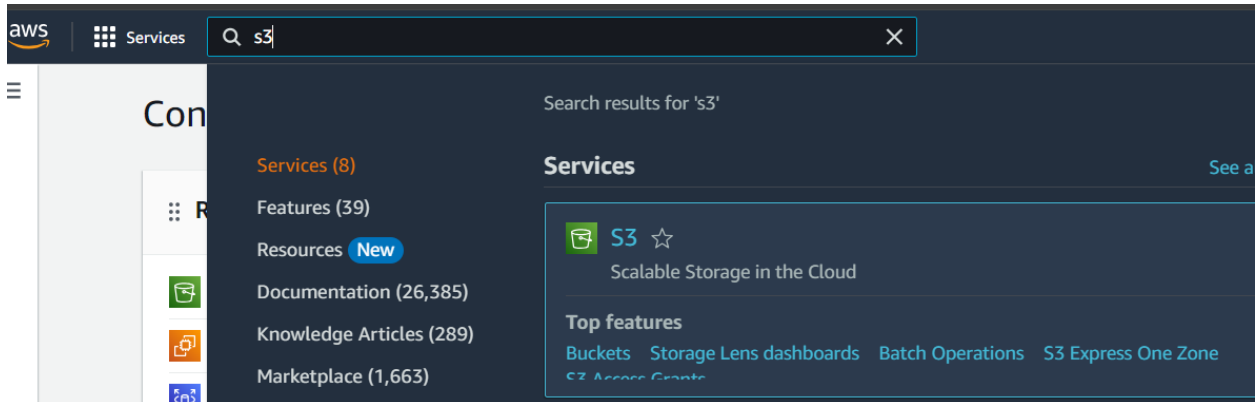


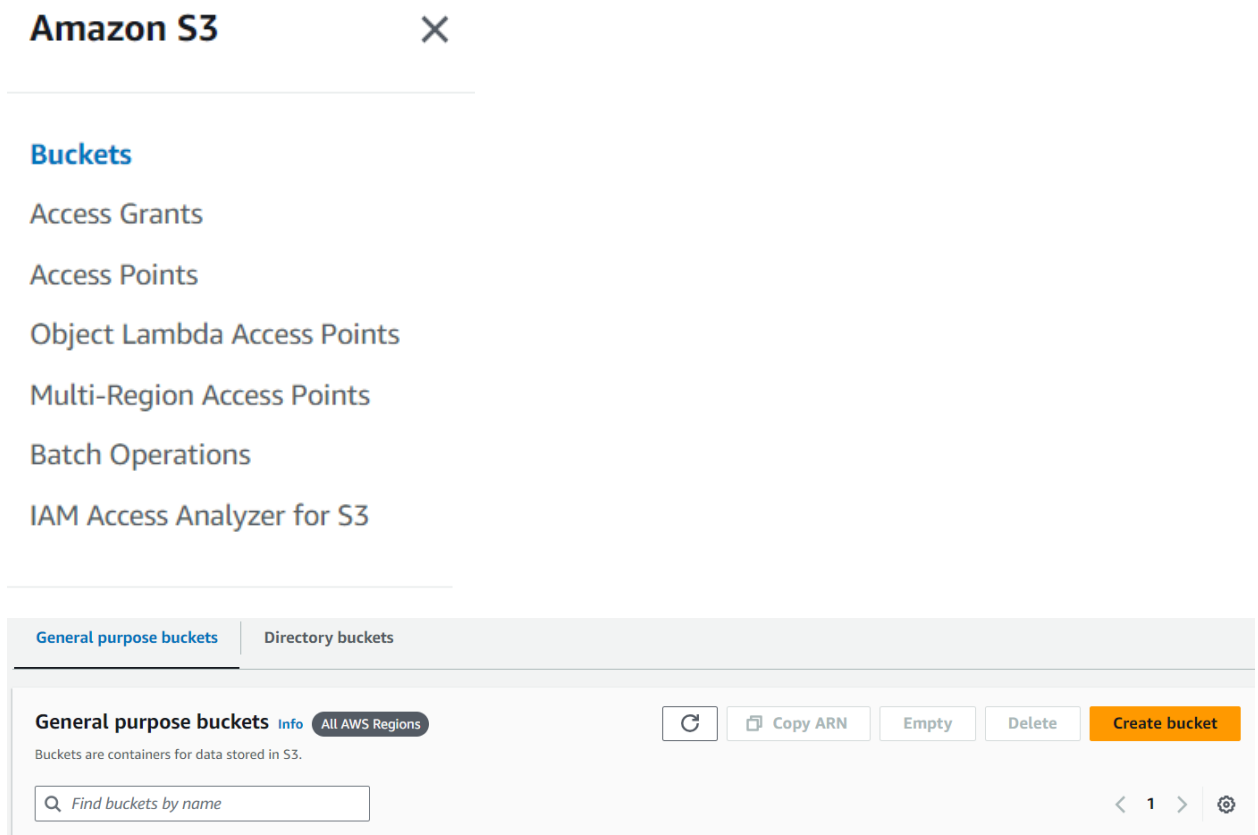
Assingment-3

TASK: Create two S3 buckets in different regions, upload a file in one S3 bucket and transfer the same file from one S3 bucket to other S3 bucket.

Search for S3 in search bar of AWS home page and click on S



→Click on **Buckets** option on left panel and click on **Create bucket** button.



→ here we have to select Availability Zone and give name of the bucket of our choice. And finally click on **Create bucket**.

[Amazon S3](#) > [Buckets](#) > Create bucket

Create bucket [Info](#)

Buckets are containers for data stored in S3.

General configuration

AWS Region
US East (N. Virginia) us-east-1

Bucket type [Info](#)

☒ **General purpose**
Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.

☐ **Directory - New**
Recommended for low-latency use cases. These buckets use only the S3 Express One Zone storage class, which provides faster processing of data within a single Availability Zone.

Bucket name [Info](#)

my-buckt-1

Bucket name must be unique within the global namespace and follow the bucket naming rules. [See rules for bucket naming](#)

Copy settings from existing bucket - optional
Only the bucket settings in the following configuration are copied.

Choose bucket

Format: s3://bucket/prefix

[General purpose buckets](#) | [Directory buckets](#)

General purpose buckets (1) [Info](#) [All AWS Regions](#)

Buckets are containers for data stored in S3.

< 1 > [Settings](#)

	Name	AWS Region	IAM Access Analyzer	Creation date
<input type="radio"/>	my-buckt-1	US East (N. Virginia) us-east-1	View analyzer for us-east-1	April 23, 2024, 16:08:41 (UTC+05:30)

→ Now create another bucket in a different region.

→ Go to **Buckets**, click on **Create bucket**. Here select a different Region (I have selected Mumbai region) and give name and **Create bucket**.

Create bucket [Info](#)

Buckets are containers for data stored in S3.

General configuration

AWS Region

Asia Pacific (Mumbai) ap-south-1

Bucket name [Info](#)

my-buckt-2

Bucket name must be unique within the global namespace and follow the bucket naming rules. [See rules for bucket naming](#) 


Copy settings from existing bucket - *optional*

Only the bucket settings in the following configuration are copied.

Choose bucket

Format: s3://bucket/prefix

Bucket Versioning


Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#) 

Bucket Versioning

☐ Disable

☒ Enable

Tags - *optional* (0)

You can use bucket tags to track storage costs and organize buckets. [Learn more](#) 

No tags associated with this bucket.

Add tag

Default encryption [Info](#)

Server-side encryption is automatically applied to new objects stored in this bucket.

Encryption type [Info](#)

- ☒ Server-side encryption with Amazon S3 managed keys (SSE-S3)
- ☐ Server-side encryption with AWS Key Management Service keys (SSE-KMS)
- ☐ Dual-layer server-side encryption with AWS Key Management Service keys (DSSE-KMS)
Secure your objects with two separate layers of encryption. For details on pricing, see [DSSE-KMS pricing](#) on the **Storage** tab of the [Amazon S3 pricing page](#). [↗](#)

Bucket Key

Using an S3 Bucket Key for SSE-KMS reduces encryption costs by lowering calls to AWS KMS. S3 Bucket Keys aren't supported for DSSE-KMS. [Learn more](#) [↗](#)

- ☐ Disable
- ☒ Enable

► Advanced settings

[i](#) After creating the bucket, you can upload files and folders to the bucket, and configure additional bucket settings.

Cancel

Create bucket

>>Now we have two buckets both in different regions.

General purpose buckets (2) Info All AWS Regions				↻	Copy ARN	Empty	Delete	Create bucket
Buckets are containers for data stored in S3.								
<input type="text" value="Find buckets by name"/>				< 1 > ⓘ				
Name	▲	AWS Region	▼	IAM Access Analyzer		Creation date		
<input type="radio"/> my-buckt-1		US East (N. Virginia) us-east-1		View analyzer for us-east-1		April 23, 2024, 16:08:41 (UTC+05:30)		
<input type="radio"/> my-buckt-2		Asia Pacific (Mumbai) ap-south-1		View analyzer for ap-south-1		April 23, 2024, 16:30:45 (UTC+05:30)		

→ Now go to source bucket (my-buckt-1), upload any file. We can upload folders as well. Here I'm just uploading a simple text file (PUNITHH.txt).

my-buckt-1 [Info](#)

[Objects](#) | [Properties](#) | [Permissions](#) | [Metrics](#) | [Management](#) | [Access Points](#)

Objects (0) [Info](#)

[Refresh](#) [Copy S3 URI](#) [Copy URL](#) [Download](#) [Open](#) [Delete](#) [Actions](#) [Create folder](#) [Upload](#)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

☐ Show versions < 1 > [Settings](#)

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
--------------------------	------	------	---------------	------	---------------

No objects

You don't have any objects in this bucket.

[Upload](#)

→ click on **Upload** option and then click on **Add files** option and select our file and click on **Open**

Upload [Info](#)

Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)

Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.

Files and folders (1 Total, 21.0 B)

[Remove](#)

[Add files](#)

[Add folder](#)

All files and folders in this table will be uploaded.

< 1 > [Settings](#)

<input type="checkbox"/>	Name	Folder	Type
<input type="checkbox"/>	PUNITHHH.txt	-	text/plain

→ finally click on **Upload**

Destination
Info

Destination
s3://my-buckt-1

▶ Destination details
Bucket settings that impact new objects stored in the specified destination.

▶ Permissions
Grant public access and access to other AWS accounts.

▶ Properties
Specify storage class, encryption settings, tags, and more.

Cancel
Upload

→ Now our file uploaded successfully. Click on **Close** button to close upload status notification.

Upload succeeded
View details below.

The information below will no longer be available after you navigate away from this page.

Summary

Destination
s3://my-buckt-1

Succeeded
1 file, 21.0 B (100.00%)

Failed
0 files, 0 B (0%)

Files and folders
Configuration

Files and folders (1 Total, 21.0 B)

Find by name

Name	Folder	Type	Size	Status	Error
PUNITHH.txt	-	text/plain	21.0 B	Succeeded	-

→ now click on **Management** and click on **Create replication rule** in Replication rules area

my-buckt-1 [Info](#)

[Objects](#) | [Properties](#) | [Permissions](#) | [Metrics](#) | [Management](#) | [Access Points](#)

Objects (1) [Info](#)

[Copy S3 URI](#)[Copy URL](#)[Download](#)[Open](#)[Delete](#)[Actions](#)[Create folder](#)[Upload](#)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

☐ Show versions[< 1 >](#) [Settings](#)

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	PUNITHHH.txt	txt	April 23, 2024, 16:47:33 (UTC+05:30)	21.0 B	Standard

Replication rules (0)

[View details](#)[Edit rule](#)[Delete](#)[Actions](#)[Create replication rule](#)

Use replication rules to define options you want Amazon S3 to apply during replication such as server-side encryption, replica ownership, transitioning replicas to another storage class, and more. [Learn more](#)

Replication rule name	Status	Destination bucket	Destination Region	Priority	Scope	Storage class	Replica owner	Replication Time Control	KMS-encrypted objects (SSE-KMS or DSSE-KMS)	Replica modification sync
-----------------------	--------	--------------------	--------------------	----------	-------	---------------	---------------	--------------------------	---	---------------------------

No replication rules

You don't have any rules in the replication configuration.

[Create replication rule](#)

→ give name and select Apply to all objects in the bucket option

Create replication rule [Info](#)

Replication rule configuration

Replication rule name

MY-RULE-1

Up to 255 characters. In order to be able to use CloudWatch metrics to monitor the progress of your replication rule, the replication rule name must only contain English characters.

Status

Choose whether the rule will be enabled or disabled when created.

☒ Enabled

☐ Disabled

Priority

The priority value resolves conflicts that occur when an object is eligible for replication under multiple rules to the same destination. The rule is added to the configuration at the highest priority and the priority can be changed on the replication rules table.

0

Source bucket

Source bucket name

my-buckt-1

Source Region

US East (N. Virginia) us-east-1

Choose a rule scope

☐ Limit the scope of this rule using one or more filters

☒ Apply to all objects in the bucket

- under Destination field, click on **Browse S3** to choose our destination bucket
- select our Destination bucket (my-buckt-2) and click on **Choose path** option.

Destination

Destination

You can replicate objects across buckets in different AWS Regions (Cross-Region Replication) or you can replicate objects across buckets in the same AWS Region (Same-Region Replication). You can also specify a different bucket for each rule in the configuration. [Learn more](#) or see [Amazon S3 pricing](#)

- ☒ Choose a bucket in this account
- ☐ Specify a bucket in another account

Bucket name

Choose the bucket that will receive replicated objects.

[Browse S3](#)

Destination Region

-

Buckets (2)

< 1 >

	Name	AWS Region
<input type="radio"/>	my-buckt-1	US East (N. Virginia) us-east-1
<input checked="" type="radio"/>	my-buckt-2	Asia Pacific (Mumbai) ap-south-1

Cancel

Choose path

→ Now, Under IAM role, select **Create new role** option and select **Replication Time Control (RTC)** option under Additional replication options and finally click on Save button.

Bucket name

Choose the bucket that will receive replicated objects.

[Browse S3](#)

Destination Region

Asia Pacific (Mumbai) ap-south-1

IAM role


- ☒ Create new role
- ☐ Choose from existing IAM roles
- ☐ Enter IAM role ARN

Encryption

Server-side encryption protects data at rest.

- ☐ Replicate objects encrypted with AWS Key Management Service (AWS KMS)
Replicate SSE-KMS and DSSE-KMS encrypted objects.

Additional replication options

- ☒ Replication Time Control (RTC)
Replication Time Control replicates 99.99% of new objects within 15 minutes and includes replication metrics. Additional fees will apply. [Learn more](#)
- ☒ Replication metrics
With replication metrics, you can monitor the total number and size of objects that are pending replication, and the maximum replication time to the destination Region. You can also view and diagnose replication failures. CloudWatch metrics fees apply. [Learn more](#) or see [Amazon CloudWatch pricing](#)
-  To publish event notifications to a destination whenever replication events occur, set S3 event notifications or CloudWatch alarms before replication begins. [Learn more](#)
- ☐ Delete marker replication
Delete markers created by S3 delete operations will be replicated. Delete markers created by lifecycle rules are not replicated. [Learn more](#)
- ☐ Replica modification sync
Replicate metadata changes made to replicas from the destination bucket to the source bucket. [Learn more](#)

[Cancel](#)[Save](#)

→ Now, Replicate existing objects? Dialogue box will appear. Select Yes, replicate existing objects option and click on Submit.

→ now click on **Browse S3** under Completion report field and select our destination bucket and click on **Choose path** option

Completion report

Generate a CSV completion report that lists your target objects, task success or error codes, outputs, and descriptions. Completion reports are encrypted using SSE-S3. [Learn more](#)

☒ Generate completion report

Completion report scope

☐ Failed tasks only

☒ All tasks

Completion report destination

Specify a general purpose bucket location to store the completion report. '/job-[job-id]/report.json' will automatically be appended to the specified destination. [Learn more](#)

s3://bucket-name/prefix

View

Browse S3

Format: s3://<bucket>/<optional-prefix-with-path>. S3 will append the path with a "/". If you add a "/" to the prefix, it will appear as an extra folder in the S3 console.

Buckets (2)

Find buckets by name

Name	AWS Region
my-bucket-1	US East (N. Virginia) us-east-1
my-bucket-2	Asia Pacific (Mumbai) ap-south-1

CancelChoose path

→under **Permissions** field, select **Create new role** and finally click on **Save** button.

Completion report destination

Specify a general purpose bucket location to store the completion report. '/job-{job-id}/report.json' will automatically be appended to the specified destination. [Learn more](#)

[View](#)[Browse S3](#)

Format: s3://<bucket>/<optional-prefix-with-path>. S3 will append the path with a "/". If you add a "/" to the prefix, it will appear as an extra folder in the S3 console.

Permissions

Choose an IAM role with the [required access permissions and trust relationships](#). An IAM role policy template based on your job configuration, and the IAM trust policy required for batch operations to assume the IAM role are available below. [Learn more about IAM roles](#).

► View IAM role policy template and IAM trust policy

- ☒ Create new role
- ☐ Choose from existing IAM roles
- ☐ Enter IAM role ARN

[Cancel](#)[Save](#)

→ now go and check whether our file replicated or not.

→ go to source bucket, and there we can our text file which we uploaded (i.e. PUNITHHH.txt)

my-buckt-1 [Info](#)

[Objects](#) | [Properties](#) | [Permissions](#) | [Metrics](#) | [Management](#) | [Access Points](#)

Objects (1) [Info](#)

[Refresh](#) [Copy S3 URI](#) [Copy URL](#) [Download](#) [Open](#) [Delete](#) [Actions](#) [Create folder](#) [Upload](#)

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

☐ Show versions < 1 > ⚙

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	PUNITHHH.txt	txt	April 23, 2024, 16:47:33 (UTC+05:30)	21.0 B	Standard

→ Now go to destination bucket, and check whether the same file is there are not.

my-buckt-2

Info

Objects

Properties

Permissions

Metrics

Management

Access Points

Objects (2)

Info

Copy S3 URI

Copy URL

Download

Open

Delete

Actions

Create folder

Upload

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Find objects by prefix

Show versions

<1>

<input type="checkbox"/>	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	job-1cbe7688-e4a2-42a7-9c49-23bf85f766fa/	Folder	-	-	-
<input type="checkbox"/>	PUNITHHH.txt	txt	April 23, 2024, 16:47:33 (UTC+05:30)	21.0 B	Standard

→from above pic, it is clear that our file is replicated successfully.