AWS S3 File Replicator:

This Project creates 2 AWS S3 buckets and copies files in one bucket to the other.

It's written in Node.js

Unless you use the existing S3 bucket plugin, CloudFormation won't let you use an existing AWS S3 bucket.

In Serverless Framework, when you have function s3 events, they will automatically create a new AWS S3 bucket, if it doesn't exist already.

This is where the inputs bucket comes from.

The outputs bucket is created in the resources section.

Simply upload a file to the inputs bucket (example using the AWS S3 console) and see it be instantly transferred to the outputs bucket.

S3 Replication is a fully-managed feature available for Amazon Simple Storage Service (S3) customers.

It can automatically replicate S3 objects to help you reduce costs, protect your data, and achieve compliance with regulatory requirements.

Here are the two S3 storage replication options:

Cross-Region Replication (CRR)—copies S3 objects across multiple Amazon Regions (ARs), representing geographically separate Amazon data centres.

Same-Region Replication (SRR)—copies S3 objects between buckets in different availability zones (AZs), which are separate data centers in the same AR.

AWS S3 Cross-Region Replication (CRR):

CRR can help you reduce latency, maintain compliance, enforce security, and implement disaster recovery. The feature lets you replicate objects into other Amazon Regions (ARs), including your object’s metadata and object tags.

Amazon S3 Same-Region Replication (SRR):

Amazon S3 Same-Region Replication (SRR) provides fully automated replication of S3 objects to another AZ, within the same AR. It is available in all AWS commercial regions as well as AWS GovCloud (US).

How SRR works:

SRR uses asynchronous replication, meaning that objects are not copied to the other AZ immediately after they are created or modified. You can configure SRR using the S3 Management Console, API, or SDK.

SRR identifies objects for which you requested replication at the prefix, bucket, or tag level, and starts replication. You can set the AWS account that owns the original copy to own the replicated object. Alternatively, you can use a different account for the copies to protect them from accidental deletion.

Here are key use cases for SRR:

- Aggregate logs from several S3 buckets to process in the same AR. You can also use it to configure live replication between development and test environments.
- Make a copy of your S3 objects and keep it in the same AR to satisfy data compliance and sovereignty requirements.

SRR Use Cases:

Here are key use cases for SRR:

- **Aggregate logs into a single bucket—**in some cases, you may need to store logs in several buckets or across different accounts. SRR lets you easily replicate these logs into one bucket located in one AR. You can then process logs in one location.
- **Replication between developer and test accounts—**sometimes, you may need to share data between test and developer accounts. SRR lets you use rules to replicate objects and metadata between multiple accounts.
- **Abide by data sovereignty laws—**some laws require storing data in separate AWS accounts and prohibit moving the data from a specific AR. SRR lets you backup critical data even when compliance requirements do not allow moving the data across ARs.

S3-Compatible Storage On-Premises with Cloudian:

Cloudian HyperStore is a massive-capacity object storage device that is fully compatible with Amazon S3. It can store up to 1.5 Petabytes in a 4U Chassis device, allowing you to store up to 18 Petabytes in a single data centre rack. HyperStore comes with fully redundant power and cooling, and performance features including 1.92TB SSD drives for metadata, and 10Gb Ethernet ports for fast data transfer.

HyperStore is an object storage solution you can plug in and start using with no complex deployment. It also offers advanced data protection features, supporting use cases like compliance, healthcare data storage, disaster recovery, ransomware protection and data lifecycle management.