

Your first website on S3

Maroua Nouioua

- Amazon S3
- Buckets
- Access Points
- Object Lambda Access Points
- Multi-Region Access Points
- Batch Operations
- Access analyzer for S3
- Block Public Access settings for this account
- Storage Lens
- Dashboards
- AWS Organizations settings

Account snapshot


View Storage Lens dashboard


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

Buckets (0)

Info

Buckets are containers for data stored in S3. [Learn more](#)




 Copy ARN

Empty


Delete

Create bucket

< 1 >









| Name ▲ | AWS Region ▼ | Access ▼ | Creation date ▼ |
|-----------------------------|--------------|----------|-----------------|
| No buckets | | | |
| You don't have any buckets. | | | |
| <div>Create bucket</div> | | | |

 Services

Search for services, features, blogs, docs, and more

[Alt+S]

   Global  Maroua_Nouioua 



Amazon S3 > Create bucket


Create bucket [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

General configuration

Bucket name

testone

 Bucket with the same name already exists

Bucket name must be unique and must not contain spaces or uppercase letters. [See rules for bucket naming](#)

AWS Region

EU (Frankfurt) eu-central-1

Copy settings from existing bucket - optional

Only the bucket settings in the following configuration are copied.

Choose bucket

Feedback

English (US)

© 2021, Amazon Web Services, Inc. or its affiliates.

Privacy

Terms

Cookie preferences

You need to choose a name that's going to be specific and unique to you

Someone in AWS globally has already created a bucket with the name testone

the Amazon S3 console is a global console.

But

when you create an S3 bucket, it will be linked to a specific region.

1. Click here after writing the bucket name

Cancel

Create bucket

Amazon S3 > Create bucket

Create bucket [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)

General configuration

Bucket name

1. A valid bucket name

Bucket name must be unique and must not contain spaces or uppercase letters. [See rules for bucket naming](#)

AWS Region

2. Select a region

Copy settings from existing bucket - *optional*

Only the bucket settings in the following configuration are copied.

3. Click here

The bucket is created

Buckets (1) [Info](#)

Buckets are containers for data stored in S3. [Learn more](#)





 Copy ARN

Empty

Delete

Create bucket

 Find buckets by name

| | Name ▲ | AWS Region ▼ | Access ▼ | Creation date ▼ |
|--|-------------------------------------|------------------------|----------|------------------|
|  | mar-supcom-students | EU (Ireland) eu-west-1 | Public | 2023-03-15 15:00 |

1. Click on the name of bucket to be able to add object

mar-supcom-students [Info](#)

Objects Properties Permissions Metrics Management Access Points

Objects (0)

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

| | Name ▲ | Type ▼ | Last modified ▼ | Size ▼ | Storage class ⁵ ▼ |
|--|--------|--------|-----------------|--------|------------------------------|
|--|--------|--------|-----------------|--------|------------------------------|

2. Click here

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 folders**.

Files and folders (1 Total, 21.4 KB)
All files and folders in this table will be uploaded.

Remove

Add files

Add folder

| <input type="checkbox"/> | Name | Folder | Type | Size |
|--------------------------|------------|--------|-----------|---------|
| <input type="checkbox"/> | SUPCOM.png | - | image/png | 21.4 KB |

1. Click: **Add files** or Drag and drop


2. Click on Upload again after adding your file

Files and folders (1 Total, 21.4 KB)

| Name | Folder | Type | Size | Status | Error |
|----------------------------|--------|-----------|---------|-------------|-------|
| SUPCOM.png | - | image/png | 21.4 KB | ✔ Succeeded | - |

How to open this file?
How can i see the contents of this file?

The file is uploaded successfully

| <input type="checkbox"/> | Name | Type | Last modified | Size | Storage class |
|--------------------------|--|------|---|---------|---------------|
| <input type="checkbox"/> |  SUPCOM.png | png | December 24, 2021, 16:21:56 (UTC+01:00) | 21.4 KB | Standard |

1

1. Click here

SUPCOM.png

Info

Copy S3 URI

Download

Open

Object actions

Properties

Permissions

Versions

Object overview

Owner

maroua.nouioua

AWS Region

EU (Ireland) eu-west-1

Last modified

December 24, 2021, 16:21:56 (UTC+01:00)


Size

21.4 KB


Type

png


Key

 SUPCOM.png


S3 URI

 s3://mar-supcom-students/SUPCOM.png


Amazon Resource Name (ARN)

 arn:aws:s3:::mar-supcom-students/SUPCOM.png

Entity tag (Etag)

 3d4ac903a5d745eb

Object URL

 <https://mar-supcom-students.s3.eu-west-1.amazonaws.com/SUPCOM.png?response-content-disposition=inline&X-Amz-Security-Token=IQoJb3JpZ2lu...>

2

2. Click here

Result

This special URL is called a **pre-signed URL** (very long URL) and it contains user's AWS credentials.

how it's work:

URL: here a way of passing some of my credentials!!

AWS: yes I recognize you, I can show you the picture.

The first way



Properties

Permissions

Versions

1

Object overview

Owner
maroua.nouioua

AWS Region
EU (Ireland) eu-west-1

Last modified
December 24, 2021, 16:21:56 (UTC+01:00)

Size
21.4 KB

Type
png

Key
SUPCOM.png

S3 URI
s3://mar-supcom-students/SUPCOM.png

Amazon Resource Name (ARN)
arn:aws:s3:::mar-supcom-students/SUPCOM.png

Entity tag (Etag)
3d4ac903a5d745eb61a37cc4946febb5

Object URL
<https://mar-supcom-students.s3.eu-west-1.amazonaws.com/SUPCOM.png>

1. Click here

Result

If we try to open the file using its public URL, it's not going to work because our bucket is not public.

mar-supcom-students.s3.eu-west-1.amazonaws.com/SUPCOM.png

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Error>
  <Code>AccessDenied</Code>
  <Message>Access Denied</Message>
  <RequestId>ABKMJSHHGT914AWG</RequestId>
  <HostId>C/7ihuQY9Dgeb6dTZdnwQrK9GYXWgax43x85RMkpxS0g4UEYt6vXNXOqR5aRqdHvReujTHBT2P8=</HostId>
</Error>
```

2

The second way

mar-supcom-students

1. Click here



- Objects
- Properties
- Permissions
- Metrics
- Management
- Access Points

Permissions overview

Access
Bucket and objects not public

Block public access (bucket settings)

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 all your S3 buckets and 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 your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

Edit

Block all public access
On

Individual Block Public Access settings for this bucket

1

2

Block public access (bucket settings)

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 all your S3 buckets and 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 your buckets or objects within, you can customize the individual settings below to suit your specific storage use cases. [Learn more](#)

3. disable all the public access settings



- ☒ 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.

4. Click here



We need to create a public bucket policy. This is why we do 2 and 3 steps.

Edit Block public access (bucket settings)

1

⚠ Updating the Block Public Access settings for this bucket will affect this bucket and all objects within. This may result in some objects becoming public.

1. Write the word confirm

To confirm the settings, enter *confirm* in the field.

confirm

Cancel

Confirm

2. Click here

Block all public access

⚠ Off

► Individual Block Public Access settings for this bucket

You are able to write a bucket policy that is going to be public.

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

2

Edit

Delete

3. Click here

Edit bucket policy [Info](#)

3

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts. [Learn more](#)

Policy examples [↗](#)

Policy generator [↗](#)

4. Click here

Here some policy examples, please take a look



1

**We want to « Allow » everyone
« * » to do « GetObject » to be able
to read the objects in our bucket**

AWS Policy Generator

The AWS Policy Generator is a tool that enables you to create policies that control access to [Amazon Web Services \(AWS\)](#) products. For more information about creating policies, see [key concepts in Using AWS Identity and Access Management](#). Here are sample policies:

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 [Lambda Function Policy](#), an [API Gateway Endpoint Policy](#), and an [SQS Queue Policy](#).

Select Type of Policy S3 Bucket Policy 

1. Choose « S3 Bucket Policy »

Why we added « /* » after our ARN in the 5th step?

Because the action we have chosen called « GetObjects » applies to the objects in our buckets.

Which are whatever coming after the bucket names.

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.

2. Choose « Allow »

Effect ☒ Allow ☐ Deny

Principal

| |
|------------------------------|
| <p> * </p> |
|------------------------------|

Use a comma to separate multiple values.

| AWS Service | Amazon S3 |
|-------------|-----------|
|-------------|-----------|

Use multiple statements to add permissions for more than one service.

Actions

1 Action(s) Selected

- ☐ All Actions ('*')

Amazon Resource Name (ARN)

```
arn:aws:s3:::mar-supcom-st
```

ARN should follow the following format: `arn:aws:s3:::${BucketName}/${KeyName}`.
Use a comma to separate multiple values.

Add Conditions (Optional)

6. Click here

Add Statement

3. Put « * »

4. Copy the S3 buckets name.

5. Paste it in ARN, add in the end « /* »

[Edit bucket policy](#) [Info](#)

2

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket.

[Policy examples](#) 

Policy generator 

Budget ARN

arn:aws:s3::mar-supcom-students

You added the following statements. Click the button below to Generate a policy.

| Principal(s) | Effect | Action | Resource | Conditions | |
|--------------|--------|----------------|------------------------------------|------------|---|
| • * | Allow | • s3:GetObject | arn:aws:s3:::mar-supcom-students/* | None | 1 |

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.

Generate Policy

Start Over

1.Click here

Policy JSON Document

Click below to edit. To save the policy, copy the text below to a text editor. Changes made below will **not be reflected in the policy generator tool**.

```
{
  "Id": "Policy1640429572304",
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "Stmt1640429407506",
      "Action": [
        "s3:GetObject"
      ],
      "Effect": "Allow",
      "Resource": "arn:aws:s3:::mar-supcom-students/*",
      "Principal": "*"
    }
  ]
}
```

This AWS Policy Generator is provided for informational purposes only, you are still responsible for your use of Amazon Web Services technologies and ensuring that you use it in compliance with all applicable terms and conditions. This AWS Policy Generator is provided as is, without warranty of any kind, either expressed or implied.

Close

2

2.Copy it

3. Paste it

Bucket policy

The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policies don't apply to objects owned by other accounts.

Policy examples

Policy generator

3

Bucket ARN

arn:aws:s3:::mar-supcom-students

Policy

```
1 {
2   "Id": "Policy1640429572304",
3   "Version": "2012-10-17",
4   "Statement": [
5     {
6       "Sid": "Stmt1640429407506",
7       "Action": [
8         "s3:GetObject"
9       ],
10      "Effect": "Allow",
11      "Resource": "arn:aws:s3:::mar-supcom-students/*",
12      "Principal": "*"
13    }
14  ]
15 }
```

4.Click here

Cancel

Save changes

Publicly accessible

Objects Properties **Permissions** Metrics Management Access Points

Permissions overview

Access

 Public

1

The access has been changed to public

 mar-supcom-students.s3.eu-west-1.amazonaws.com/SUPCOM.png

2

1. Click on « Objects »
2. Click on « SUPCOM.png »
3. Click on « Object URL » (in mycase : <https://mar-supcom-students.s3.eu-west-1.amazonaws.com/SUPCOM.png>)

SUPCOM

Higher School of Communication of Tunis

After doing the 3 steps above, the picture will appear normally

Acknowledgement

These slides are Copyright 2021- Maroua Nouioua of the
University of Carthage SUP'COM.