S3 Lifecycle Rules

The S3 lifecycle is allows you to manage your bucket objects so that they can be stored cost effectively throughout their lifecycle.

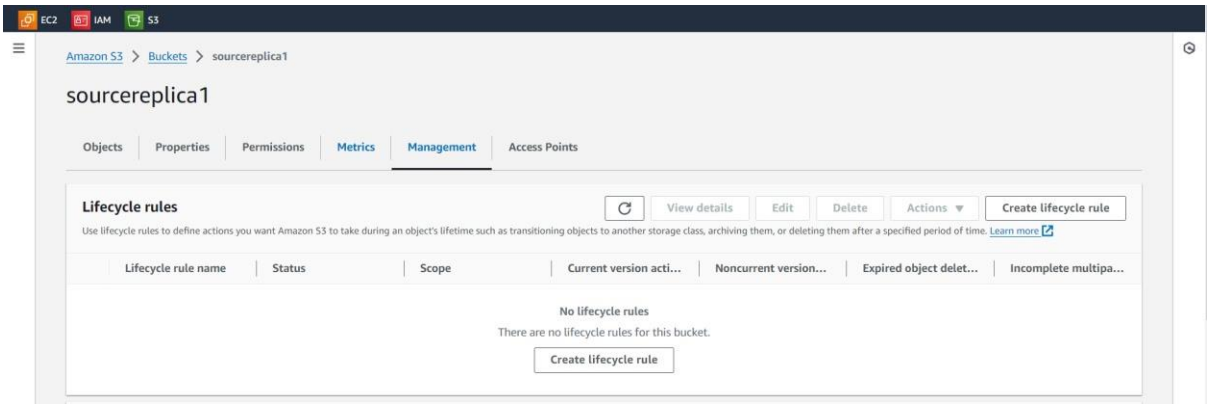
Lifecycle is a set of rules that define actions should be taken on the objects like transition and deletion over the period of time based on criteria such as storage class and age.

There are two type of actions:

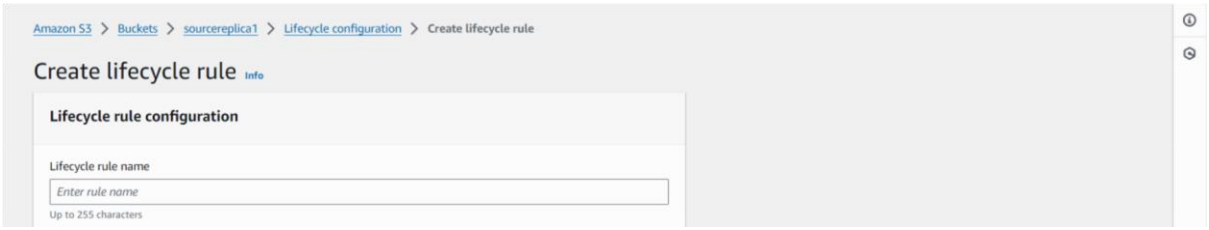
1) **Transition actions:** These actions define when the objects transition to another storage class (For e.g. Standard class transition to Intelligent Tiering).
2) **Expiration actions:** These actions define when the objects expire. S3 service deletes the expired objects on behalf of you.

Steps to creating lifecycle configurations are given below:

1. Go the management section of bucket and under this section appears lifecycle rules.

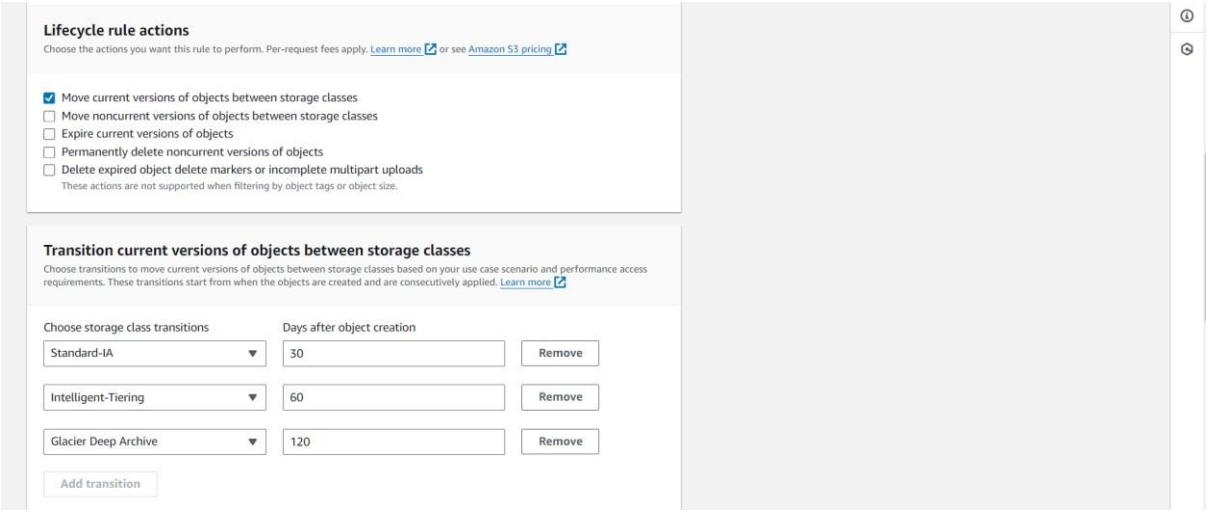


2. Click on “Create lifecycle rule”. Now there are various options, first name the lifecycle.

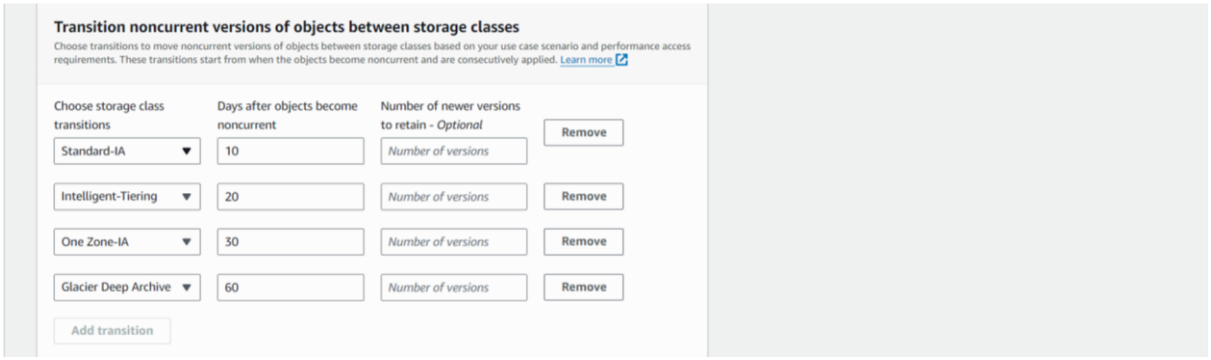


3. Now choose the lifecycle actions you want to perform.

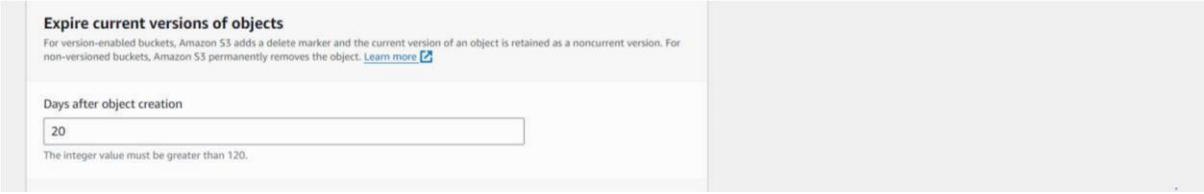
4. Choose transition of objects between storage classes by specifying type of storage and transition after number of days.



5. Then there is also option to move noncurrent objects between transition classes. Noncurrent objects are referred to the old versions of the objects. The old versions will be transitioned between classes.



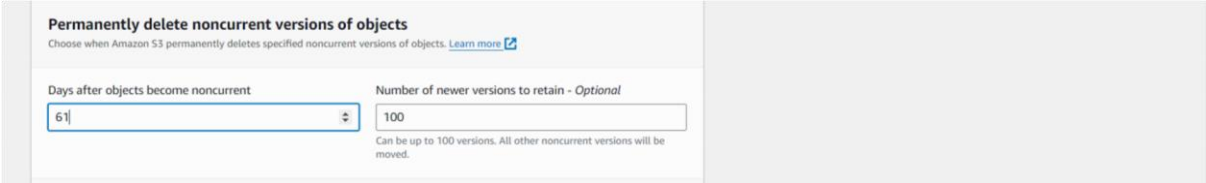
6. Next option is to “Expire current versions of the objects”.
   In version-enabled buckets, delete marker is added to the object that deletes the object, so basically it expires and after the specific days of expiration it gets deleted.
   But in non-versioned buckets S3 permanently deletes the object.
   Enter the number of days of expiration of current object:



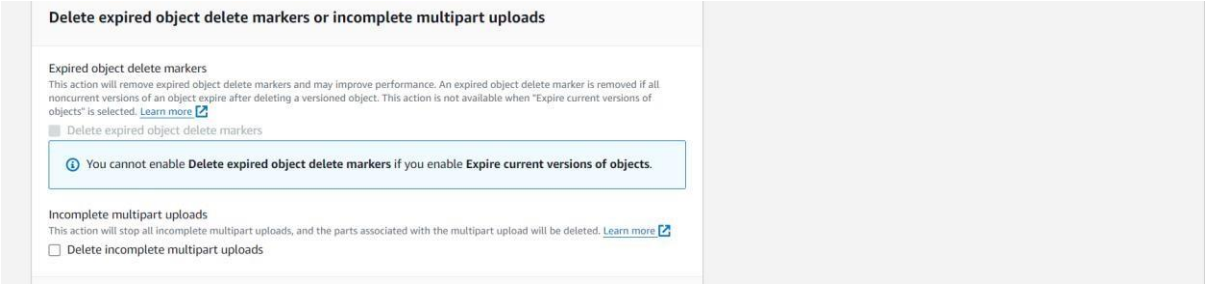
   In this case after 121 days the current version of object will expire and delete marker will be added.

7. Next is to add number of days for “Permanently delete noncurrent versions of objects”. In this section the older versions of the object will be deleted permanently.

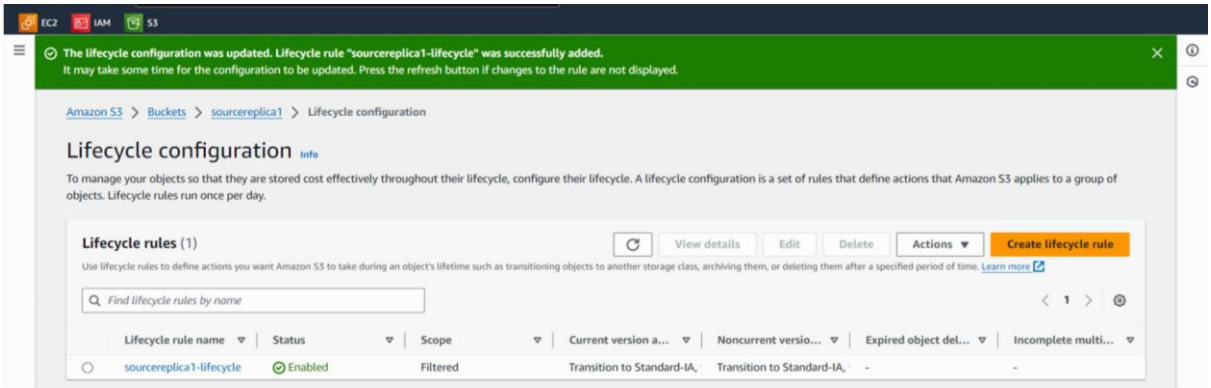
   So we transitioned the noncurrent objects in the deep glacier class in step 5. These objects goes into deep glacier class after 151 days. Hence we need to give value greater than 151.



8. This is last action provided by S3, which gives us an option to remove delete markers of the expired object and delete incomplete multipart uploads.



9. Last step is to review the actions taken and create the rule.



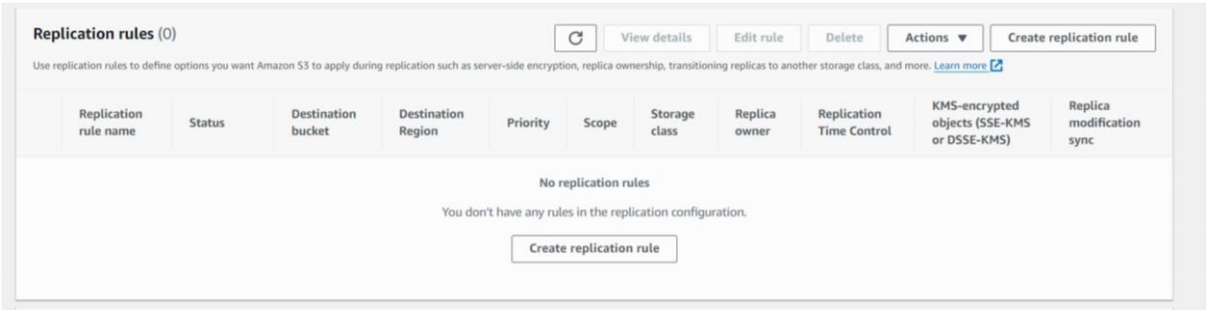
S3 Replication rules

Replication rules defines how the objects in one bucket are automatically replicated to another destination bucket. This destination buckets can be in your own aws account or different aws account.

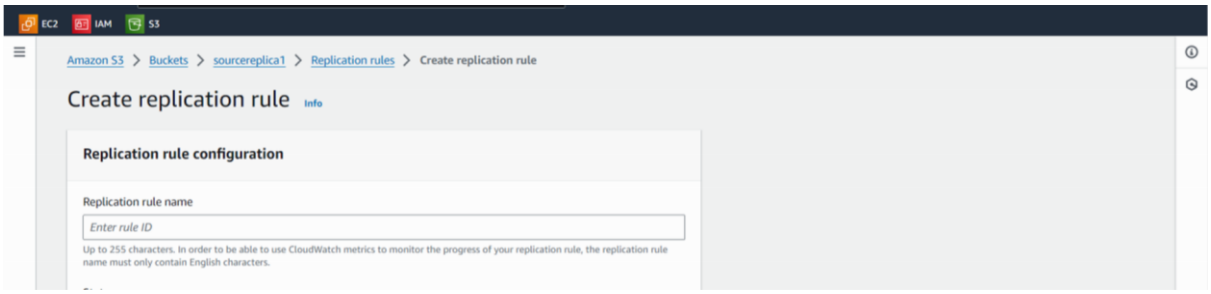
This replication is useful in case of disaster, data recovery or availability across different regions and availability zones.

Follow above steps to create replication rules:

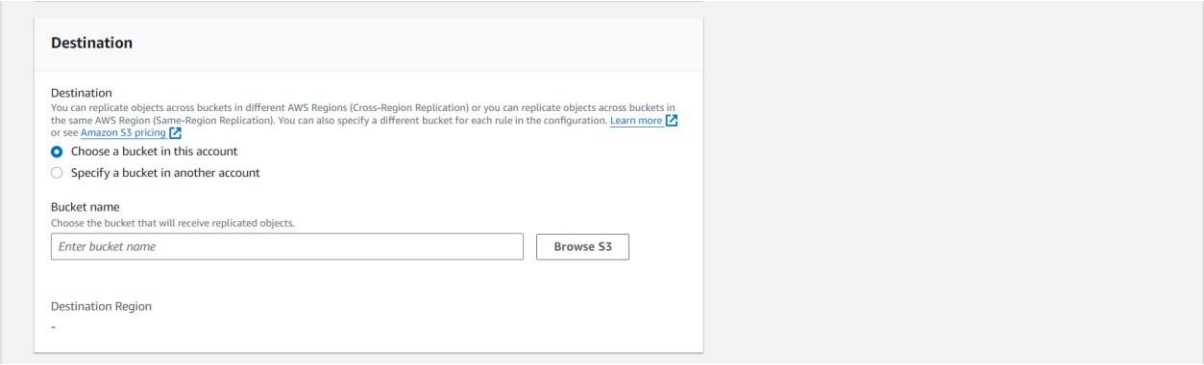
1. Under management section of bucket click on create replication rule.



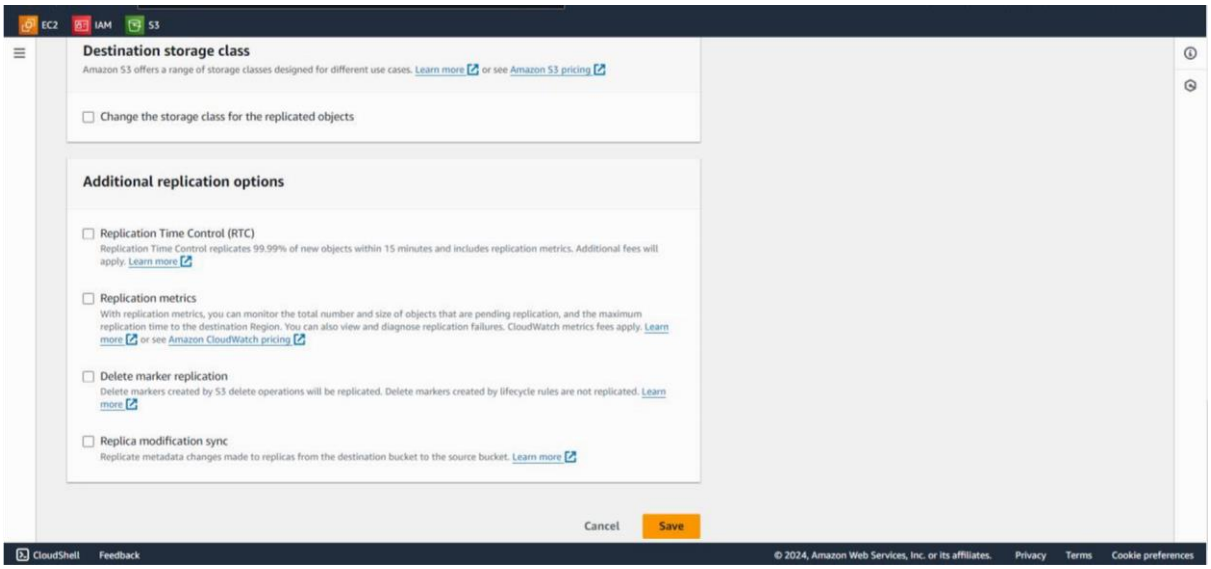
2. Give the name for replication rule.



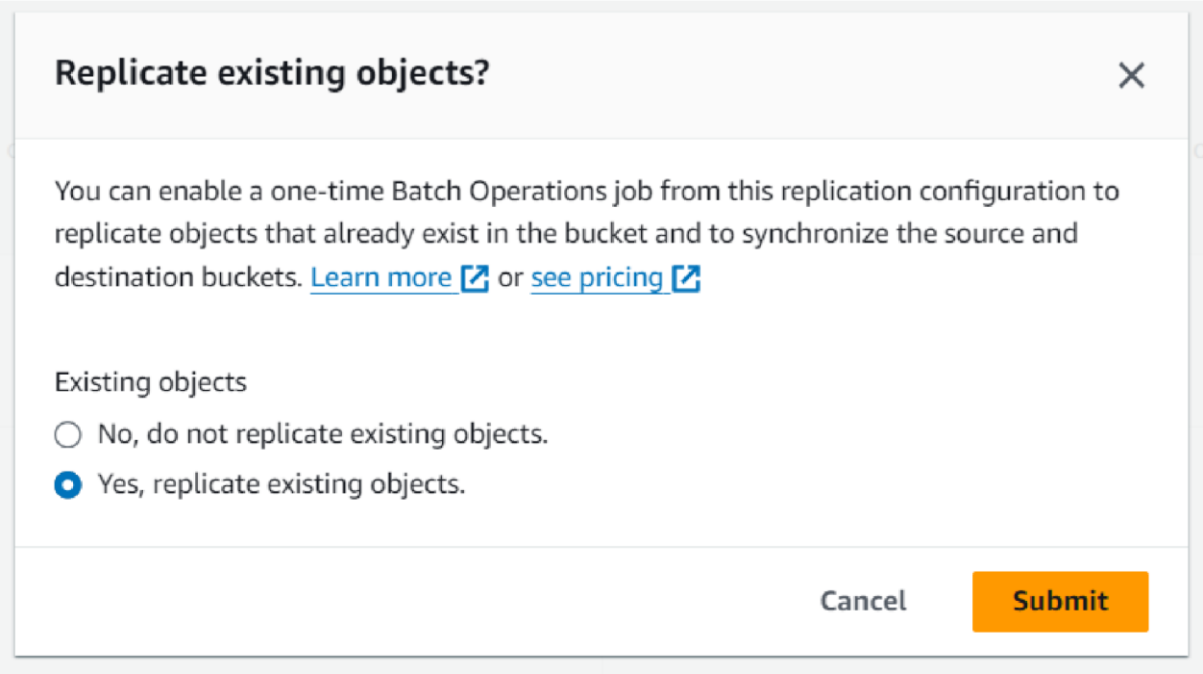
3. Choose and enter the destination bucket information.



4. There are various options for replicating like change storage class for replicated objects, additional replication info, etc. Finally click on save.



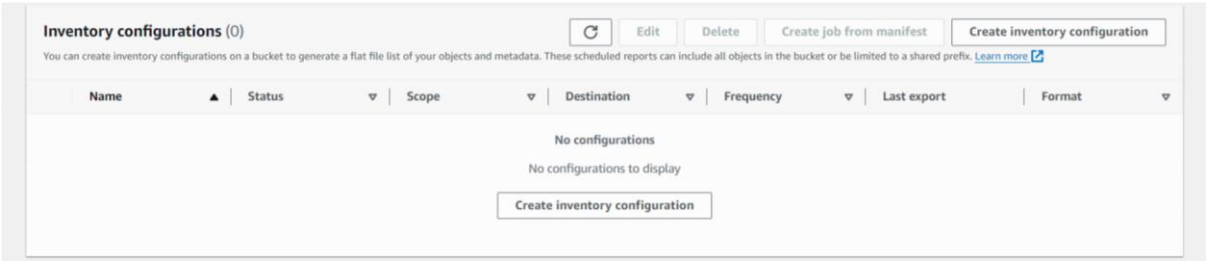
5. Prompt will open asking “Replicate existing objects”. Choose as per your need. Then click on submit.



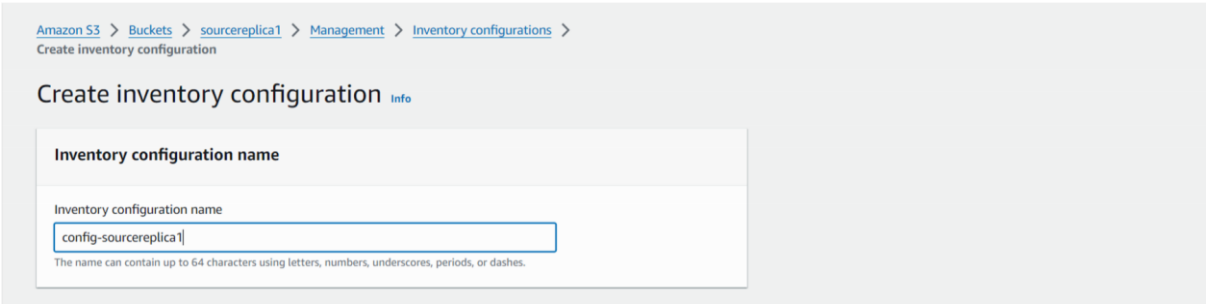
Inventory Configurations

This section provide you scheduled reports about the objects or be limited to prefix. This reports contains metadata of objects and list of objects.

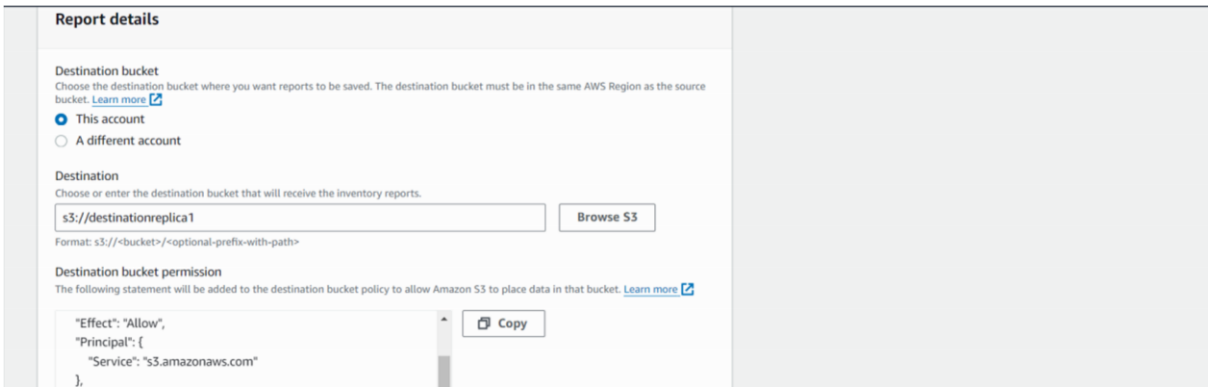
1. To create configuration, click on create inventory configuration option under management section of bucket.



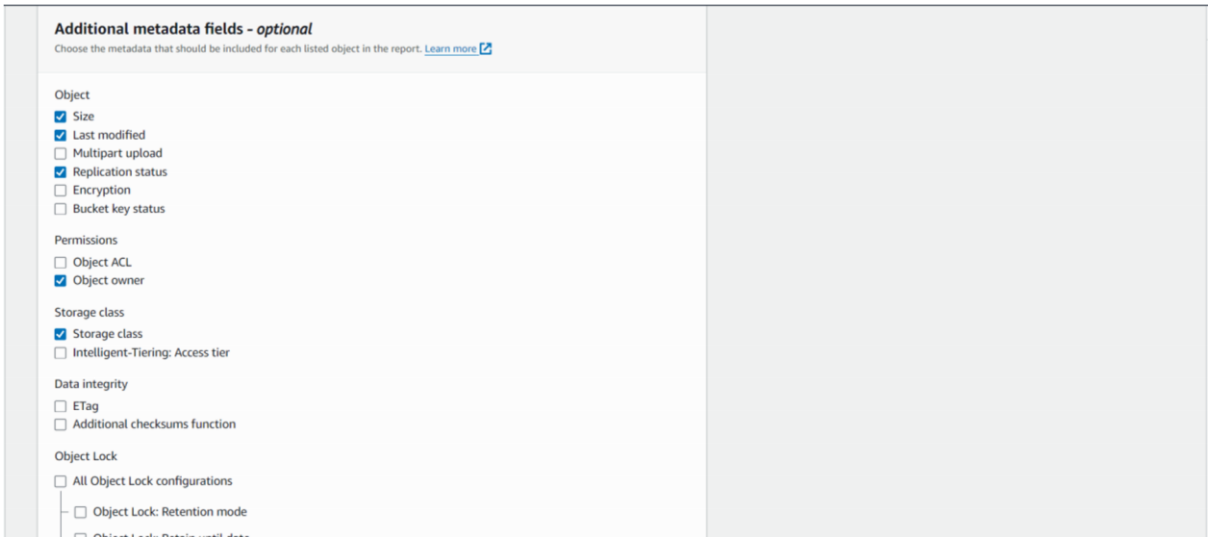
2. Enter the name of inventory configuration file.



3. Now choose the report details i.e. destination bucket, destination bucket permissions, frequency of report generation, report file format.



4. Finally select the metadata you want to include in report, this step is optional.



5. **Click on create and the inventory configuration will be created…..**