

# Managed Services on AWS - Hands on Submission - Option 1

## Project 1

- **CloudWithAWS-TIO-20**

## Try it out objective

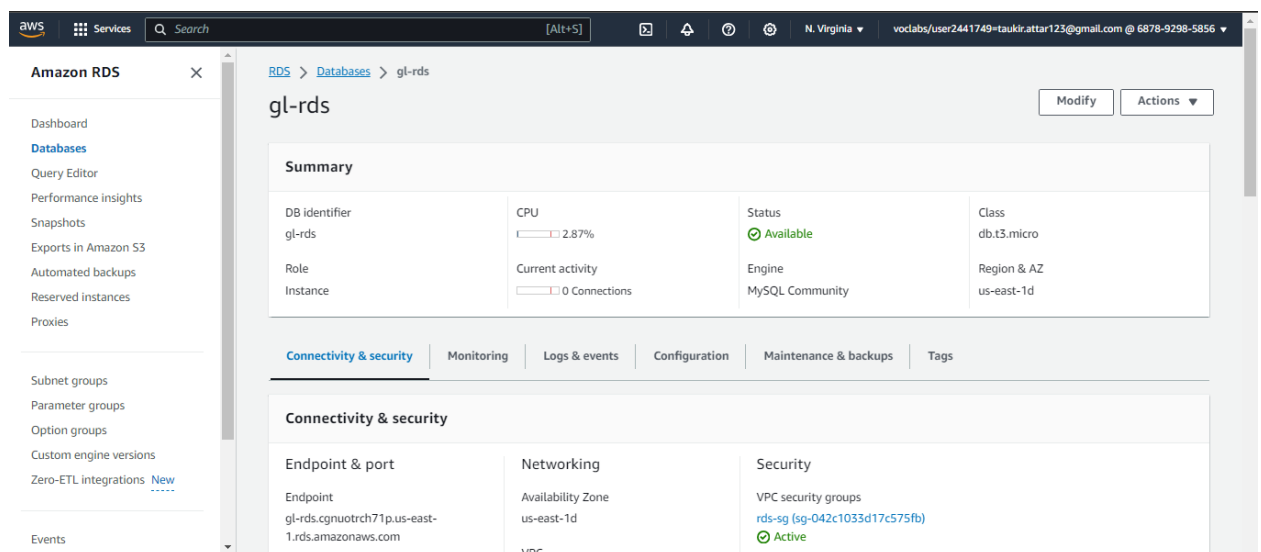
Use this hands-on to get started with managed relational database service - RDS.

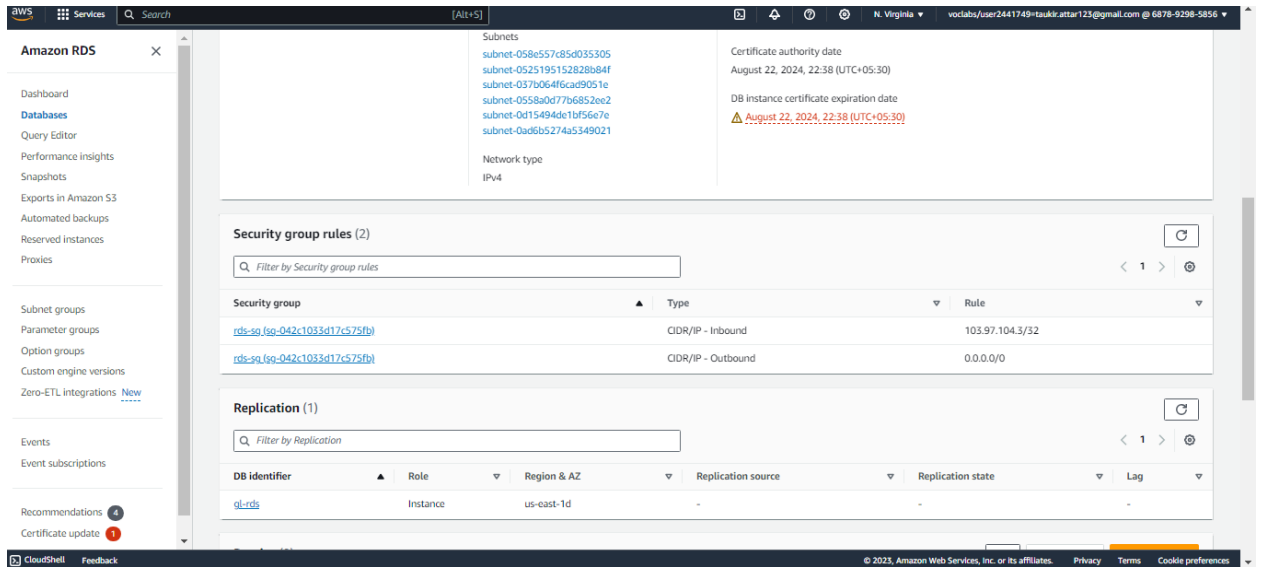
## The goal

The following are the goals of this hands-on:

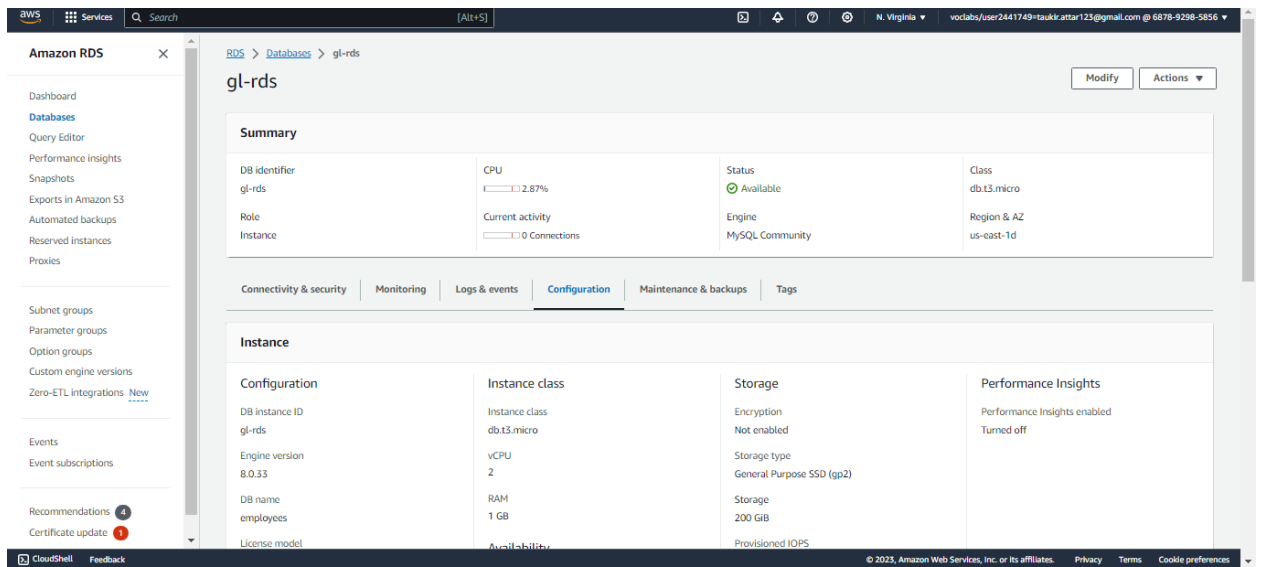
1. Create a MySQL RDS fully managed instance
2. Understand the simplicity of database management on the cloud

## A. Hands-on: Create the database





## Configuration



Amazon RDS console showing instance details for **gi-rds**.

Property	Value
Engine version	8.0.33
DB name	employees
License model	General Public License
Option groups	default:mysql-8-0 <span>In sync</span>
Amazon Resource Name (ARN)	arn:aws:rds:us-east-1:687892985856:db:gi-rds
Resource ID	db-ZPZTA4EMN76SKB7HZZZFVQIIRE
Created time	October 02, 2023, 17:10 (UTC+05:30)
DB instance parameter group	default:mysql8.0 <span>In sync</span>
Deletion protection	Disabled
vCPU	2
RAM	1 GB
Storage type	General Purpose SSD (gp2)
Storage	200 GiB
Provisioned IOPS	-
Storage throughput	-
Storage autoscaling	Disabled
Master username	root
Master password	*****
IAM DB authentication	Not enabled
Multi-AZ	No
Secondary Zone	-

**Recommendations (4)**

Filter by recommendations

Buttons: Dismiss, Schedule, Apply now

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# Monitoring

Amazon RDS console showing the **Monitoring** tab for instance **gi-rds**.

**CloudWatch (24)**

Period: 5 minutes | Add instance to compare | Monitoring

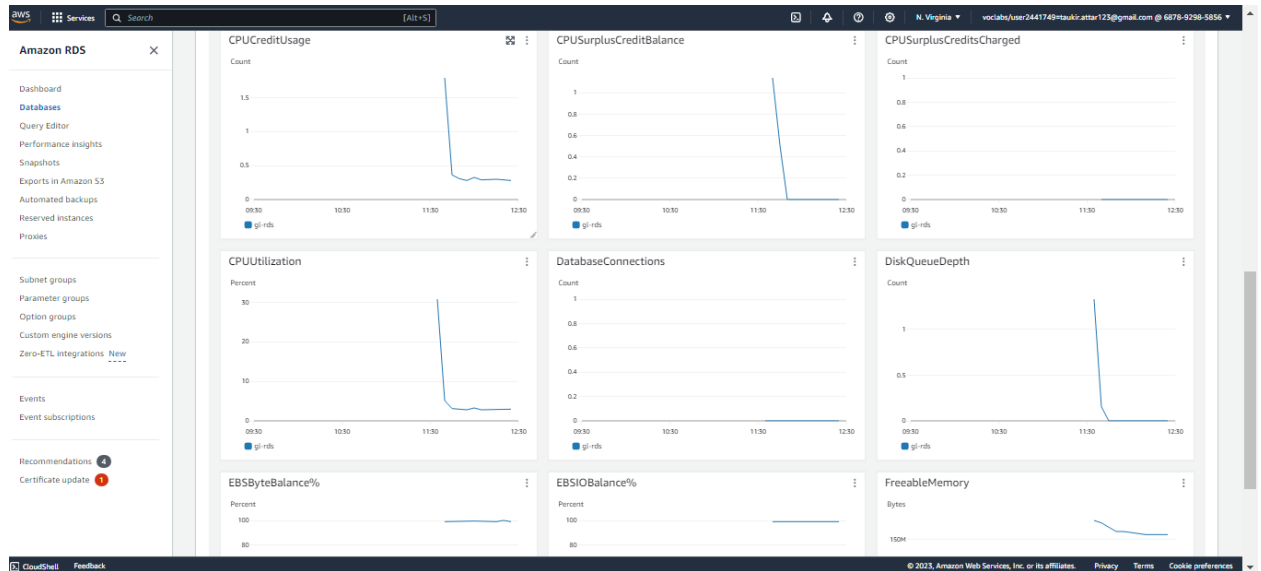
Search by metric

Time range: 1h 3h 12h 1d 3d 1w Custom UTC timezone

Metrics displayed:

- BinLogDiskUsage** (Bytes): Line graph showing usage over time.
- BurstBalance** (Percent): Line graph showing burst balance over time.
- CPUCreditBalance** (Count): Line graph showing CPU credit balance over time.
- CPUCreditUsage** (Count): Line graph showing CPU credit usage over time.
- CPUSurplusCreditBalance** (Count): Line graph showing surplus credit balance over time.
- CPUSurplusCreditsCharged** (Count): Line graph showing surplus credits charged over time.

Legend: gi-rds



1. In the above screen shot I have created database.
2. The region is N Virginia.
3. In database creation card selected standard create.
4. In engine option card selected My SQL.
5. Templates card click the Dev/Test
6. In Settings card selected DB instance identifier text field gl-rds
7. In the Credentials Settings section, the Master username is root
8. Master password and Confirm password is password.
9. Then selected Bustable classes and db.t3.micro I have selected
10. Under the Storage card the storage type is GeneralPurposeSSD(gp2)
11. Enable storage auto scaling
12. In availability & durability card stand by instance is not created
13. For the New VPC security group name is rds-sg
14. For the Initial data base name field employees
15. Enable automated backups
16. Enable encryption
17. Enable enhanced monitoring
18. Enable auto minor version upgrade

## B. Hands-On: Cleaning up!

Delete gl-rds instance?

Are you sure you want to Delete the **gl-rds** DB Instance?

☒ Create final snapshot

Determines whether a final DB Snapshot is created before the DB instance is deleted.

Final snapshot name

Determines whether to retain automated backups after deletion.

gl-rds-snapshot


To confirm deletion, type *delete me* into the field.

delete me

Cancel

Delete

RDS > Databases


**Consider creating a Blue/Green Deployment to minimize downtime during upgrades**

You may want to consider using Amazon RDS Blue/Green Deployments and minimize your downtime during upgrades. A Blue/Green Deployment provides a staging environment for changes to production databases. [RDS User Guide](#) [Aurora User Guide](#)

**Databases (0)**
Group resources
Modify
Actions
Restore from S3
Create database

DB identifier ▲	Status ▼	Role ▼	Engine ▼	Region & AZ ▼	Size ▼	Actions ▼	CPU ▼	Current activity ▼	Maintenance
No instances found									

1. In RDS management console under Amazon RDS click Databases
2. DB identifier gl-rds on delete option enter delete me

,

# Project 2

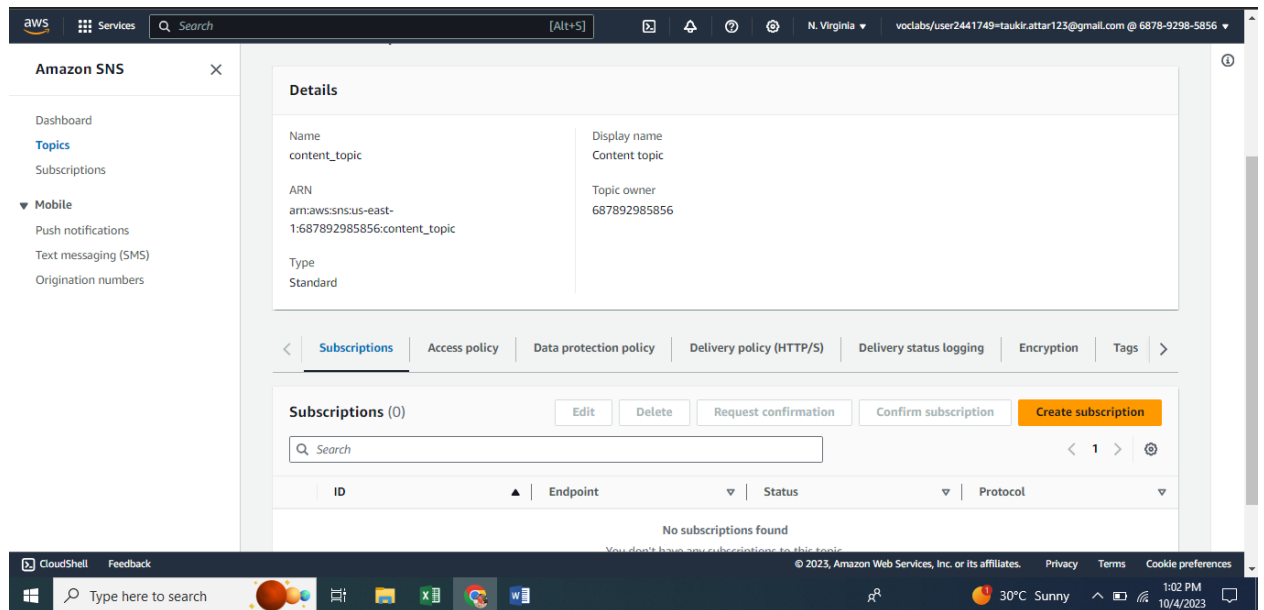
## CloudWithAWS-TIO-21

### The goal

The following are the goals of this handson:

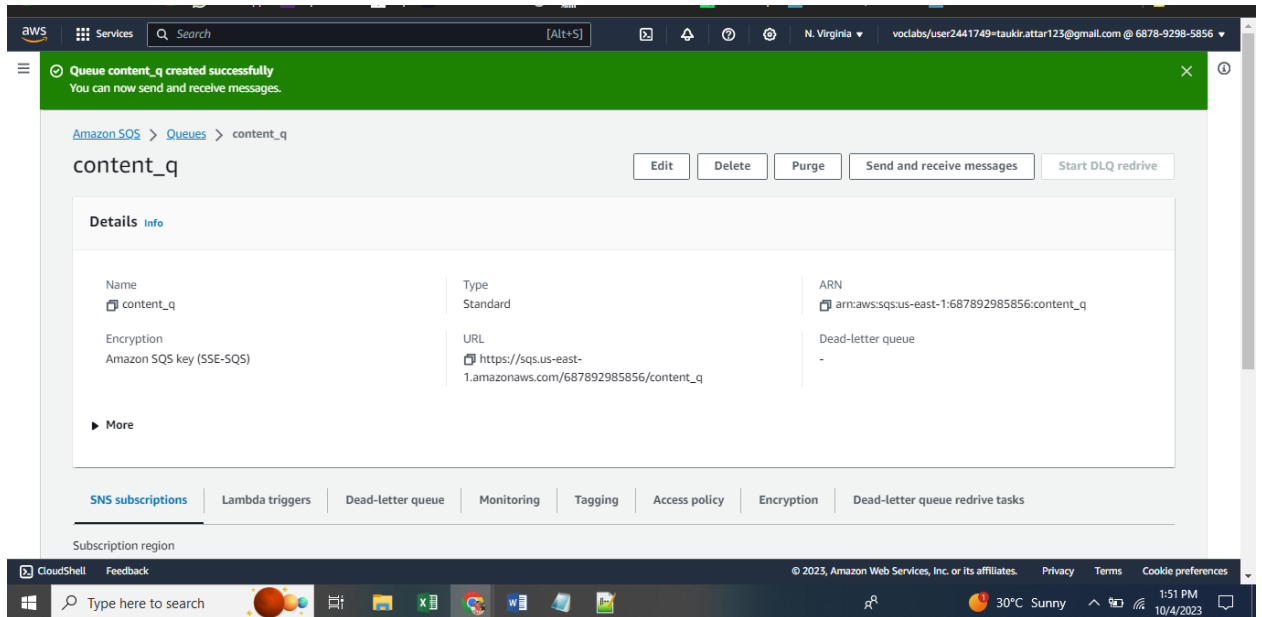
- 1.Create the SNS topic and a Queue
- 2.Create a subscription in SNS for the Queue
- 3.Ensure the permission is granted for SNS to push the message to SQS
- 4.Publish a message in SNS and observe it in the SQS console

### A. Hands-on : Create the SNS topic



19. In the above screen shot I have created SNS topic.
20. The region is N Virginia.
21. Name of the text field name is content\_topic .
22. Display name is Content topic.

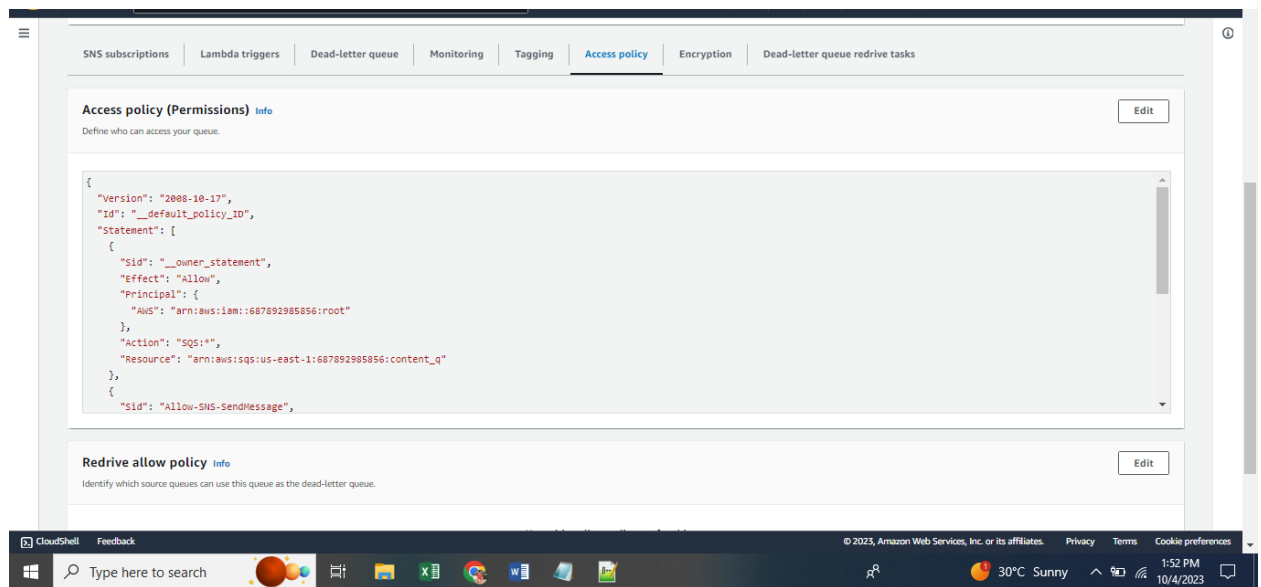
## B. Hands–On : Create the SQS queue



1. In the above screen shot I have created SQS topic.
2. The region is N Virginia.
3. Text field name is content\_q .
4. Under the Configuration card make the following changes.
5. For the Visibility time out change the value to 10 Seconds.
6. For the Message retention period change the value to 15 Minutes.
7. For the Maximum message size change the value to 64 KB.

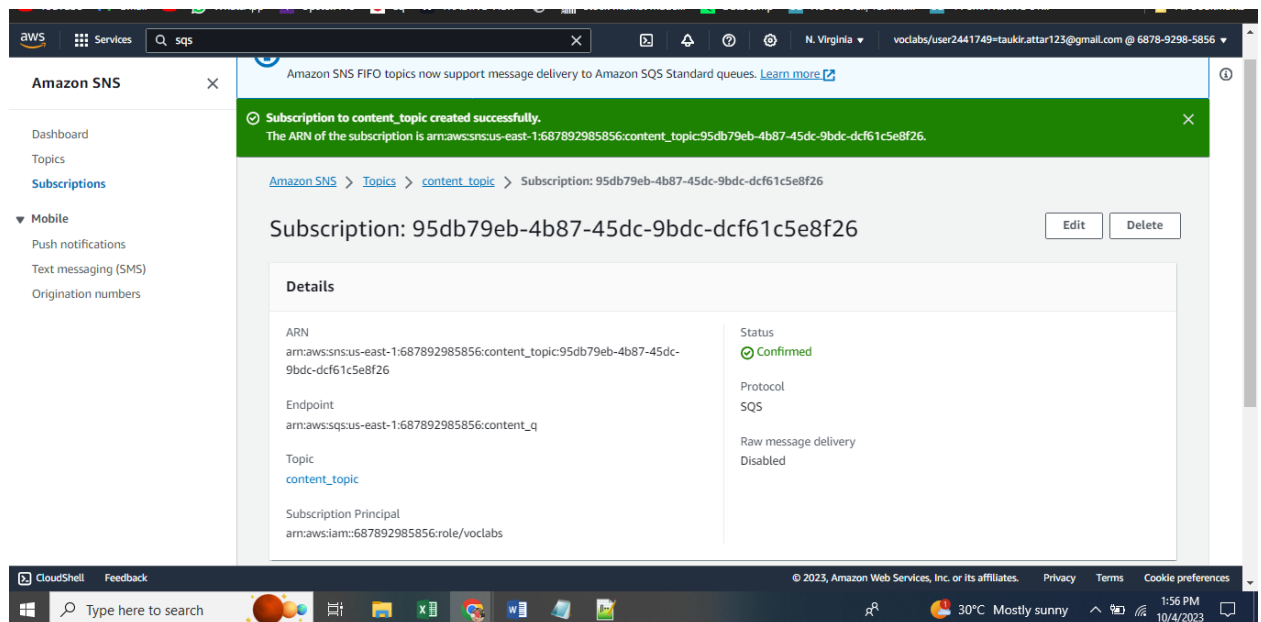


## Access policy



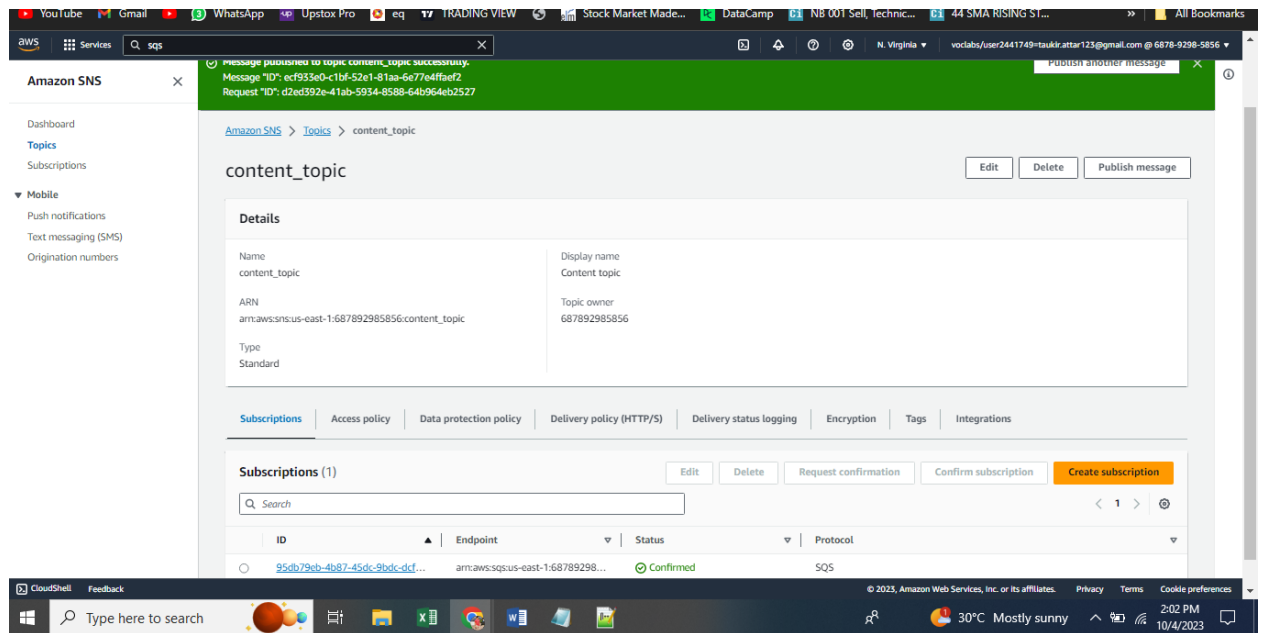
In the above screen shot I have made changes in JSON script by adding my AWS acc id in the given JSON script and replace the text marked by NNNNNNNNNNN to acc id

## C. Hands-On: Create the subscription(SNS->SQS)



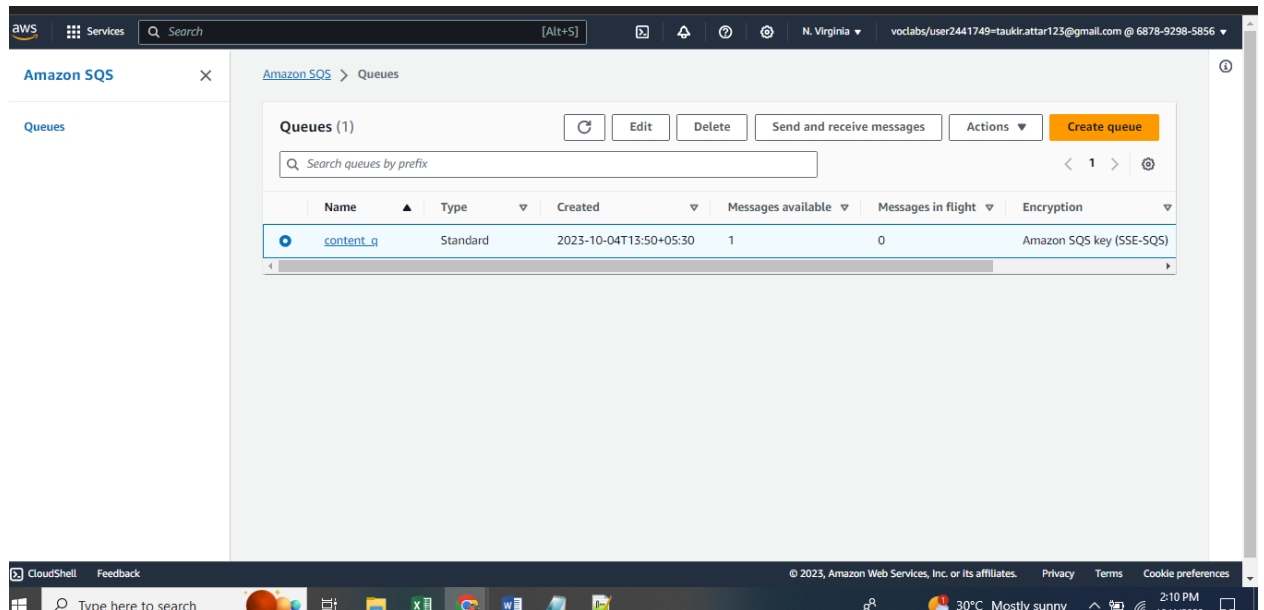
1. From The Protocol dropdown I have selected Amazon SQS.
2. Then Clicked on the End point search text field and select the arn of the content\_q
3. Then Clicked on the Create subscription button
4. In the above screen shot I have created subscription between SNS and SQS

## Publish message



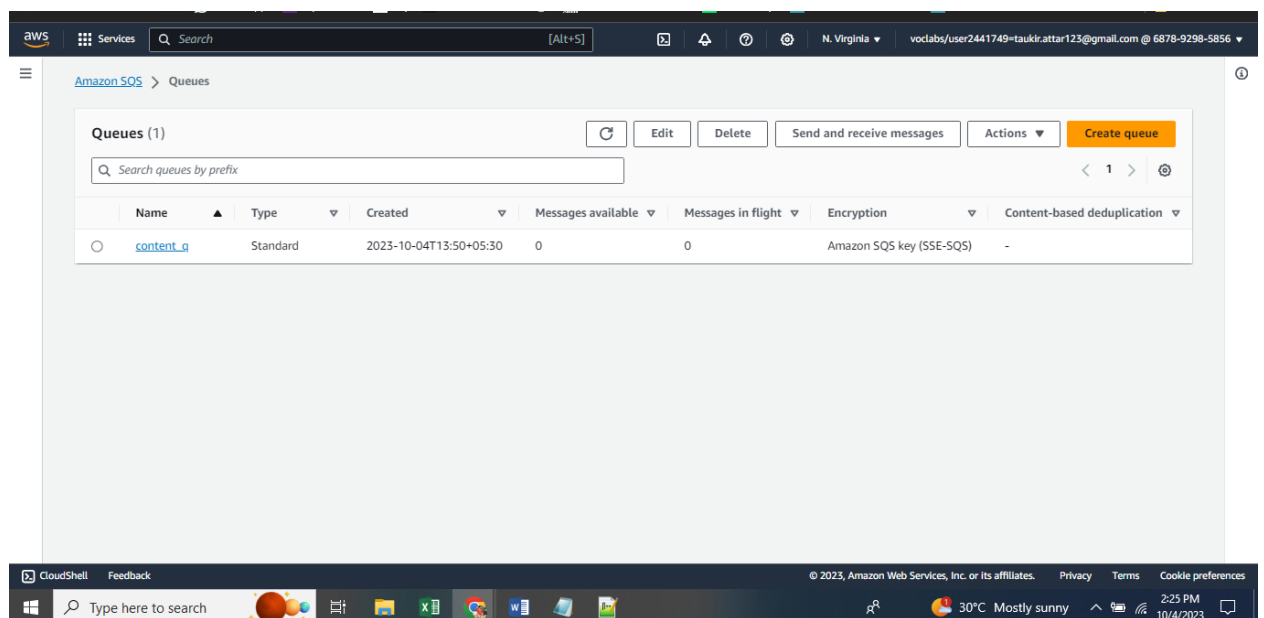
1. To publish message the subject field name is sample.
2. The Message body to send to the end point text area is This is a sample message.
3. Once every this is created so clicked on publish message button

# Message available shows 1



1. In the above screen shot I went to SQS management console tab and refresh the page
2. Notice the Message is available it shows 1 in thee message tab

## B. Hands-On: Cleaning up!



1. Went to the SQS management console, and listing the queues.
2. Then clicked on the radio to the left of the content\_q and click Delete button from the top right side of the screen.
3. Type delete in the confirmation window and click Delete button.
4. Then went to the SNS management console listing the topics
5. Then clicked on the radio to the left of the content\_topic and click Delete button from the top right side of the screen.
6. Type delete me in the confirmation window and click Delete button