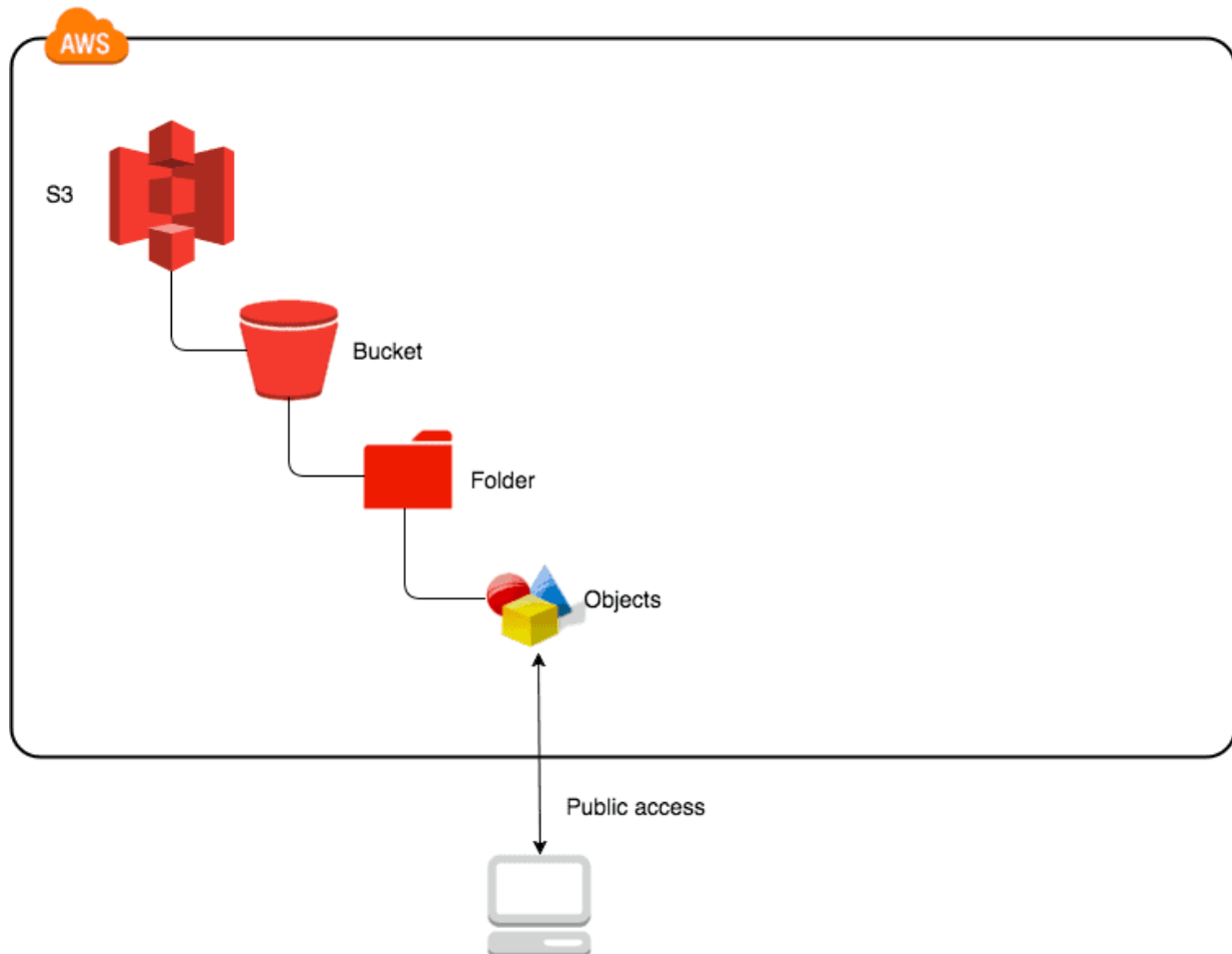


Amazon S3 Bucket: Overview, Errors & Resolutions

Simple Storage Service (S3) from Amazon Web Services (AWS) allows users to organize and manage data in logical containers known as “**buckets**”. AWS is constantly improving and simplifying the bucket creation and configuration process, from simply clicking “**Create bucket**” in the user interface to enabling creation.

What is Amazon S3?

Simple Storage Service (Amazon S3) provides object storage, which is intended for the online preservation and retrieval of any volume of data or information. A web services interface is used to provide this storage. In order to simplify web-scale computing, it guarantees **99.99999999% object durability** and **99.999% object availability** while being intended for developers. Additionally, it can store data files up to 5 terabytes in size.



Overview: Amazon S3 bucket creation

To build a bucket, you can use the **Amazon S3 console**, **Amazon S3 APIs**, **AWS CLI**, or **AWS SDKs**. In one of the AWS Regions, the bucket must initially be created. You must select a bucket

name and region when creating a bucket. Other storage management options for the bucket are optional. The bucket name and region cannot be changed once the bucket has been created. The AWS account that generated the bucket is the owner of it. You can add as many objects as you want to the bucket. Each of your AWS accounts by default permits the creation of up to 100 buckets. If you require more buckets, you can submit a service limit increase to increase your account bucket limit to a **maximum of 1,000 buckets**.



Restrictions and Guidelines for naming buckets in Amazon S3:

- These, for instance, must have a length of 3 to 63 characters.
- Additionally, names can only contain lowercase letters, digits, dots (.), and hyphens (-).
- S3 Bucket names must therefore start and conclude with a letter or number.
- As a result, AWS S3 Bucket names cannot be represented as IP addresses. (for example, 192.168.5.4).
- Moreover, Amazon S3 Bucket names cannot start with `xn--` (for buckets created after February 2020).
- Finally, AWS S3 Bucket names cannot contain dots (.) when used with Amazon S3 Transfer Acceleration.



How can I fix the “Bucket name already exists” or “BucketAlreadyExists” problem from Amazon S3?

In Amazon Simple Storage Service, I’m attempting to create a new bucket. But I continue to experience one of the following issues:

- The Amazon S3 console displays “Bucket name already exists.”
- Using the AWS CLI or an AWS SDK, you can provide “BucketAlreadyExists”

- The Amazon S3 console displays the message “Bucket name is already owned by you.”
- From the AWS CLI or an AWS SDK, enter “BucketAlreadyOwnedByYou”

How do I resolve this?

Resolution:

Globally unique Amazon S3 bucket names are required. You must create the bucket with an alternative name if you encounter the **“Bucket name already exists”** or **“BucketAlreadyExists”** error. These error messages show that another AWS account is the owner of a bucket with the same name.

Whether you get the error message **“Bucket name is already owned by you”** or **“BucketAlreadyOwnedByYou,”** look in your account to see if you have a bucket with that name. The fact that your account is already using the bucket name is shown by these error messages. The Amazon S3 console allows you to review current buckets. To check if you already have a bucket with that name, you may use the AWS CLI command head bucket.

Examples of S3 Bucket names:

According to the guidelines for AWS S3 Bucket Naming and Restrictions, the following bucket names, for example, are acceptable and follow the suggested naming conventions:

- `docexamplebucket`
- `log-delivery-march-2020`
- `my-hosted-content`

The following example bucket names are **not** valid:

- `doc example bucket` (contains underscores)
- `DocExampleBucket` (contains uppercase letters)
- `doc-example-bucket-` (ends with a hyphen)
- `docexamplewebsite.com`
- `www.docexamplewebsite.com`
- `my.example.s3.bucket`