

# Hands On Amazon S3

## 1. Create S3 bucket in an AWS region and give a unique name to it

**aws** Services Search [Alt+S] Global Prathamesh Sawant

**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 - New**  
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  
mydemobucket-prathamesh  
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

**Block Public Access settings for this bucket**  
Public access is granted to buckets and objects through access control lists (ACLs), bucket policies, access point policies, or all. In order to ensure that public access to this bucket and its objects is blocked, turn on Block all public access. These settings apply only to this bucket and its access points. AWS recommends that you turn on Block all public access, but before applying any of these settings, ensure that your applications will work correctly without public access. If you require some level of public access to this bucket or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

☒ **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.

## 2. Bucket

**aws** Services Search [Alt+S] Global Prathamesh Sawant

**Amazon S3 > Buckets**

**Account snapshot**  
Storage lens provides visibility into storage usage and activity trends. [Learn more](#)

**View Storage Lens dashboard**

**General purpose buckets** | Directory buckets

**General purpose buckets (2)** Info

[Refresh](#) [Copy ARN](#) [Empty](#) [Delete](#) [Create bucket](#)

Buckets are containers for data stored in S3.

Search my 1 match < 1 > Settings

Name	AWS Region	Access	Creation date
mydemobucket-prathamesh	US East (N. Virginia) us-east-1	Bucket and objects not public	February 25, 2024, 19:11:03 (UTC+05:30)

### 3. Upload Objects into the bucket

The screenshot shows the AWS S3 'Upload' console. At the top, there's a navigation bar with the AWS logo, 'Services', a search bar, and user information. The main heading is 'Upload' with an 'Info' link. Below this, a message states: 'Add the files and folders you want to upload to S3. To upload a file larger than 160GB, use the AWS CLI, AWS SDK or Amazon S3 REST API. [Learn more](#)'. A dashed box contains the instruction: 'Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.' Below this is a section titled 'Files and folders (1 Total, 50.6 KB)' with 'Remove', 'Add files', and 'Add folder' buttons. A note says 'All files and folders in this table will be uploaded.' There's a search bar 'Find by name' and a pagination control '< 1 >'. A table lists the files:

<input type="checkbox"/>	Name	Folder	Type	Size
<input type="checkbox"/>	Cover_Prathamesh.p...	-	image/png	50.6 KB

Below the table is the 'Destination' section with an 'Info' link. It shows the destination as 's3://mydemobucket-prathamesh'. There are three expandable sections: 'Destination details' (Bucket settings that impact new objects stored in the specified destination.), 'Permissions' (Grant public access and access to other AWS accounts.), and 'Properties' (Specify storage class, encryption settings, tags, and more.). At the bottom right, there are 'Cancel' and 'Upload' buttons.

The screenshot shows the AWS S3 console interface. The breadcrumb navigation is: Amazon S3 > Buckets > mydemobucket-prathamesh > Cover\_Prathamesh.png. The main heading is 'Cover\_Prathamesh.png' with an 'Info' link. Below the heading are buttons for 'Copy S3 URI', 'Download', 'Open', and 'Object actions'. There are three tabs: 'Properties' (selected), 'Permissions', and 'Versions'. The 'Object overview' section displays the following details:

<b>Owner</b> sawantpr78  <b>AWS Region</b> US East (N. Virginia) us-east-1  <b>Last modified</b> February 25, 2024, 19:25:22 (UTC+05:30)  <b>Size</b> 50.6 KB  <b>Type</b> png  <b>Key</b> Cover_Prathamesh.png	<b>S3 URI</b> s3://mydemobucket-prathamesh/Cover_Prathamesh.png  <b>Amazon Resource Name (ARN)</b> arn:aws:s3:::mydemobucket-prathamesh/Cover_Prathamesh.png  <b>Entity tag (Etag)</b> 73c369ede468ec6e10a205086e2c61ab  <b>Object URL</b> https://mydemobucket-prathamesh.s3.amazonaws.com/Cover_Prathamesh.png
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#### 4. Create a folder and upload objects in it

The screenshot shows the AWS S3 console interface for the 'images/' folder in the 'mydemobucket-prathamesh' bucket. The breadcrumb navigation is: Amazon S3 > Buckets > mydemobucket-prathamesh > images/. The main heading is 'images/' with a 'Copy S3 URI' button. There are two tabs: 'Objects' (selected) and 'Properties'. The 'Objects (1)' section displays the following details:

	Name	Type	Last modified	Size	Storage class
<input type="checkbox"/>	1234.jpg	jpg	February 25, 2024, 19:32:53 (UTC+05:30)	52.0 KB	Standard

## 5. Give permission to the file, so that it can be accessible from public URL

The screenshot shows the AWS console interface for editing bucket settings. The breadcrumb trail is: Amazon S3 > Buckets > mydemobucket-prathamesh > Edit Block public access (bucket settings). The page title is 'Edit Block public access (bucket settings)' with an 'Info' link. Below the title is a section 'Block public access (bucket settings)' with explanatory text. A list of settings follows, each with a checkbox:

- ☐ **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.

At the bottom right are 'Cancel' and 'Save changes' buttons.

## 6. Generate Bucket policy

The screenshot shows the AWS Policy Generator tool. It includes the Amazon Web Services logo and the title 'AWS Policy Generator'. A brief description of the tool is provided. The configuration steps are as follows:

- Step 1: Select Policy Type**  
A Policy is a container for permissions. The different types of policies you can create are an IAM Policy, an S3 Bucket Policy, an SNS Topic Policy, a VPC Endpoint Policy, and an SQS Queue Policy.  
Select Type of Policy: S3 Bucket Policy
- Step 2: Add Statement(s)**  
A statement is the formal description of a single permission. See a description of elements that you can use in statements.  
Effect: ☒ Allow ☐ Deny  
Principal: \*  
AWS Service: Amazon S3 ☐ All Services ('\*')  
Actions: 1 Action(s) Selected ☐ All Actions ('\*')  
Amazon Resource Name (ARN): demobucket-prathamesh/\*  
ARN should follow the following format: arn:aws:s3:::{BucketName}/{KeyName}. Use a comma to separate multiple values.  
Add Conditions (Optional)  
Add Statement
- Step 3: Generate Policy**  
A policy is a document (written in the Access Policy Language) that acts as a container for one or more statements.  
Add one or more statements above to generate a policy.

The screenshot shows the AWS IAM console interface. On the left, a JSON policy is being edited. The policy has the following structure:

```
1 {
2   "Id": "Policy1708871598954",
3   "Version": "2012-10-17",
4   "Statement": [
5     {
6       "Sid": "Stmt1708871596438",
7       "Action": [
8         "s3:GetObject"
9       ],
10      "Effect": "Allow",
11      "Resource": "arn:aws:s3:::mydemobucket-prathamesh",
12      "Principal": "*"
13    }
14  ]
15 }
```

On the right, the 'Edit statement' panel is open, showing a 'Select a statement' dialog. The dialog prompts the user to 'Select an existing statement in the policy or add a new statement.' and includes a '+ Add new statement' button.

At the bottom of the console, there are buttons for 'Cancel' and 'Save changes'.

## 7. Access through Public URL

The screenshot shows a public profile page for Prathamesh Sawant, a student. The page is accessible via a public URL: [https://mydemobucket-prathamesh.s3.amazonaws.com/Cover\\_Prathamesh.png](https://mydemobucket-prathamesh.s3.amazonaws.com/Cover_Prathamesh.png). The profile information displayed is:

- Name:** Prathamesh Sawant
- Role:** Student
- Email:** psawant@mitaoe.ac.in
- Phone:** 7057702020
- Location:** Kolhapur, India
- LinkedIn:** [linkedin.com/in/prathamesh-sawant-54b78121b](https://www.linkedin.com/in/prathamesh-sawant-54b78121b)