

Module 6: S3 Bucket Versioning

Assignment

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Course Offered: -Advanced Cloud Computing and Devops

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Date Of Submission: -24/10/2024

Problem Statement:

You work for XYZ Corporation. Their application requires a storage service that can store files and publicly share them if required. Implement S3 for the same.

Tasks To Be Performed:

1. Enable versioning for the bucket created in task 1.
2. Re-upload any 2 files already uploaded to verify if versioning works.

S3 Bucket Versioning

Login to your AWS Management console, search for S3 service

Create bucket [Info](#)

Buckets are containers for data stored in S3.

General configuration

AWS Region

US East (N. Virginia) us-east-1

Bucket type [Info](#)

General purpose

Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.

Directory

Recommended for low-latency use cases. These buckets use only the S3 Express One Zone storage class, which provides faster processing of data within a single Availability Zone.

Bucket name [Info](#)

hiteshfilestorage

Bucket name must be unique within the global namespace and follow the bucket naming rules. [See rules for bucket naming](#)

Copy settings from existing bucket - *optional*

Only the bucket settings in the following configuration are copied.

Choose bucket

Format: s3://bucket/prefix

Object Ownership [Info](#)

Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.

ACLs disabled (recommended)

All objects in this bucket are owned by this account. Access to this bucket and its objects is specified using only policies.

ACLs enabled

Objects in this bucket can be owned by other AWS accounts. Access to this bucket and its objects can be specified using ACLs.

Object Ownership

Bucket owner enforced

Provide the S3 bucket name it should be a unique name otherwise bucket will give you an error

Block all public access
Turning this setting on is the same as turning on all four settings below. Each of the following settings are independent of one another.

- Block public access to buckets and objects granted through *new* access control lists (ACLs)**
S3 will block public access permissions applied to newly added buckets or objects, and prevent the creation of new public access ACLs for existing buckets and objects. This setting doesn't change any existing permissions that allow public access to S3 resources using ACLs.
- Block public access to buckets and objects granted through *any* access control lists (ACLs)**
S3 will ignore all ACLs that grant public access to buckets and objects.
- Block public access to buckets and objects granted through *new* public bucket or access point policies**
S3 will block new bucket and access point policies that grant public access to buckets and objects. This setting doesn't change any existing policies that allow public access to S3 resources.
- Block public and cross-account access to buckets and objects through *any* public bucket or access point policies**
S3 will ignore public and cross-account access for buckets or access points with policies that grant public access to buckets and objects.

Bucket Versioning

Versioning is a means of keeping multiple variants of an object in the same bucket. You can use versioning to preserve, retrieve, and restore every version of every object stored in your Amazon S3 bucket. With versioning, you can easily recover from both unintended user actions and application failures. [Learn more](#)

Bucket Versioning

Disable

Enable

By default **Block all public access** is ticked do not uncheck unless you need a bucket to be public.

Select Enable Versioning.

Click on “**Create Bucket**”

Objects | **Properties** | Permissions | Metrics | Management | Access Points

Bucket overview

AWS Region US East (N. Virginia) us-east-1	Amazon Resource Name (ARN) arn:aws:s3:::hiteshfilestorage	Creation date October 24, 2024, 21:33:17 (UTC+05:30)
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Bucket Versioning

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Bucket Versioning

Enabled

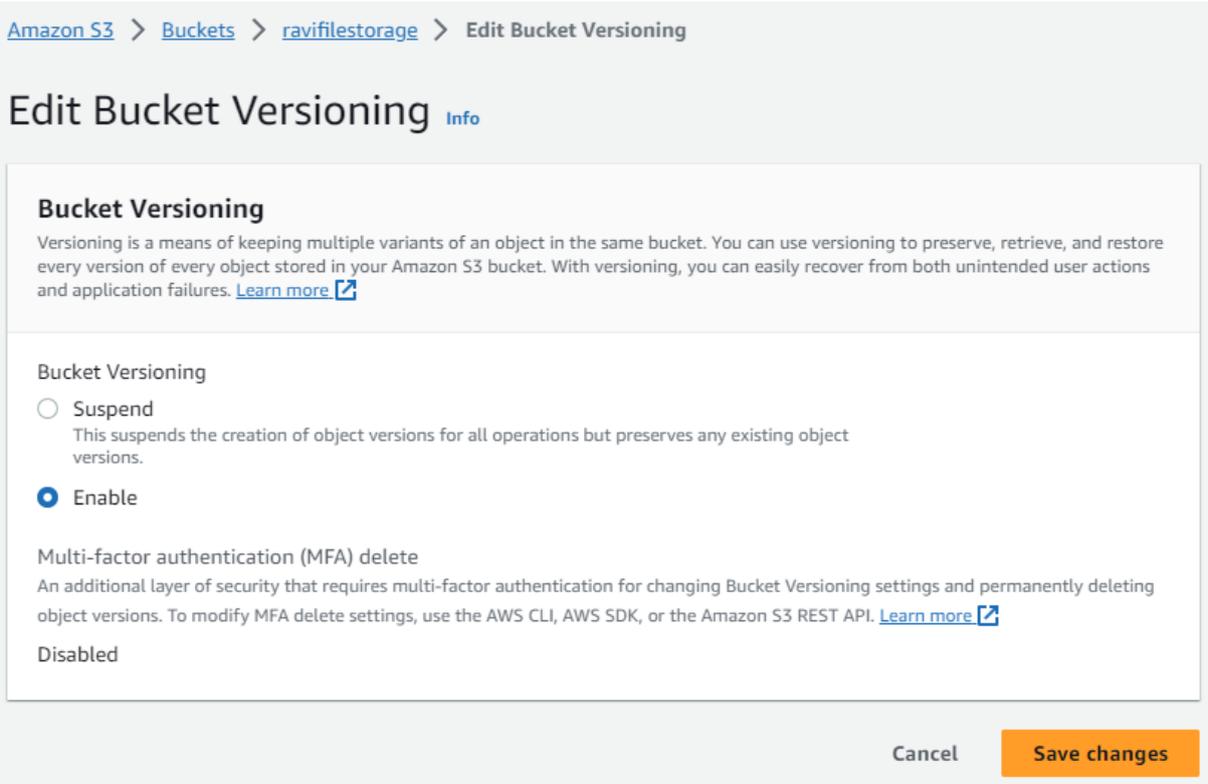
Multi-factor authentication (MFA) delete
An additional layer of security that requires multi-factor authentication for changing Bucket Versioning settings and permanently deleting object versions. To modify MFA delete settings, use the AWS CLI, AWS SDK, or the Amazon S3 REST API. [Learn more](#)

Disabled

[Edit](#)

In case if you already have the bucket, click on the bucket name then it will go into the bucket properties

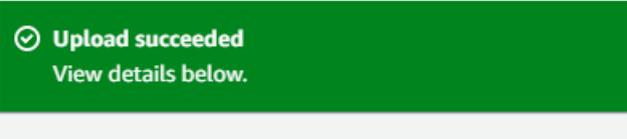
Click on Edit (Bucket Versioning)



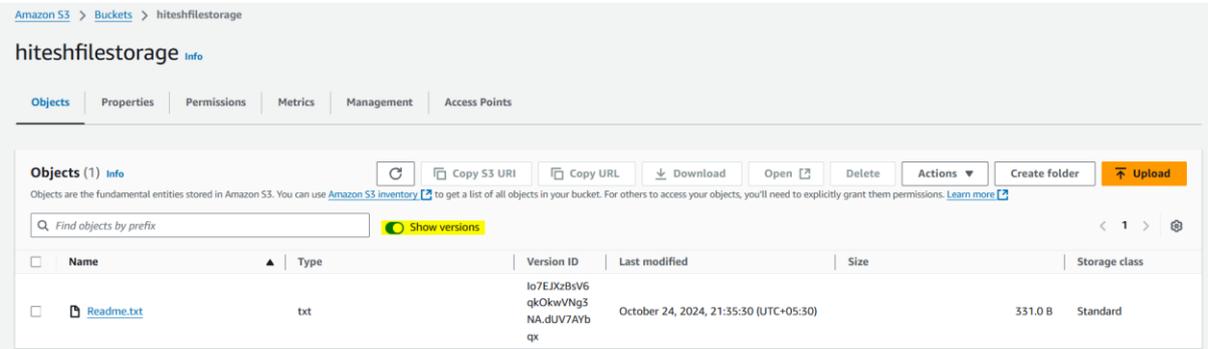
Once you enable the versioning you can't disable, you can suspend the versioning.

Select **Enable** then Click **“Save Changes”**

Now upload the objects to bucket



I have uploaded a simple text file successfully



Slide the show versions button to see the multiple versions of the same object

Amazon S3 > Buckets > hiteshfilestorage

hiteshfilestorage Info

Objects Properties Permissions Metrics Management Access Points

Objects (2) Info Refresh Copy S3 URI Copy URL Download Open Delete Actions Create folder Upload

Objects are the fundamental entities stored in Amazon S3. You can use [Amazon S3 inventory](#) to get a list of all objects in your bucket. For others to access your objects, you'll need to explicitly grant them permissions. [Learn more](#)

Find objects by prefix Show versions < 1 > Settings

<input type="checkbox"/>	Name	Type	Version ID	Last modified	Size	Storage class
<input type="checkbox"/>	Readme.txt	txt	nNu_ggfang PuDavFRkHl0t PGfm3qCXN D	October 24, 2024, 21:37:50 (UTC+05:30)	202.0 B	Standard
<input type="checkbox"/>	Readme.txt	txt	lo7EJXzBsV6 qkOkwVNg5 NA.dUV7AYb qx	October 24, 2024, 21:35:30 (UTC+05:30)	331.0 B	Standard

I have uploaded the text file with minor modifications it saved multiple versions
That's all I could able to see the versioning is working fine.