

Module 10 Guided Lab - Automating Infrastructure Deployment with AWS CloudFormation

Lab-08

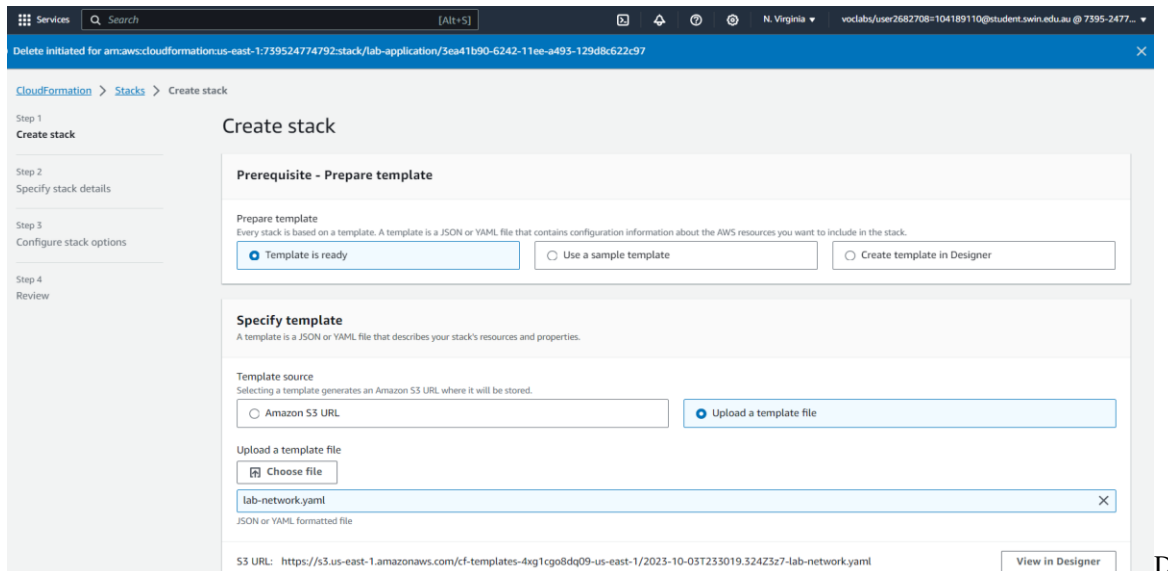
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Lab session: Friday 4:30-6:30

In this lab we deploy multiple layers of infrastructure with AWS CloudFormation, update a CloudFormation stack, and delete a stack (while retaining some resources).

Task 1 :: Deploying a network layer



The screenshot displays the AWS CloudFormation console's 'Create stack' wizard. The interface is divided into a left-hand navigation pane and a main content area. The navigation pane shows four steps: 'Step 1: Create stack', 'Step 2: Specify stack details', 'Step 3: Configure stack options', and 'Step 4: Review'. The main content area is titled 'Create stack' and contains two sections: 'Prerequisite - Prepare template' and 'Specify template'. In the 'Prerequisite' section, the 'Template is ready' radio button is selected. The 'Specify template' section shows the 'Template source' as 'Upload a template file'. Below this, the 'Upload a template file' section shows a 'Choose file' button and a text input field containing 'lab-network.yaml'. At the bottom, the 'S3 URL' is displayed as 'https://s3.us-east-1.amazonaws.com/cf-templates-4xg1cgo8dq09-us-east-1/2023-10-03T233019.324Z3z7-lab-network.yaml', and a 'View in Designer' button is visible.

Fig 1.1 Uploading template in Cloud formation

[Alt+S] N. Virginia voclabs/user2682708=104189110@student.swin.edu.au @ 7395-2477...

reate stack

Specify stack details

Stack name

Stack name

lab-network

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

Fig1.2 giving the name to the stack

[Alt+S] N. Virginia voclabs/user2682708=104189110@student.swin.edu.au @ 7395-2477...

> Create stack

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.

Key

Value - optional

Q application X

Q inventory X

Remove

Add new tag

You can add 49 more tag(s)

Permissions

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

Fig 1.3 Adding Tags

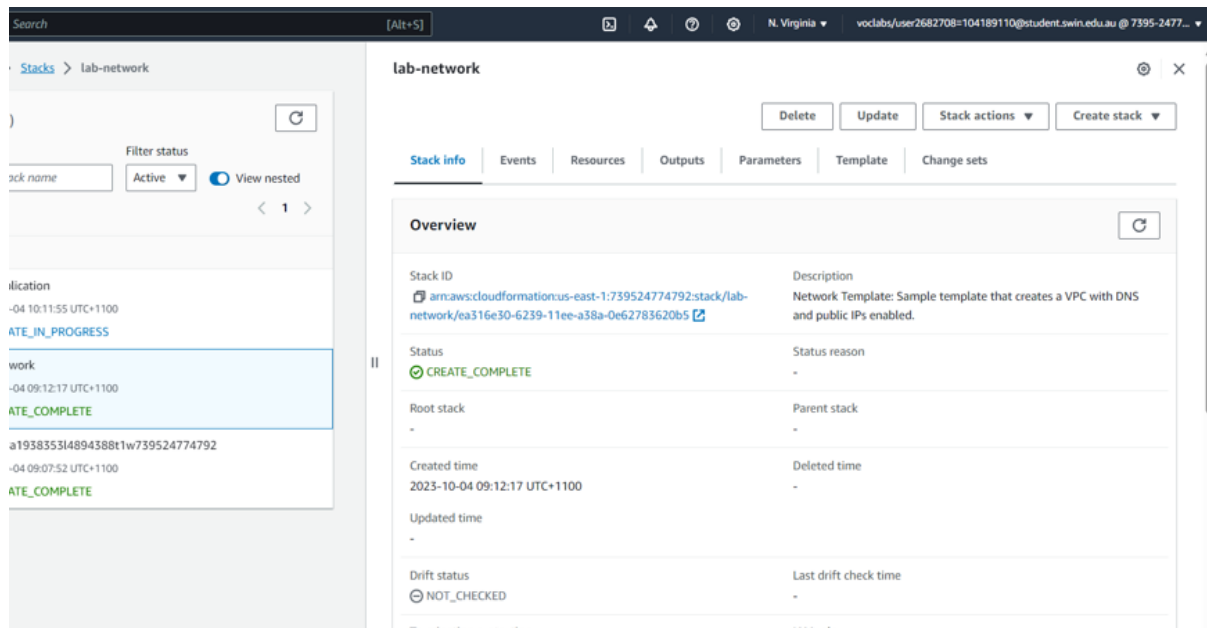


Fig 1.3 confirming the successful creation

Task 2 :: Deploying an application Layer

Creating application layer same as done in task one but different config file.

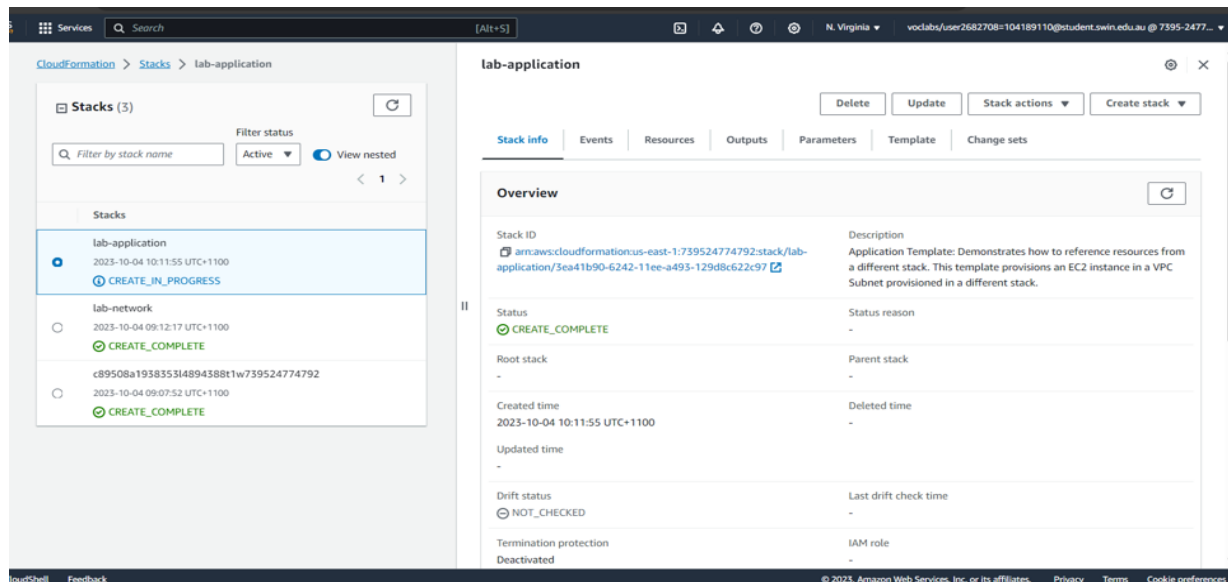


Fig 2.1 Creation in progress

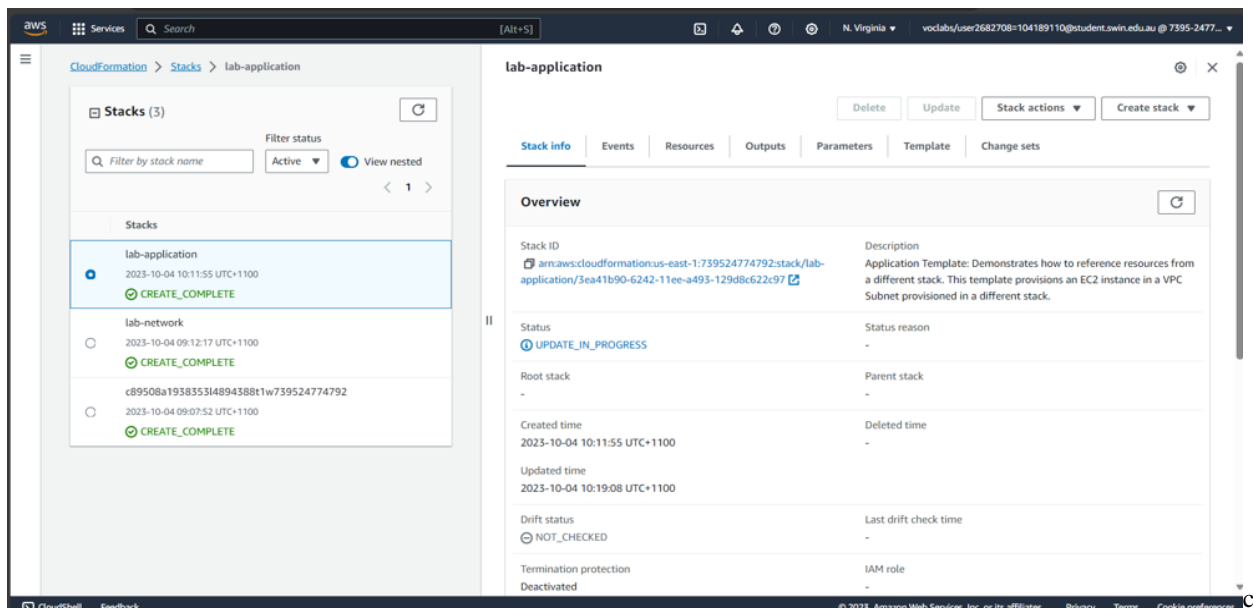


Fig 2.2 successful creation of the application/network layer



Congratulations, you have successfully launched the AWS CloudFormation sample.

Fig 2.3 Copied the URL to open in another browser to check

Task 3 :: Updating the stack

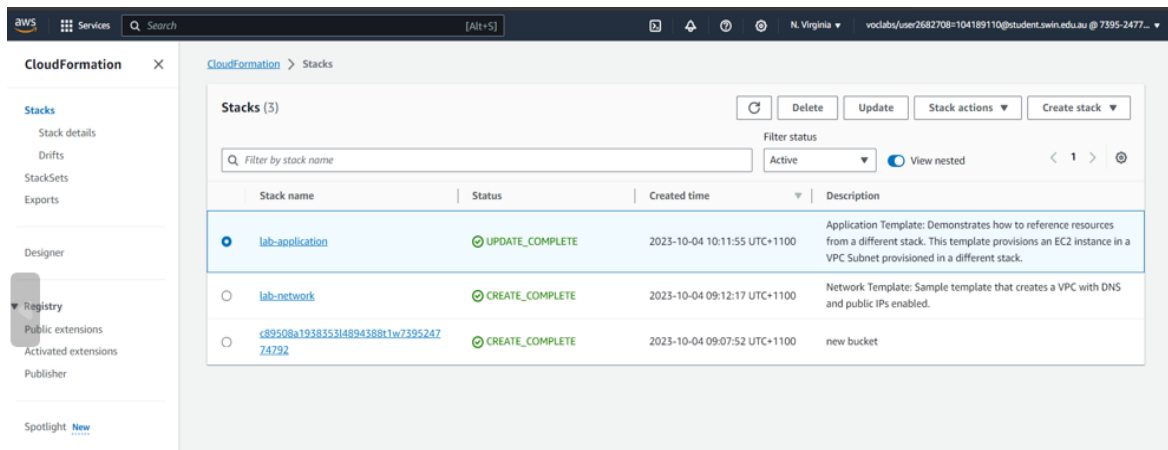


Fig 3.1 Stack update for updating the inbound rule SSH on port 22

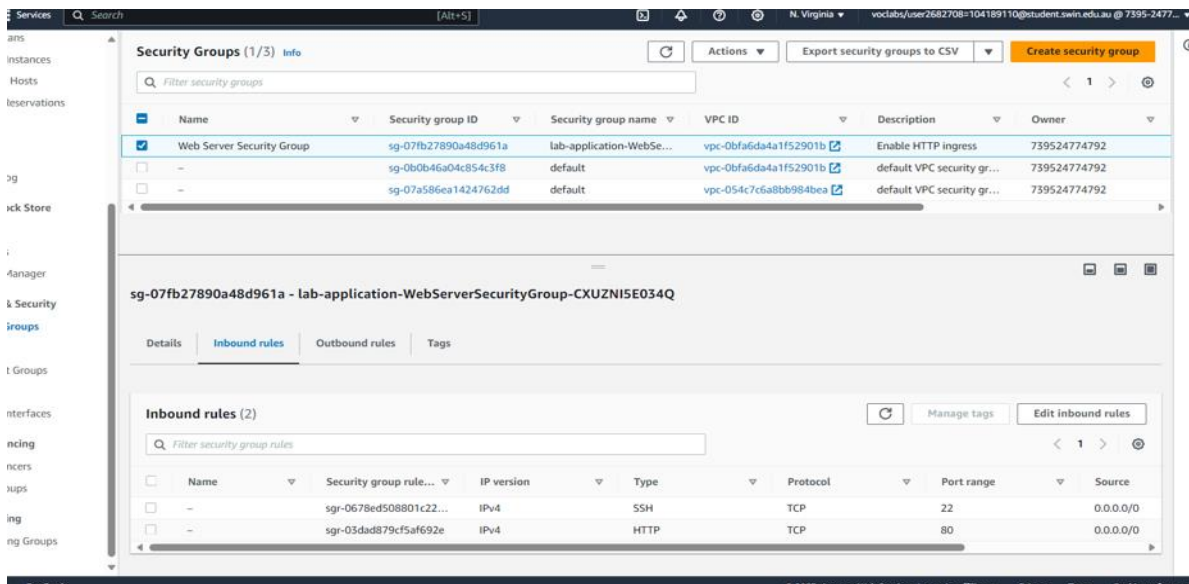


Fig 3.2 New inbound rule

Task 4 Exploring templates with AWS cloud formation designer

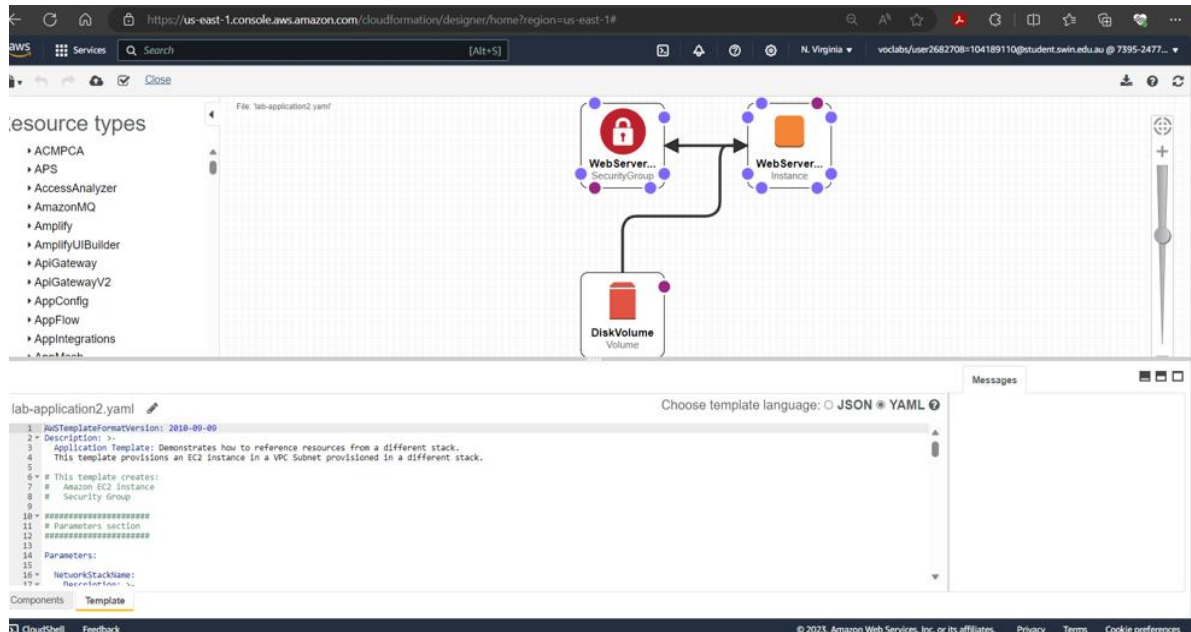


Fig 4.1 design for the lab-application2.yaml

Task 5 :: Deleting the stack and checking the snapshot

The screenshot shows the AWS CloudFormation console with a 'Delete initiated' dialog box. The dialog lists the stack name, status, created time, and description for the 'lab-application' stack. The stack is currently in a 'DELETE_IN_PROGRESS' state. The dialog also shows a list of other stacks, including 'lab-network' and 'c89508a19383531489438811w739524774792', which are in a 'CREATE_COMPLETE' state.

Stack name	Status	Created time	Description
lab-application	DELETE_IN_PROGRESS	2023-10-04 10:11:55 UTC+1100	Application Template: Demonstrates how to reference resources from a different stack. This template provisions an EC2 instance in a VPC Subnet provisioned in a different stack.
lab-network	CREATE_COMPLETE	2023-10-04 09:12:17 UTC+1100	Network Template: Sample template that creates a VPC with DNS and public IPs enabled.
c89508a19383531489438811w739524774792	CREATE_COMPLETE	2023-10-04 09:07:52 UTC+1100	new bucket

Fig 5.1 deleting the stack

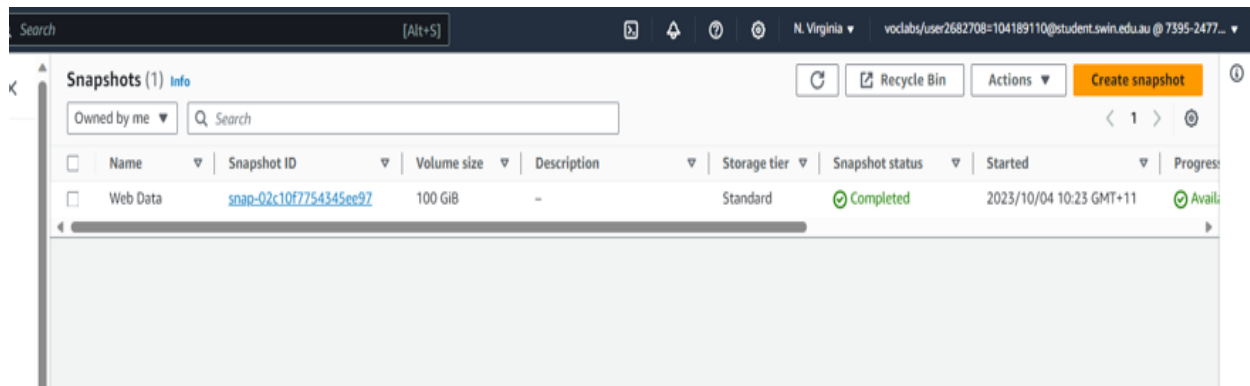


Fig 5.2 checking the snapshot taken (Amazon EBS)

Submission

Oct 4 at 10:25am

[Submission Details](#)

Grade: 100 (100 pts possible)

Graded Anonymously: no

Comments:

No Comments

Fig 6.1 submitted and graded