

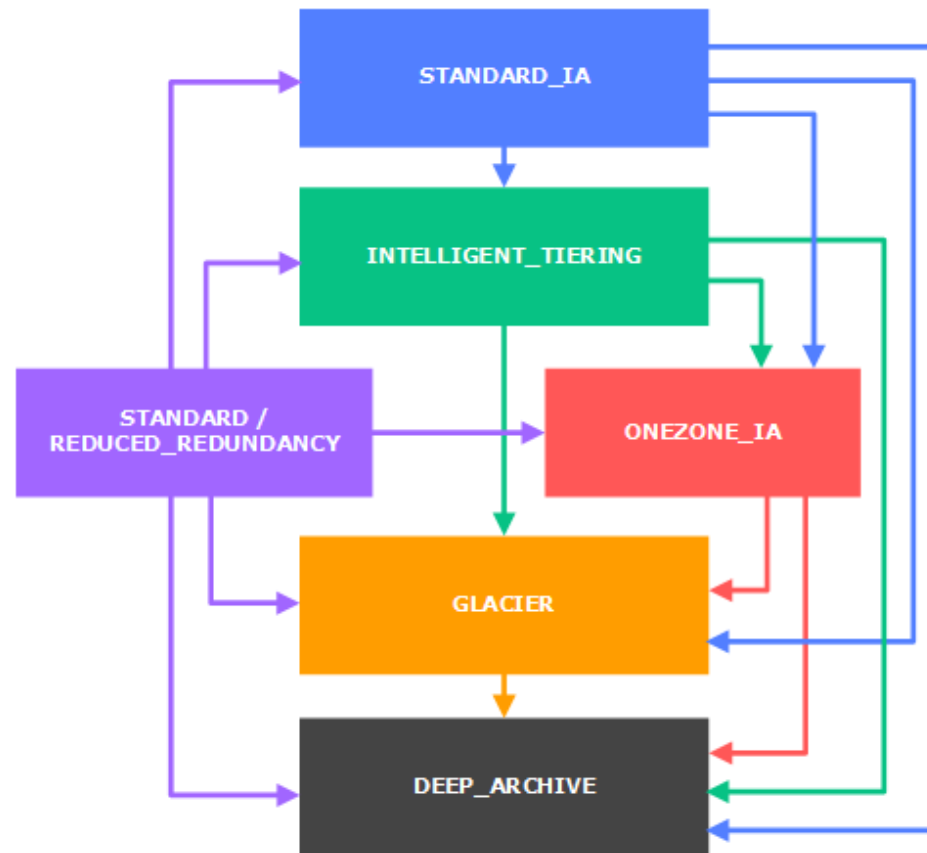
AWS S3 - Management

Lifecycle Transition

You can add rules in a lifecycle configuration to tell Amazon S3 to transition objects to another Amazon S3 storage class. For example:

- When you know that objects are infrequently accessed, you might transition them to the STANDARD_IA storage class.
- You might want to archive objects that you don't need to access in real time to the GLACIER storage class.

Lifecycle Transition



Lifecycle Transition

Amazon S3 supports the following lifecycle transitions between storage classes using a lifecycle configuration:

- You can transition from the STANDARD storage class to any other storage class.
- You can transition from any storage class to the GLACIER or DEEP_ARCHIVE storage classes.
- You can transition from the STANDARD_IA storage class to the INTELLIGENT_TIERING or ONEZONE_IA storage classes.
- You can transition from the INTELLIGENT_TIERING storage class to the ONEZONE_IA storage class.
- You can transition from the GLACIER storage class to the DEEP_ARCHIVE storage class.

Lifecycle Transition

The following lifecycle transitions are not supported:

- You can't transition from any storage class to the STANDARD storage class.
- You can't transition from any storage class to the REDUCED_REDUNDANCY storage class.
- You can't transition from the INTELLIGENT_TIERING storage class to the STANDARD_IA storage class.
- You can't transition from the ONEZONE_IA storage class to the STANDARD_IA or INTELLIGENT_TIERING storage classes.
- You can't transition from the DEEP_ARCHIVE storage class to any other storage class.

Lifecycle Transition - Expiration

- When an object reaches the end of its lifetime, Amazon S3 queues it for removal and removes it asynchronously. There may be a delay between the expiration date and the date at which Amazon S3 removes an object. You are not charged for storage time associated with an object that has expired.
- If you create a lifecycle expiration rule that causes objects that have been in INTELLIGENT_TIERING, STANDARD_IA, or ONEZONE_IA storage for less than 30 days to expire, you are charged for 30 days. If you create a lifecycle expiration rule that causes objects that have been in GLACIER storage for less than 90 days to expire, you are charged for 90 days. If you create a lifecycle expiration rule that causes objects that have been in DEEP_ARCHIVE storage for less than 180 days to expire, you are charged for 180 days.

Cross Region Replication

- Replication enables automatic, asynchronous copying of objects across Amazon S3 buckets. Buckets that are configured for object replication can be owned by the same AWS account or by different accounts. You can copy objects between different AWS Regions or within the same Region.

To enable object replication, you use a bucket-level configuration. You add the replication configuration to your source bucket. The minimum configuration must provide the following:

- The destination bucket where you want Amazon S3 to replicate objects
- An AWS Identity and Access Management (IAM) role that Amazon S3 can assume to replicate objects on your behalf

Cross Region Replication

You can replicate objects between different AWS Regions or within the same AWS Region.

- **Cross-Region replication** (CRR) is used to copy objects across Amazon S3 buckets in different AWS Regions.
- **Same-Region replication** (SRR) is used to copy objects across Amazon S3 buckets in the same AWS Region.

Cross Region Replication

When to use replication?

- **Replicate objects into different storage classes**—You can use replication to directly put objects into Glacier, DEEP ARCHIVE, or another storage class in the destination bucket. You can also replicate your data to the same storage class and use lifecycle policies on the destination bucket to move your objects to a colder storage class as it ages.
- **Maintain object copies under different ownership**—Regardless of who owns the source object, you can tell Amazon S3 to change replica ownership to the AWS account that owns the destination bucket. This is referred to as the *owner override* option. You can use this option to restrict access to object replicas.

Cross Region Replication

When to use CRR?

- **Meet compliance requirements**—Although Amazon S3 stores your data across multiple geographically distant Availability Zones by default, compliance requirements might dictate that you store data at even greater distances. Cross-Region replication allows you to replicate data between distant AWS Regions to satisfy these requirements.
- **Minimize latency**—If your customers are in two geographic locations, you can minimize latency in accessing objects by maintaining object copies in AWS Regions that are geographically closer to your users.
- **Increase operational efficiency**—If you have compute clusters in two different AWS Regions that analyse the same set of objects, you might choose to maintain object copies in those Regions.

Cross Region Replication

Replication requires the following:

- The source bucket owner must have the source and destination AWS Regions enabled for their account. The destination bucket owner must have the destination Region enabled for their account.
- Both source and destination buckets must have versioning enabled.
- Amazon S3 must have permissions to replicate objects from the source bucket to the destination bucket on your behalf.
- If the owner of the source bucket doesn't own the object in the bucket, the object owner must grant the bucket owner READ and READ_ACP permissions with the object access control list (ACL). For more information, see [Managing Access with ACLs](#).
- If the source bucket has Amazon S3 object lock enabled, the destination bucket must also have object lock enabled. For more information, see [Locking Objects Using Amazon S3 Object Lock](#).
- To enable replication on a bucket that has object lock enabled, contact AWS Support.