Project02 Report

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# Cloud operation Chapter 11

Figure 1

Knowledge check of module 11. This module discusses automated and repeatable deployments. This module also provides a hands-on lab where you practice creating and configuring automated and repeatable deployments with AWS CloudFormation

Graphical user interface

Description automatically generated with medium confidence

Note: passing knowledge check

Module Highlight:

This module discusses automated and repeatable deployments. This module also provides a hands-on lab where you practice creating and configuring automated and repeatable deployments with AWS CloudFormation. AWS offers several methods to help configure and manage infrastructure that is deployed on the AWS Cloud. It is important to plan the configuration and orchestration of AWS resources proactively instead of reactively. Resources can span multiple AWS services. Typically, resources include Amazon Elastic Compute Cloud (Amazon EC2) instances, Auto Scaling groups, security groups, Elastic Load Balancing load balancers, and the other resources that comprise your deployed infrastructure on AWS.

Figure 2

Guided lab for cloud formation that prove I have completed all tasks required for this lab. Including creating all stack using yamls and delete stack afterwards

Graphical user interface, application, Teams

Description automatically generated

Note: All resources in the lab are created using the yaml files and add bucket to stack. There are total 8 resources being created including IGW and S3, labVPC and so on.

Lessons learnt: After this lab, I’m able to create my own stack using pre-defined yaml files. And I have got a basic understanding of how cloud formation works and how should I utilize it.

# Cloud architecture Chapter 10

Figure 3

Knowledge check for Cloud architecture Chapter 10 In this module, I learned how to:Recognize when to automate and why, Identify how to model, create, and manage a collection of AWS resources

Graphical user interface, application

Description automatically generated

Note: passing knowledge check for module 10.

Module Highlight:

In this module, I learned how to:Recognize when to automate and why, Identify how to model, create, and manage a collection of AWS resources using AWS CloudFormation. Use the Quick Start AWS CloudFormation templates to set up an architecture. Indicate how to use AWS System Manager and AWS OpsWorks for infrastructure and deployment automation. Indicate how to use AWS Elastic Beanstalk to deploy simple application

Figure 4

Finishes Automating guided lab following the example provided by the lab. The screenshot is the grading of the lab, I have got a 20/20 in this lab.

Graphical user interface, application

Description automatically generated

Note: Screenshot of Passing lab for module 10., In this lab, I have obtained knowledge of automating infrastructure deployments by using yaml files to define the stack needed for the desired application.

Figure 5

Screenshot of Stacks being created in lab10. All two stacks are being created using the yaml file provided in the lab. And execution is a success.

Graphical user interface, text, application

Description automatically generated

Note: Stack being created in lab 10. I had Deploy a stack from a template that creates an Amazon VPC virtual private cloud with a subnet. Add an Amazon S3 bucket to the template and update the stack. Add an Amazon EC2 instance to the template and update the stack. Delete the stack

Lesson learnt

This lab shows how to deploy multiple layers of infrastructure with CloudFormation, update a stack and delete a stack (while retaining some resources). Now I know how to conduct all different operations on a stack.

Figure 6

Challenge lab10. This is a screenshot of the static website being created with in the lab. This lab includes hosting a static website and grant public access to it.

Graphical user interface, website

Description automatically generated

Note: Finished static web hosting in lab10. I now have the knowledge of how to host my own static website on a s3 server and how to give access to it so it can be accessed publicly.

Figure 7

Finish Challenge Lab 10. This is a screenshot of the grading of the lab. But there are some issue with the system that I can’t get a score. And it show 503 service unavailable.

Graphical user interface

Description automatically generated

Note: Something wrong with the grading service, can’t get a grade after several attempt to submit. I’ve learned several cases of automated deployment in this lab and this will help me a lot in the future career.

**Lesson learnt**

In this lab, I have gained experience with creating AWS CloudFormation templates. I used the templates to create and update AWS CloudFormation stacks. The stacks create and manage updates to resources in multiple AWS service areas in your AWS account. I have used AWS CodeCommit to control the version of your templates.