Introduction

S: In these exercises you will learn how to:

- create IAM users in AWS;
- secure access to Object Storage S3 in AWS.

How to deliver your assignments?

Fill in this document with required information. Answer questions and upload the document to Canvas at most one week after the assignment is given.

Assignment 1: Create IAM users in AWS

Difficulty: ★★☆☆☆. Estimated time: 45-60 minutes.

Follow the demo of the class:

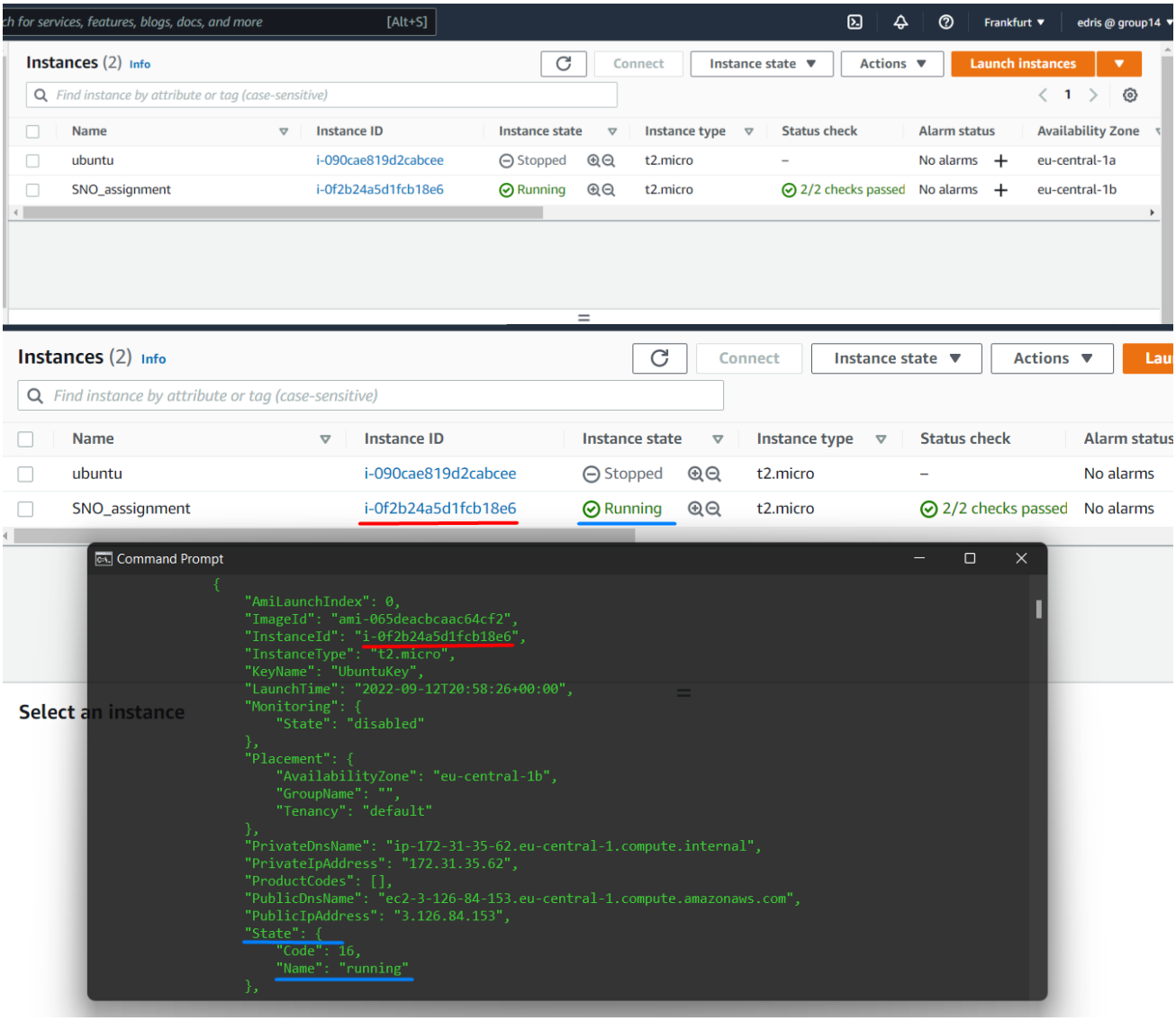
- Create 3 IAM users using your case-study group root account.
- Launch an EC2 instance
- Configure password policy, use more complex options than the default one
- Create access keys for one of the IAM user
- Install AWS CLI
- Configure AWS CLI with the access keys, run:

 # aws configure

- Demonstrate the EC2 instance running via AWS CLI. Run:

 # aws ec2 describe-instances

Provide a screenshot of AWS CLI configuration and EC2 instances overview



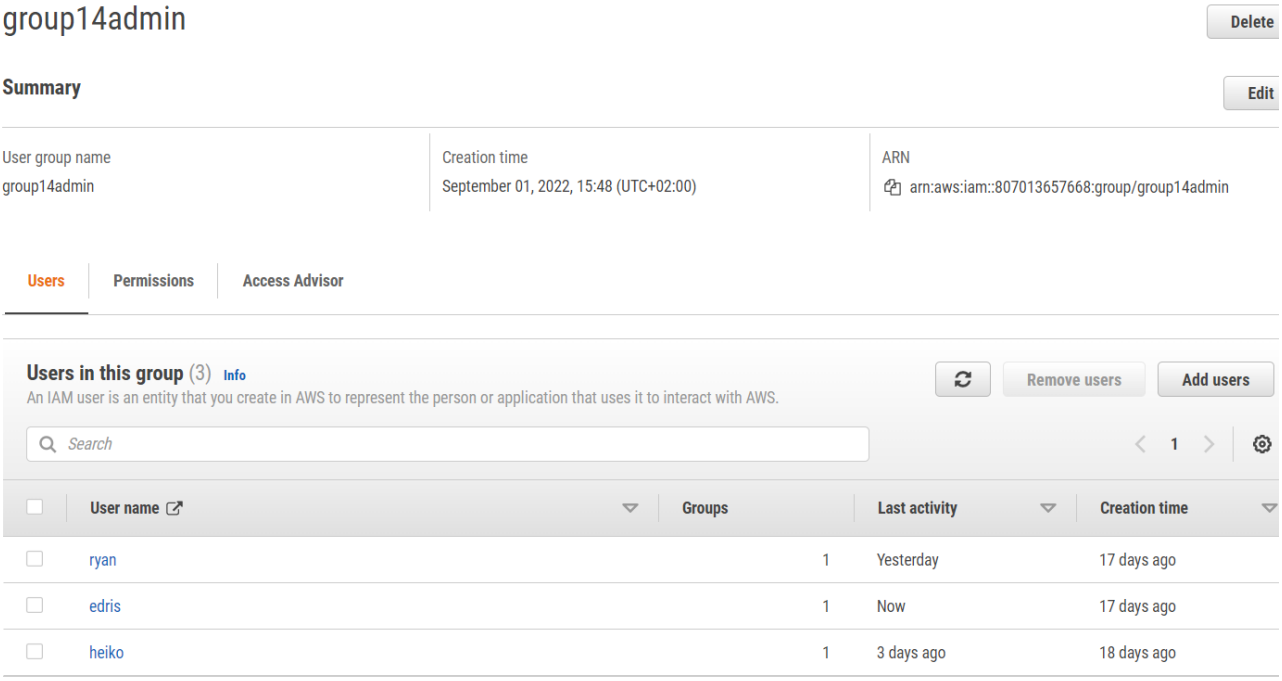
Assignment 2: Play with security controls of Object Storage S3 in AWS

Difficulty: ★★☆☆☆. Estimated time: 45-60 minutes.

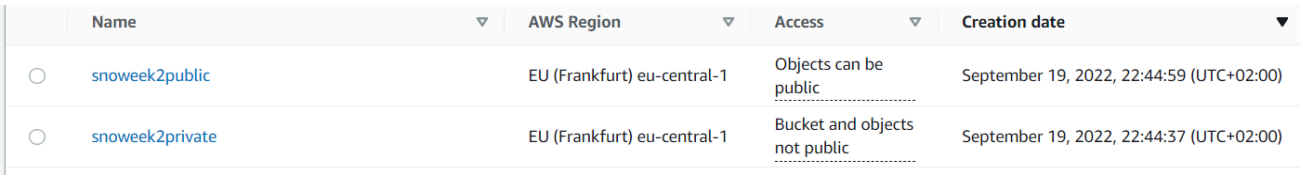
- ~~Create a group for the IAM users in exercise 1.~~
- ~~Create several private buckets~~
- ~~One bucket must be shared with all IAM users, other buckets must be visible only per IAM user~~
- Demonstrate a use of different policies for different type of files (use S3 tags if necessary)
- ~~Demonstrate versioning system for the files in a bucket~~
- ~~Demonstrate server-side encryption~~

- Create a bucket policy with a policy generator for certain files or folders – think about some useful scenario for your case-study?...

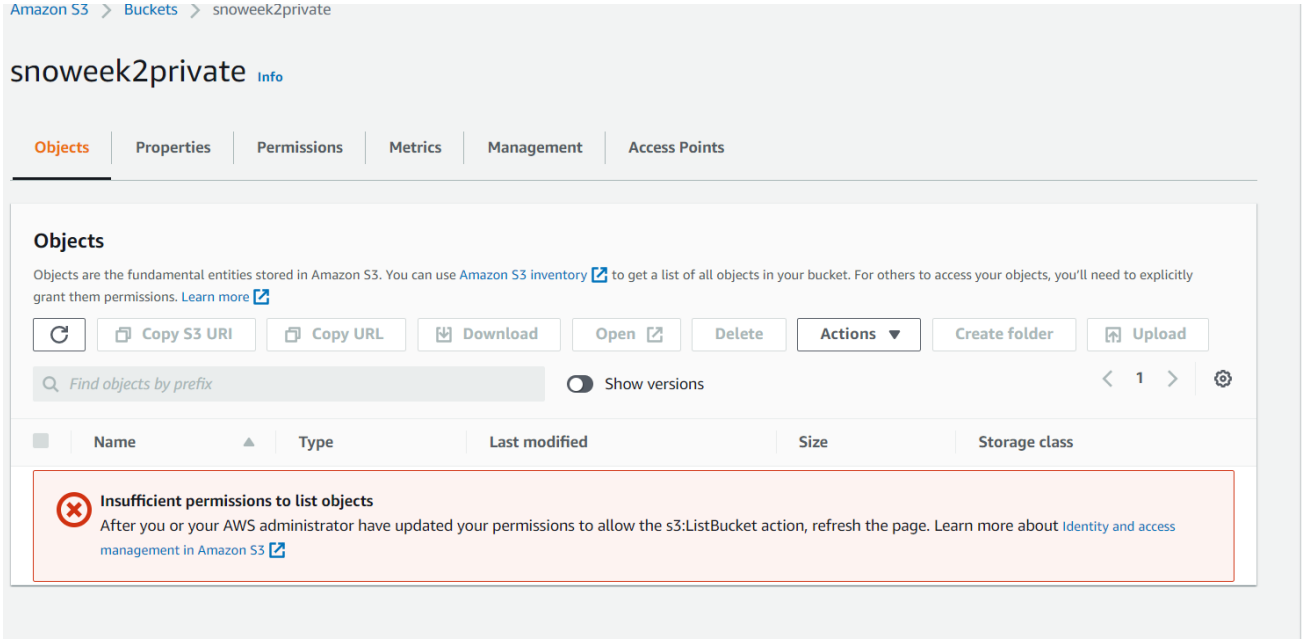
Provide a screenshots and descriptions of the steps above



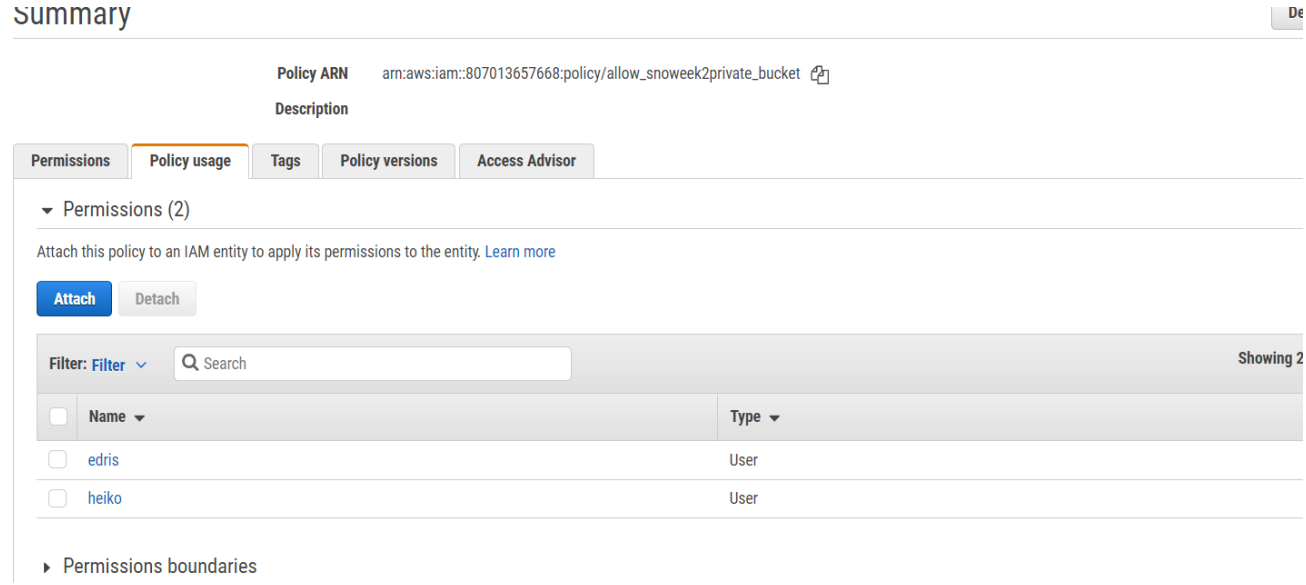
I created a group named group14admin with all of our users in it.

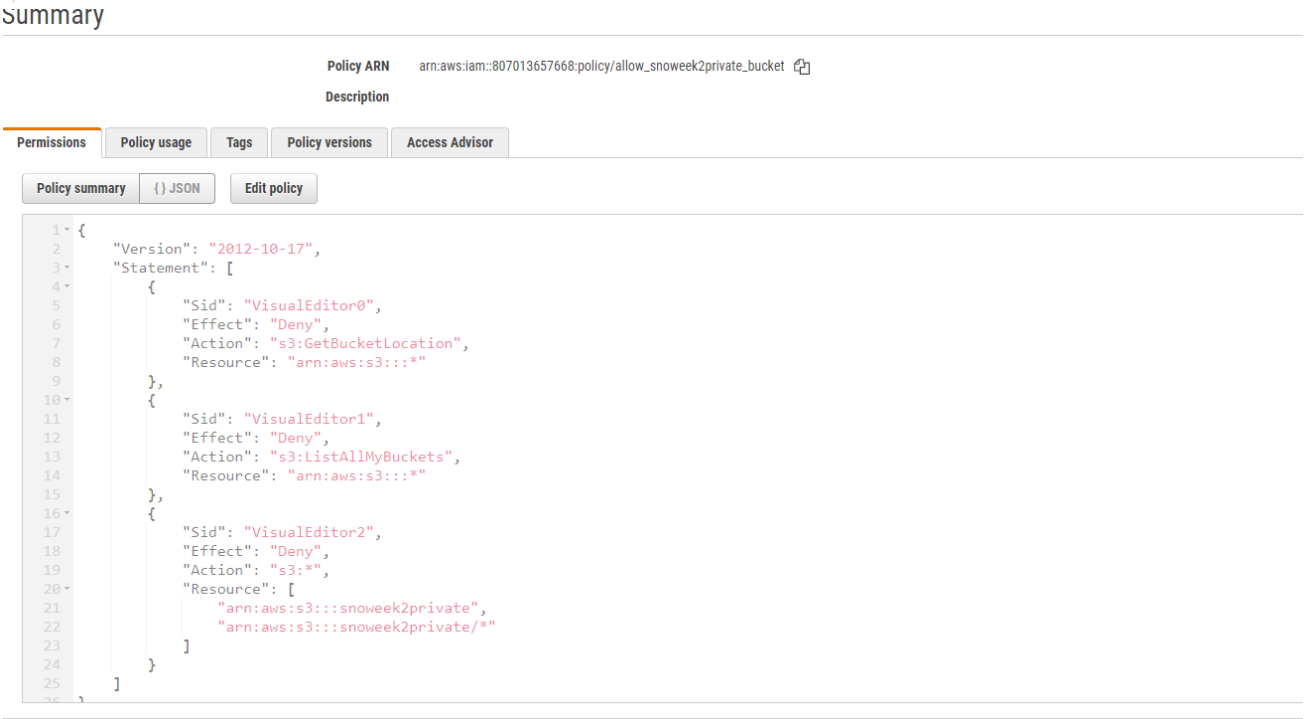


2 newly created buckets.


Amazon S3 > Buckets > snoweek2private
snoweek2private Info
Objects
Properties
Permissions
Metrics
Management
Access Points
Objects
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
Copy S3 URI
Copy URL
Download
Open
Delete
Actions
Create folder
Upload
Find objects by prefix
Show versions
1
Name
Type
Last modified
Size
Storage class
Insufficient permissions to list objects
After you or your AWS administrator have updated your permissions to allow the s3:ListBucket action, refresh the page. Learn more about Identity and access management in Amazon S3

Policy only allows user Ryan to access this private bucket.

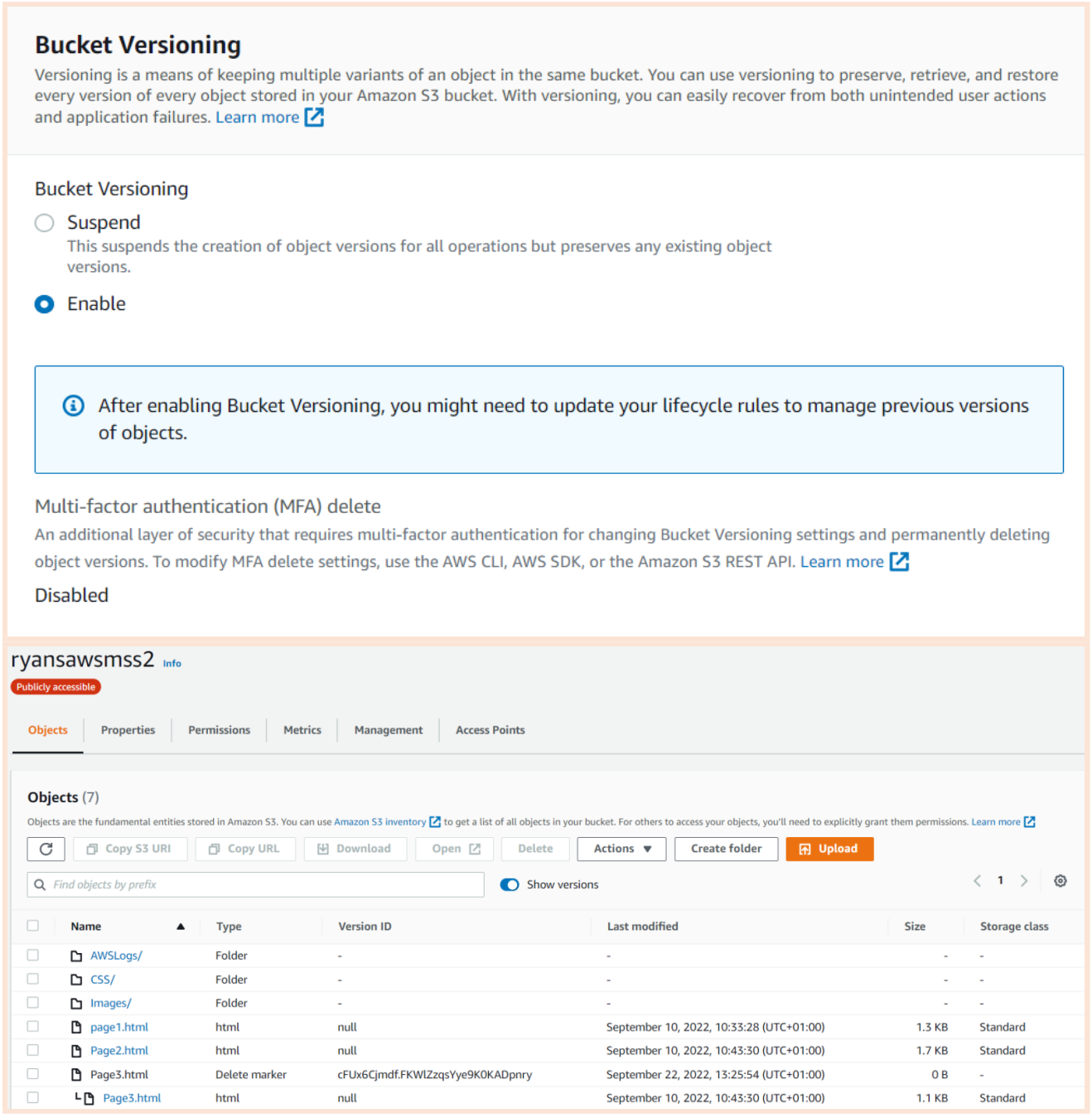




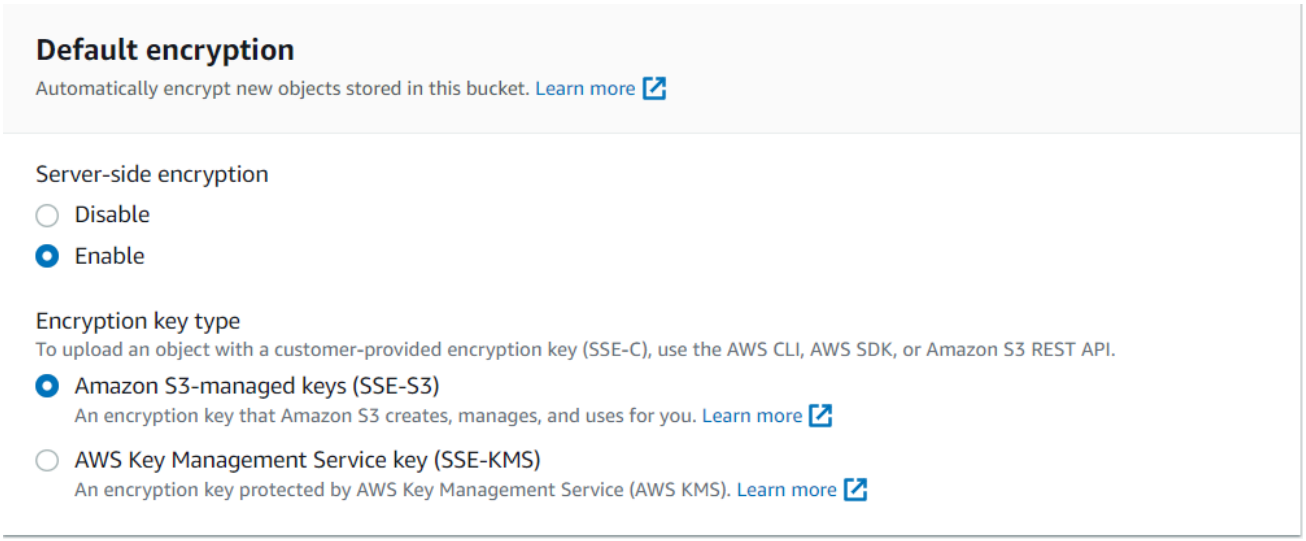
Policy in JSON.

The other bucket is accessible by everyone.

Bucket versioning:



Server side encryption:



Use of different policies for different type of files