

**Placement Empowerment Program**  
***Cloud Computing and DevOps Centre***

**Use Cloud Storage:** Create a storage bucket on your cloud platform and upload/download files. Configure access permissions for the bucket.

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## **Introduction**

In this (PoC), we will explore AWS S3 (Simple Storage Service) to understand its functionality as a reliable cloud storage solution. The task involves creating an S3 bucket, uploading and downloading files, and configuring access permissions to manage who can access the stored data. This PoC demonstrates S3's versatility in securely storing and retrieving files, both publicly and privately. We will also set bucket policies to control access and test public URLs for hosted files. By completing this task, we gain hands-on experience with S3 and its key features, such as scalability, security, and cost-efficiency.

## **Objectives**

- **Understand AWS S3 Basics:** Learn how to create, configure, and manage an S3 bucket for cloud storage.
- **File Operations:** Gain hands-on experience in uploading, downloading, and managing files within the S3 bucket.
- **Access Control:** Configure bucket policies and permissions to manage secure and public access to stored data.

## **Step by Step Overview**

### **1. Create a S3 Bucket**

- Log in to your management console.
- Navigate into S3.
- Block public access.

**Create bucket** Info

Buckets are containers for data stored in S3.

**General configuration**

**AWS Region**  
Europe (Stockholm) eu-north-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

myawsbucket

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.

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

**Block Public Access settings for this bucket**

## 2. Upload into bucket

- Now, after creating the bucket. Open it and Click on Upload option.
- Choose a image into upload.
- Go to the uploaded file in your bucket. Click the file name to open its details. Select Download to save the file locally.

## 3. Permissions

- Open your Bucket and navigate to “Permissions” tab.
- Click on “Block Public Access”.

**Upload: status** Close

After you navigate away from this page, the following information is no longer available.

**Summary**

**Destination**  
s3://cloud-poc-demo

**Succeeded**  
1 file, 511.1 KB (100.00%)

**Failed**  
0 files, 0 B (0%)

**Files and folders** Configuration

**Files and folders** (1 total, 511.1 KB)

Find by name

Name	Folder	Type	Size	Status	Error
IMG-20241028-WA0074.jpg	-	image/jpeg	511.1 KB	Succeeded	-

## 4. Accessing the uploaded image

Use the S3 bucket URL or public file URL to test access permissions.

## **Outcome:**

We have successfully create an AWS S3 bucket and perform file upload/download operations. And configured and validate access permissions, ensuring secure or public access as needed. And gained a solid understanding of S3's functionality, enabling its use in real world cloud-based applications.