

AWS DAY 15 & 16 ASSIGNMENT

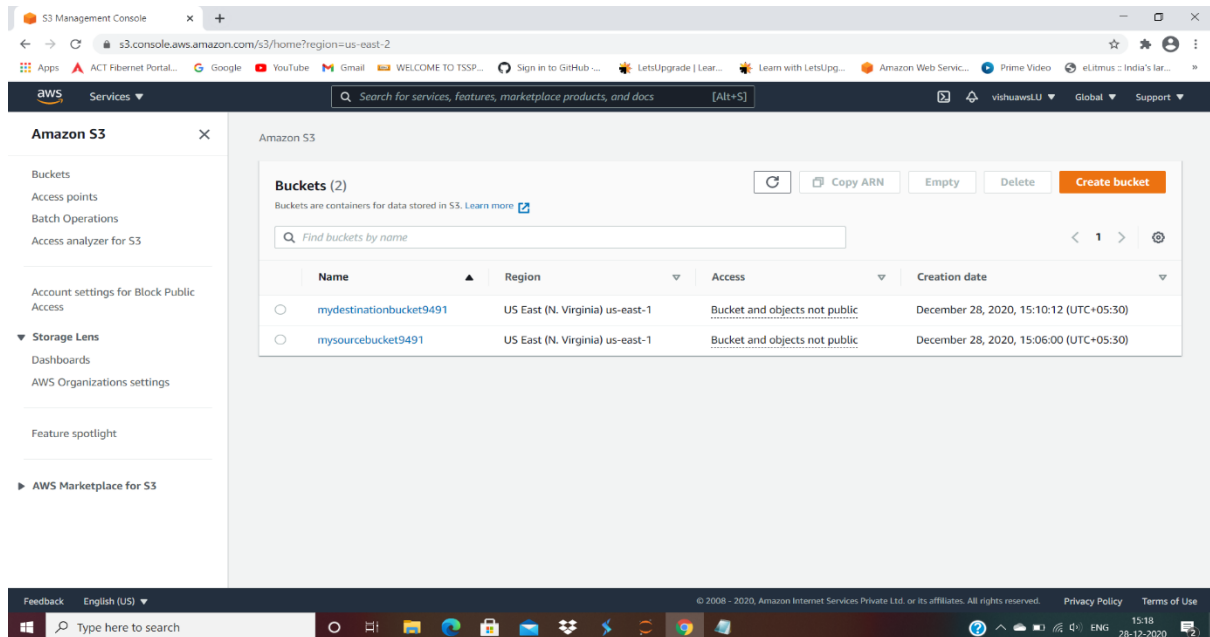
Question 1: Working with Lambda

Step1: Create two s3 buckets with the name

sourcebucket : arn:aws:s3:::mysourcebucket0210

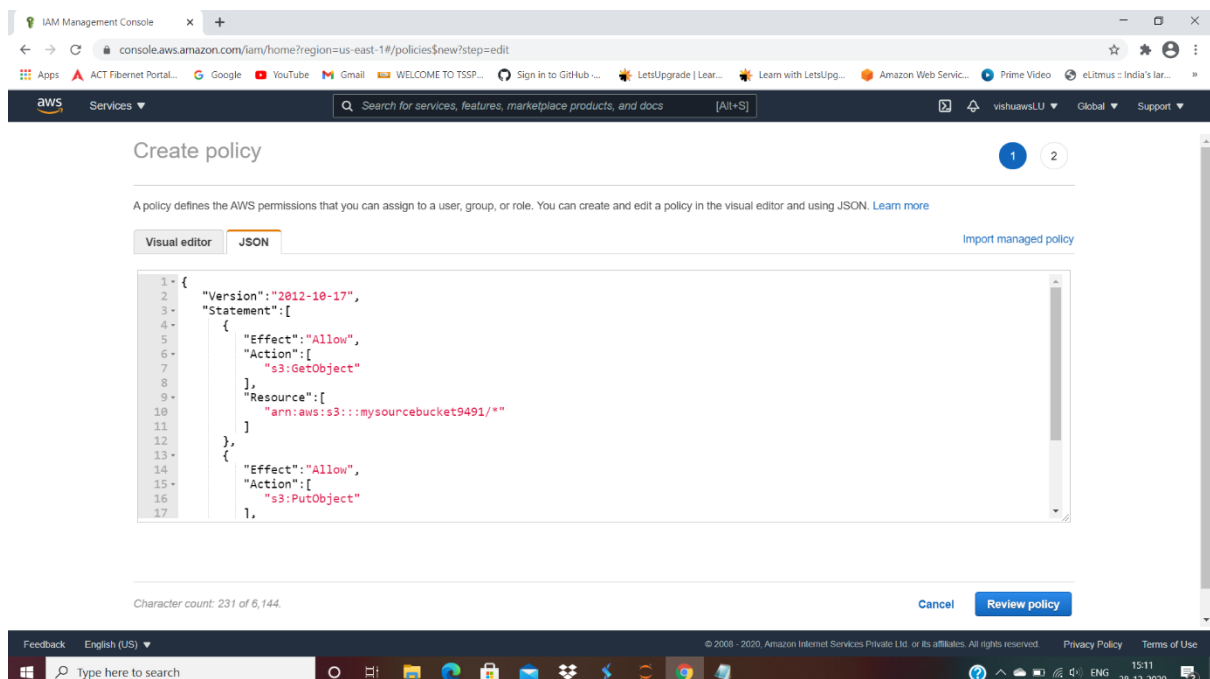
destinationbucket : arn:aws:s3:::mydestinationbucket0210

Ss1: S3 console with two buckets



Step2: Create a policy with limited Read-write permissions using a JSON script

Ss2: json script in place



Ss3:policy console with your policy filtered

The screenshot shows the 'Create policy' wizard in the AWS IAM Management Console, specifically the 'Review policy' step. The policy name is 'mypolicy'. The description field is empty. A summary table shows the policy is allowed for 1 of 264 services, specifically S3, with limited read and write access. The 'Create policy' button is highlighted.

Create policy 1 2

Review policy

Name* mypolicy
Use alphanumeric and '+', '@', '_' characters. Maximum 128 characters.

Description
Maximum 1000 characters. Use alphanumeric and '+', '@', '_' characters.

Summary

Filter

Service	Access level	Resource	Request condition
Allow (1 of 264 services) Show remaining 263			
S3	Limited: Read, Write	Multiple	None

* Required

Cancel Previous **Create policy**

The screenshot shows the 'Policies' page in the AWS IAM Management Console. A green notification banner at the top states 'mypolicy has been created.' The 'Filter policies' search bar contains 'mypolicy', and the results table shows one policy named 'mypolicy' of type 'Customer managed'.

Identity and Access Management (IAM)

Dashboard

- Access management
 - Groups
 - Users
 - Roles
 - Policies**
 - Identity providers
 - Account settings
- Access reports
 - Access analyzer
 - Archive rules
 - Analyzers
 - Settings
 - Credential report
 - Organization activity
 - Service control policies (SCPs)

mypolicy has been created.

Create policy Policy actions

Filter policies mypolicy Showing 1 result

Policy name	Type	Used as	Description
mypolicy	Customer managed	None	

Step3:Create a role and attach the policy that was created in the previous step.

Ss4:Role console showing details of the role

The screenshot shows the 'Create role' page in the AWS IAM console. The browser address bar indicates the URL: `console.aws.amazon.com/iam/home?region=us-east-1#/roles$new?step=type`. The page has a progress bar with four steps, where the first step is active. The main heading is 'Create role'. Below it, the section 'Select type of trusted entity' offers four options: 'AWS service' (selected), 'Another AWS account', 'Web identity', and 'SAML 2.0 federation'. The 'AWS service' option is described as 'Allows AWS services to perform actions on your behalf.' Below this, the 'Choose a use case' section lists 'Common use cases' with 'EC2' and 'Lambda' highlighted. 'EC2' allows EC2 instances to call AWS services, while 'Lambda' allows Lambda functions to call AWS services. A grid of other services is also displayed, including API Gateway, CloudWatch Events, EKS, IoT Things Graph, Redshift, AWS Backup, CodeBuild, EMR, KMS, Rekognition, AWS Chatbot, CodeDeploy, ElastiCache, Kinesis, RoboMaker, AWS Marketplace, CodeGuru, Elastic Beanstalk, Lake Formation, and S3. At the bottom, there are 'Cancel' and 'Next: Permissions' buttons.

The screenshot shows the 'Review' step of the 'Create role' process. The browser address bar shows a more complex URL: `console.aws.amazon.com/iam/home?region=us-east-1#/roles$new?step=review&commonUseCase=Lambda%2BLambda&selectedUseCase=Lambda&policies=arn:aws:iam::255576724072:policy%2Fm...`. The progress bar now shows the fourth step as active. The section 'Review' asks the user to provide required information. The 'Role name' field contains 'myrole'. The 'Role description' field contains 'Allows Lambda functions to call AWS services on your behalf.' The 'Trusted entities' section shows 'AWS service: lambda.amazonaws.com'. The 'Policies' section shows 'mypolicy'. The 'Permissions boundary' section indicates 'Permissions boundary is not set'. At the bottom, a table shows the tag 'Key' and 'Value'. The 'Create role' button is highlighted in blue.

Step4:Create a Lambda function

Ss5:lambda functions dashboard

Create function [Info](#)

Choose one of the following options to create your function.

Author from scratch ☒ [Info](#)

Start with a simple Hello World example.

Use a blueprint ☐

Build a Lambda application from sample code and configuration presets for common use cases.

Container image ☐

Select a container image to deploy for your function.

Browse serverless app repository ☐

Deploy a sample Lambda application from the AWS Serverless Application Repository.

Basic information

Function name [Info](#)

Enter a name that describes the purpose of your function.

mylambdafunction

Use only letters, numbers, hyphens, or underscores with no spaces.

Runtime [Info](#)

Choose the language to use to write your function.

Node.js 12.x

Permissions [Info](#)

By default, Lambda will create an execution role with permissions to upload logs to Amazon CloudWatch Logs. You can customize this default role later when adding triggers.

Feedback English (US)

Type here to search

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15:13 28-12-2020

mylambdafunction

Use only letters, numbers, hyphens, or underscores with no spaces.

Runtime [Info](#)

Choose the language to use to write your function.

Node.js 12.x

Permissions [Info](#)

By default, Lambda will create an execution role with permissions to upload logs to Amazon CloudWatch Logs. You can customize this default role later when adding triggers.

Change default execution role

Execution role

Choose a role that defines the permissions of your function. To create a custom role, go to the [IAM console](#).

☐ Create a new role with basic Lambda permissions

☒ Use an existing role

☐ Create a new role from AWS policy templates

Existing role

Choose an existing role that you've created to be used with this Lambda function. The role must have permission to upload logs to Amazon CloudWatch Logs.

myrole

[View the myrole role](#) on the IAM console.

Advanced settings

Cancel Create function

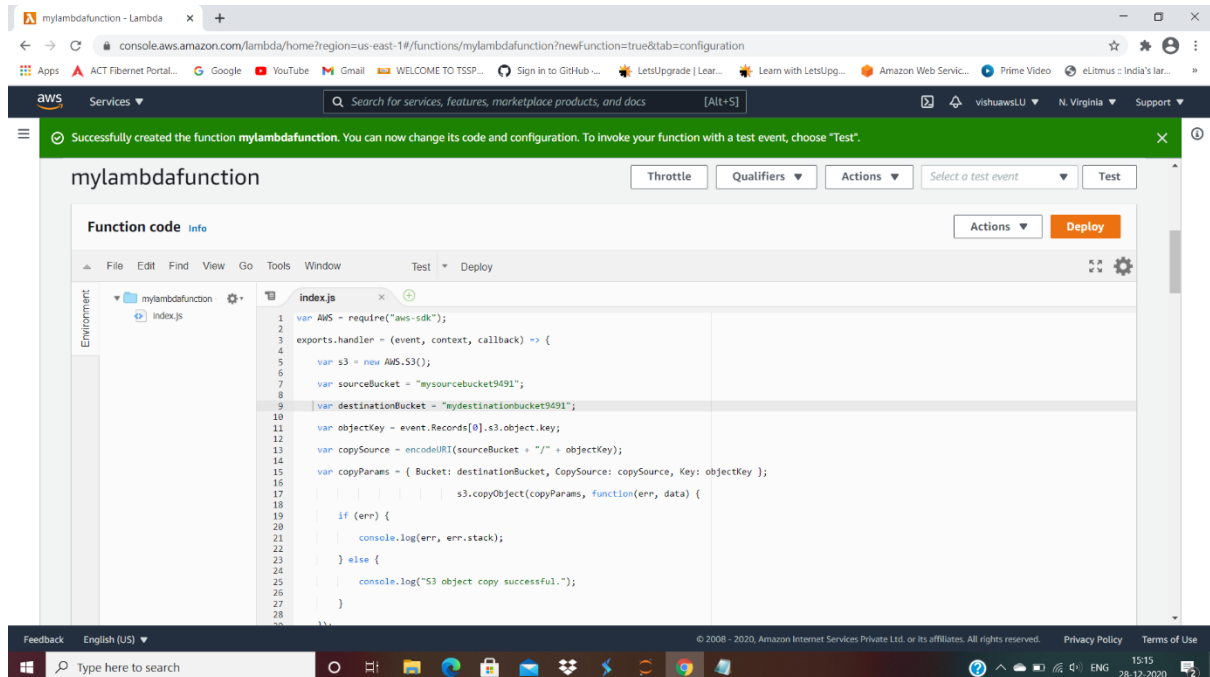
Feedback English (US)

Type here to search

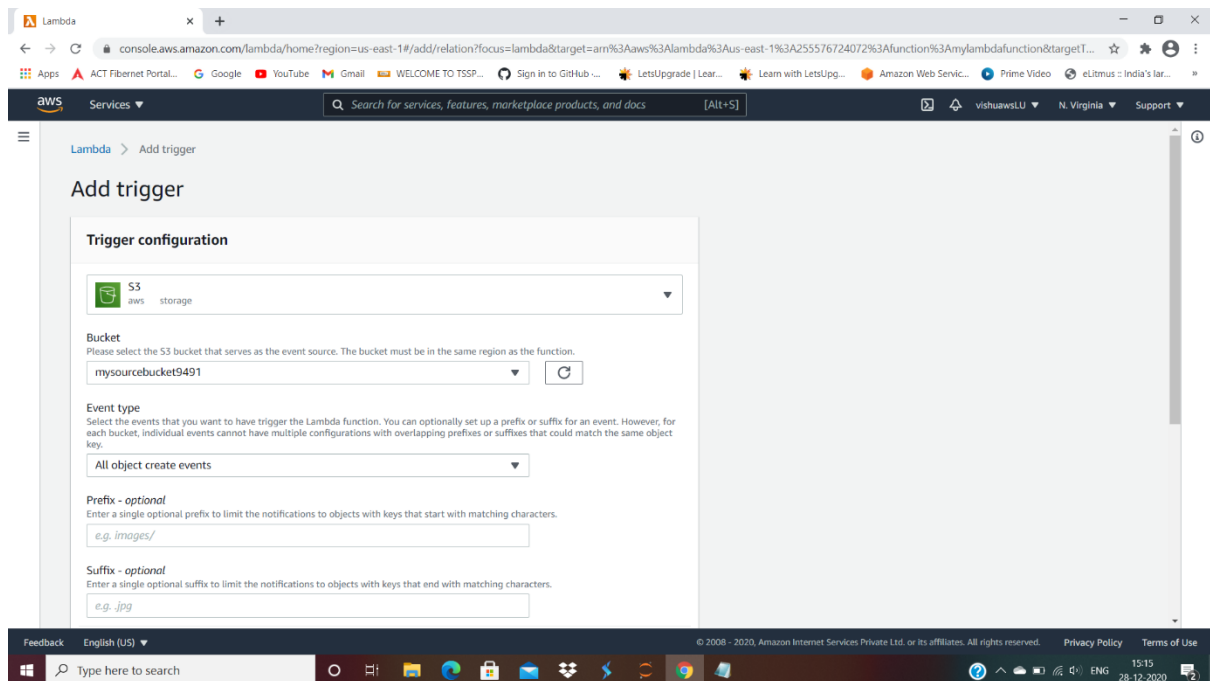
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Ss6:js file edited

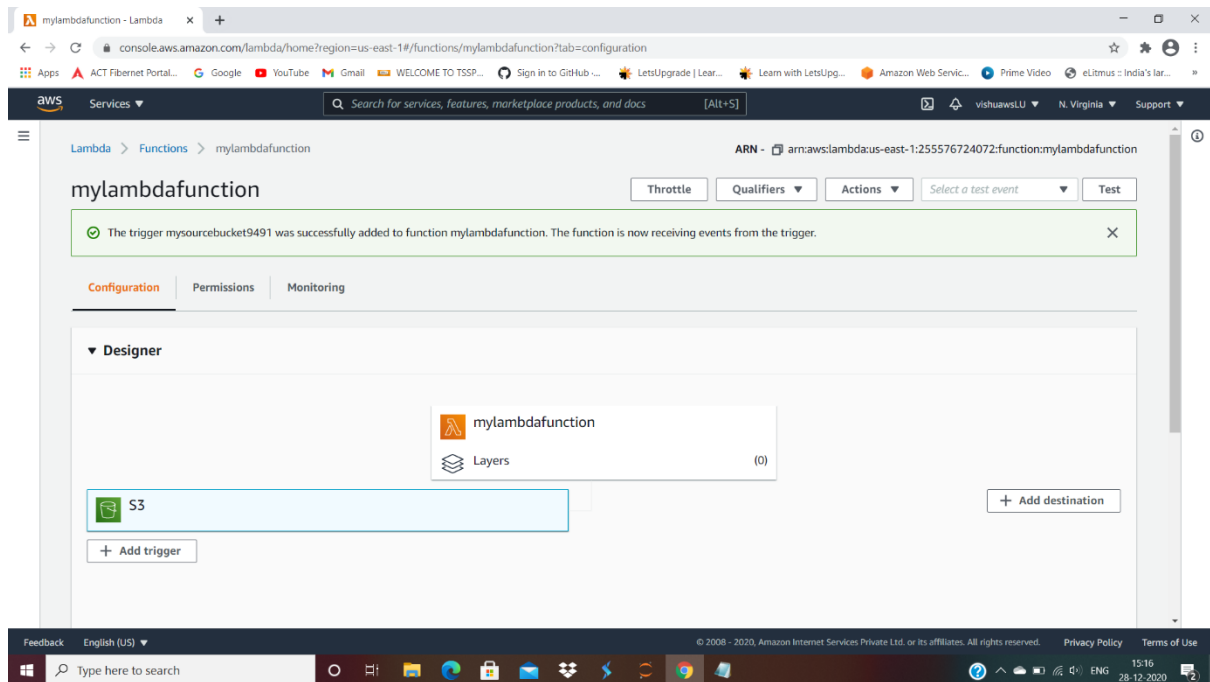


Ss7:adding trigger-s3,bucket name,confirmation for having separate buckets



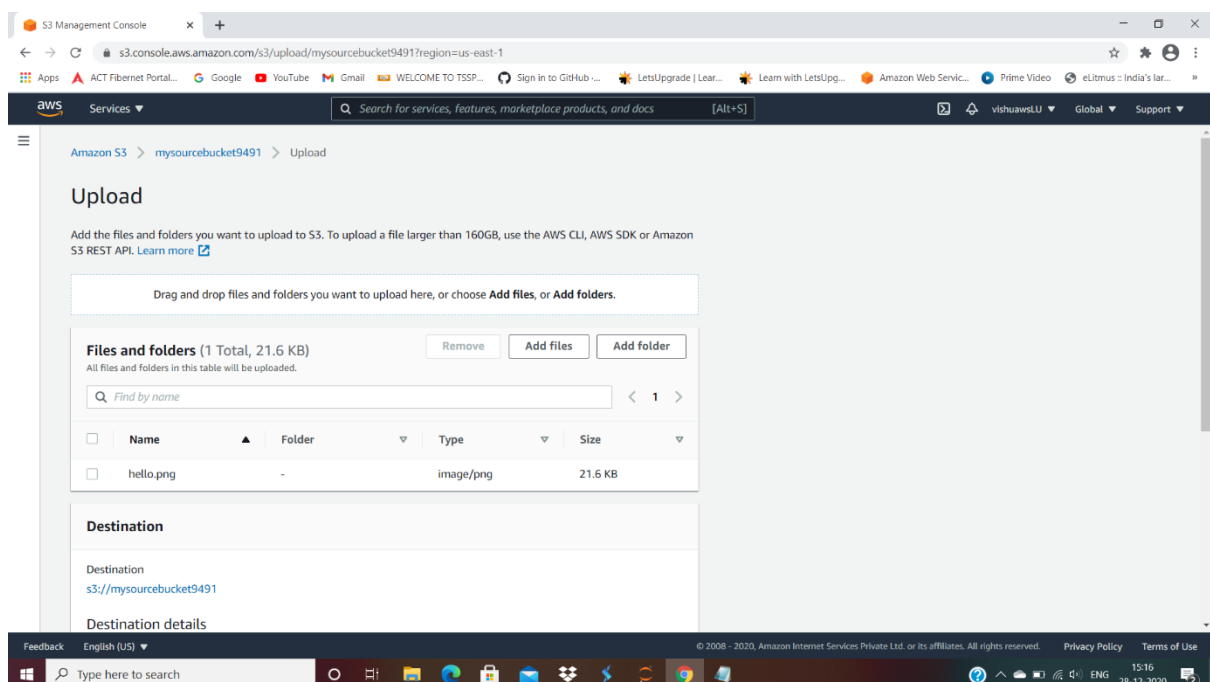
Step5:Adding triggers to the lambda function

Ss8:lambda configuration page with trigger added

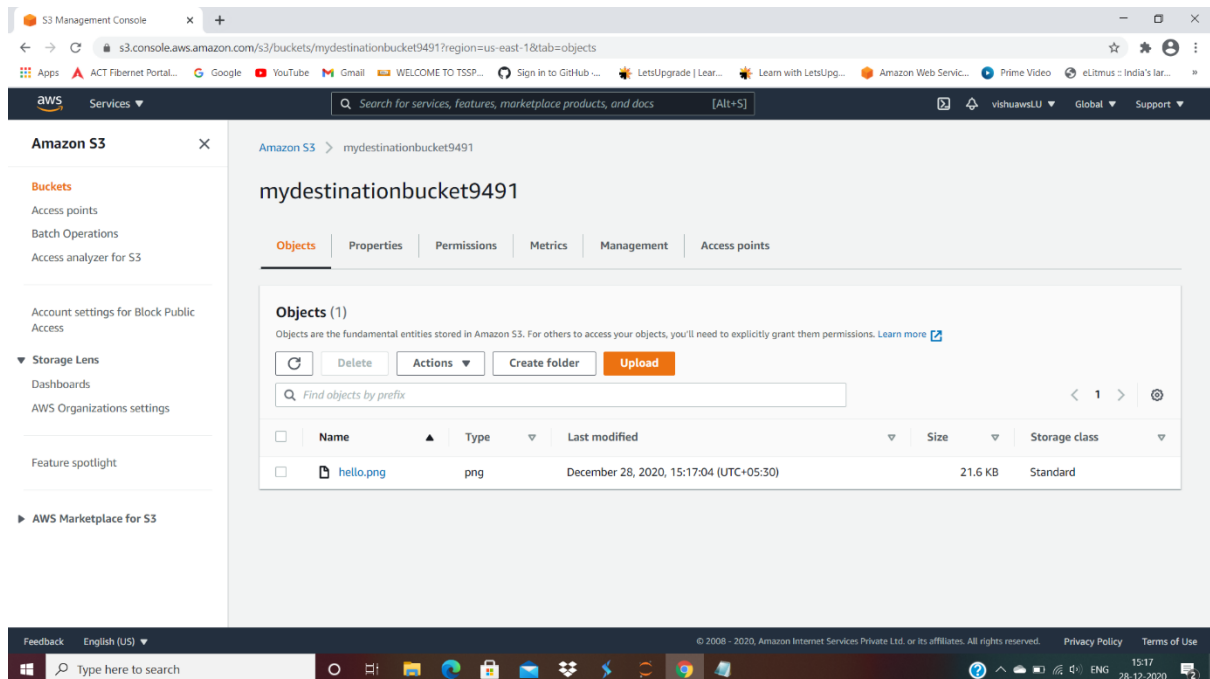


Step6:Test by uploading objects into the source bucket

Ss9:object uploaded in the source bucket



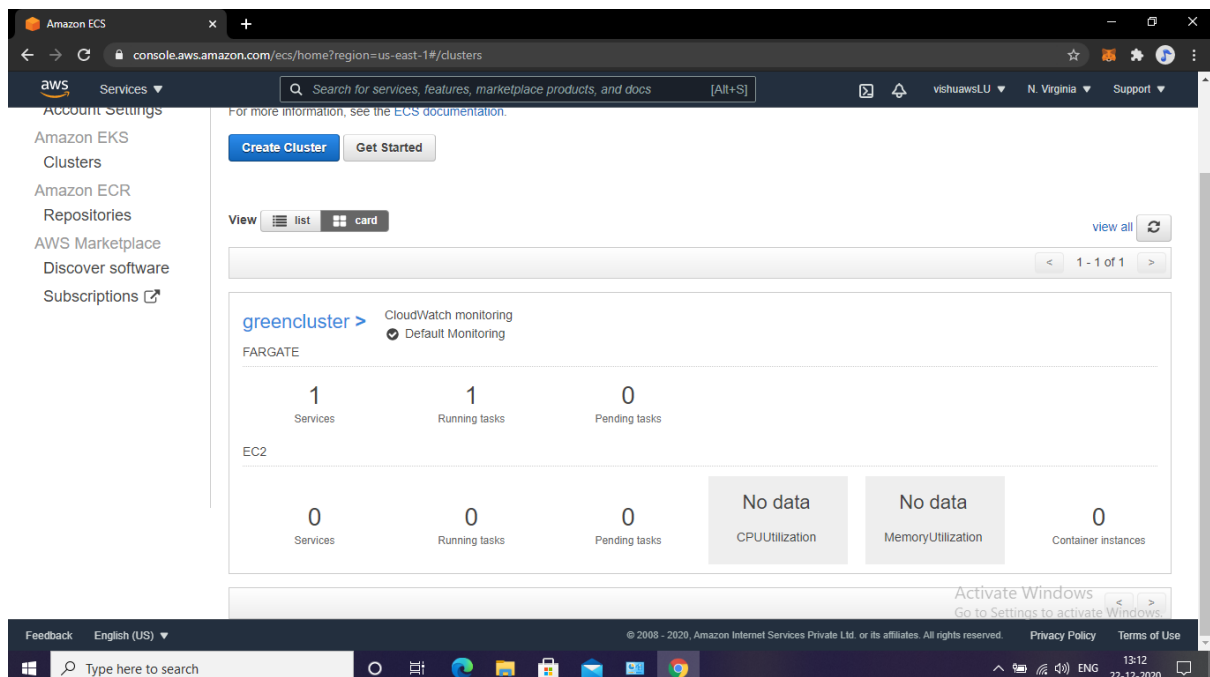
Ss10:object replicated in the destination bucket.



Question 2: Working with Elastic container service using fargate

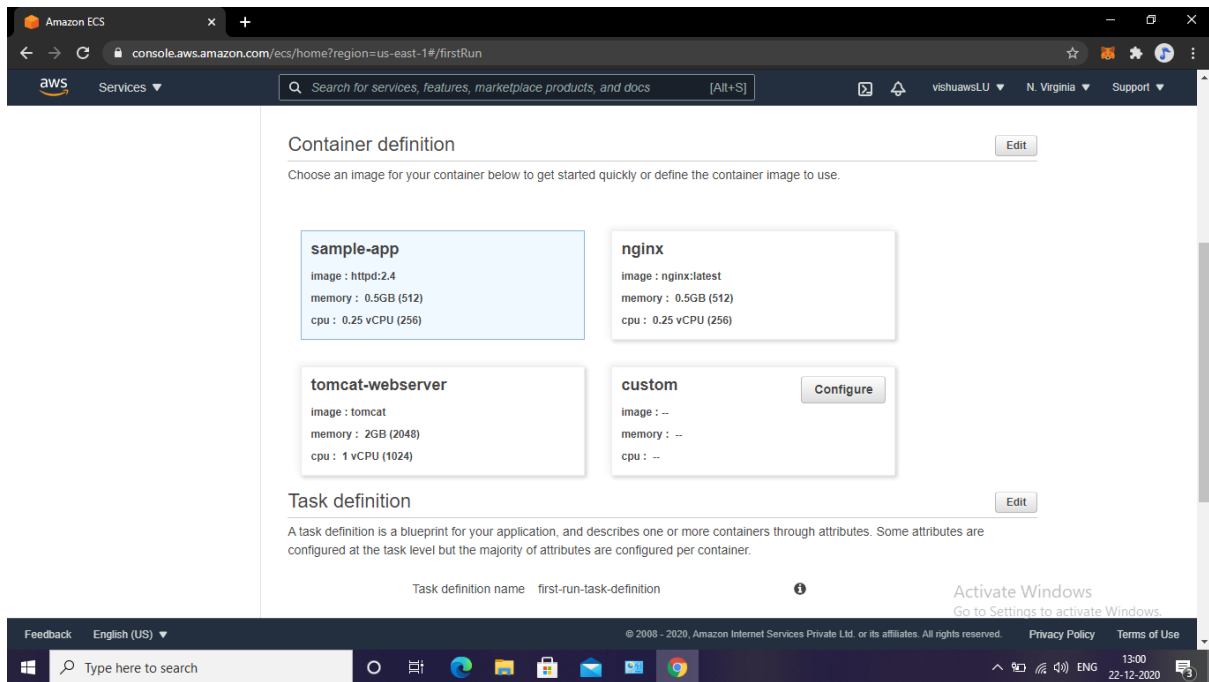
Step1:Getting started with amazon ECS using fargate

Ss1:ECS console



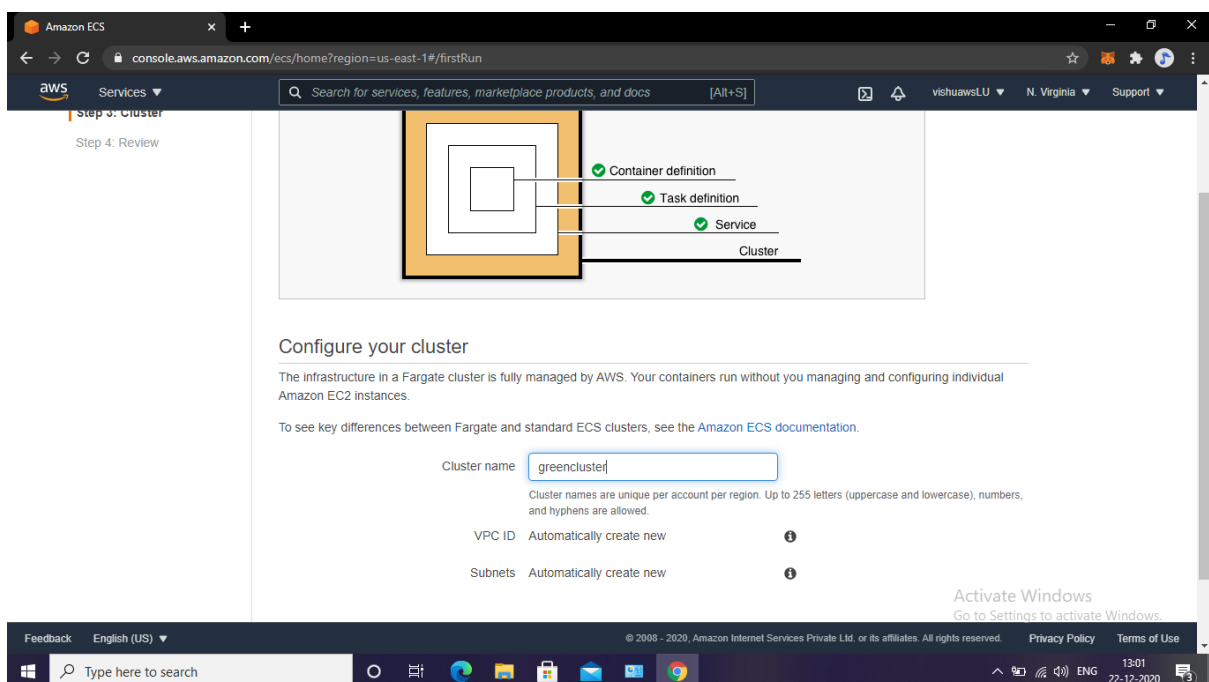
Step2:Creating container and task definition

Ss2:2nd panel with all options visible



Step4:Configuring the cluster

Ss4:next panel



Amazon ECS

console.aws.amazon.com/ecs/home?region=us-east-1#/firstRun

Services

Search for services, features, marketplace products, and docs [Alt+S]

vishuawsLU N. Virginia Support

Getting Started with Amazon Elastic Container Service (Amazon ECS) using Fargate

Step 1: Container and Task
Step 2: Service
Step 3: Cluster
Step 4: Review

Diagram of ECS objects and how they relate

Review

Review the configuration you've set up before creating your task definition, service, and cluster.

Task definition

Task definition name first-run-task-definition

Edit

Activate Windows
Go to Settings to activate Windows.

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Type here to search

Step5:Viewing the service

Ss5:Dashboard displaying the cluster created

Amazon ECS

console.aws.amazon.com/ecs/home?region=us-east-1#/firstRun

Services

Search for services, features, marketplace products, and docs [Alt+S]

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Launch Status

We are creating resources for your service. This may take up to 10 minutes. When we're complete, you can view your service.

Back View service

Additional features that you can add to your service after creation

Scale based on metrics
You can configure scaling rules based on CloudWatch metrics

Preparing service : 9 of 9 complete

EC2 resource creation complete ✓

- Cluster greencoluster complete ✓
- Task definition first-run-task-definition:1 complete ✓
- Service sample-app-service complete ✓

Additional AWS service integrations complete ✓

- Log group /ecs/first-run-task-definition complete ✓
- CloudFormation stack EC2ContainerService-greencoluster complete ✓
- VPC vpc-0e3b89d20634dbabd complete ✓
- Subnet 1 subnet-0c7842b2fa49f0b77 complete ✓
- Subnet 2 subnet-0fcae8f90d8afc09 complete ✓
- Security group sg-049039aca703cfc51 complete ✓

Activate Windows
Go to Settings to activate Windows.

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Type here to search

Ss6:Cluster information

The screenshot shows the Amazon ECS console interface. The left sidebar contains navigation links for Amazon ECS, Clusters, Task Definitions, Account Settings, Amazon EKS, Clusters, Amazon ECR, Repositories, AWS Marketplace, Discover software, and Subscriptions. The main content area displays the details for the service 'sample-app-service' within the 'greencoluster' cluster. The service status is 'ACTIVE'. Key details include: Cluster: greencoluster, Status: ACTIVE, Task definition: first-run-task-definition:1, Service type: REPLICATION, Launch type: FARGATE, Service role: AWSServiceRoleForECS, and Created By: arn:aws:iam::255576724072:root. On the right, counts are shown: Desired count: 1, Pending count: 0, and Running count: 1. Below these details are tabs for Details, Tasks, Events, Auto Scaling, Deployments, Metrics, Tags, and Logs. The 'Details' tab is active, showing sections for Load Balancing (No load balancers) and Network Access (Allowed VPC: vpc-0e3b89d20634dbabd). The bottom of the screen shows the Windows taskbar with the search bar and system tray.

Amazon ECS console showing the details of a service named 'sample-app-service'.

Service : sample-app-service

Cluster: greencoluster

Status: ACTIVE

Task definition: first-run-task-definition:1

Service type: REPLICATION

Launch type: FARGATE

Service role: AWSServiceRoleForECS

Created By: arn:aws:iam::255576724072:root

Desired count: 1

Pending count: 0

Running count: 1

Details | Tasks | Events | Auto Scaling | Deployments | Metrics | Tags | Logs

Load Balancing

Load Balancer Name | Container Name | Container Port

No load balancers

Network Access

Allowed VPC: vpc-0e3b89d20634dbabd

Ss7:Panel displaying ENI ID

The screenshot shows the Amazon ECS console interface. The left sidebar is the same as in the previous image. The main content area displays the details for a task named 'Task : 2a4d0413bd874d1e97b326c330c5b1e5' within the 'greencoluster' cluster. The task status is 'RUNNING'. Key details include: Cluster: greencoluster, Launch type: FARGATE, Platform version: 1.3.0, Task definition: first-run-task-definition:1, Group: service:sample-app-service, Task role: None, Last status: RUNNING, Desired status: RUNNING, Created at: 2020-12-22 13:04:24 +0530, and Started at: 2020-12-22 13:05:07 +0530. Below these details are tabs for Details, Tags, and Logs. The 'Details' tab is active, showing the Network section with Network mode: awsvpc and ENI ID: eni-0e29387a8c5ef38e5. The bottom of the screen shows the Windows taskbar with the search bar and system tray.

Amazon ECS console showing the details of a task named 'Task : 2a4d0413bd874d1e97b326c330c5b1e5'.

Task : 2a4d0413bd874d1e97b326c330c5b1e5

Cluster: greencoluster

Launch type: FARGATE

Platform version: 1.3.0

Task definition: first-run-task-definition:1

Group: service:sample-app-service

Task role: None

Last status: RUNNING

Desired status: RUNNING

Created at: 2020-12-22 13:04:24 +0530

Started at: 2020-12-22 13:05:07 +0530

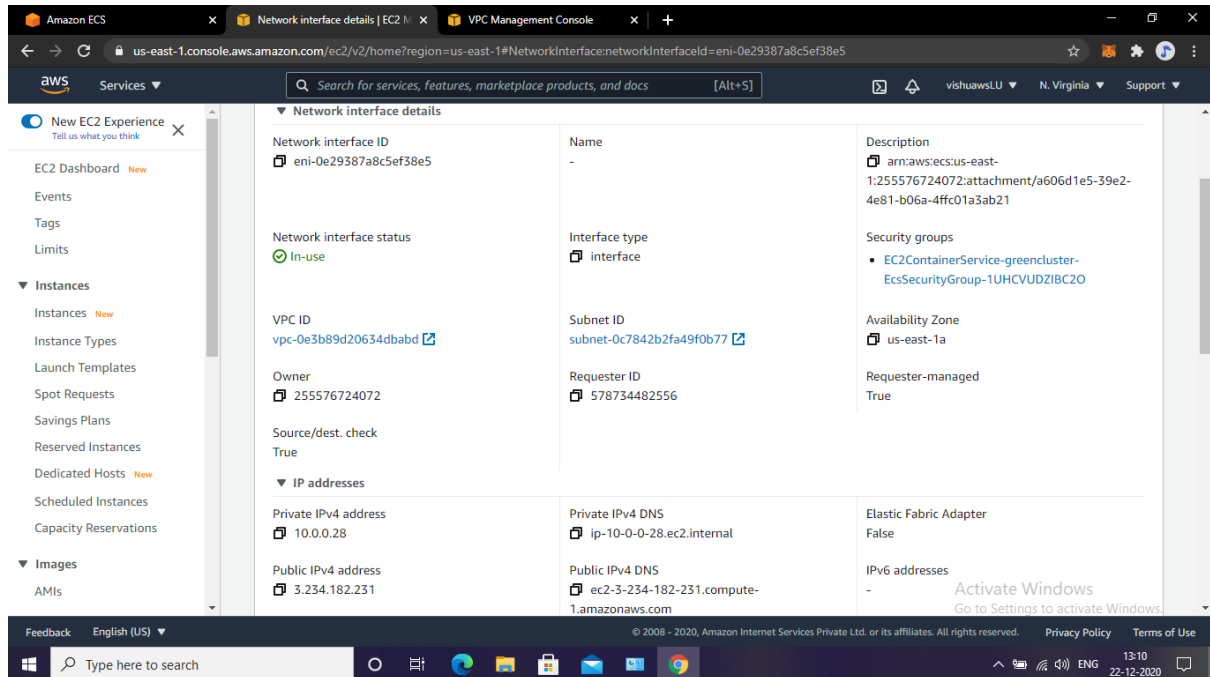
Details | Tags | Logs

Network

Network mode: awsvpc

ENI ID: eni-0e29387a8c5ef38e5

Ss8:Panel displaying the private, public, and the macid



Ss9:Display application

