Lesson 03 Demo 03

Using IAM Roles to Access S3 Bucket

Objective: To securely access Amazon S3 (Simple Storage Service) buckets from an EC2 instance using IAM (Identity and Access Management) roles

Tools required: AWS Lab

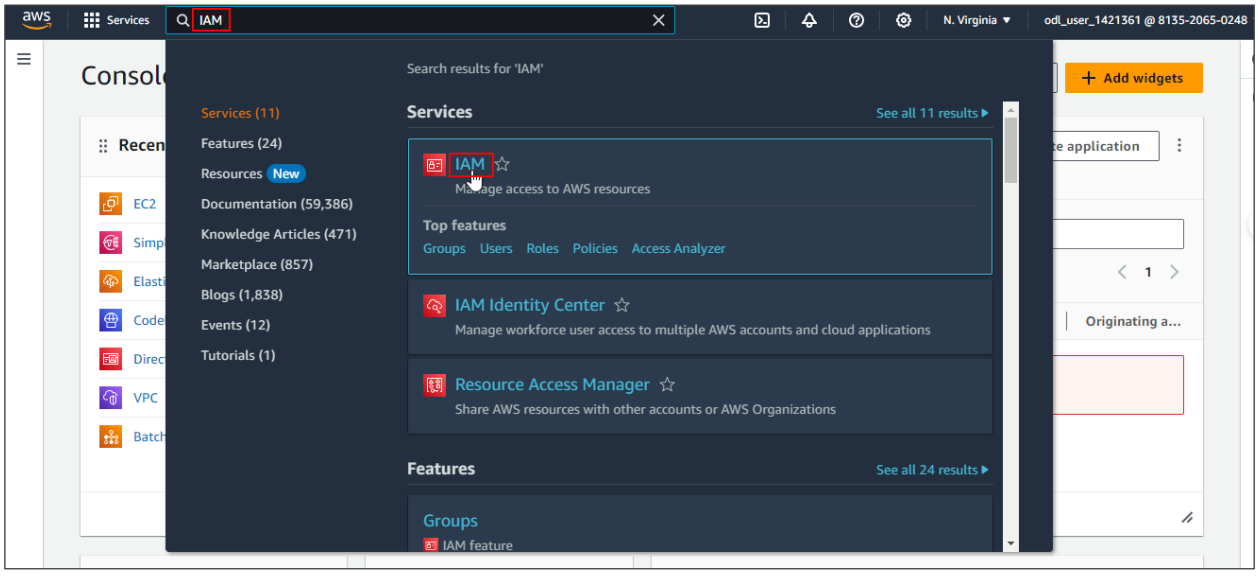
Prerequisites: Create an EC2 instance named S3

Steps to be followed:

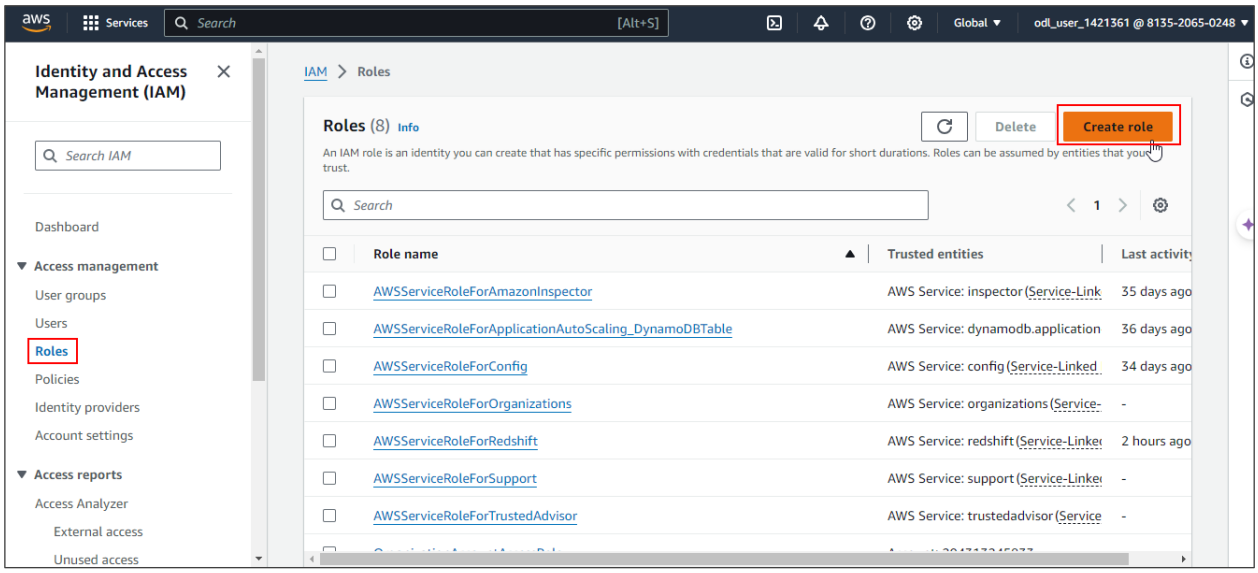
1. Create an IAM role
2. Connect IAM Profile to EC2
3. Validate access to the S3 bucket

Step 1: Create an IAM role

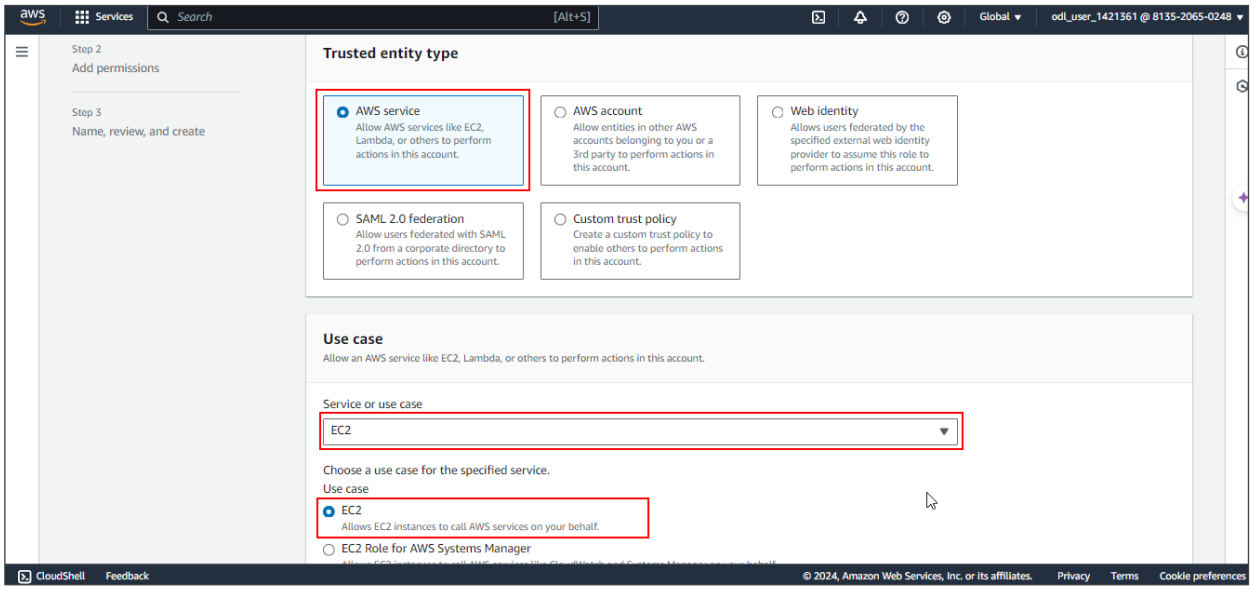
1.1 Navigate to the AWS console home dashboard, search for, and click on **IAM** as shown:

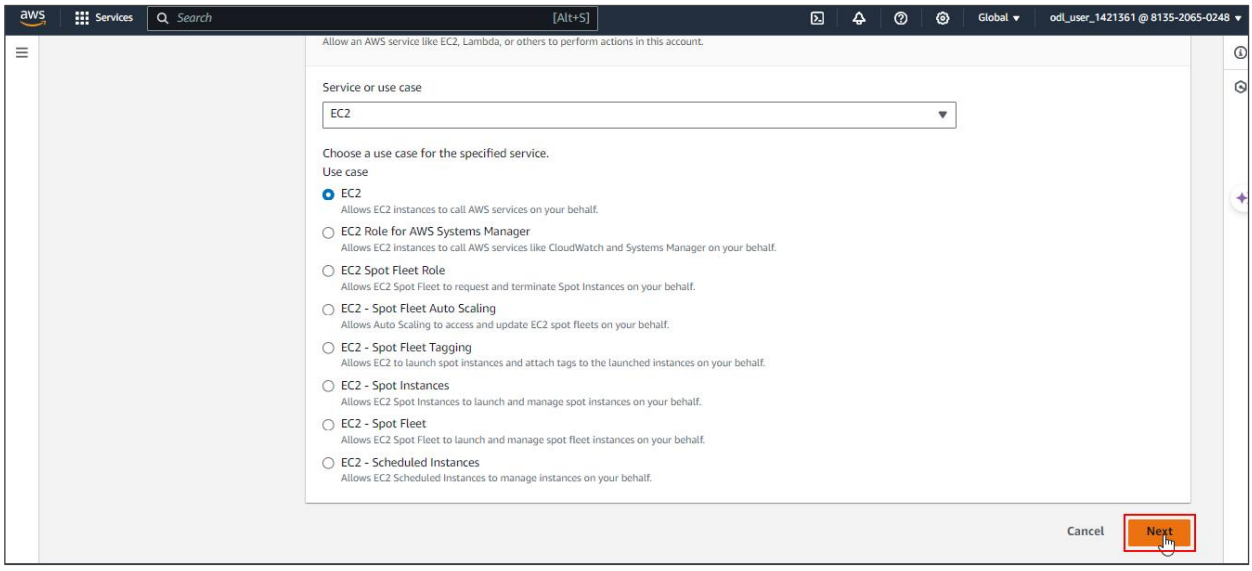


1.2 Navigate to **Roles** and click on the **Create role** button

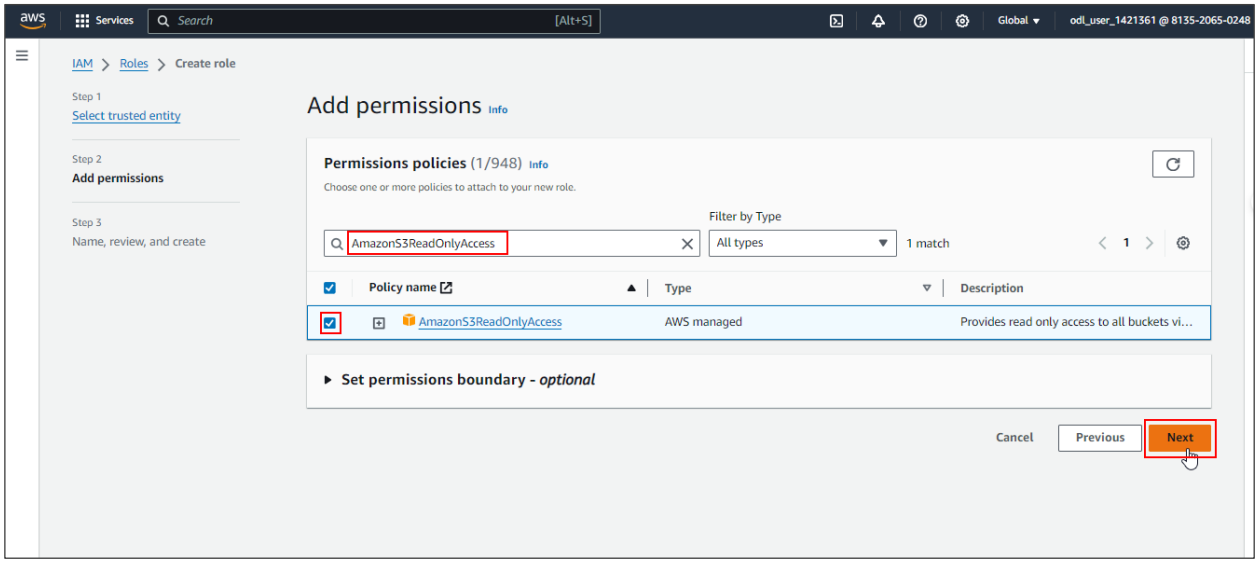


1.3 Select the **AWS service** option under **Trusted entity type** and the **EC2** option under **Use cases**, and click on **Next**

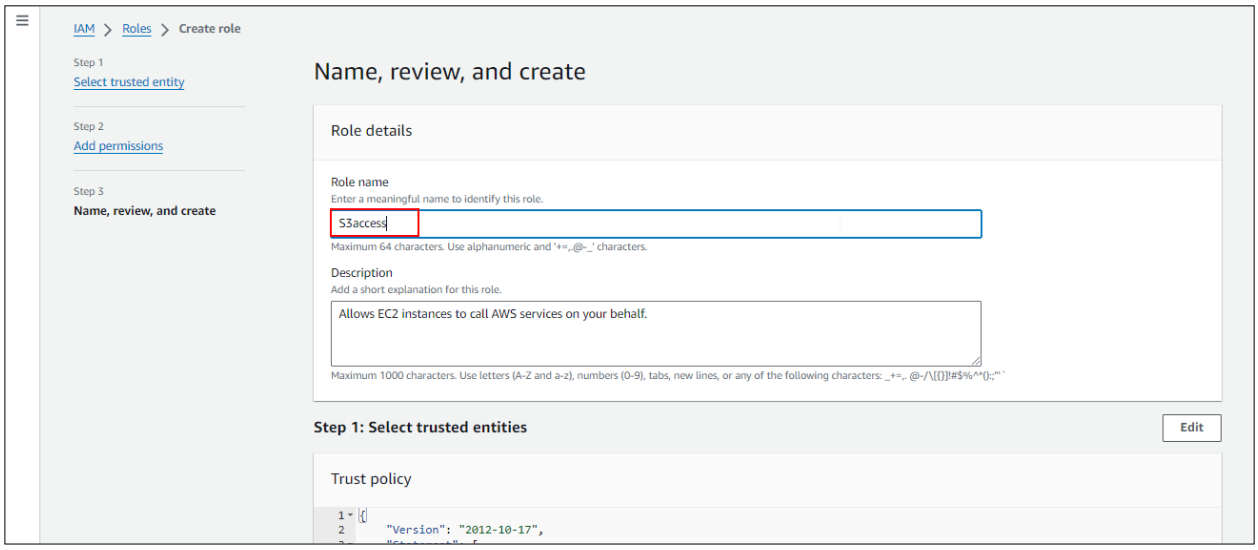


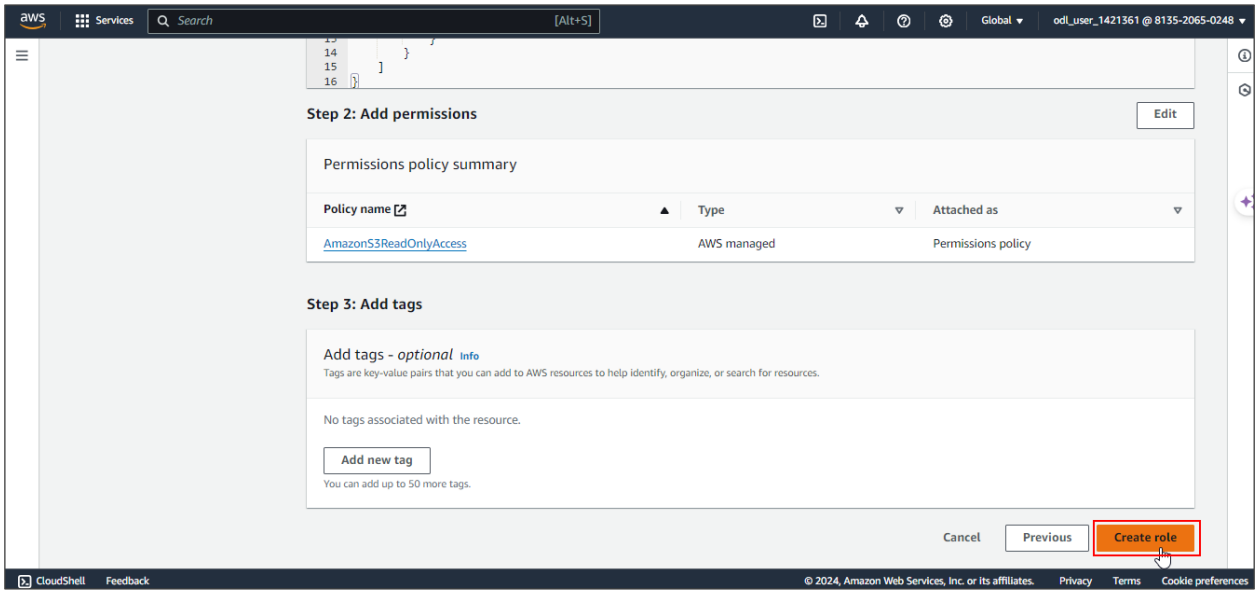


1.4 Search for and select **AmazonS3ReadOnlyAccess**, then click on **Next** to proceed

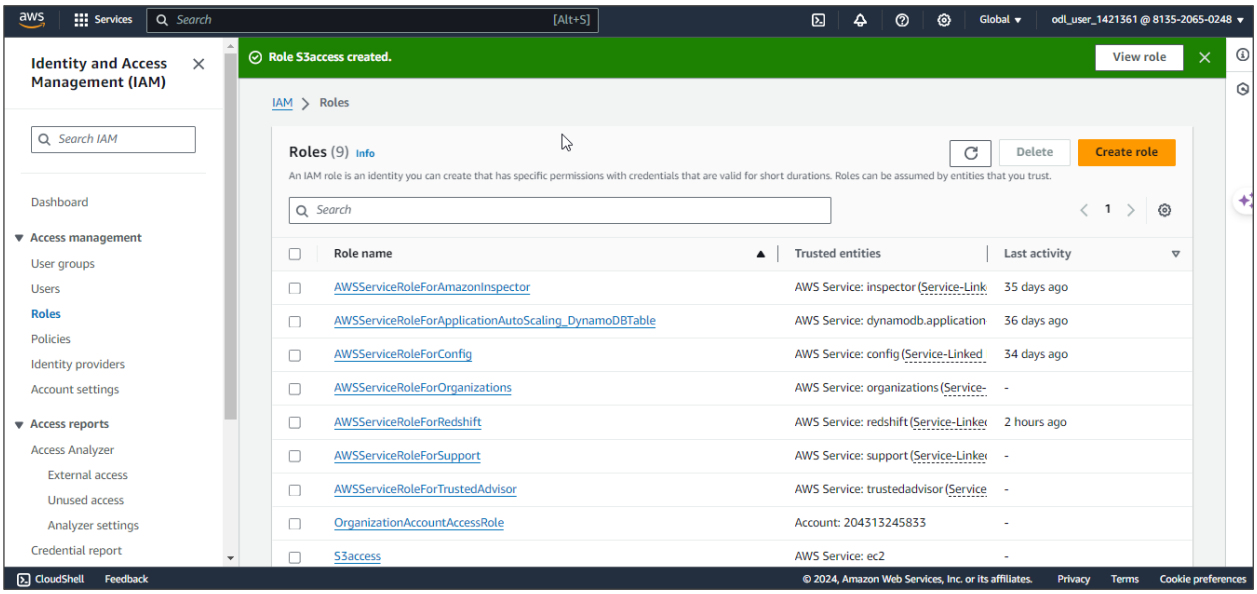


1.5 Add the role name as **S3access**, and click on **Create role**



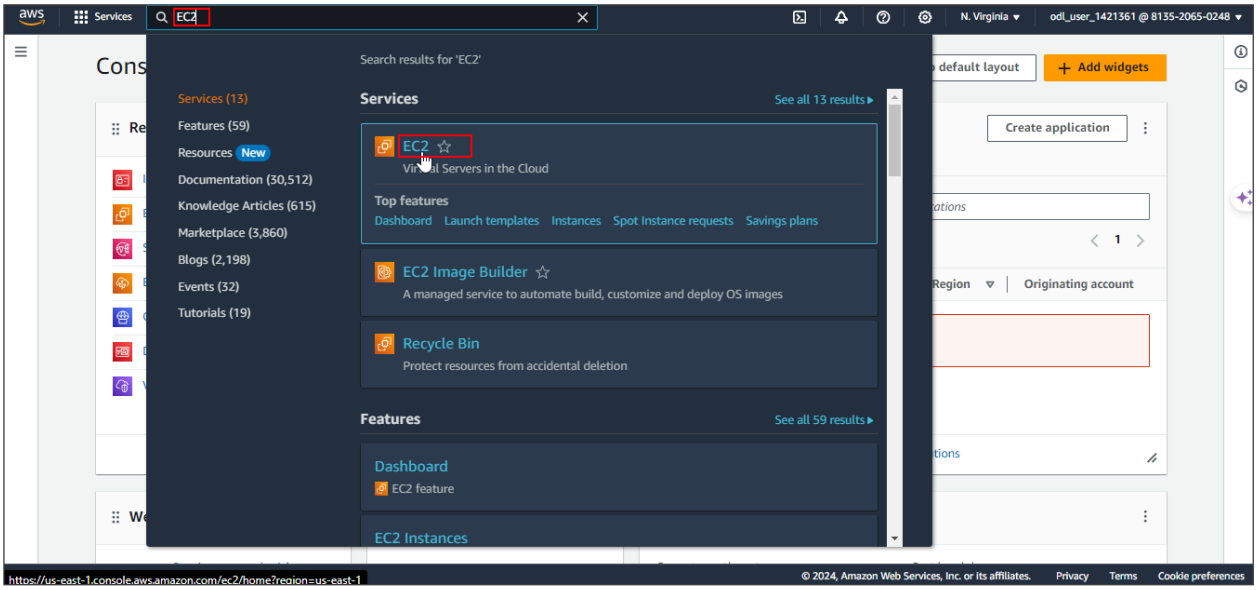


The IAM role is successfully created as shown:

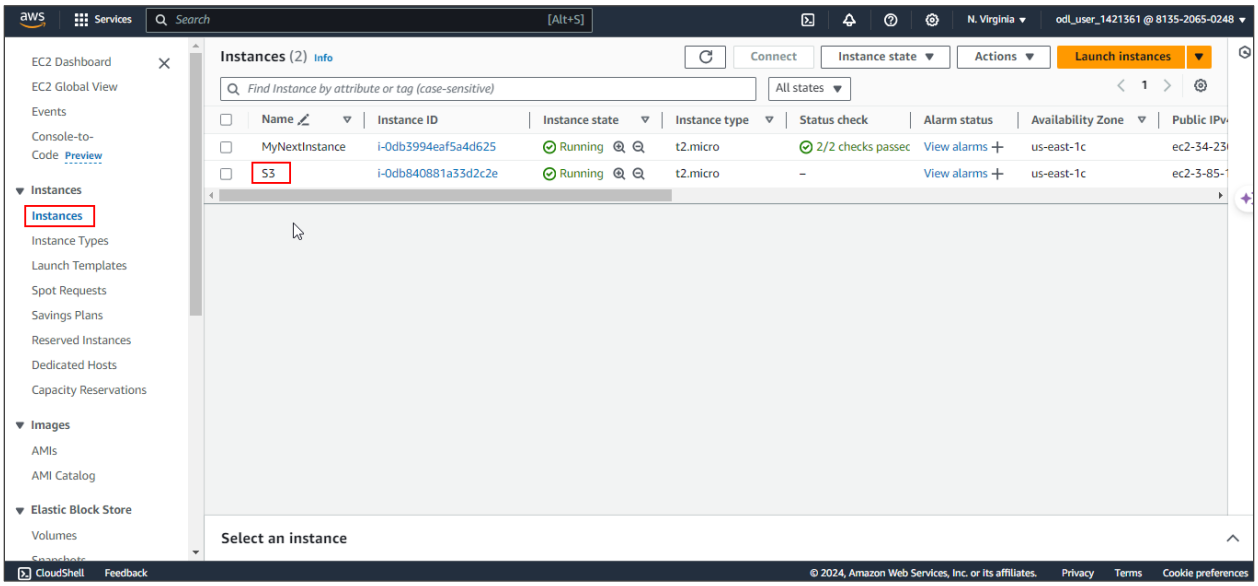


Step 2: Connect IAM Profile to EC2

2.1 Navigate to the AWS console home dashboard, search for, and click on **EC2** as shown:

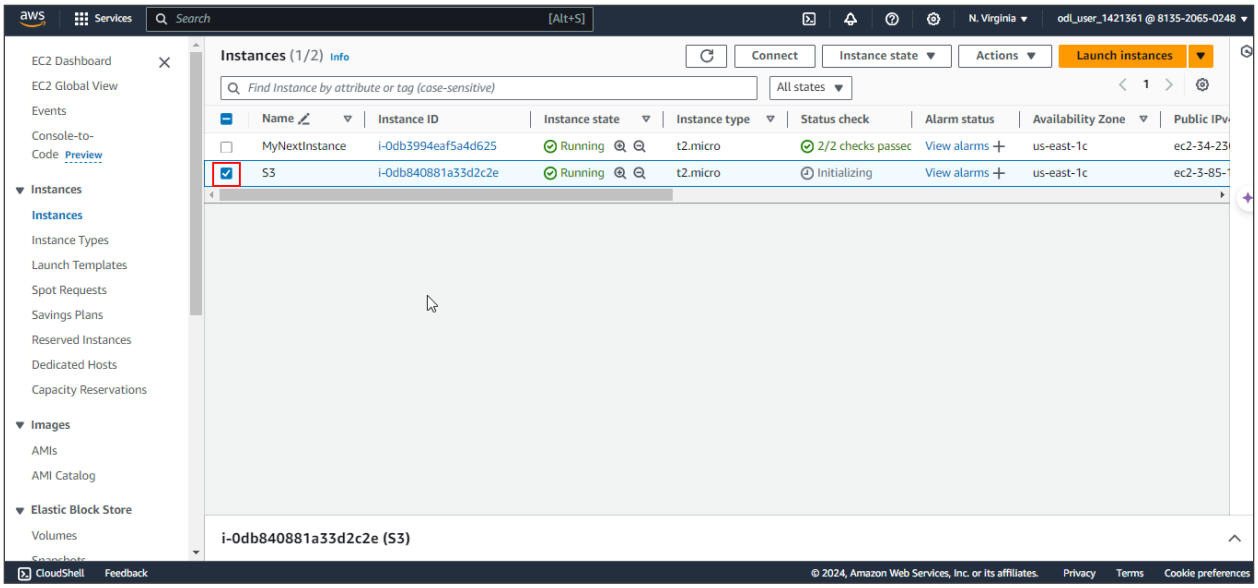


2.2 Click on **Instances** and launch a new instance named **S3**

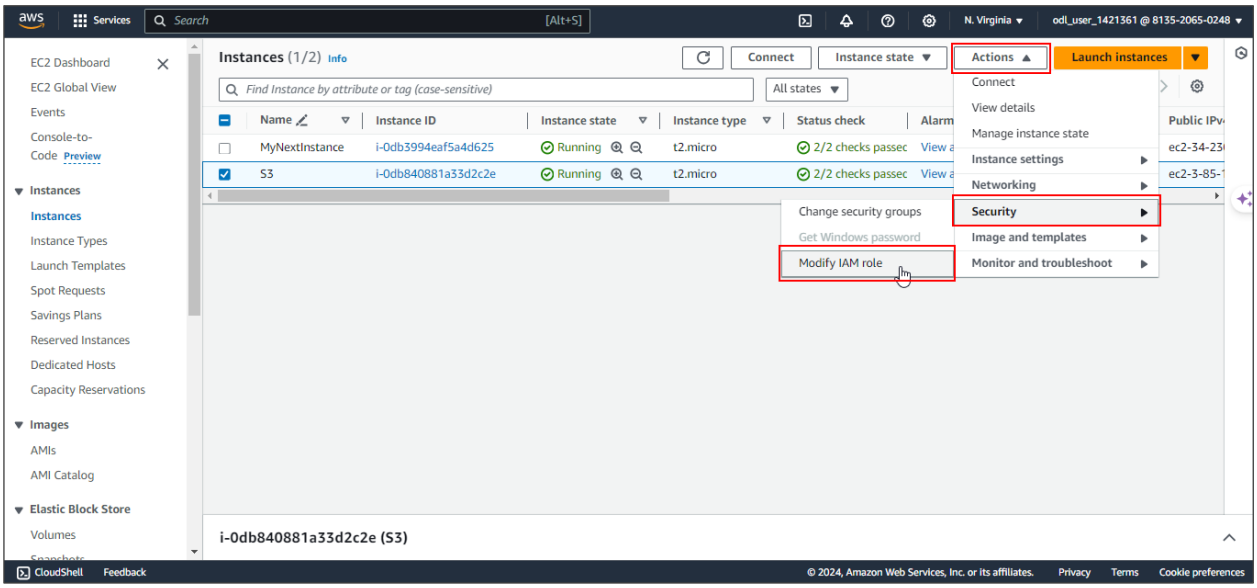


Note: Refer to Demo 01 of Lesson 03 for creating instances

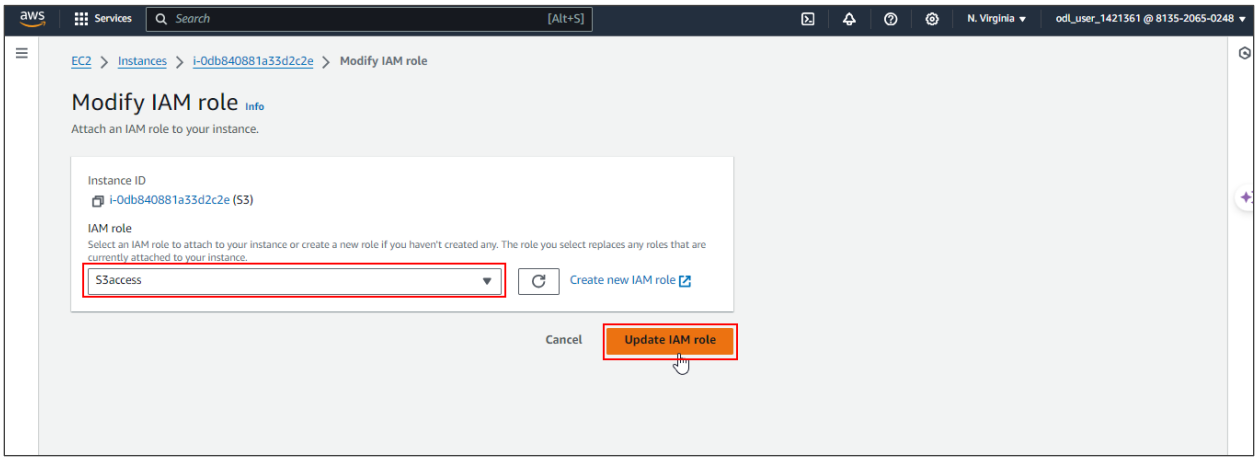
2.3 Select the **S3** instance

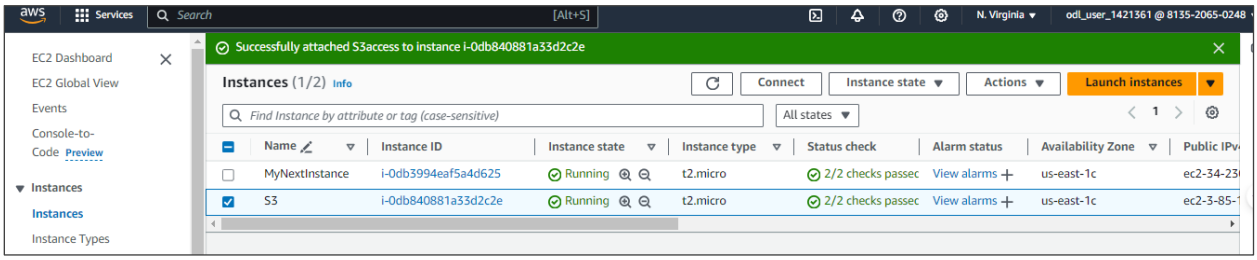


2.4 Under the **Actions** section, select the **Security** option and click on **Modify IAM role**



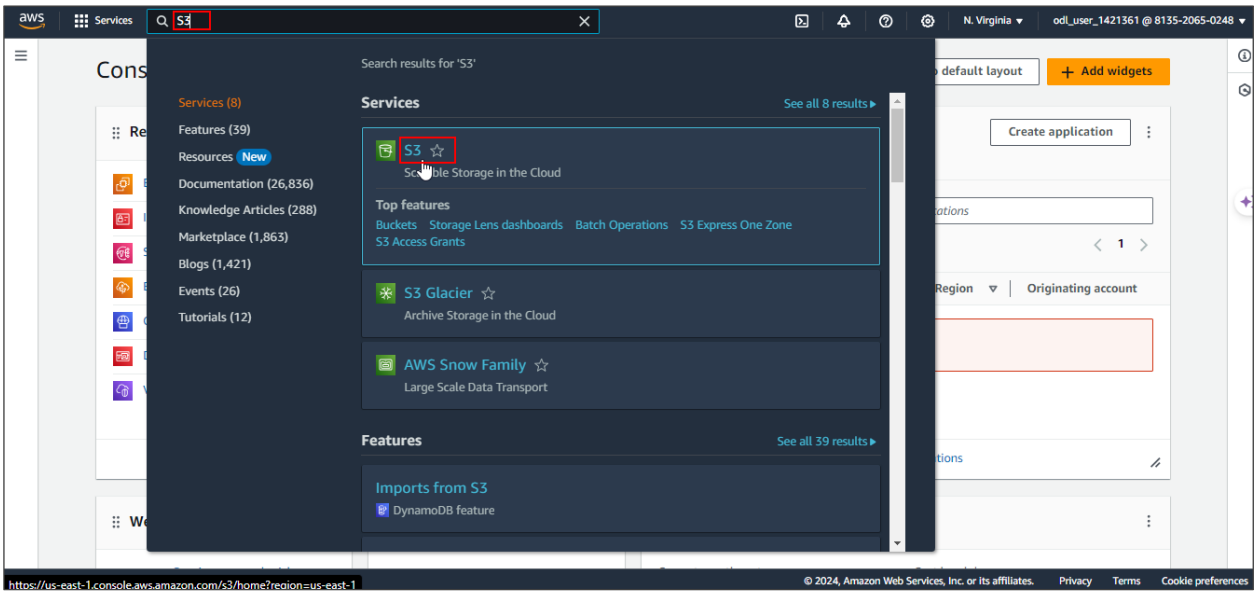
2.5 Select the previously created role **S3access** in the **IAM role** section and click on **Update IAM role**



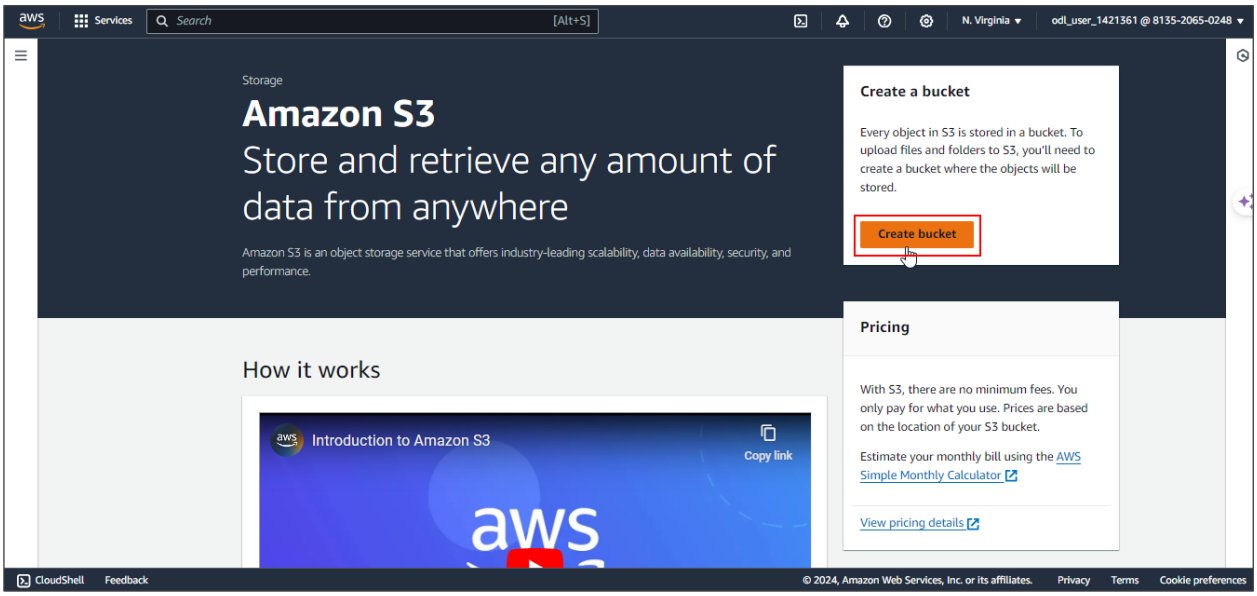


Step 3: Validate access to the S3 bucket

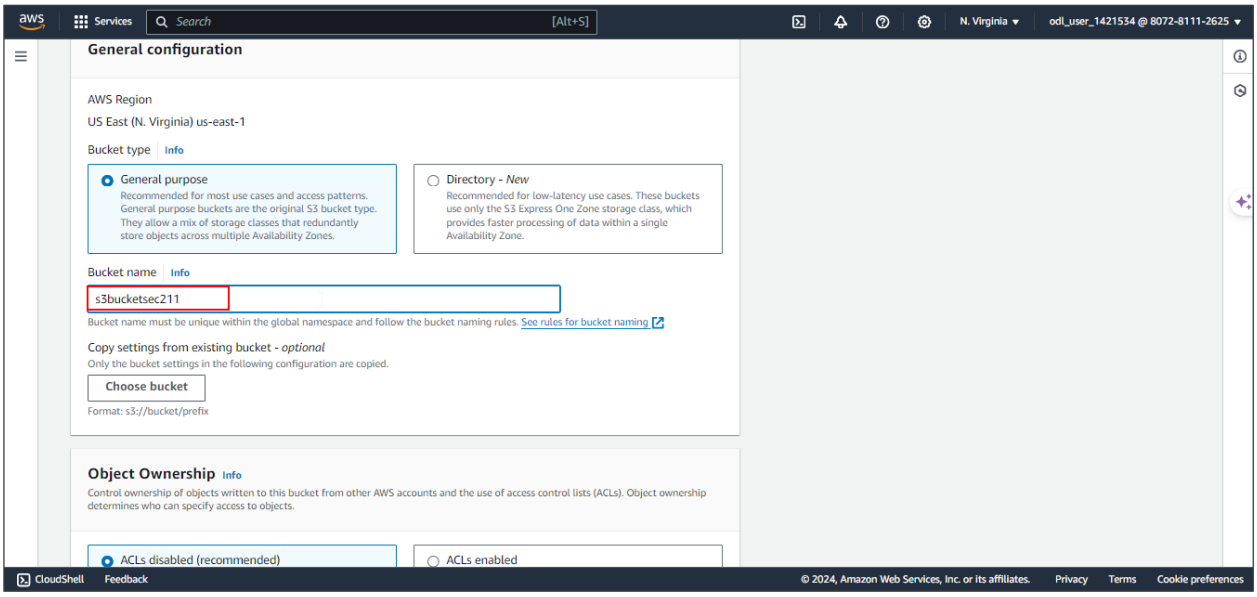
3.1 Navigate to the AWS console home dashboard, search for, and click on **S3** as shown:

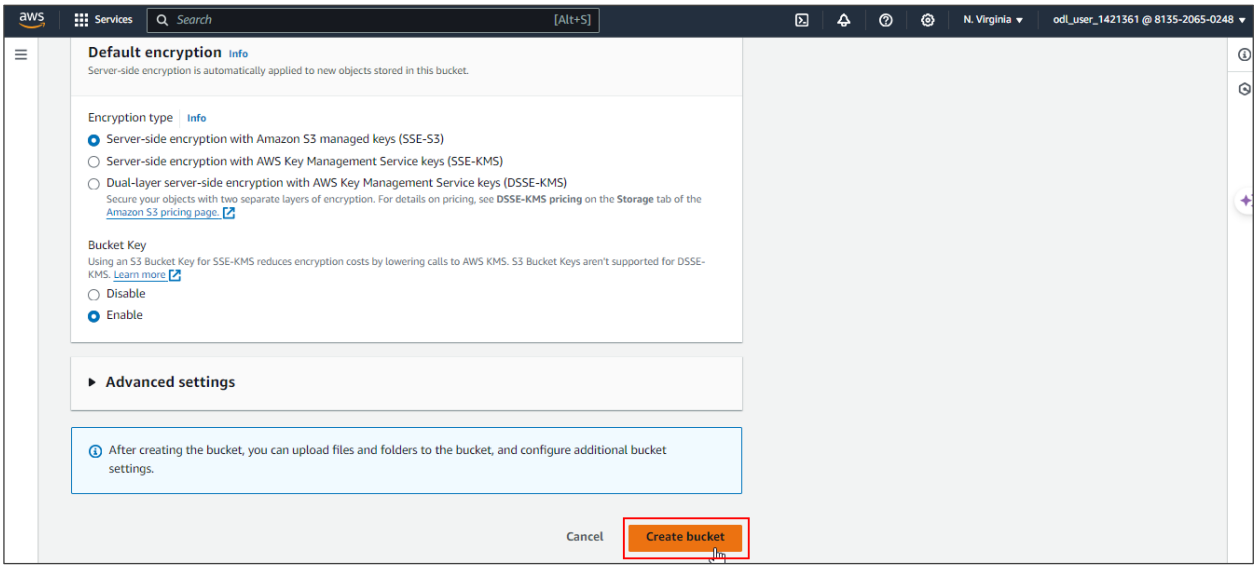


3.2 Click on **Create bucket** as shown:



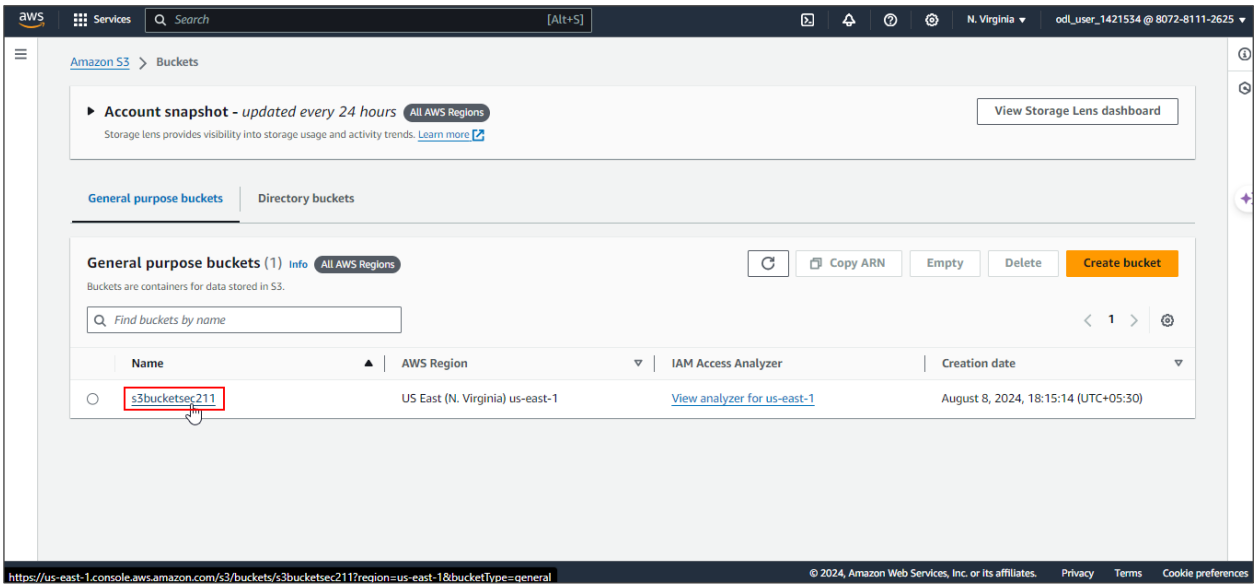
3.3 Add a unique bucket name and click on **Create bucket** as shown:





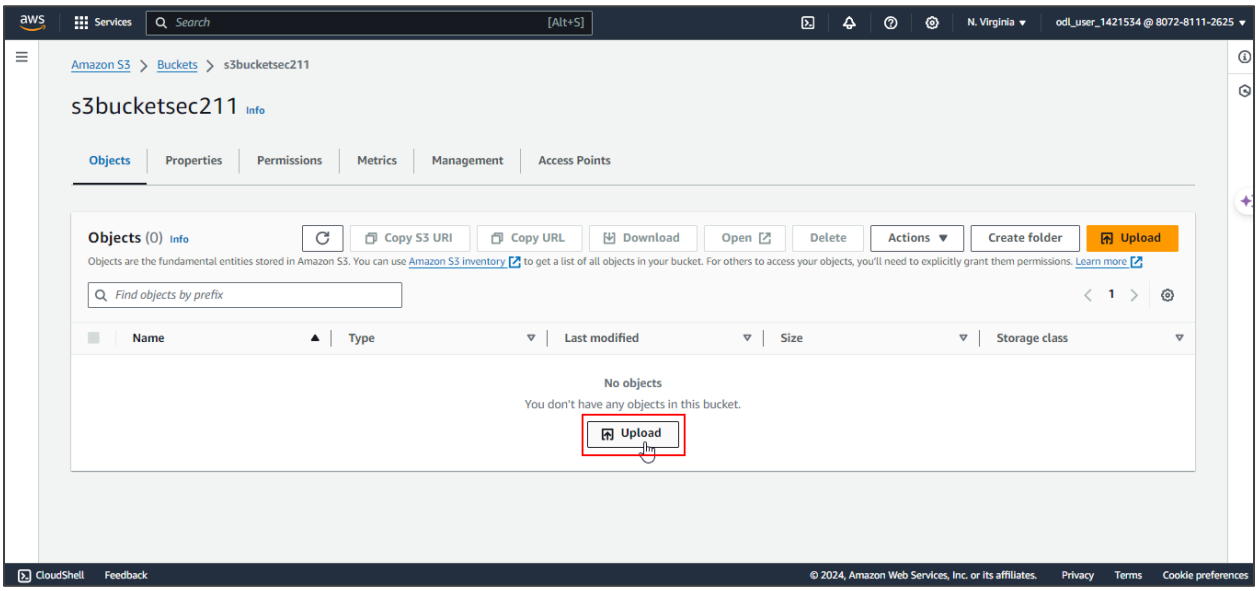
Note: Keep all the other options as default

3.4 Click on the **s3bucketsec2** bucket to verify

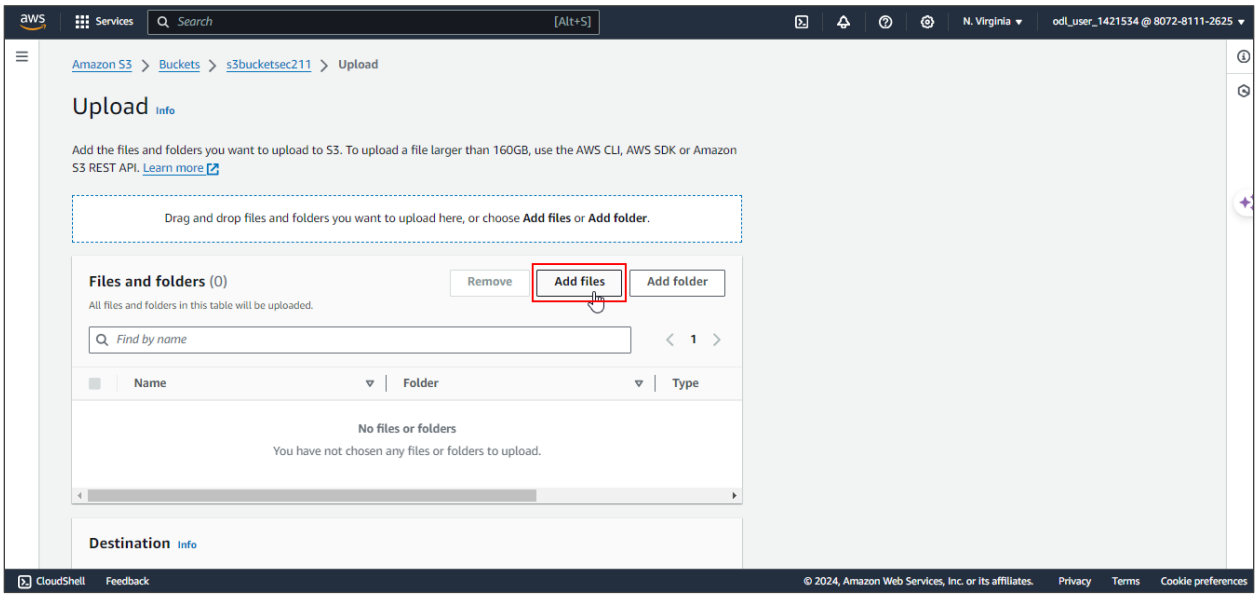


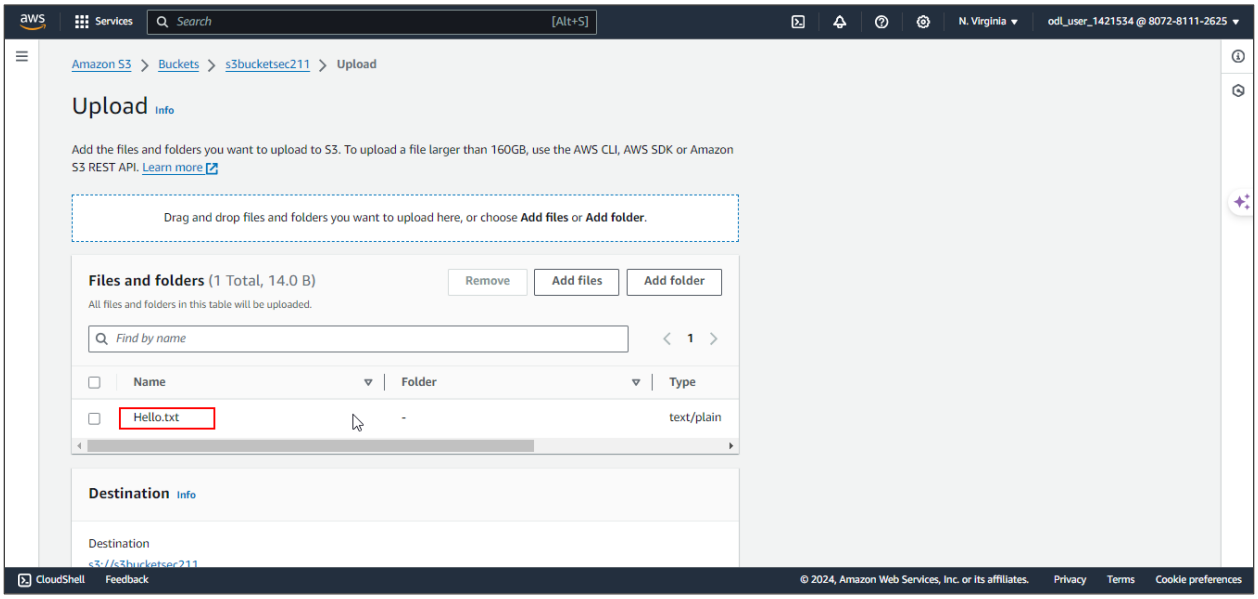
Note: Upload a **.txt** file to the S3 bucket

3.5 Click on **Upload**

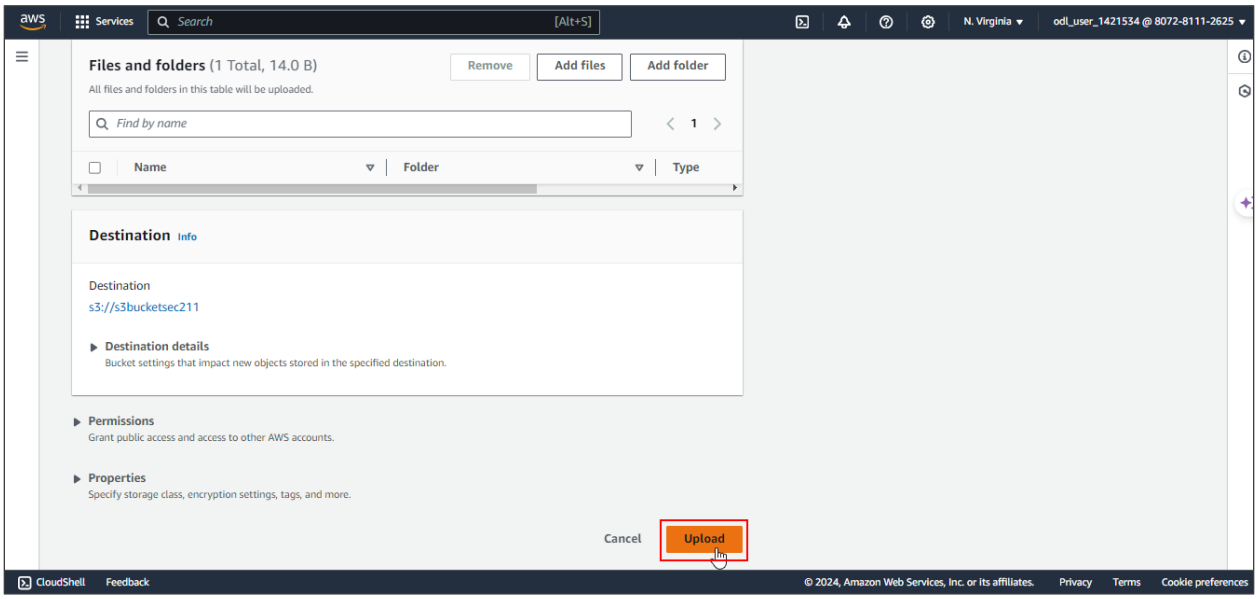


3.6 Click on **Add files** as shown and select the desired **.txt** file from your operating system

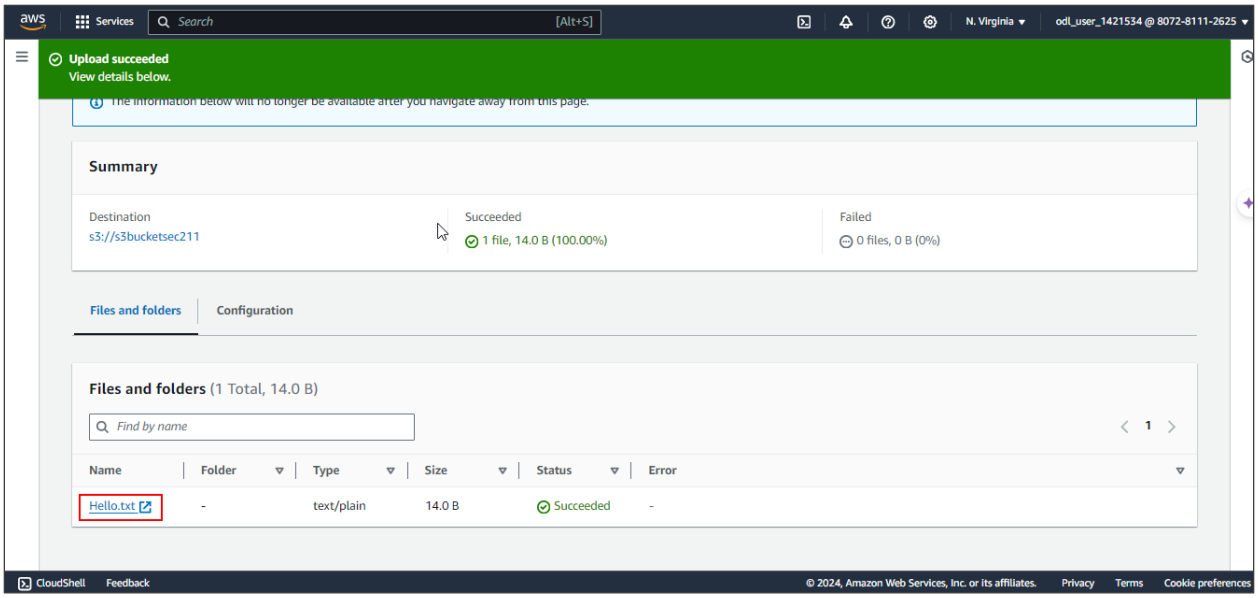




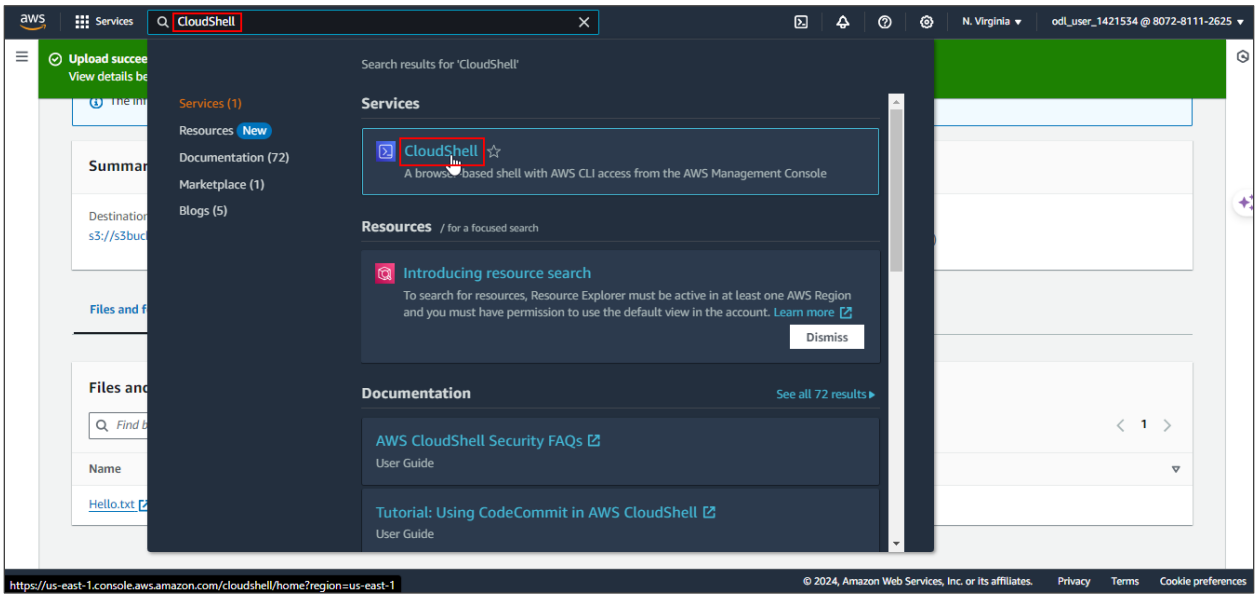
3.7 Click on the **Upload** button as shown:



The file is uploaded successfully, as shown:

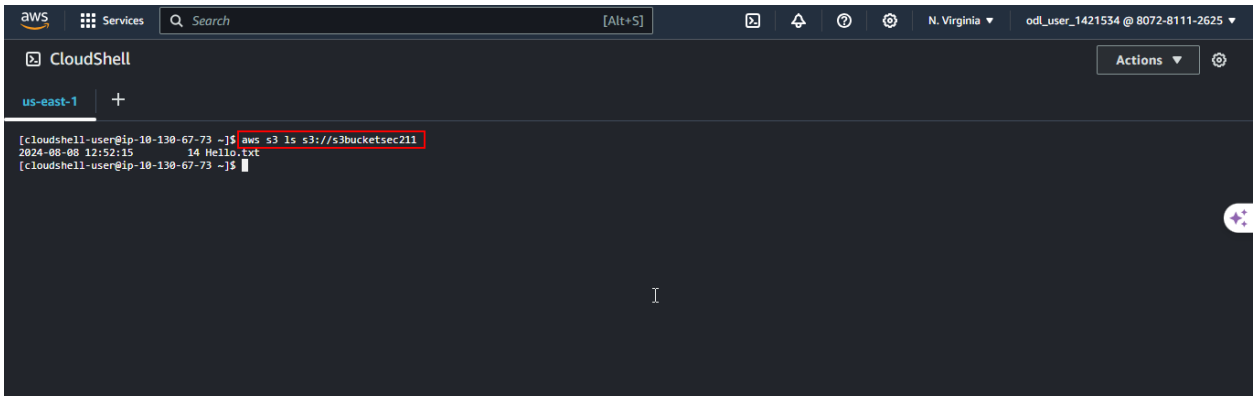


3.8 Search for and click on **CloudShell** as shown:



3.9 Add the following command in the terminal:

aws s3 ls s3://<YOUR_BUCKET_NAME>



Note: Replace **<YOUR_BUCKET_NAME>** with your bucket name

By following these steps, you have successfully secured access to Amazon S3 buckets from an EC2 instance using IAM roles.