

Project 2

Deploy a Static Website on AWS

In this project, we will learn how to create a static website and deploy it using AWS services. A static website is a site that consists of HTML, CSS, and JavaScript files, and it doesn't require server-side processing or a database

Lab Steps

Task 1: Sign in to AWS Management Console

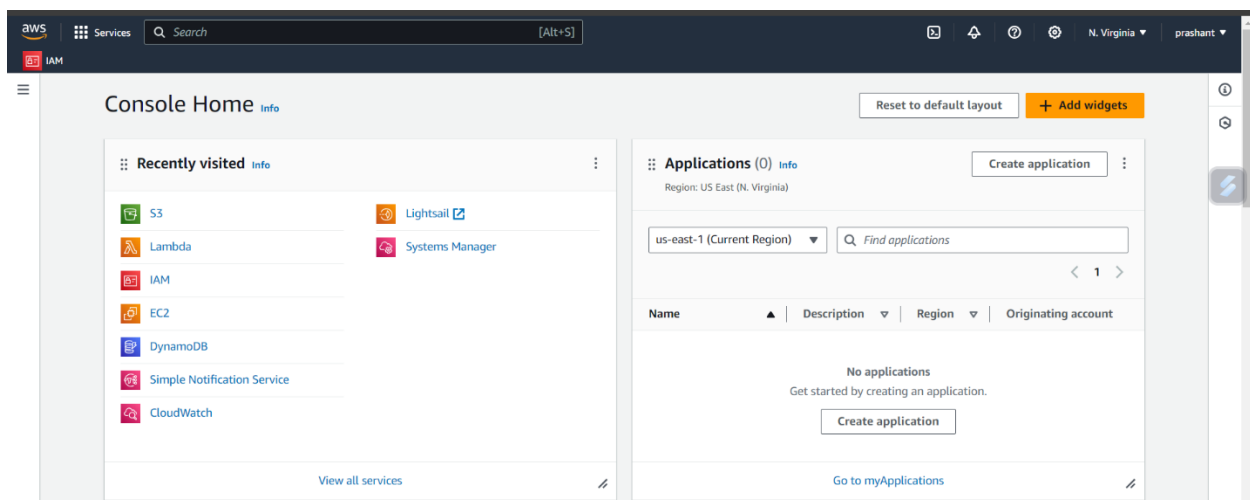
1. Click on the Open Console button, and you will get redirected to AWS Console in a new browser tab.

2. On the AWS sign-in page,

- Leave the Account ID as default. Never edit/remove the 12-digit Account ID present in the AWS Console. otherwise, you cannot proceed with the lab.

- Now copy your User Name and Password in the Lab Console to the IAM Username and Password in AWS Console and click on the Sign in button.

3. Once Signed In to the AWS Management Console, Make the default AWS Region as US East (N. Virginia) us-east-1.

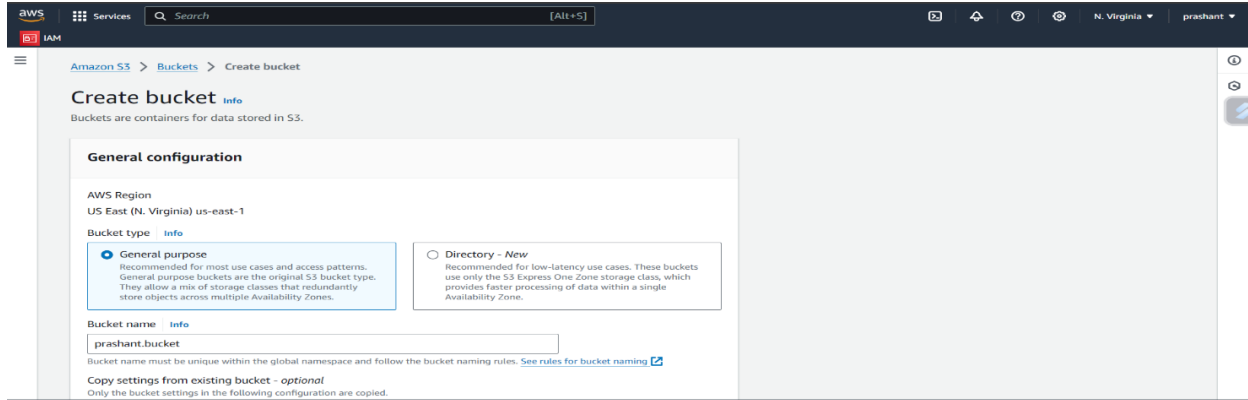


S3 BUCKET:

Amazon S3(Simple Storage Service) is a cloud-based storage service provided by AWS, it allows users to store and retrieve data over the Internet. it provides a scalable, reliable, and highly available storage

infrastructure for a variety of data types, including object storage, files, documents, and multimedia content.

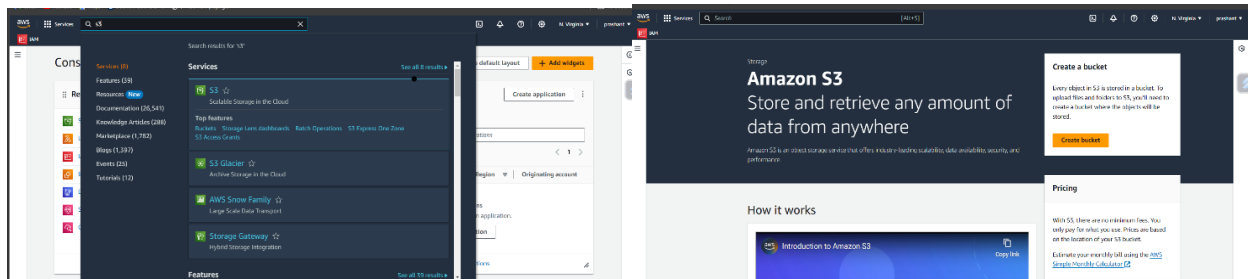
1. Creating an S3 Bucket for Static Website Hosting



On your AWS console, search for S3, and on the S3 dashboard "Create bucket", enter a globally unique name for the bucket *as no two persons can use the same*, and specify your preferred region.

a. SEARCH S3

b. In the S3 dashboard, click on the Create Bucket button.



In the General Configuration, Bucket name: Enter prashant.bucket3

NOTE:

1. S3 Bucket names are globally unique, choose a name that is available. Maybe you can enter your name and create one.
2. AWS Region: Select US East (N. Virginia) us-east-1
3. Select ACLs disabled (recommended) option(default)

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

then uncheck the "block all public access" and check the acknowledgment, then leave the rest of the configuration as default.

☐ **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.

 **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.

NOTE: . Keep everything default and click on Create Bucket button.

2. Uploading Website Content to S3

Click on your S3 bucket, click on Upload, then click on " **add files**", Select and upload your website files(HTML files).

AWS Services Search [Alt+S] N. Virginia prashant

Amazon S3 > Buckets > prashant.bucket3 > Upload

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 (2 Total, 48.0 B)

All files and folders in this table will be uploaded.

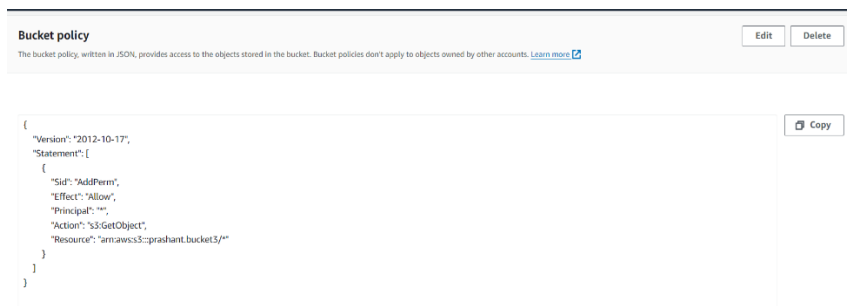
Find by name

<input type="checkbox"/>	Name	Folder	Type
<input type="checkbox"/>	prashant_error.html	-	text/html
<input type="checkbox"/>	prashant.html	-	text/html

3. Configuring S3 Bucket Permissions for Website Access

Click on the permission tab in your S3 bucket, click on edit permission, and paste the below Json configuration:

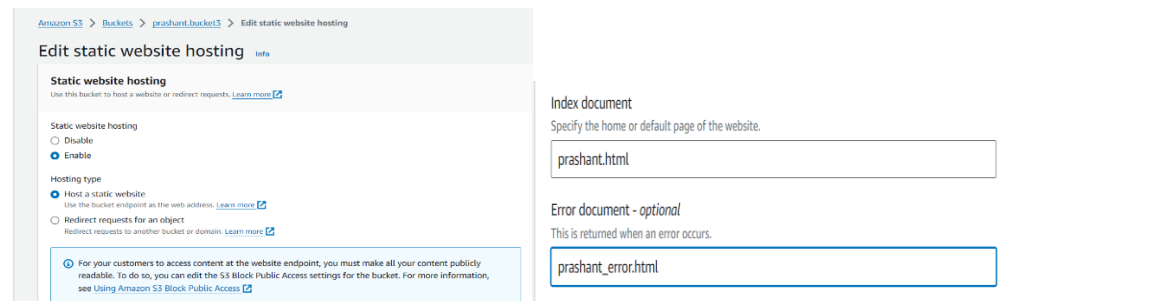
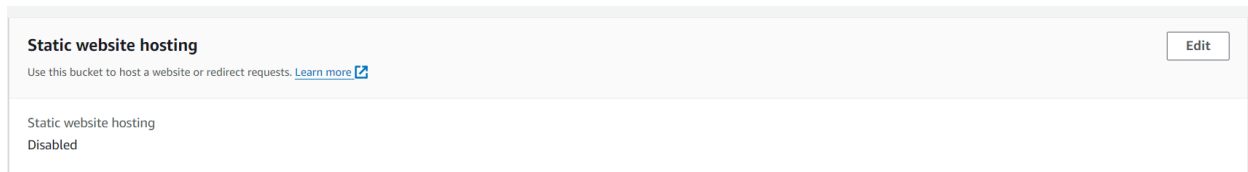
```
{  
  
  "Version": "2012-10-17",  
  
  "Statement": [  
  
    {  
  
      "Sid": "AddPerm",  
  
      "Effect": "Allow",  
  
      "Principal": "*",  
  
      "Action": "s3:GetObject",  
  
      "Resource": "arn:aws:s3:::prashant.bucket3/*"  
  
    }  
  
  ]  
}
```



Replace the "**prashant.bucket3**" in the configuration with your bucket name and click on save.

4. Enabling Static Website Hosting on S3

Click on the property Tab in your S3 bucket, scroll down to locate, and click on "static hosting", *by default it is disabled*, click on enable static hosting, follow the configuration in the snapshot, and save.



So we have successfully hosted our website in S3 so scroll down in properties and you would find a "Bucket website endpoint", copy it and paste it on your web browser and you can access your website.

