S3 Cross Region Replication

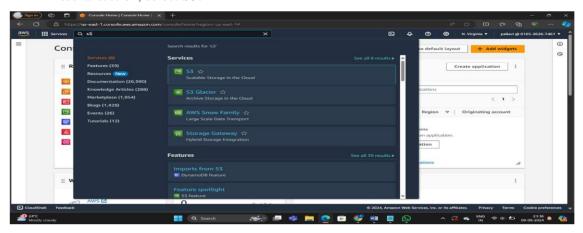
➤ What is cross region replication?

The AWS S3 – Cross-region replication (CRR) allows you to replicate or copy your data in two different regions

1. Create an Amazon S3 bucket

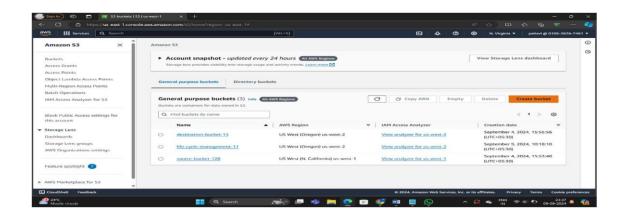
> Sign in to the Amazon S3 console

- If you have not already done so, create an AWS account.
- Log in to the AWS Management Console using your account information.
- From the AWS console services search bar, enter S3. Under the services search results section, select S3.

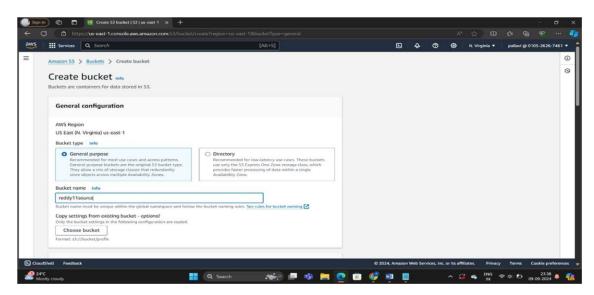


> Create a S3 bucket

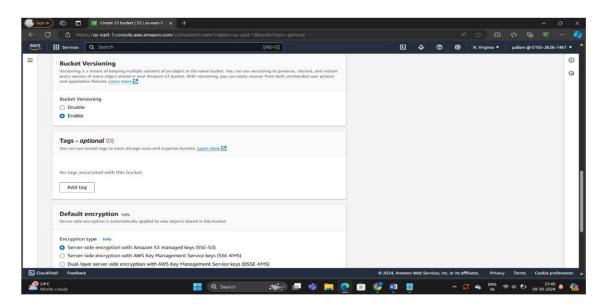
• Choose Buckets from the Amazon S3 menu in the left navigation pane and then choose the Create bucket button.



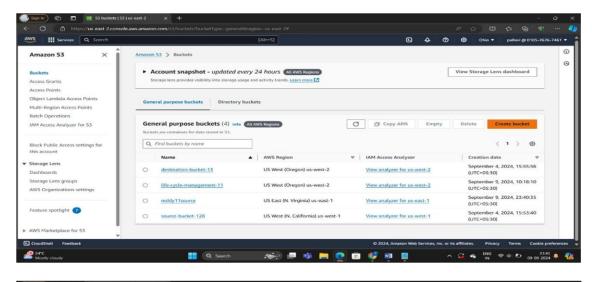
- Enter a descriptive, globally unique name for your bucket.
- Select which AWS Region you would like your bucket created in.
- For this example, the N.virgina Region is selected

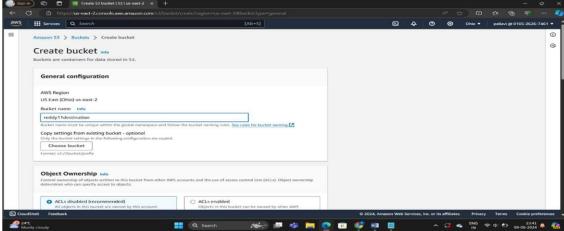


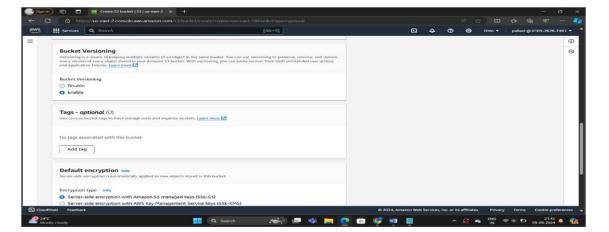
- S3 Replication requires Bucket Versioning to be enabled for both source and destination S3 buckets. For more information about versioning, see Using versioning in S3 buckets.
- You can leave the remaining options as defaults. Navigate to the bottom of the page and choose Create bucket.



- Repeat the above steps to create another S3 bucket to serve as the destination bucket for replicating objects.
- Make sure to enable Bucket Versioning for the destination S3 bucket as well







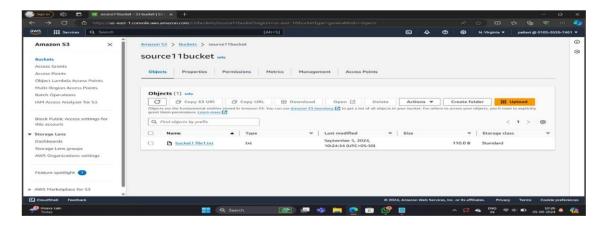
2. Create an S3 Replication on your S3 bucket

> Select source S3 bucket

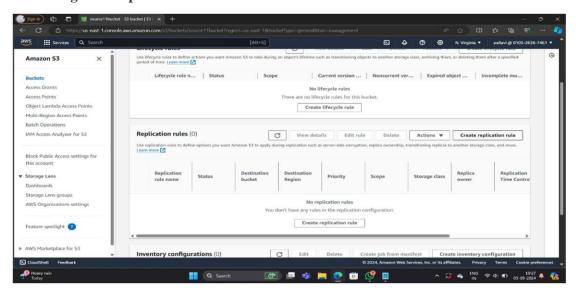
- From your list of S3 buckets, choose the S3 bucket that you want to configure as your source for replication.
- Once you select the source S3 bucket, the console takes you to the S3 bucket landing page, as shown in the following screenshot.
- Here, you can review the Objects, Properties, Permissions, Metrics, Management, and Access Points for the selected S3 bucket.

Create an S3 Replication rule for the selected S3 bucket

- Choose the Management tab of the replication source bucket. Under Management, you will see Replication rules
- Select Create replication rule.

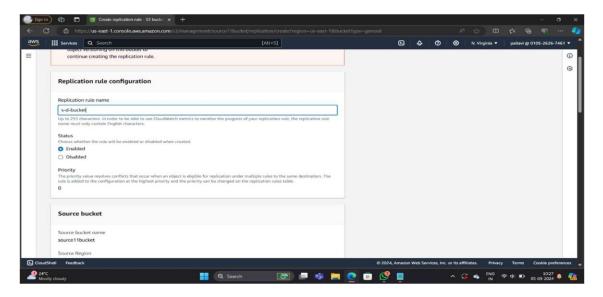


3. Configure a replication rule



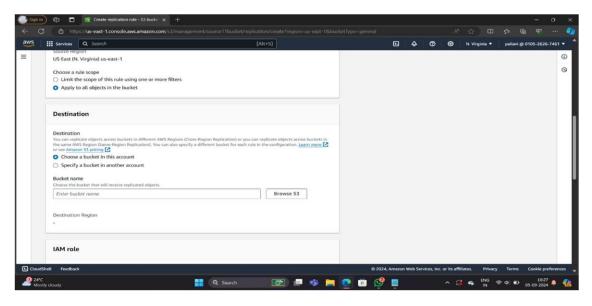
> Enable replication rule

• Provide a Replication rule name and enable the replication rule by selecting Enabled under the Status section.



> Choose what to replicate

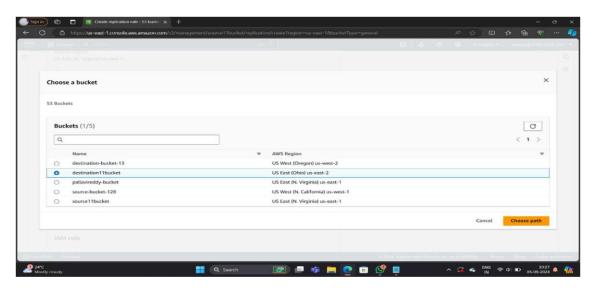
- Narrow the scope of replication by defining a Filter type (Prefix or Tags), or choose to replicate the entire bucket.
- For example, if you want to only replicate objects that are in the Prefix "Finance", specify that scope. For more information on filtering objects for replication, visit the documentation on specifying a filter in the S3 User Guide.



> Choose destination S3 bucket

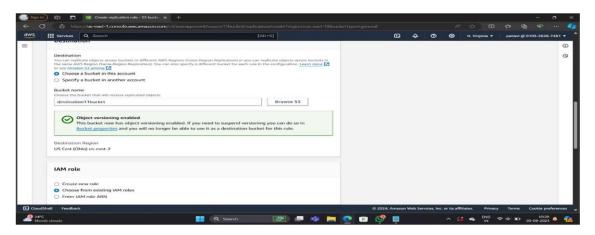
• Choose the destination bucket by selecting the Browse S3 button. You can replicate to a destination bucket in the same or different AWS Region, and in the same or different AWS account.

• Note that you will need two different S3 buckets to configure replication, and both buckets (source and destination) must have S3 Versioning enabled.

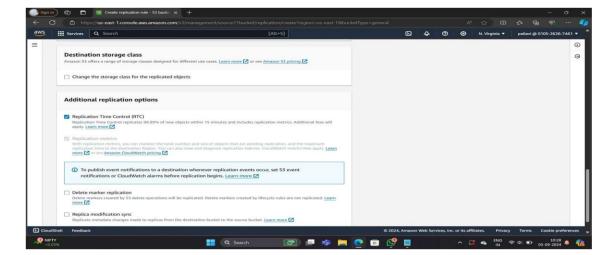


> IAM considerations

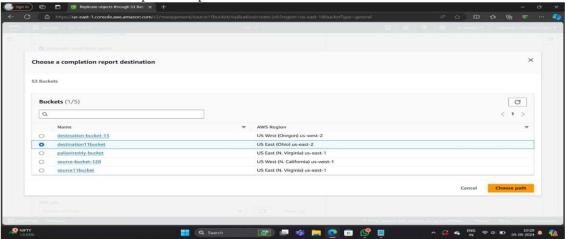
- When creating new replication rules from the same source bucket, make sure that
 the IAM role associated with this configuration has sufficient permissions to write
 new objects in the new destination bucket.
- You can choose to create a new IAM role or select an existing IAM role with the right set of permissions. For more information, see the documentation on setting up permissions for S3 Replication.



• Choose Additional replication options for the replication rule. In this example, we chose to enable S3 Replication Time Control (RTC).



• Choose a completion report destination



• We can see the destination buckets in the source region

