

Week 9 – Challenge Lab: Implementing a Serverless Architecture for the Café

Name: Tong Duc Tu Tam

Student ID: 104775085

Date: 11/07/2024

Task 1: Downloading the source code

Task 2: Creating the DataExtractor Lambda function in the VPC

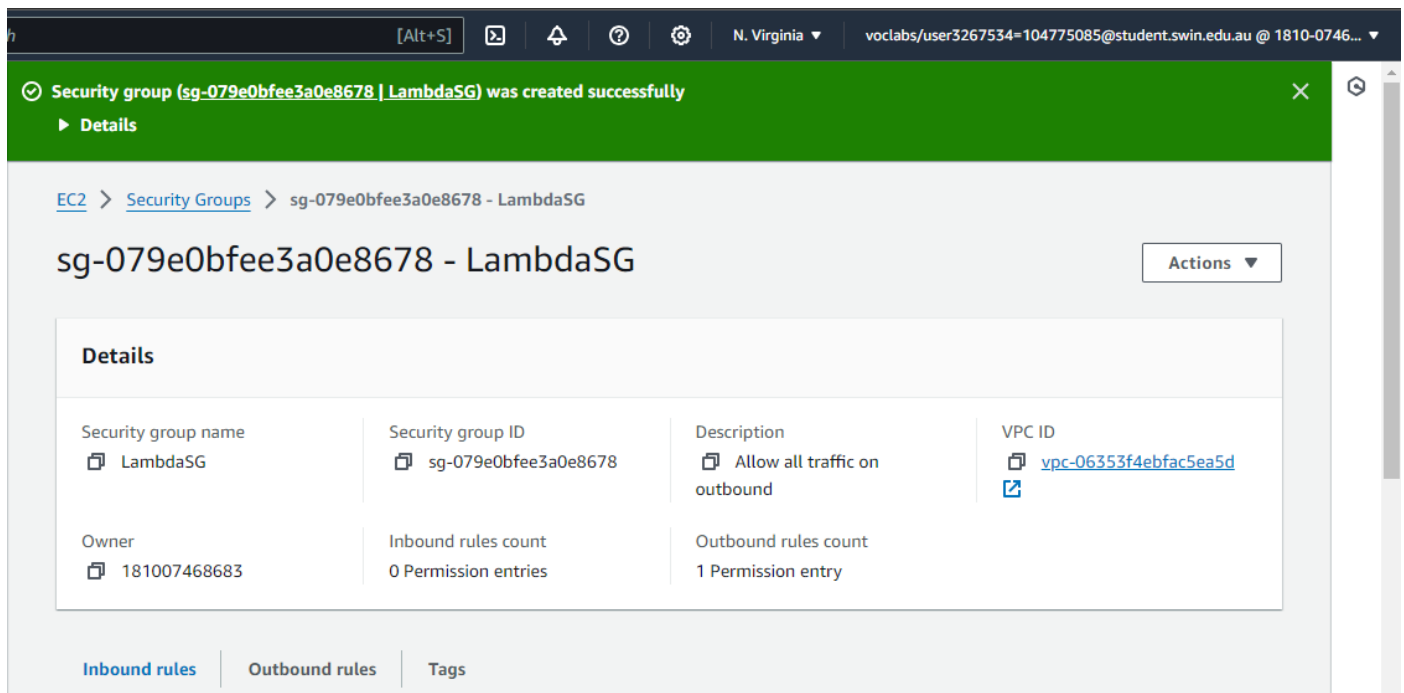


Figure 1: Create security group for lambda function.

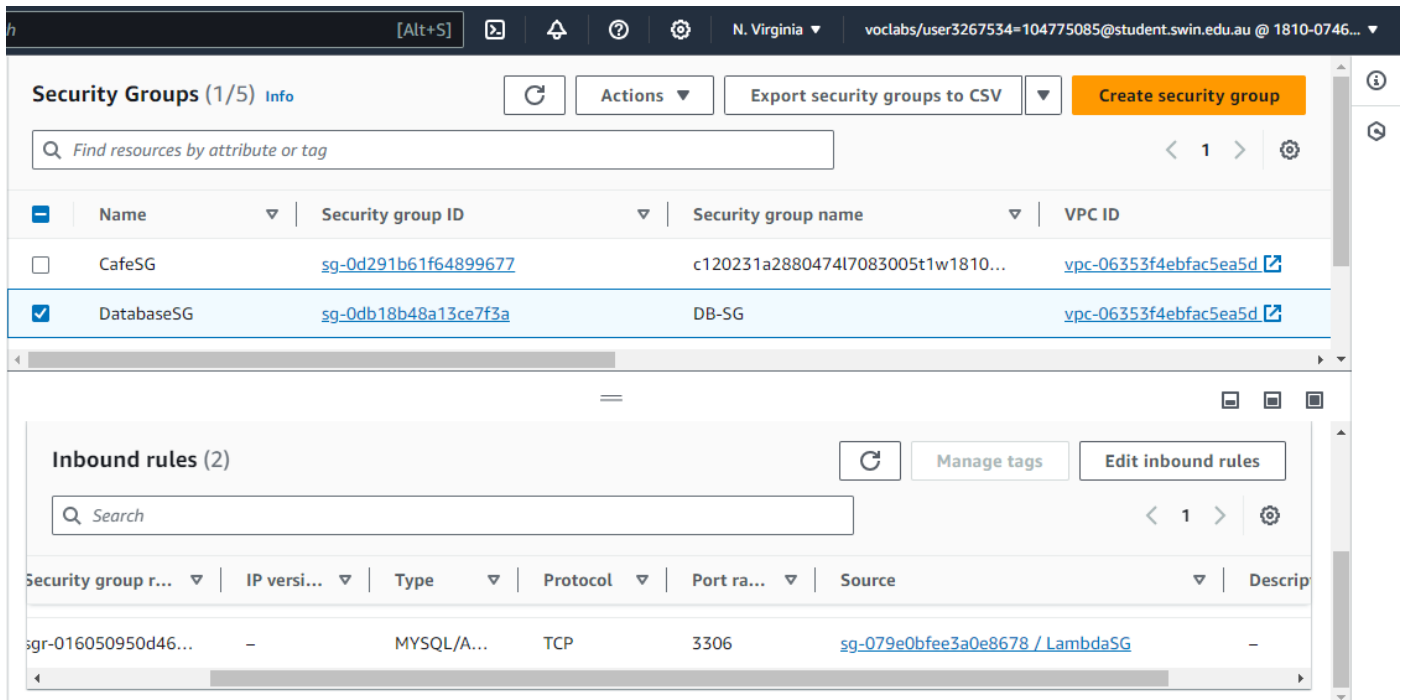


Figure 2: Update DatabaseSG.

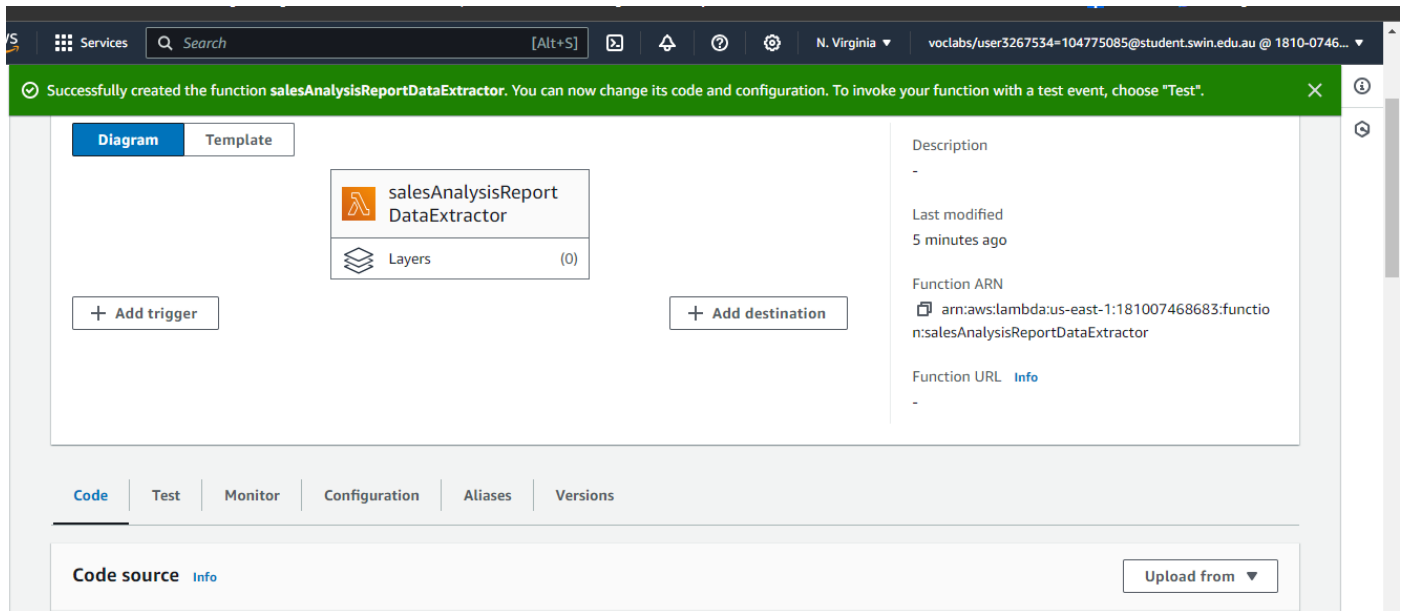


Figure 3: Create Lambda Function.

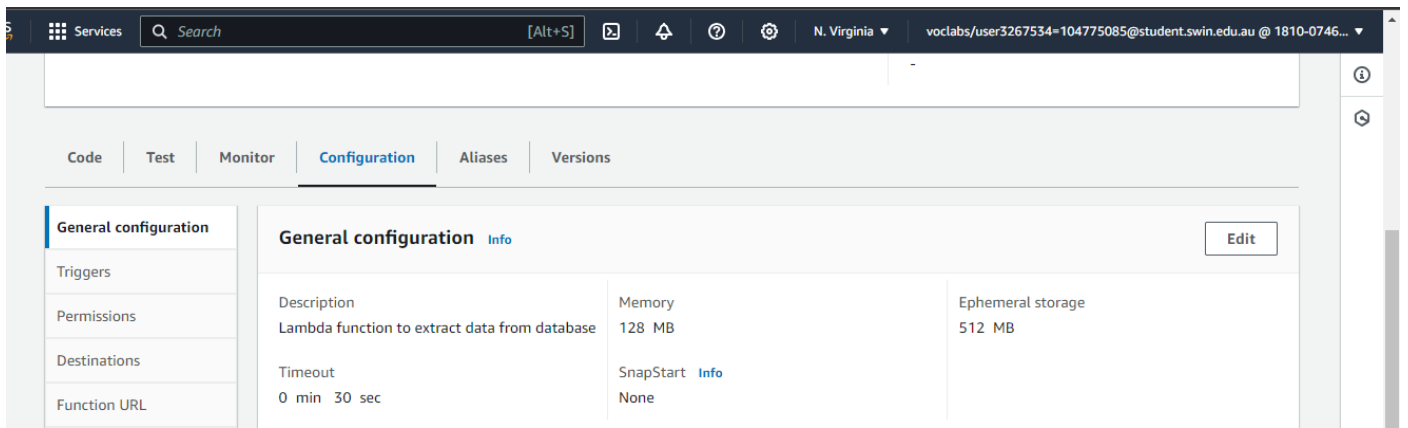


Figure 4: Configure basic information of Lambda function.

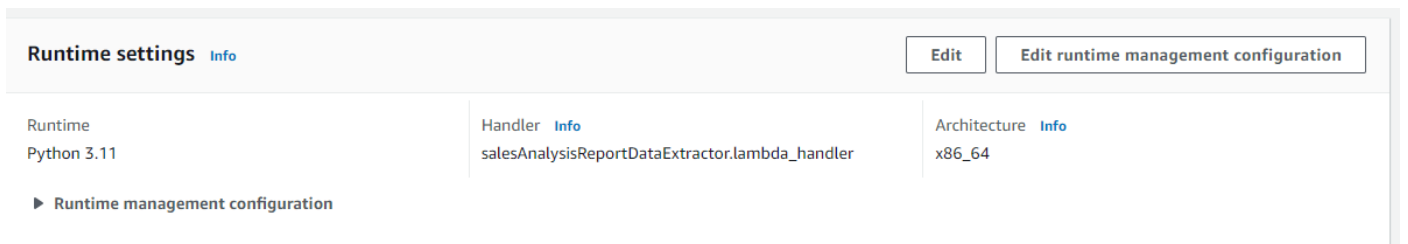


Figure 5: Config Lambda handler.

Task 3: Creating the SalesAnalysisReport Lambda function

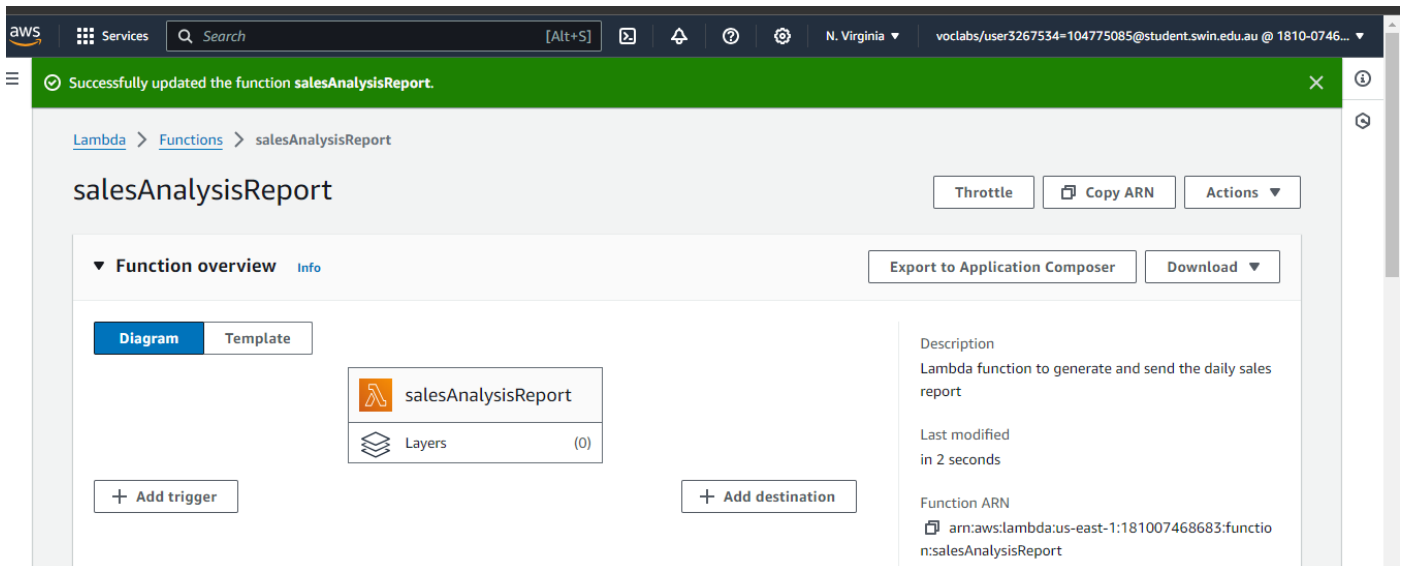


Figure 6: Create another Lambda function.

Task 4: Creating an SNS topic

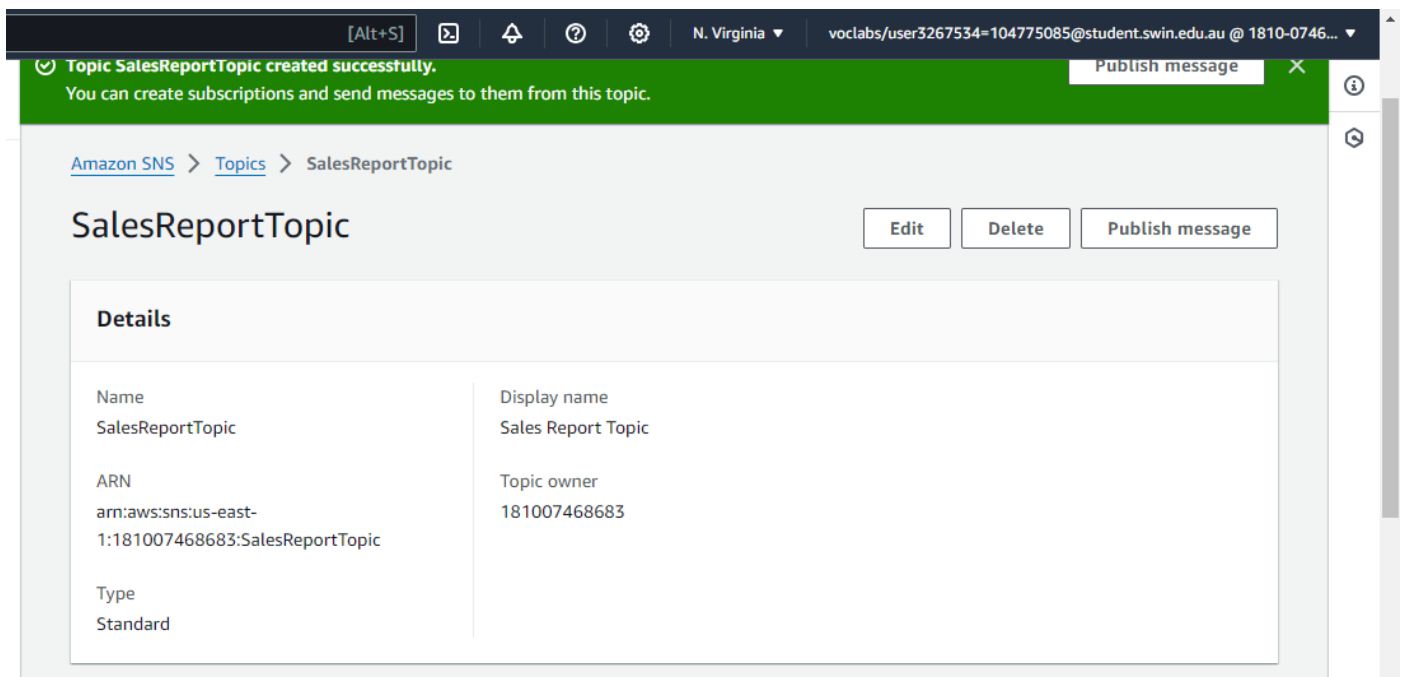


Figure 7: Create SNS topic.

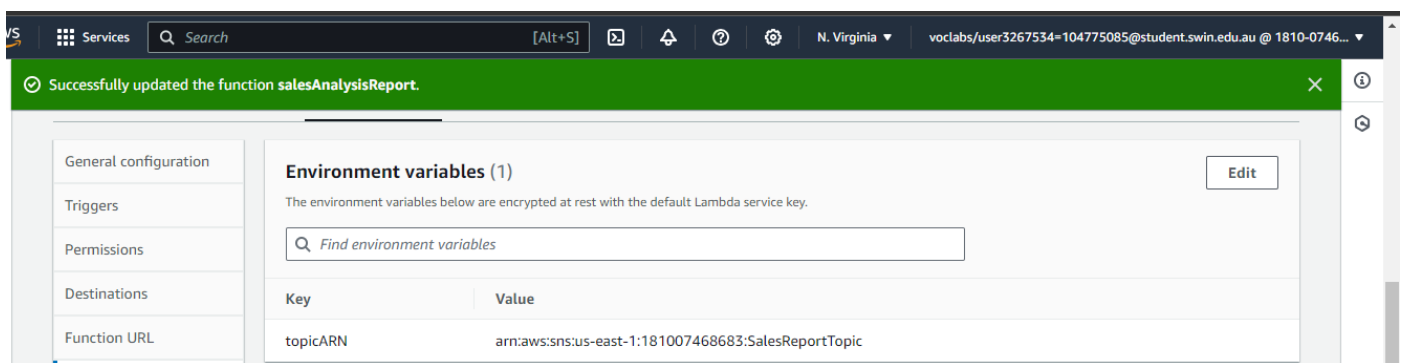


Figure 8: Edit environment variables.

Task 5: Creating an email subscription to the SNS topic

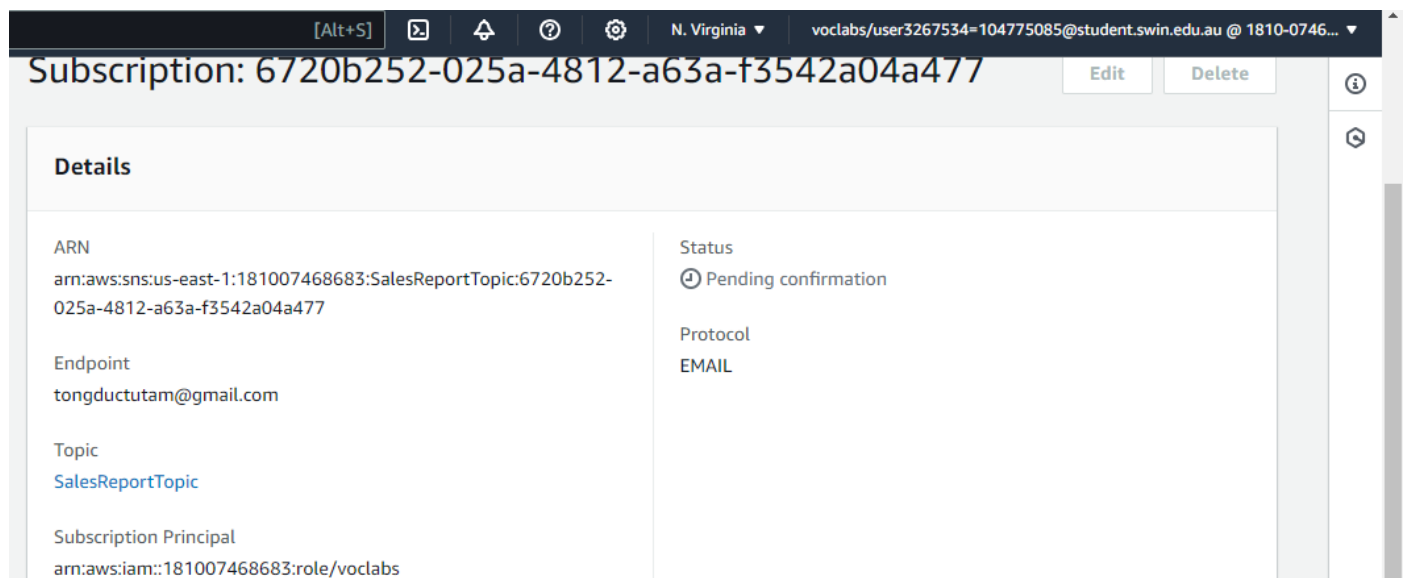


Figure 9: Create email subscription.

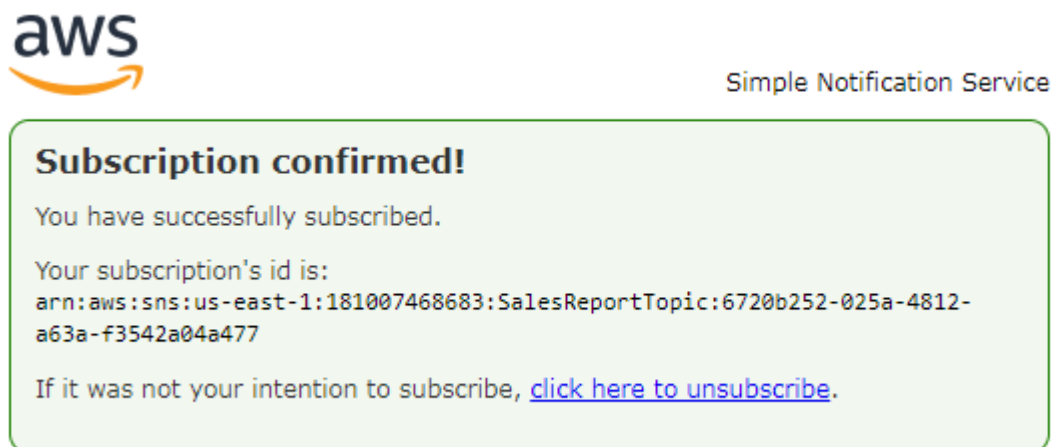


Figure 10: Confirm subscription.

Task 6: Testing the salesAnalysisReport Lambda function



Figure 11: Email notification

Task 7: Setting up an Amazon EventBridge event to initiate the Lambda function each day

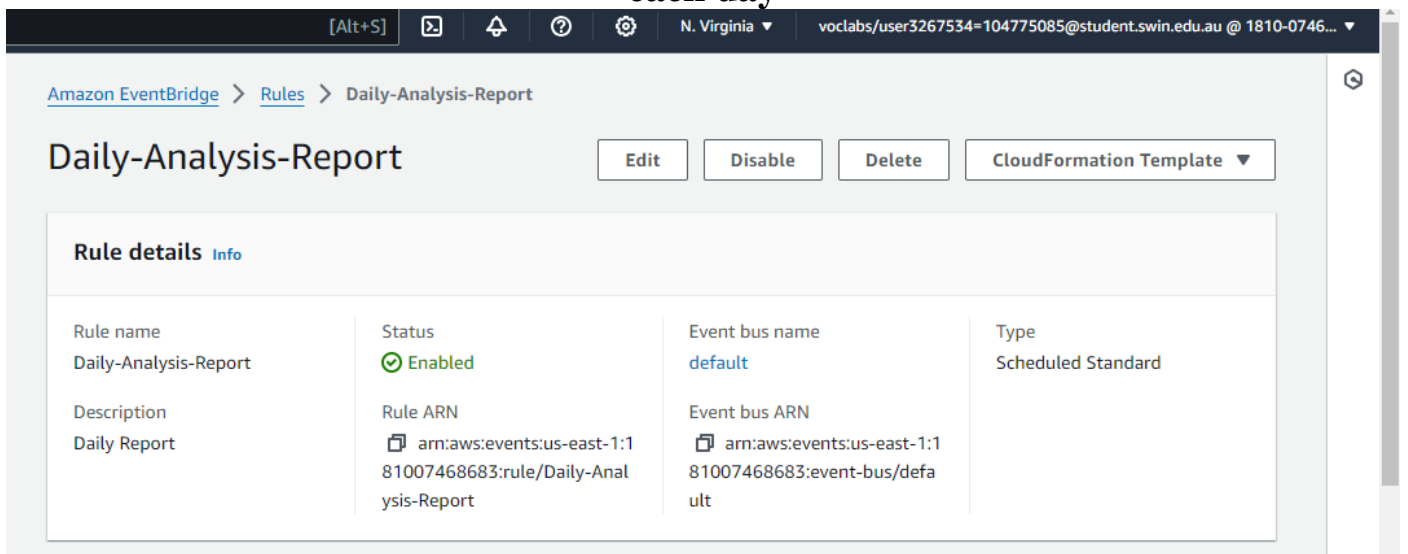


Figure 12: Created EventBridge Rule.

Submit Submission Report Grades	
Total score	35/35
<hr/>	
[Task 2] Lambda security group exists	5/5
<hr/>	
[Task 2] Lambda function salesAnalysisReportDataExtractor exists	5/5
<hr/>	
[Task 3] Lambda function salesAnalysisReport exists	5/5
<hr/>	
[Task 4] SNS topic exists	5/5
<hr/>	
[Task 5] Email subscription exists	5/5
<hr/>	

Figure 9: Score after submission.

Submission Report
X

```

[Executed at: Thu Jul 11 2:09:24 PDT 2024]

[Answer 01] Correct. The package folder is used to store any packages used
[Answer 02] Correct. The lambda needs to be able to communicate with the E
[Answer 03] Correct. You could store the topicARN in SSM.
[Answer 04] Correct. You need to accept subscriptions before messages are
[Answer 05] Correct. You can use the logs in cloudwatch to look for errors
Testing report - The Lambda security group exists.
Testing report - the salesAnalysisReportDataExtractor Lambda function exists
Testing report - The salesAnalysisReport Lambda function exists!
Testing report - The SNS topic exists and is confirmed to the Lambda function

```

Figure 10: Submission report.