# **Activity 6**

Start by creating a CloudFormation stack using the activity template. Name it "Section6ActivitySolution," select a subnet for the WebServerInstance, and proceed to create the stack. Once created, remove the EbsVolume and VolumeAttachment resources from the template and add an S3Bucket resource. Save the updated template and create a new change set in the CloudFormation Console, replacing the current template. Modify the WebServerSubnet parameter and review the changes. Execute the change set to update the stack. Verify changes, ensuring the removal of old resources and the addition of the new S3 bucket. Finally, delete the stack for cleanup.

### What we have in the Activity:

#### 1. CloudFormation Stack Management:

- Creation of a stack using a provided template.
- Parameter configuration during stack creation (e.g., subnet selection).

#### 2. Template Customization:

- Modifications to existing resources (removal of EbsVolume and VolumeAttachment).
- Addition of new resources (e.g., S3Bucket).

#### 3. Change Set Implementation:

- Creation of a change set to preview and plan updates before execution.
- Use of "Replace current template" to incorporate template changes.
- Clear description for change set tracking.

#### 4. Action Types in Change Sets:

- o Add: Creating new resources (e.g., S3 bucket).
- o *Remove*: Deleting unnecessary resources (e.g., EbsVolume).
- o *Modify*: Updating existing resources (e.g., WebServerInstance).

#### 5. Execution and Verification:

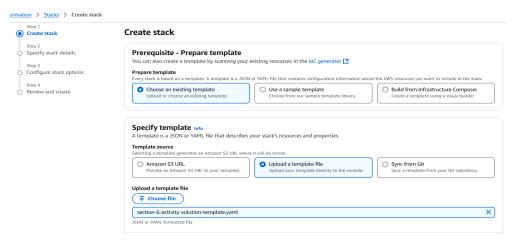
- Safe execution of the change set without impacting the existing stack until confirmed.
- Verification of stack updates through resource lists and actions.

#### 6. Resource Cleanup:

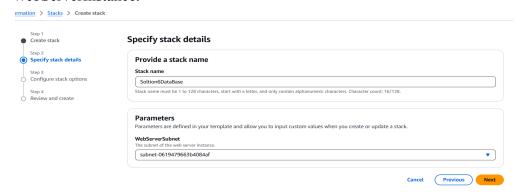
 Deletion of the stack to avoid unnecessary costs and maintain a clean environment.

## **Activity**

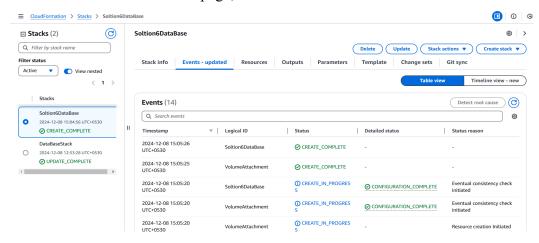
- Find the template files in our GitHub repository under the same name as the heading for easy access and edits. Find and Save the attached template locally, open it in VS Code for edits.
- 2. Open AWS CloudFormation Console and click **Create stack**. Upload the activity template and click **Next**.



3. Name the stack "Section6ActivitySolution" and select a subnet for WebServerInstance.

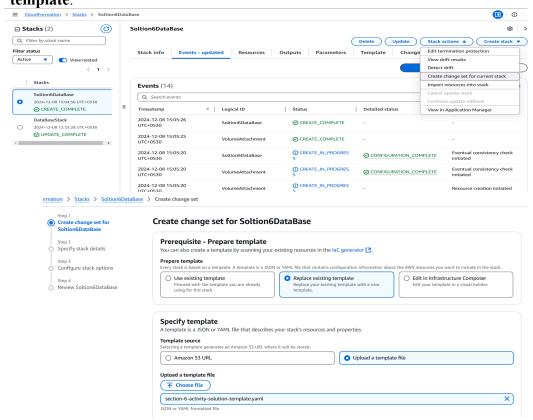


4. Click **Next** until the Review page, then click **Create stack**.

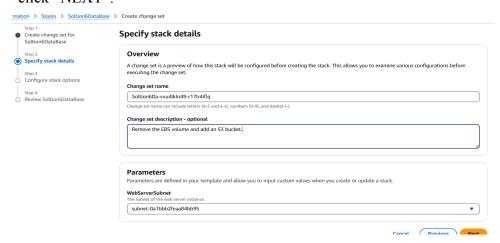


- 5. Wait for stack creation to complete and refresh to verify resources (EC2, EBS, and VolumeAttachment).
- 6. Modify the template by removing EbsVolume and VolumeAttachment and adding an S3Bucket.

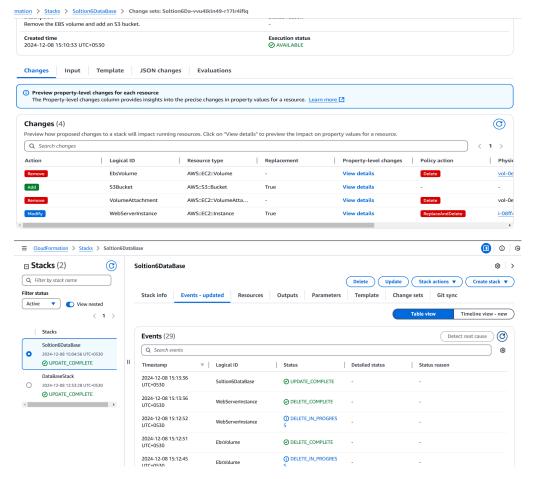
- 7. Save the modified template and return to the CloudFormation Console.
- 8. Click Create change set from the Actions menu and select Replace current template.



9. Provide a description (e.g., "Remove the EBS volume and add an S3 bucket") and click "NEXT".

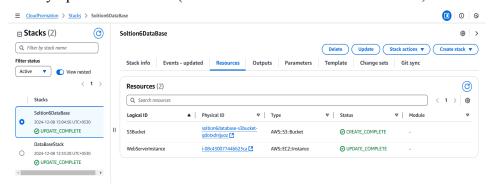


10. Upload the modified template, update the WebServerSubnet parameter, and click Next until the Review page.



11. Wait for the change set to complete and review actions (e.g., Add, Remove, Modify). Click **Execute** to apply the change set and refresh until the update completes.

12. Verify updated resources (no EbsVolume or VolumeAttachment, new S3Bucket).



13. Delete the stack to clean up resources.

