

## Lesson 09 Demo 07

### Adding Deletion Policy to Protect Resources

**Objective:** To demonstrate the process of adding a deletion policy to protect specific AWS S3 bucket resources in a CloudFormation stack

**Tools required:** AWS Management Console

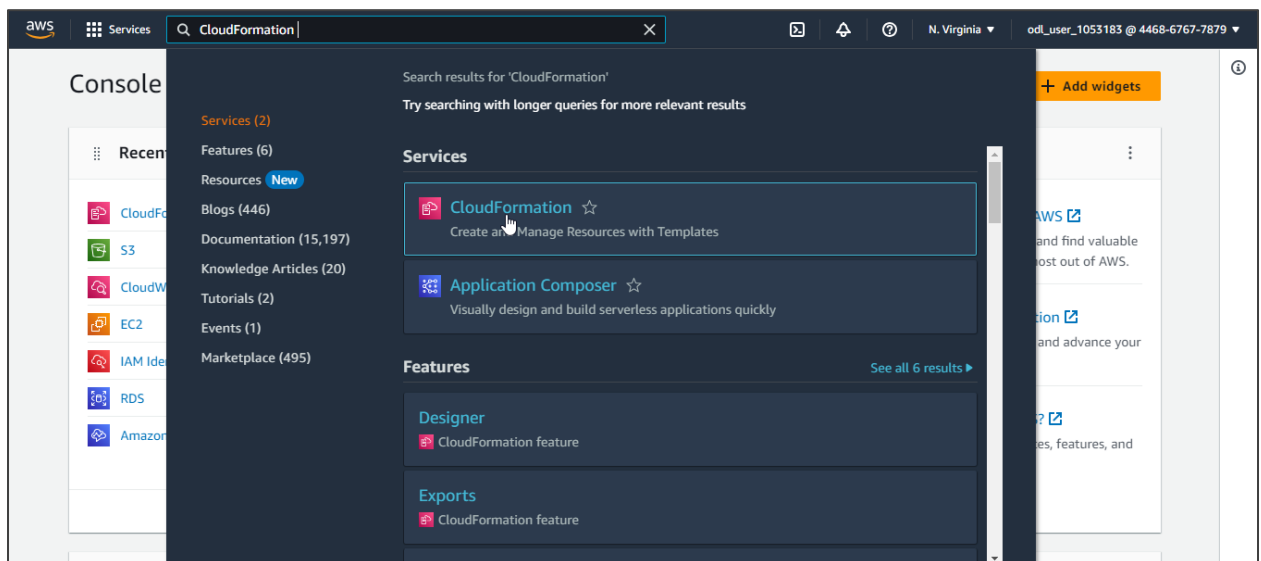
**Prerequisites:** An existing CloudFormation stack

Steps to be followed:

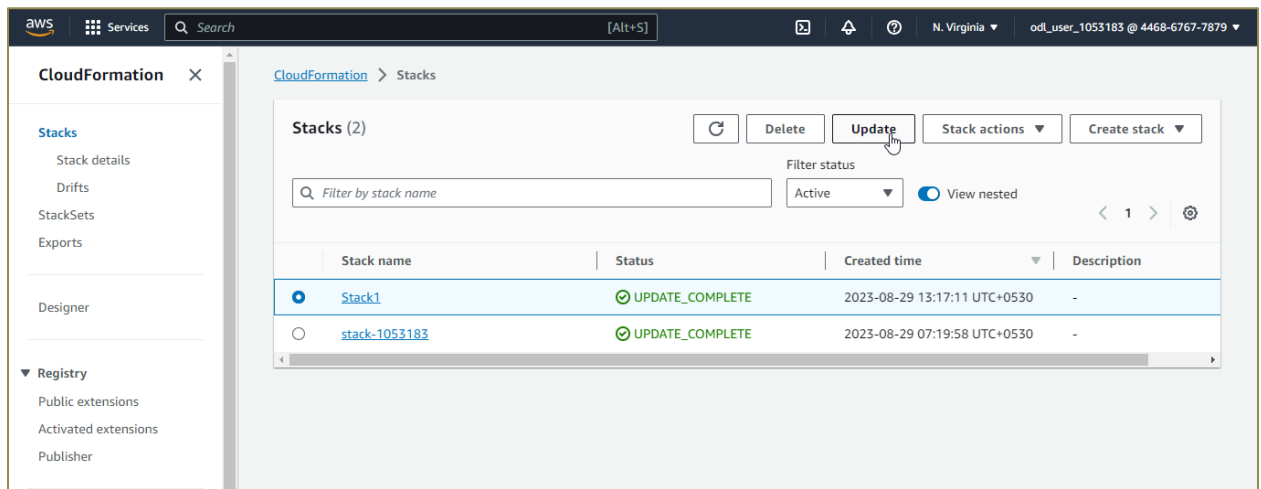
1. Edit deletion policy for specific S3 bucket
2. Delete the stack

#### Step 1: Edit deletion policy for specific S3 bucket

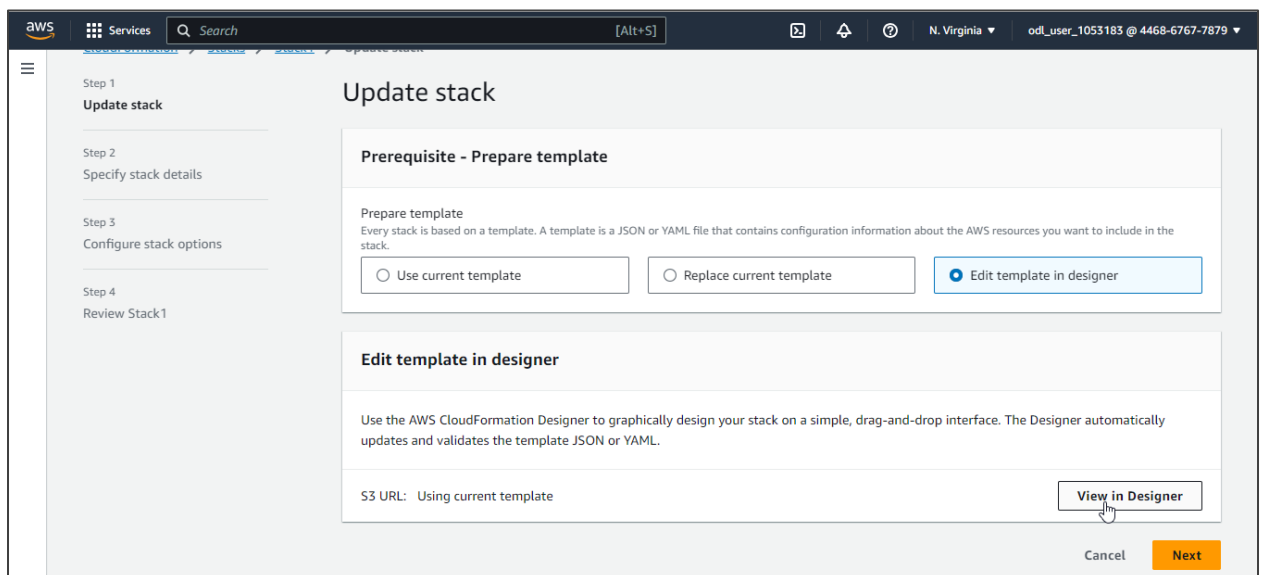
1.1 Open the AWS Management Console, search for **CloudFormation**, and select it



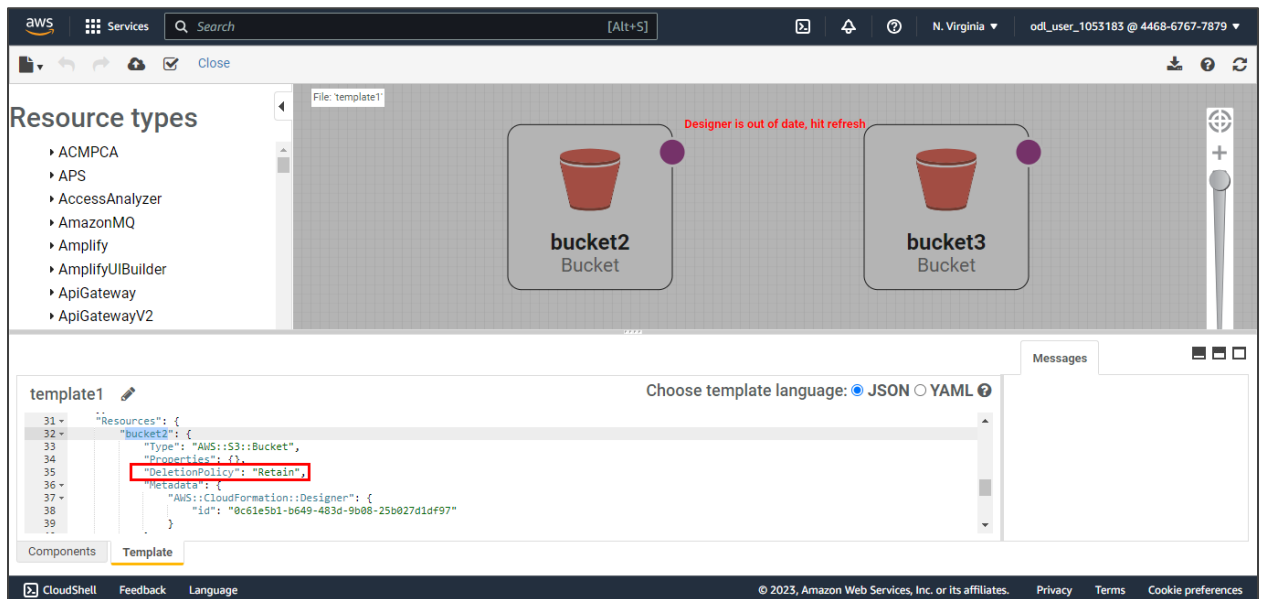
1.2 Locate and choose the existing stack containing the S3 bucket resource. Click **Update** to initiate the update process.



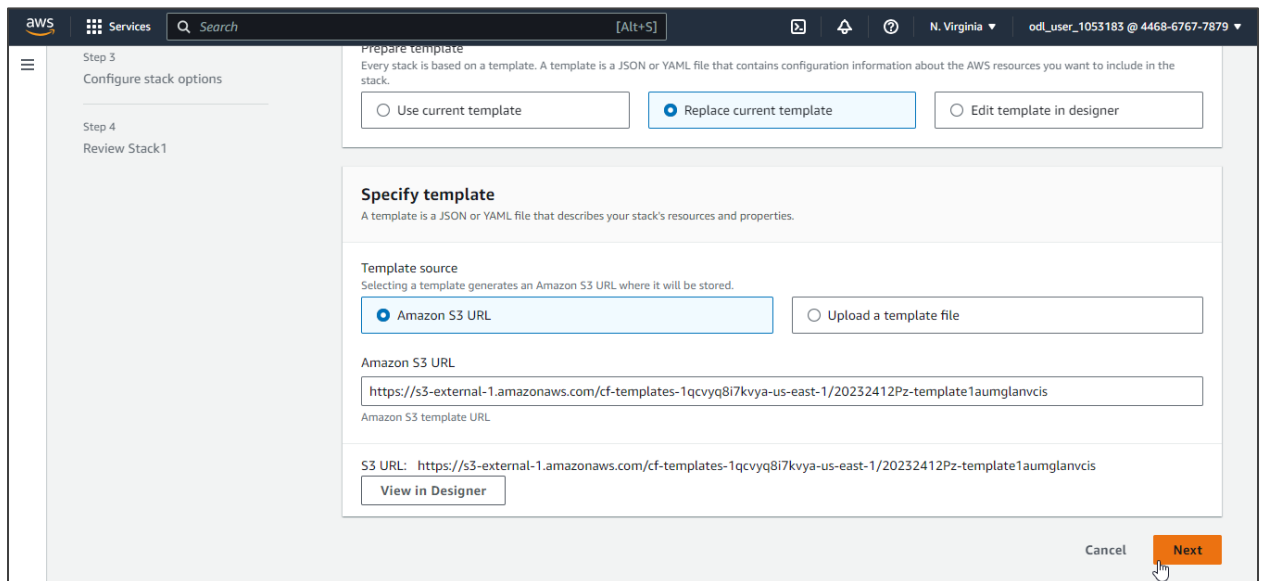
1.3 In the **Update stack** section, choose **Edit template in designer**, and click on **View in Designer**



1.4 In the **Template** tab, include the deletion policy for a single bucket as follows:  
**"DeletionPolicy": "Retain"**



1.5 Save the modified template and click **Next**



1.6 Proceed through **Specify stack details** and **Configure stack options** by clicking **Next** for each. Proceed with the update and wait for its completion (status: **UPDATE\_COMPLETE**).

The screenshot shows the AWS CloudFormation console interface. At the top, there's a navigation bar with the AWS logo, 'Services', a search bar, and user information. The main content area is divided into two sections. The top section, 'Notification options', shows 'SNS topic ARN' with a message: 'No notification options. There are no notification options defined.' The bottom section, 'Change set preview', shows 'Changes (1)' with a table of changes. The table has columns: Action, Logical ID, Physical ID, Resource type, and Replacement. One change is listed: 'Modify' action on 'bucket2' (Logical ID), with Physical ID 'stack1-bucket2-jl3o6a...', Resource type 'AWS::S3::Bucket', and Replacement 'False'. At the bottom, there are buttons for 'View change set', 'Cancel', 'Previous', and 'Submit'.

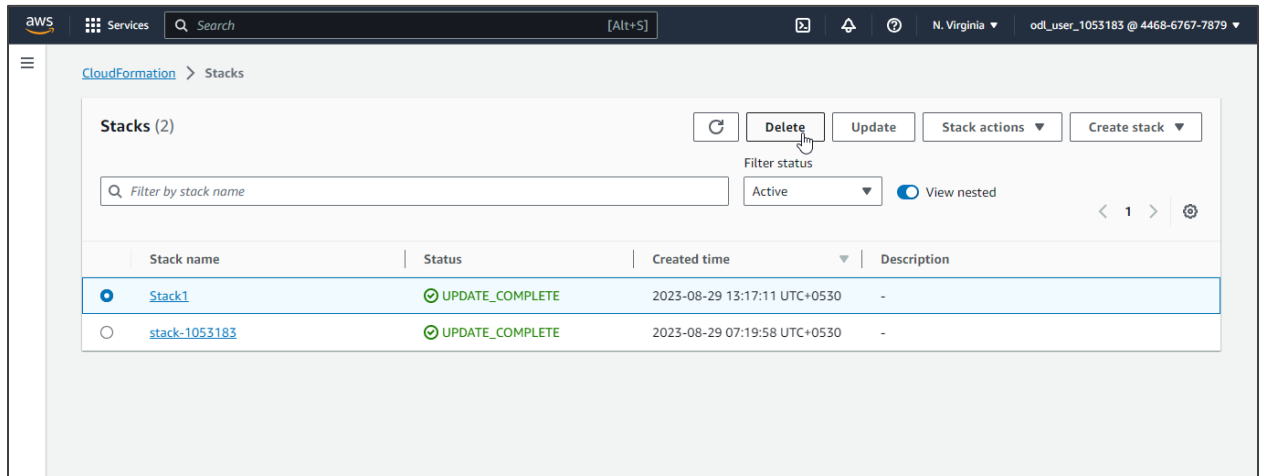
Action	Logical ID	Physical ID	Resource type	Replacement
Modify	bucket2	stack1-bucket2-jl3o6a...	AWS::S3::Bucket	False

The screenshot shows the AWS CloudFormation console with two panels. The left panel, 'Stacks (2)', lists two stacks: 'Stack1' (created 2023-08-29 13:17:11 UTC+0530) and 'stack-1053183' (created 2023-08-29 07:19:58 UTC+0530). Both have a green checkmark and 'UPDATE\_COMPLETE' status. The right panel, 'Stack1', shows the 'Events' tab selected. It displays a list of 20 events. The first event is highlighted with a red box: it occurred at 2023-08-29 16:50:41 UTC+0530 for Logical ID 'Stack1' and has a status of 'UPDATE\_COMPLETE'.

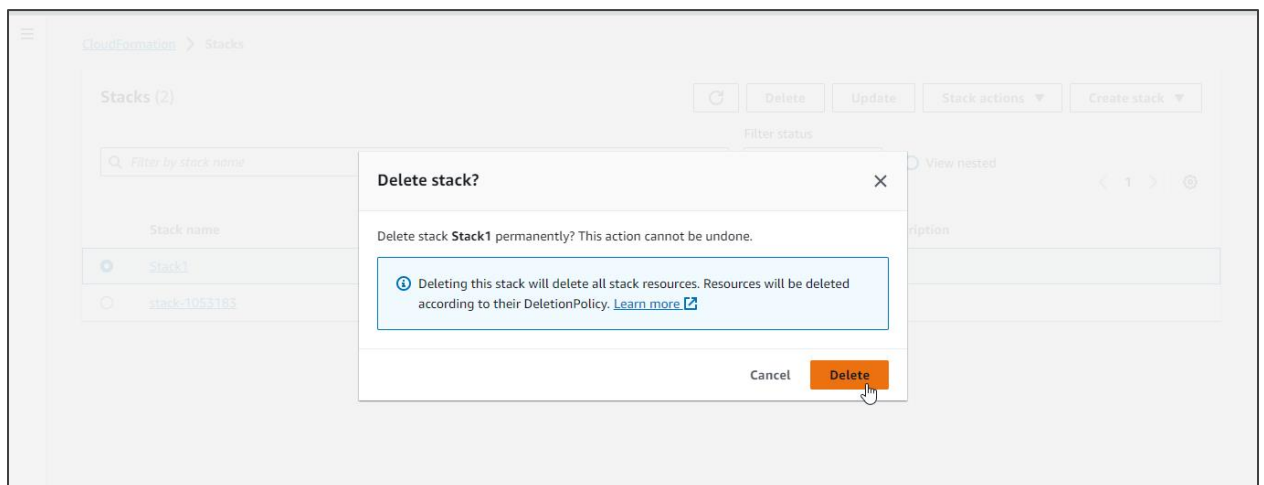
Timestamp	Logical ID	Status	Stack
2023-08-29 16:50:41 UTC+0530	Stack1	UPDATE_COMPLETE	Stack1
2023-08-29 16:50:40 UTC+0530	Stack1	UPDATE_COMPLETE_CLEANUP_IN_PROGRESS	Stack1
2023-08-29 16:50:39 UTC+0530	bucket2	UPDATE_COMPLETE	Stack1

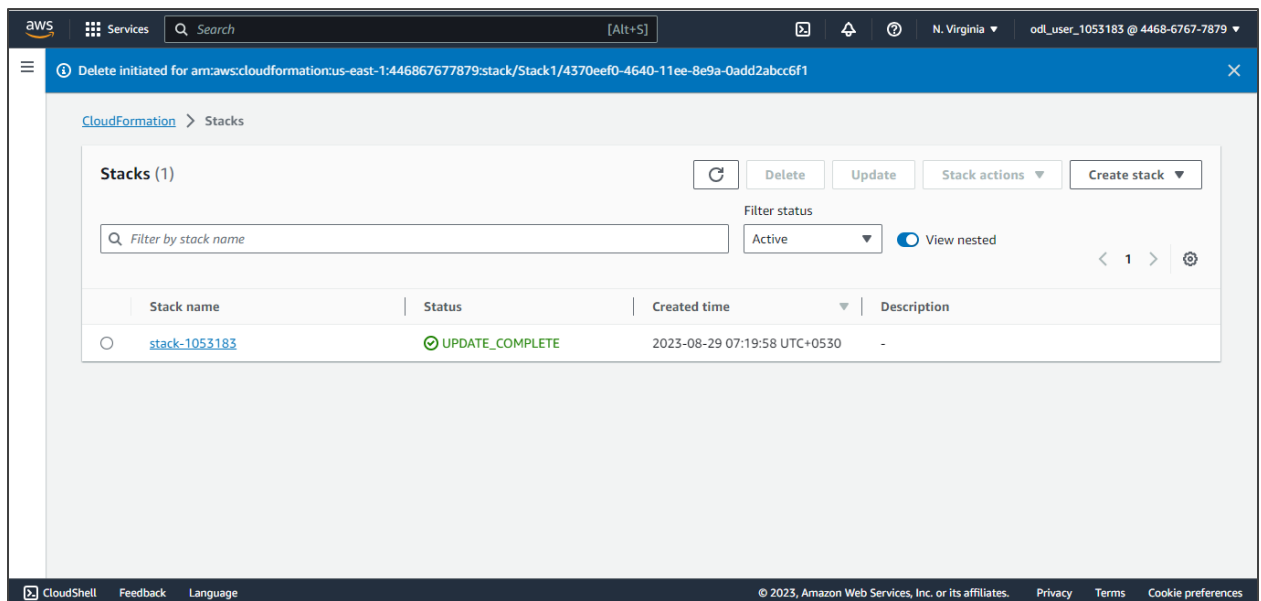
## Step 2: Delete the stack

### 2.1 After the update is complete, delete the stack



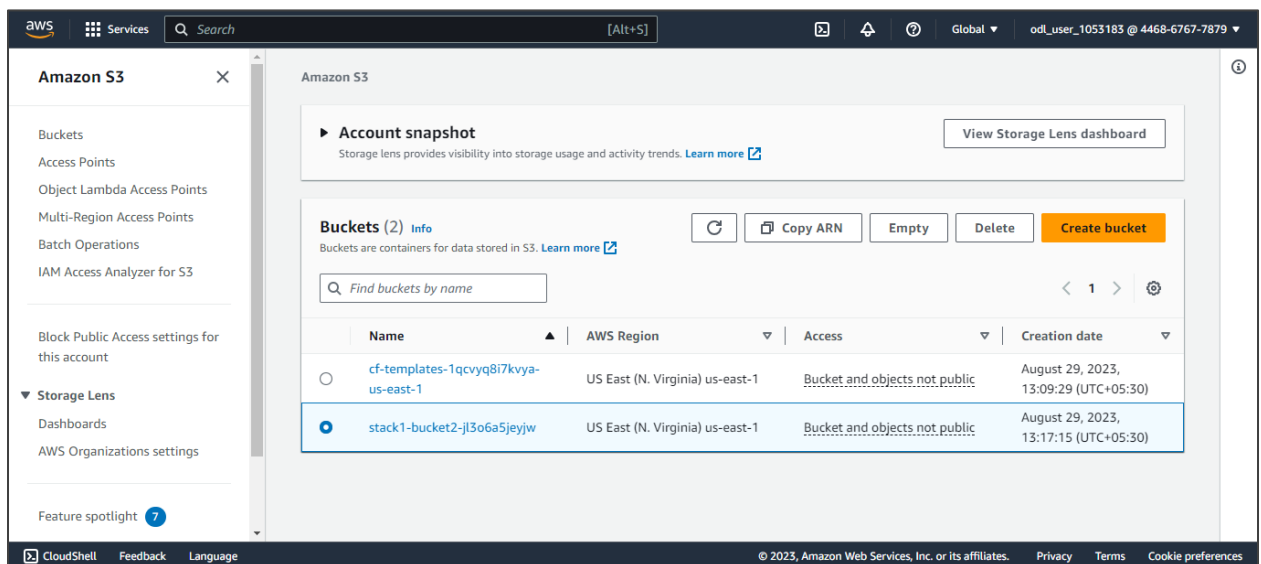
### 2.2 Select **Delete** when prompted





You must check if the stack was deleted successfully.

## 2.3 Navigate to the S3 bucket dashboard to verify that the S3 bucket specified in the template is retained after the stack deletion



You will notice that one S3 bucket has not been deleted.

By following these steps, you have successfully updated the deletion policy for an AWS S3 bucket resource in a CloudFormation stack, ensuring its retention during stack deletion.