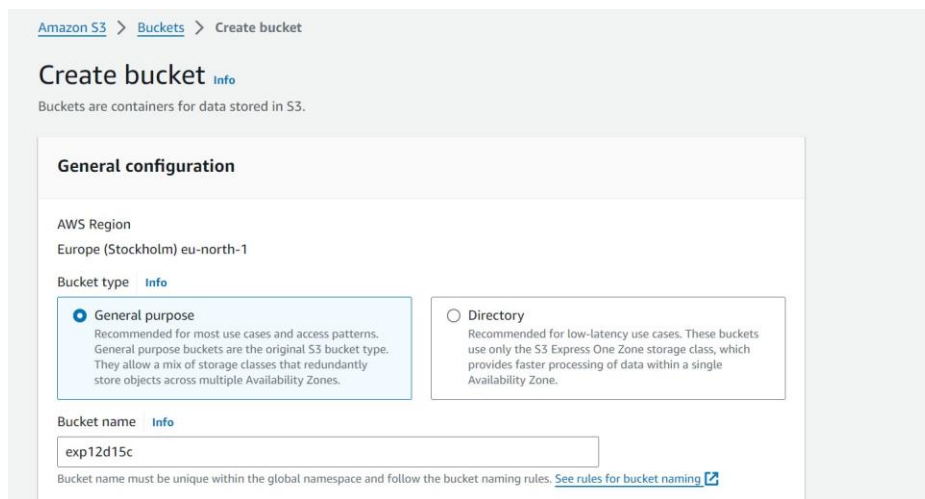


## EXPERIMENT:12

**Aim:** To create a Lambda function which will log “An Image has been added” once you add an object to a specific bucket in S3

### STEPS:

**Create an S3 Bucket:** Start by creating a new S3 bucket and give it a unique name.



Amazon S3 > Buckets > Create bucket

### Create bucket [Info](#)

Buckets are containers for data stored in S3.

#### General configuration

AWS Region  
Europe (Stockholm) eu-north-1

Bucket type [Info](#)

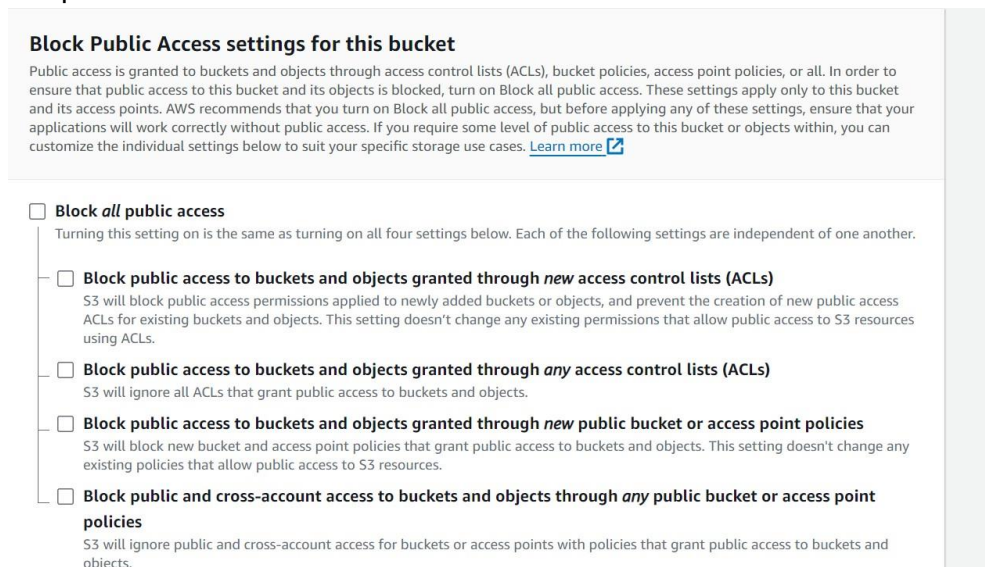
☒ **General purpose**  
Recommended for most use cases and access patterns. General purpose buckets are the original S3 bucket type. They allow a mix of storage classes that redundantly store objects across multiple Availability Zones.

☐ **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](#)

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

**Enable Public Access:** Since the bucket will act as a trigger for the Lambda function, ensure that public access is enabled.



#### 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.

- ☐ **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.

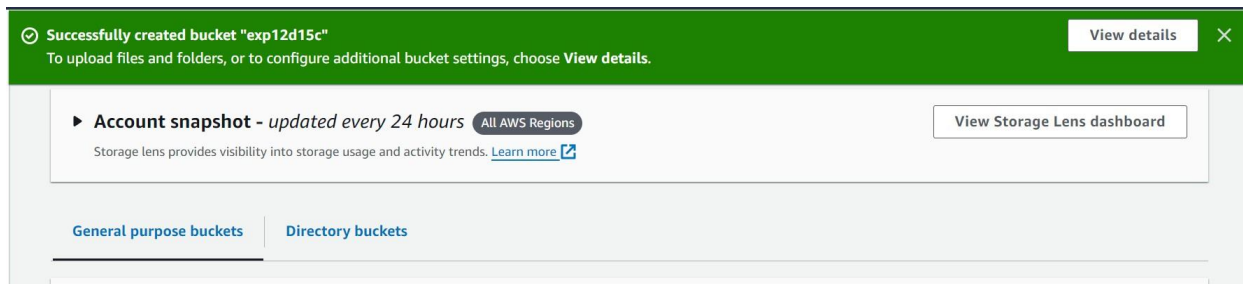
**. Confirm Public Access:** After enabling public access, confirm the settings to proceed with bucket creation.



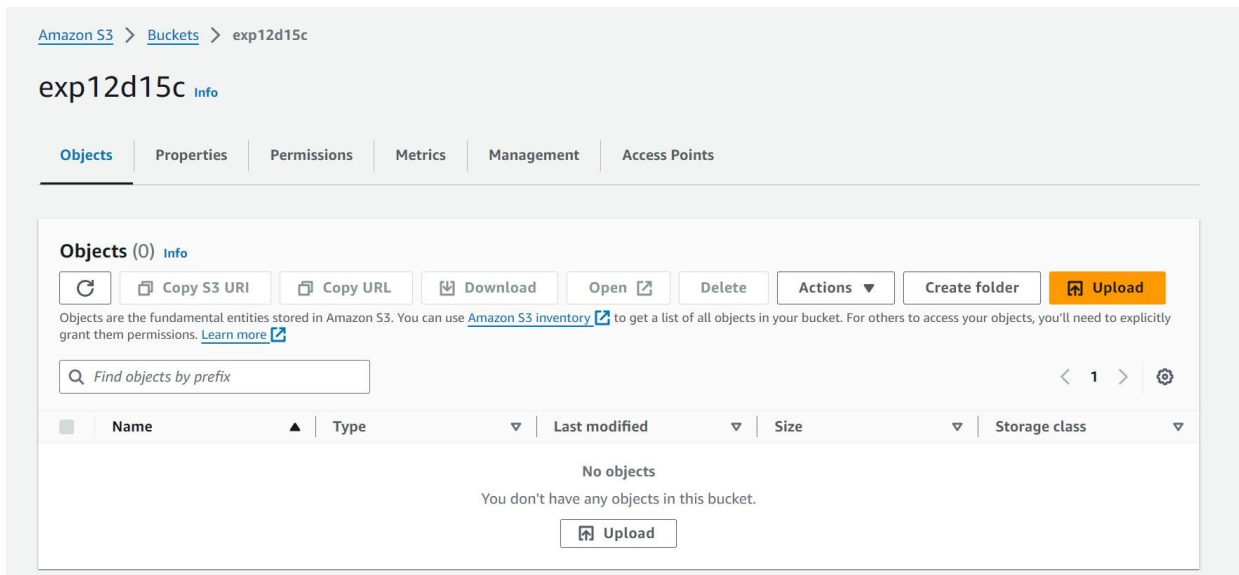
**Turning off block all public access might result in this bucket and the objects within becoming public**  
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.

☒ I acknowledge that the current settings might result in this bucket and the objects within becoming public.

**Bucket Creation Confirmation:** A confirmation message will appear, indicating the bucket was created successfully.



. **Upload a File:** Click the "Upload" button and add a file to the bucket (e.g., a .png or .txt file).



. **File Upload Confirmation:** Once the file is uploaded, you'll receive a confirmation message indicating success.

## Upload [Info](#)

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](#)

Drag and drop files and folders you want to upload here, or choose **Add files** or **Add folder**.

**Files and folders (1 Total, 293.3 KB)** Remove Add files Add folder

All files and folders in this table will be uploaded.

 < 1 >

<input type="checkbox"/>	Name	Folder	Type
<input type="checkbox"/>	AppBar( title Text('Guidelines'), ),....	-	image/png

**Access Lambda in AWS Dashboard:** Open the AWS dashboard, search for "Lambda," and access the Lambda function created in experiment 10 to add the S3 bucket as a trigger.

**Upload succeeded**  
View details below.

### Summary

Destination <a href="#">s3://exp12d15c</a>	Succeeded 1 file, 293.3 KB (100.00%)	Failed 0 files, 0 B (0%)
-----------------------------------------------	-----------------------------------------	-----------------------------

**Files and folders** | Configuration


**Files and folders (1 Total, 293.3 KB)** < 1 >

Name	Folder	Type	Size	Status	Error
<a href="#">AppBar( title...</a>	-	image/png	293.3 KB	Succeeded	-

**Add the Trigger:** In the Lambda function dashboard, click the "Add trigger" button.

**Configure the Trigger:** On the trigger configuration page, select "S3" as the service and choose your bucket. Complete the required information and save the configuration.

**Trigger configuration** [Info](#)

 **S3**  
aws asynchronous storage

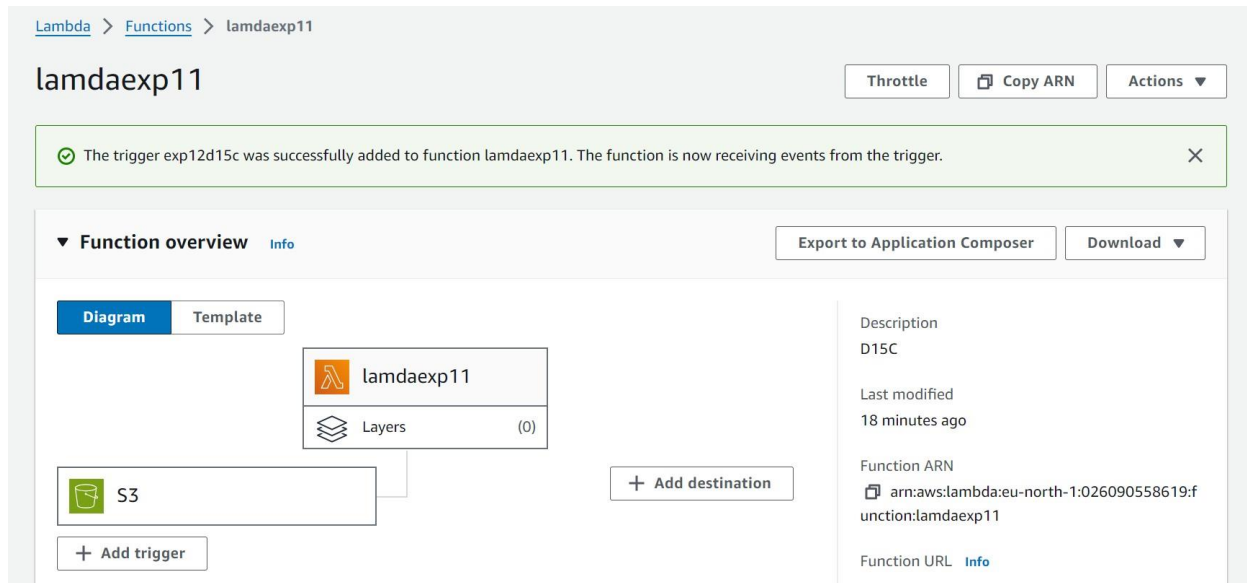
**Bucket**  
Choose or enter the ARN of an S3 bucket that serves as the event source. The bucket must be in the same region as the function.  
 × ↺  
Bucket region: eu-north-1

**Event types**  
Select the events that you want to have trigger the Lambda function. You can optionally set up a prefix or suffix for an event. However, for each bucket, individual events cannot have multiple configurations with overlapping prefixes or suffixes that could match the same object key.  

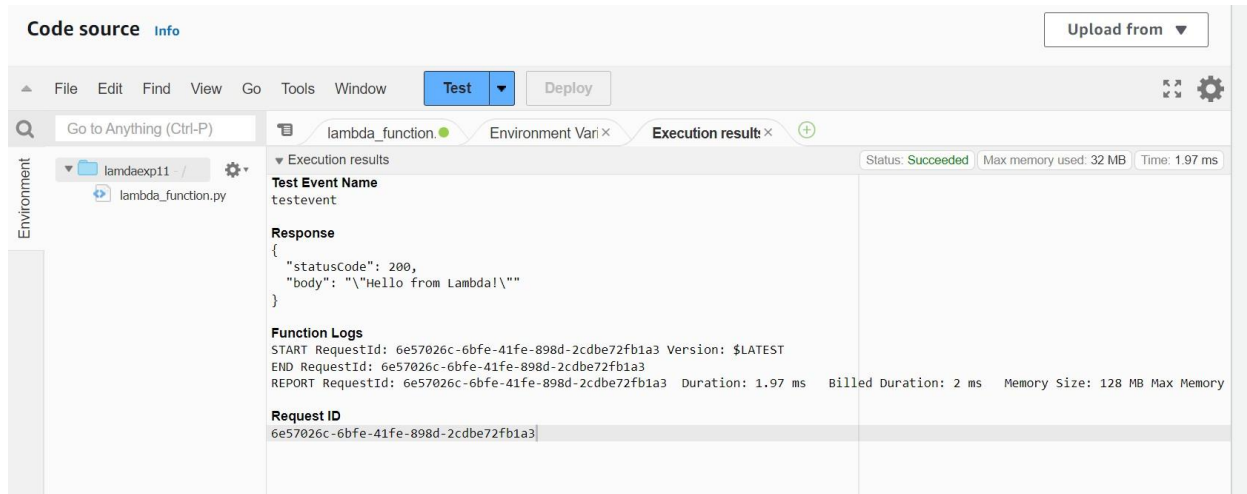
All object create events ×

**Prefix - optional**  
Enter a single optional prefix to limit the notifications to objects with keys that start with matching characters. Any [special characters](#) must be URL encoded.

**Trigger Confirmation:** You'll see a confirmation message showing that the S3 bucket has been successfully added as a trigger.



**Test the Lambda Function:** Run the code by clicking on the "Test" tab. A success message will indicate that the Lambda function executed successfully.



## Conclusion:

The experiment successfully showcased the integration of an S3 bucket with a Lambda function. By setting up the S3 bucket to trigger the Lambda function upon object uploads, we created an efficient, automated process for logging when files are added.