack

Step 1  
[Create stack](#)

Step 2  
**Specify stack details**

Step 3  
Configure stack options

Step 4  
Review Stack1

**Specify stack details**

**Stack name**

Stack name  
Stack1  
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

Cancel Previous **Next**

## 1.11 In the Review section, click **Submit**

### Notification options

SNS topic ARN

No notification options

There are no notification options defined

### Stack creation options

Timeout

-

Termination protection

Deactivated

► Quick-create link

Create change set

Cancel Previous **Submit**

[CloudFormation](#) > [Stacks](#) > Stack1

Stacks (2)

Filter status  
 Active ▼

☒ View nested

Stacks

Stack1

2023-08-29 13:17:11 UTC+0530

CREATE\_IN\_PROGRESS

stack-1053183

2023-08-29 07:19:58 UTC+0530

CREATE\_COMPLETE

Stack1

Delete

Update

Stack actions ▼

Create stack ▼

Stack info

Events

Resources

Outputs

Parameters

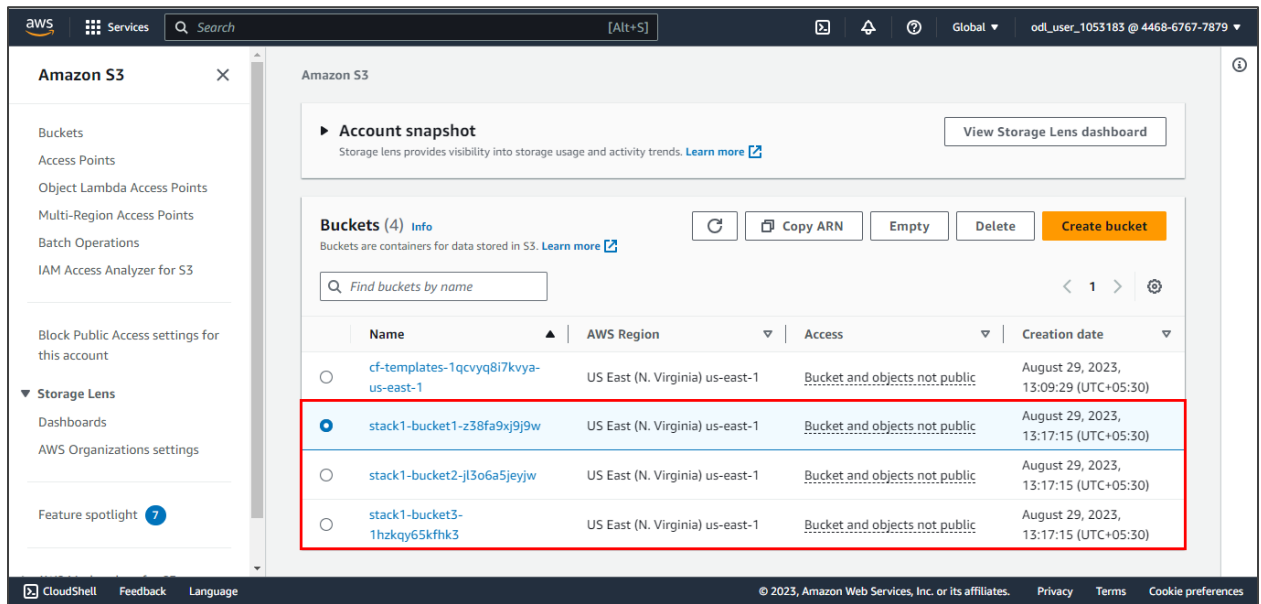
Templa

Events (11)

Timestamp	Logical ID	Status	Statu
2023-08-29 13:17:36 UTC+0530	Stack1	CREATE_COMPLETE	-
2023-08-29 13:17:35 UTC+0530	bucket2	CREATE_COMPLETE	-
2023-08-29 13:17:35 UTC+0530	bucket1	CREATE_COMPLETE	-



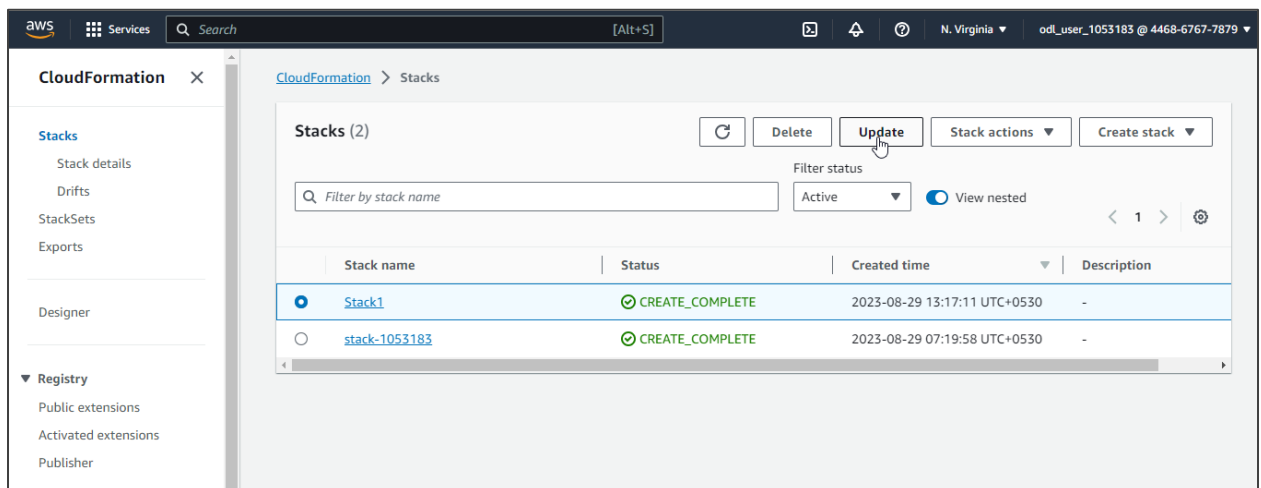
## 1.12 Go to the S3 bucket dashboard



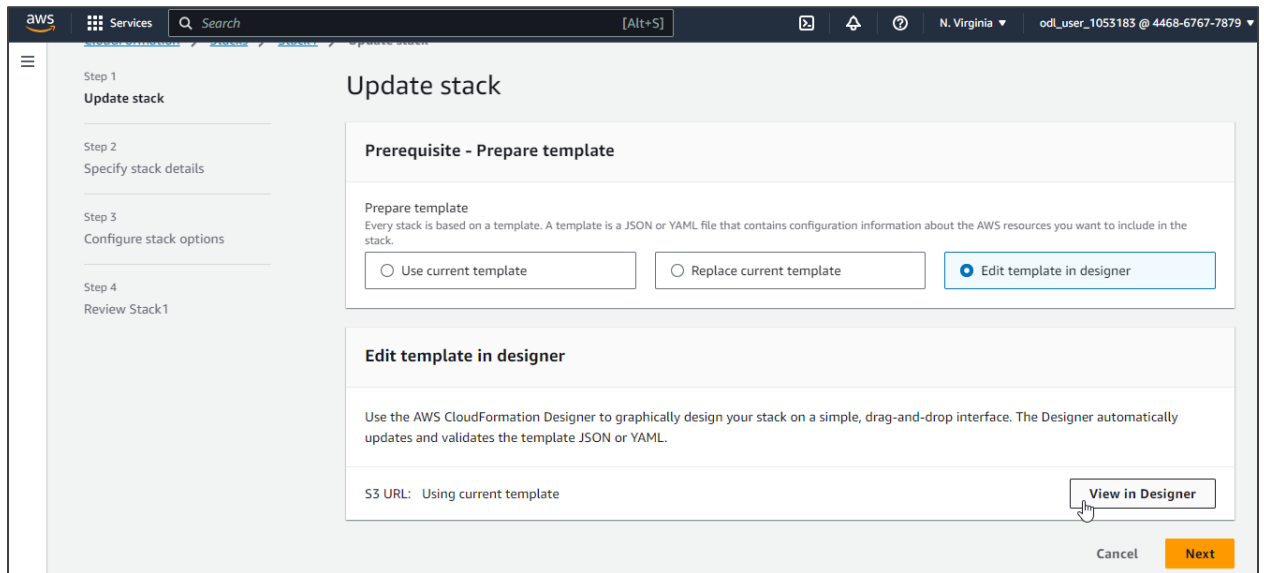
You will find that all three buckets were created.

## Step 2: Delete an S3 Bucket from the stack

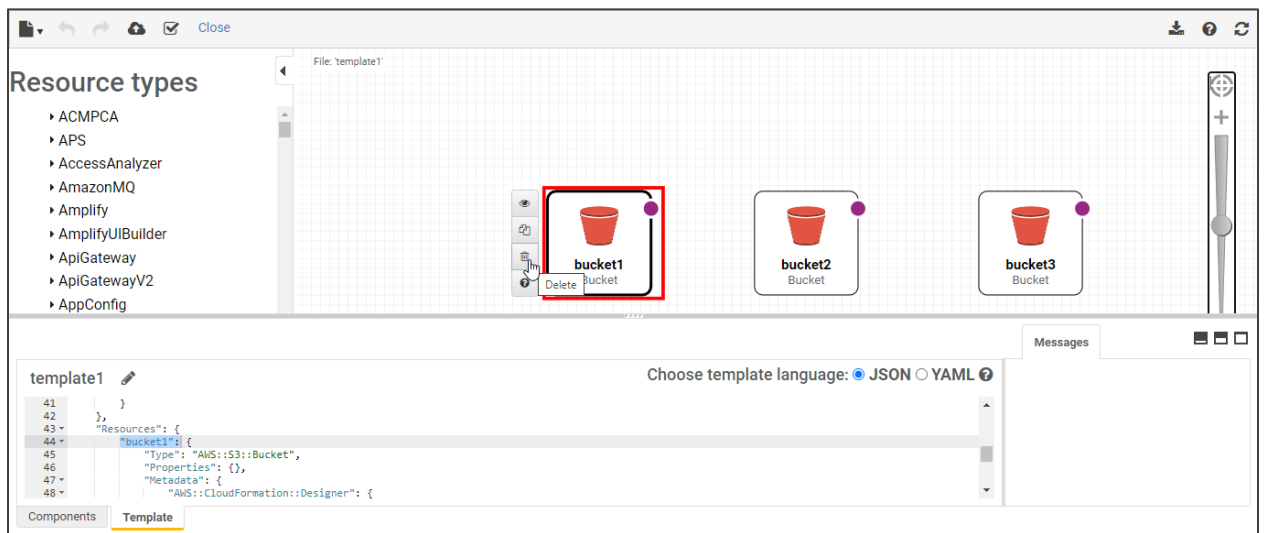
### 2.1 Go to the CloudFormation dashboard, select the stack you created, and click **Update**



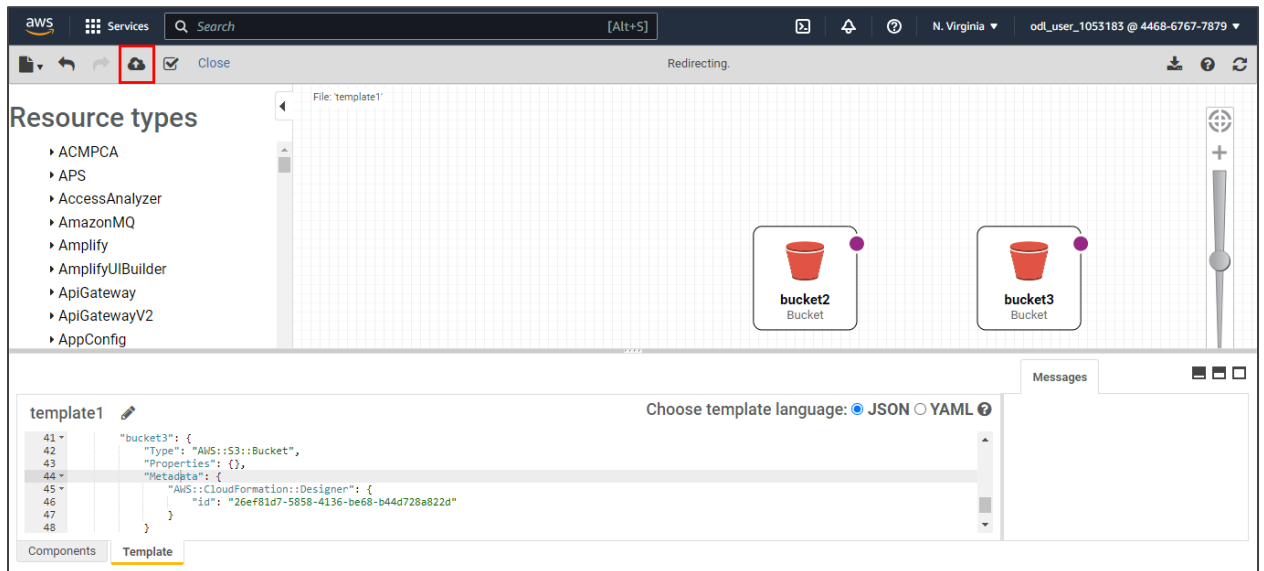
## 2.2 Select **Edit template in designer** and click on **View in Designer**



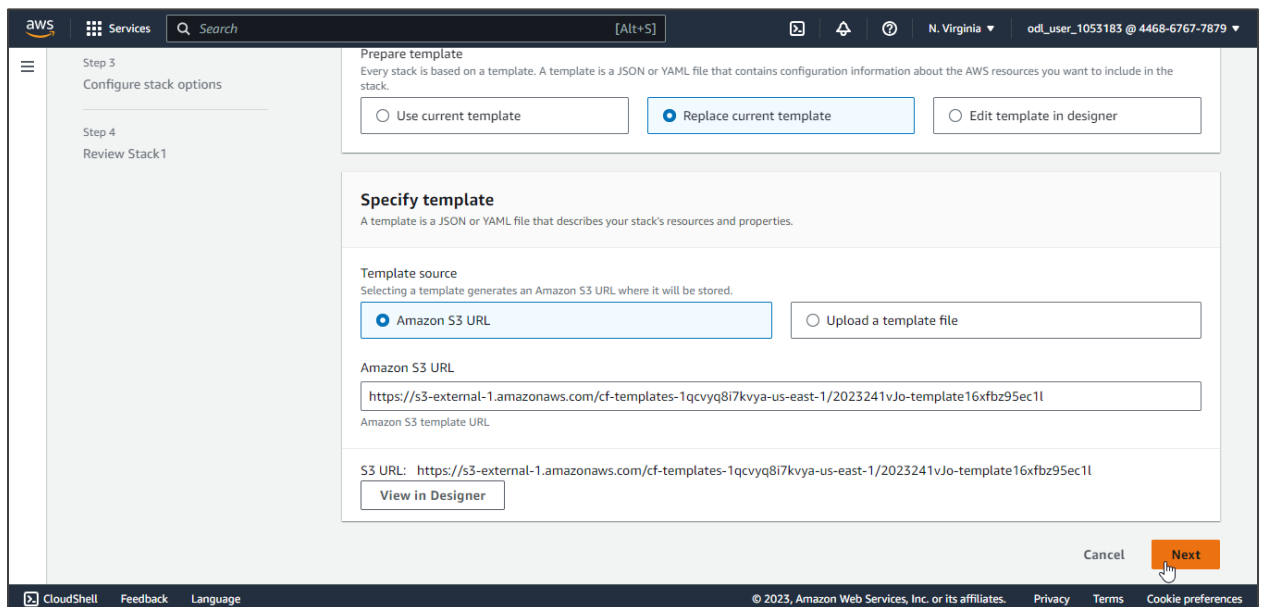
## 2.3 Select the first bucket and click on the delete icon to remove the bucket from the stack



## 2.4 After deleting the bucket, click on the **Upload icon** to upload the template



## 2.5 In the update stack section, click **Next**



## 2.6 Proceed through **Specify stack details** and **Configure stack options** by clicking **Next** for each

**Roll back**

- ☒ **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 during update**  
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.
- Notification options**

Cancel Previous **Next**

## 2.7 In the review section, click **Create stack**

**Notification options**

SNS topic ARN

No notification options  
There are no notification options defined

**Change set preview**

**Changes (1)**

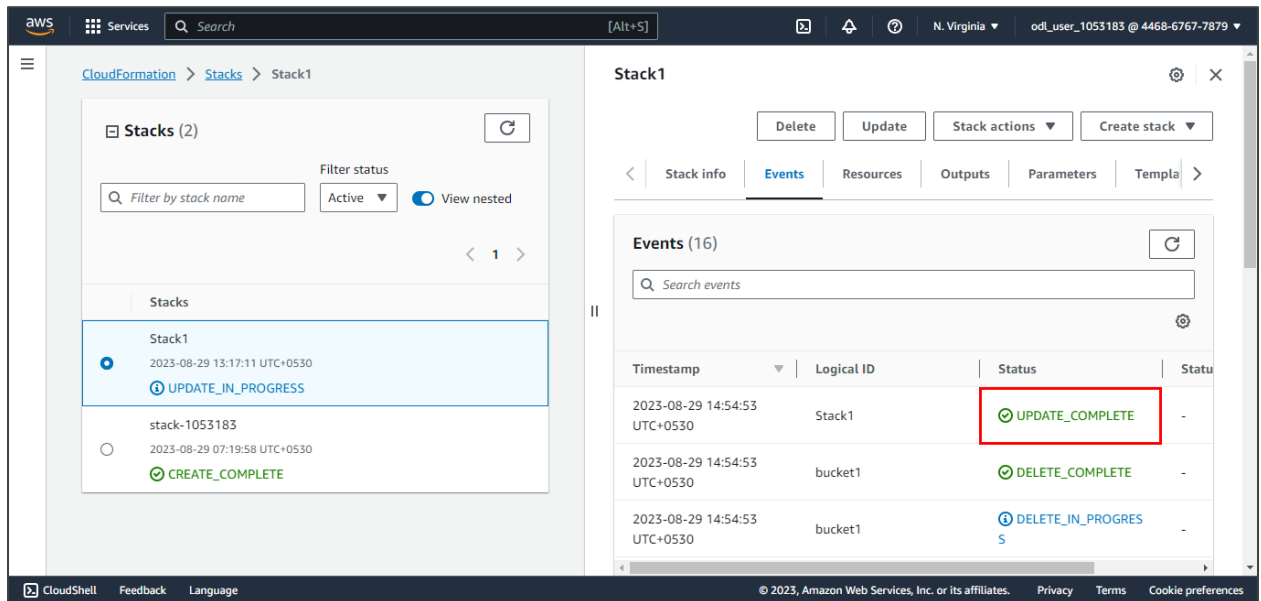
Search changes

Action	Logical ID	Physical ID	Resource type	Replacement
Remove	bucket1	stack1-bucket1-z38fa...	AWS::S3::Bucket	-

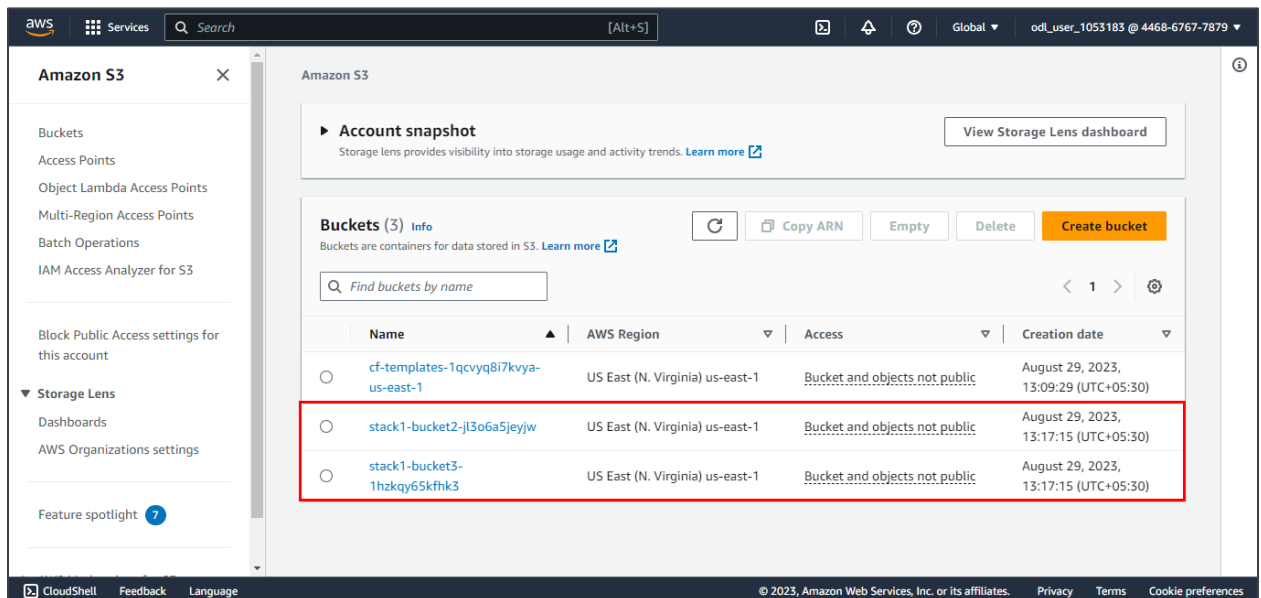
View change set

Cancel Previous **Submit**

## 2.8 After a few minutes, the status will change to **UPDATE\_COMPLETE**



## 2.9 Return to the S3 bucket dashboard and refresh the page. You will notice that only the second and third buckets remain.



This indicates that the first bucket has been successfully deleted.

By following these steps, you have effectively updated the stack by removing one S3 bucket from it.