

Amazon Web Service S3:

The screenshot shows the AWS S3 User Guide page for hosting a static website. The page is titled "Amazon Simple Storage Service (S3) > User Guide" and includes a search bar, "Contact Us", "English", and "Return to the Console" buttons. The left sidebar lists various S3 topics, with "Hosting a static website" selected. The main content area explains that static websites consist of individual webpages with static content, while dynamic websites rely on server-side processing. A "Note" box states that the AWS Amplify Console supports single-page apps built with frameworks like React JS, Vue JS, Angular JS, and Nuxt, and static site generators like Gatsby JS, React-static, Jekyll, and Hugo. It also mentions that Amazon S3 website endpoints do not support HTTPS, but CloudFront can be used to serve HTTPS requests. The page concludes by directing users to the "Website endpoints" section for more information.

Amazon Simple Storage Service (S3) > User Guide

PDF RSS

You can use Amazon S3 to host a static website. On a *static* website, individual webpages include static content. They might also contain client-side scripts.

By contrast, a *dynamic* website relies on server-side processing, including server-side scripts, such as PHP, JSP, or ASP.NET. Amazon S3 does not support server-side scripting, but AWS has other resources for hosting dynamic websites. To learn more about website hosting on AWS, see [Web Hosting](#).

Note

You can use the AWS Amplify Console to host a single-page web app. The AWS Amplify Console supports single-page apps built with single-page app frameworks (for example, React JS, Vue JS, Angular JS, and Nuxt) and static site generators (for example, Gatsby JS, React-static, Jekyll, and Hugo). For more information, see [Getting Started in the AWS Amplify Console User Guide](#).

Amazon S3 website endpoints do not support HTTPS. If you want to use HTTPS, you can use Amazon CloudFront to serve a static website hosted on Amazon S3. For more information, see [How do I use CloudFront to serve HTTPS requests for my Amazon S3 bucket?](#) To use HTTPS with a custom domain, see [Configuring a static website using a custom domain registered with Route 53](#).

For more information about hosting a static website on Amazon S3, including instructions and step-by-step walkthroughs, see the following topics.

[Website endpoints](#)

The screenshot shows the "Create a bucket" page in the Amazon S3 console. The page features a large heading "Amazon S3" and a subheading "Store and retrieve any amount of data from". A "Create a bucket" button is prominently displayed. The page also includes a "Create a bucket" section with the text: "Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored."

Amazon S3

Store and retrieve any amount of data from

Create a bucket

Every object in S3 is stored in a bucket. To upload files and folders to S3, you'll need to create a bucket where the objects will be stored.

The screenshot shows the "Create bucket" configuration page in the Amazon S3 console. The page includes a "General configuration" section with fields for "Bucket name" (static.host) and "AWS Region" (US East (N. Virginia) us-east-1). There is also a "Copy settings from existing bucket - optional" section with a "Choose bucket" button. The "Object Ownership" section is also visible, explaining that it controls ownership of objects written to the bucket.

Amazon S3

Create bucket

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

General configuration

Bucket name

static.host

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

AWS Region

US East (N. Virginia) us-east-1

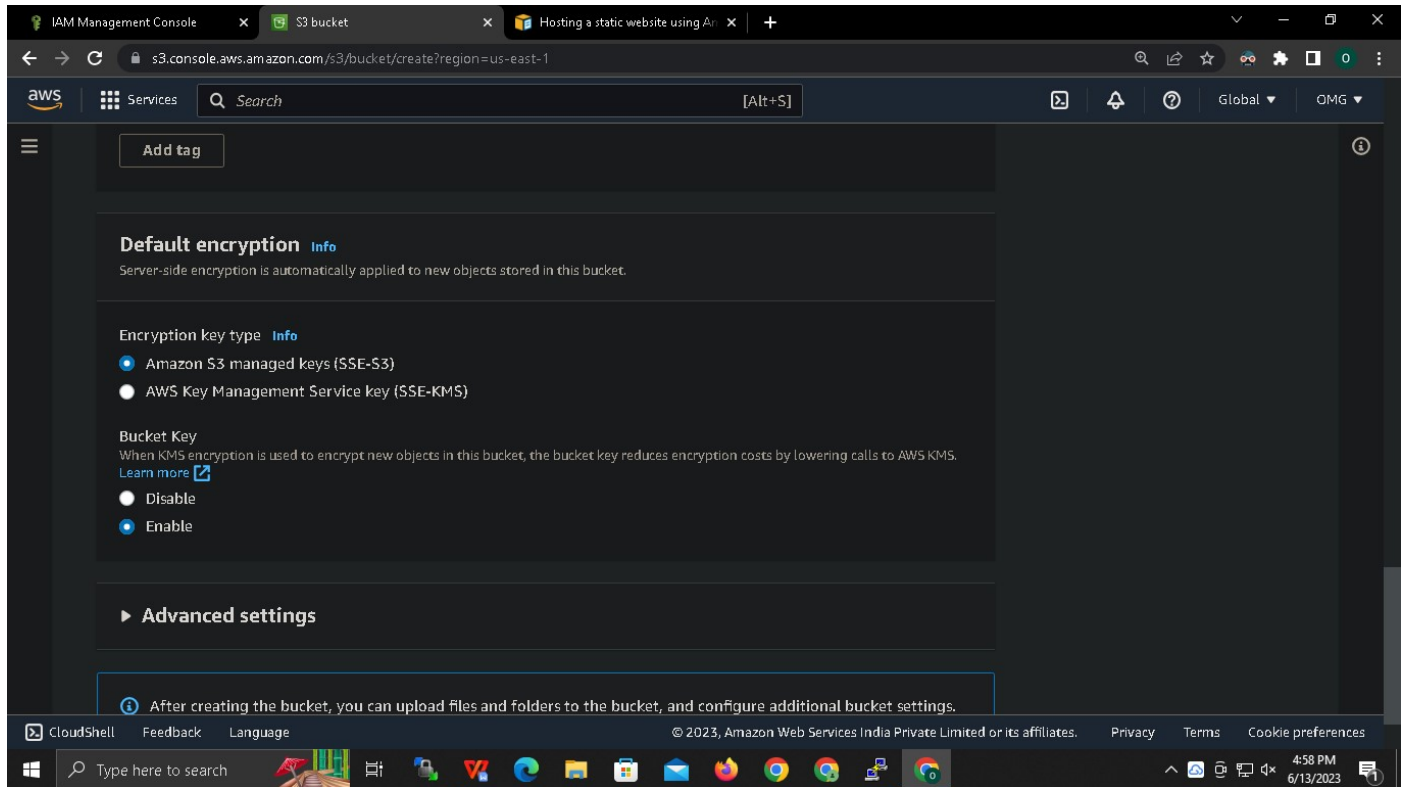
Copy settings from existing bucket - optional

Only the bucket settings in the following configuration are copied.

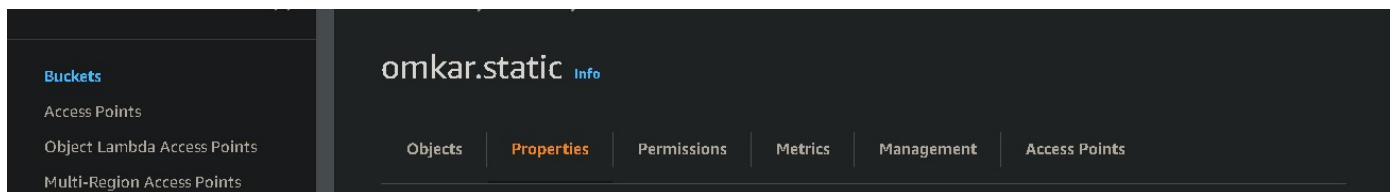
Choose bucket

Object Ownership [Info](#)

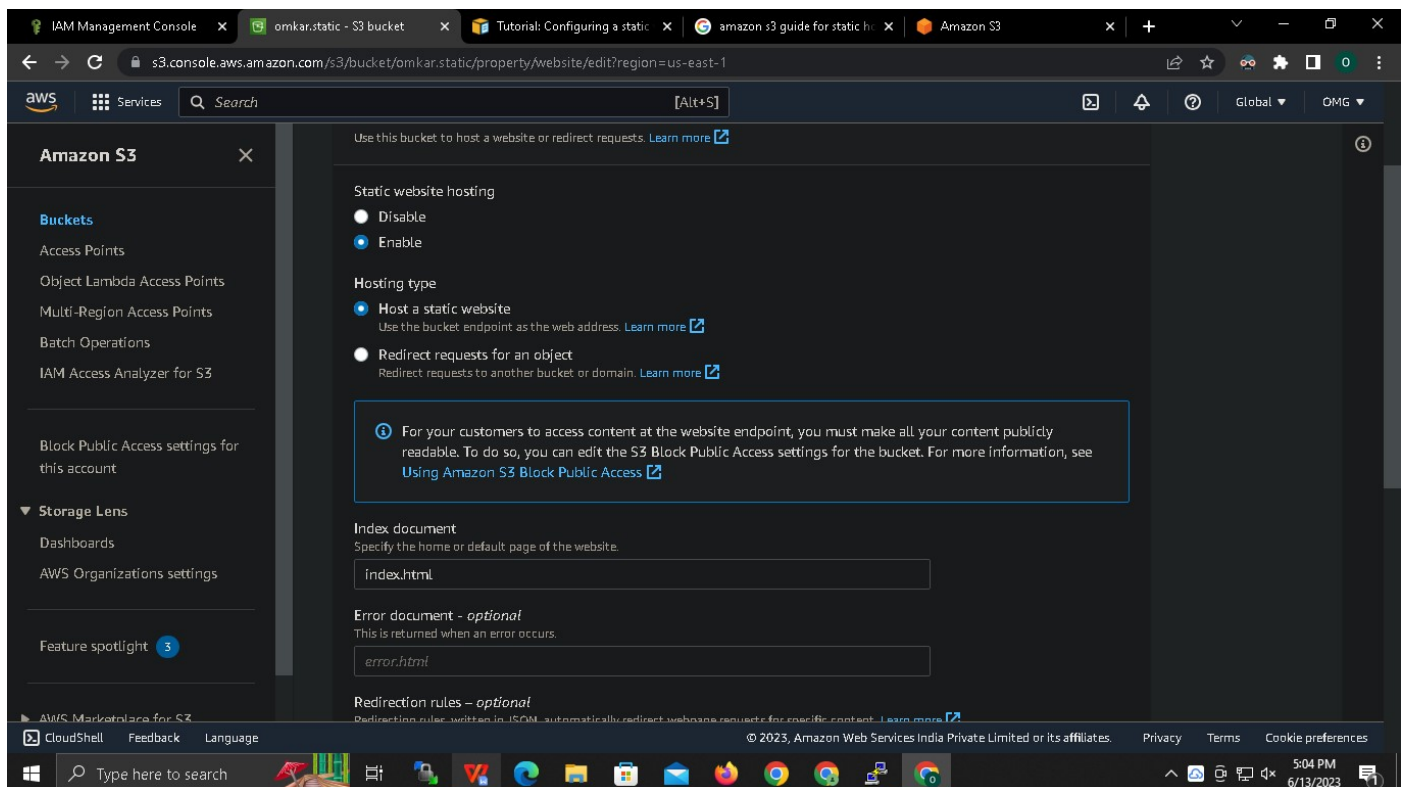
Control ownership of objects written to this bucket from other AWS accounts and the use of access control lists (ACLs). Object ownership determines who can specify access to objects.



Go to properties :



Edit static web hosting :



Edit Block access list :

The screenshot shows the AWS IAM Management Console interface. The left sidebar contains the 'Amazon S3' menu with options like Buckets, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, IAM Access Analyzer for S3, Storage Lens, Dashboards, and AWS Organizations settings. The main content area is titled 'Block public access (bucket settings)' and explains that public access is granted through ACLs, bucket policies, access point policies, or all. It provides instructions on how to block public access and lists four settings to configure:

- ☐ **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.

The bottom of the screenshot shows the Windows taskbar with various application icons and the system clock displaying 5:04 PM on 6/13/2023.

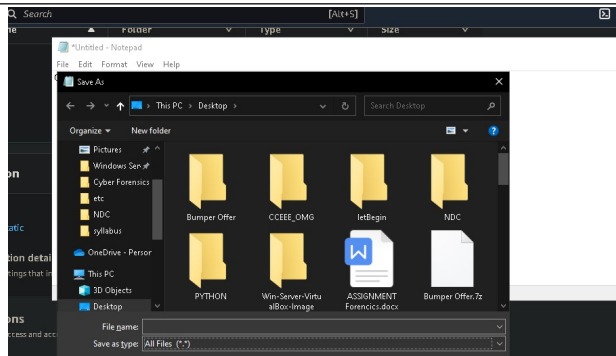
Edit bucket policy Json:

The screenshot shows the AWS IAM Management Console interface. The left sidebar contains the 'Amazon S3' menu. The main content area is titled 'Bucket policy' and explains that the bucket policy, written in JSON, provides access to the objects stored in the bucket. It provides instructions on how to edit the policy and shows the current policy JSON:

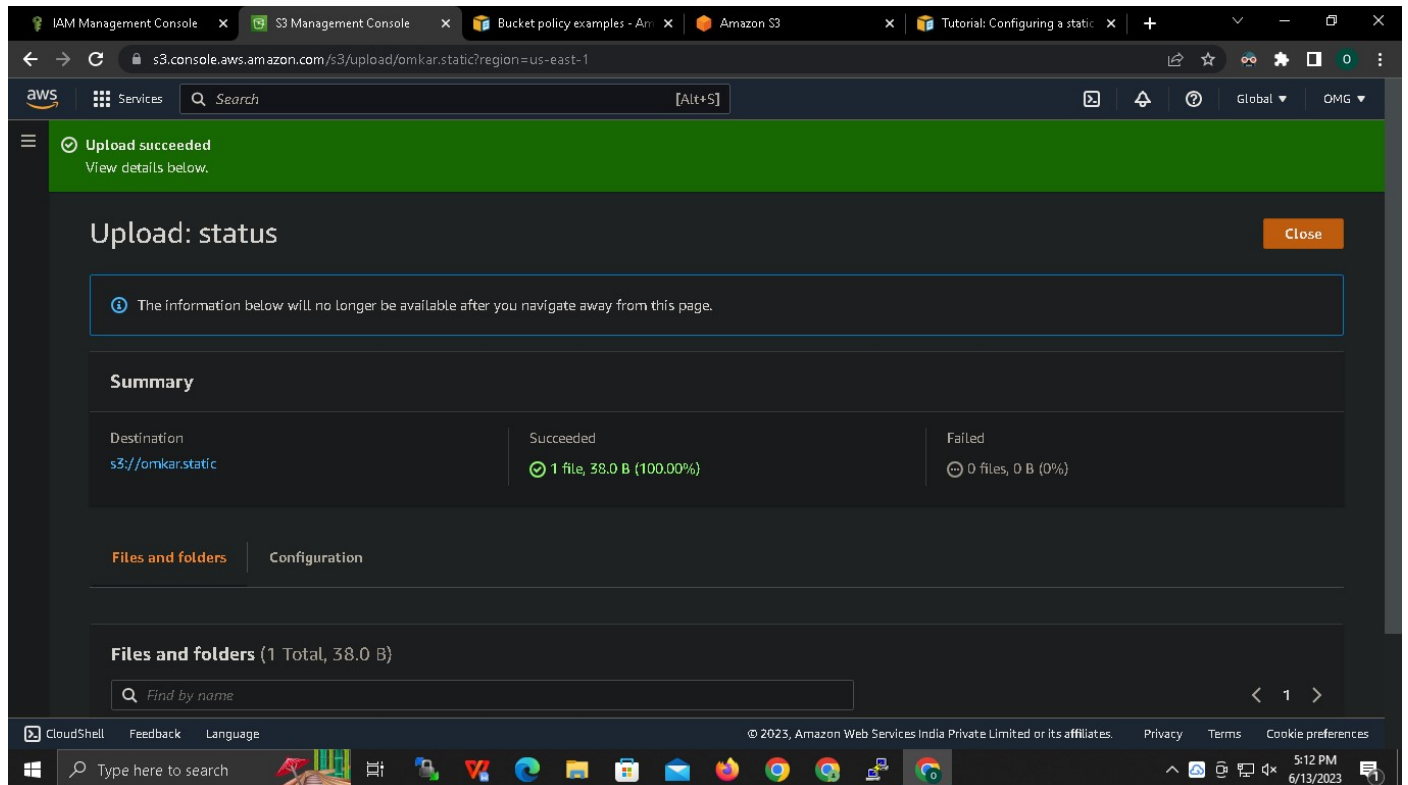
```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "PublicReadGetObject",
      "Effect": "Allow",
      "Principal": "*",
      "Action": "s3:GetObject",
      "Resource": "arn:aws:s3:::omkar.static/*"
    }
  ]
}
```

The bottom of the screenshot shows the Windows taskbar with various application icons and the system clock displaying 5:04 PM on 6/13/2023.

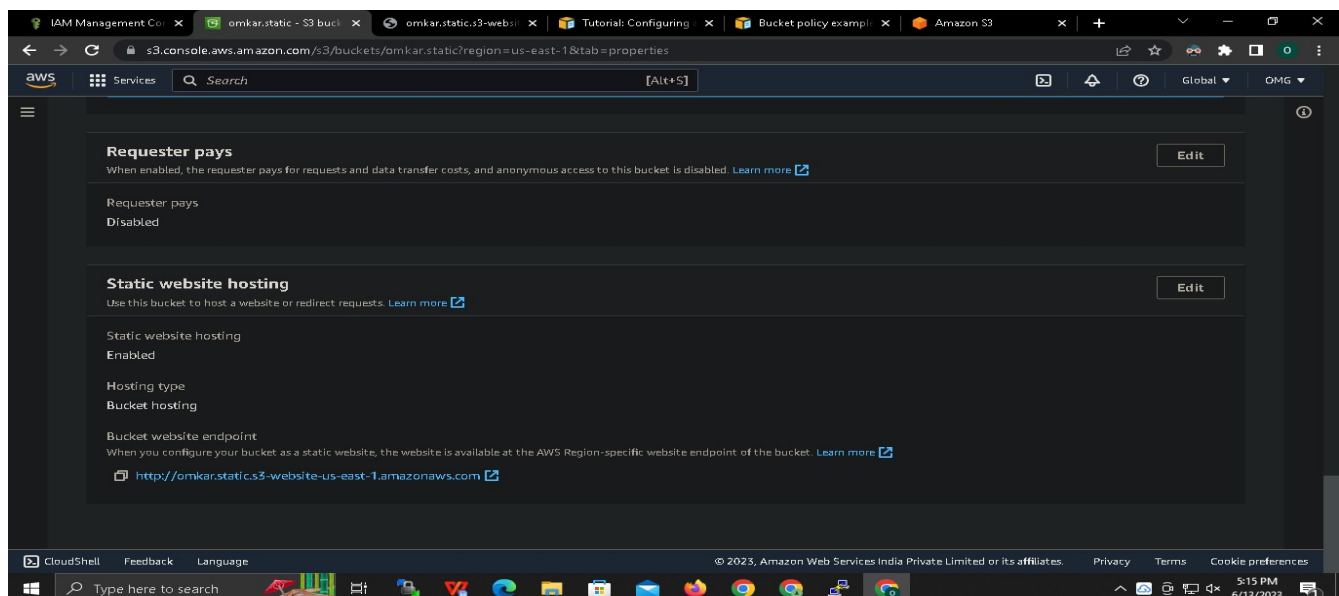
Create index.html file on desktop:



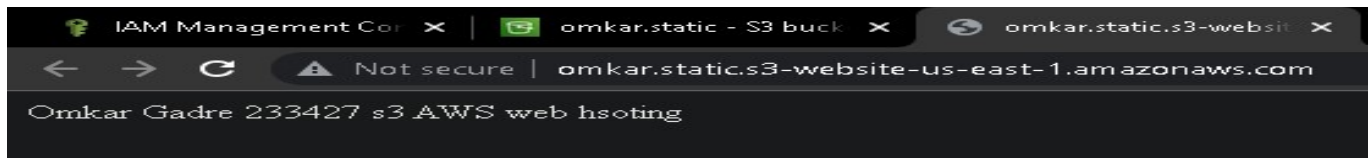
Upload Index file :



Test your endpoint



Tested:



Amazon has purchased computers and is not renting it to us the major advantages of it are data privacy and security, no maintenance is required, faster data recovery and provided high chances to do scalability, reduces cost as well as cost / hour, and even server crashes it can be relocated easily, AWS has their website which is a frontend for us.

An entrepreneur has an idea, develops an application and code and worries as he wants a server to host that but there came AWS for his help. In AWS, if you host a website, you pay for the hour you used, not for monitoring or maintenance. If your site gets a hit on AWS, you have to just upgrade your plan with AWS; you can also setup an auto-upgrading policy. Example: earlier 100 customers were able to access easily but customer have increased, hence you need to create a server. AWS will automatically create a load balancer server. Even if workload got decreased below the threshold value, then automatically a server will come down, hence manually we don't bother it, all work about AWS.

Netflix is on AWS, amazing: they don't have servers, their data is AWS.

Before AWS: maintenance expenditure, data privacy, scalability and flexibility:

After AWS: all this problem solves

Pay as you go

Facts:

Largest companies like NASA, NETFLIX also use AWS; they generate 60% profit from it. If companies like Netflix can use, why can't our startup?

Other: Azure, VMware, Alibaba Cloud, Google Cloud.

EC2:

Elastic Compute Cloud, the most popular service, they provide a service where we can host a code; it's a virtual machine server, they also provide location-based server, we also have liberty to scale an EC2 server as well, (autoscaling)

RDS: relational database service: Amazon Aurora, MariaDB, SQL, MySQL and Oracle:

We shall get port number, we will have local name and host 3306 is for MySQL: *Amazon Aurora* is a cluster of multiple databases:

Storage service: Amazon S3, simple storage service, it's an **object storage service**, it's like a Google Drive, its a bucket service, we just throw objects in that and when we want take it out,

Cloud front : content delivery network : youtube stores its videos in cdn and when we try to access video the request go to edge location ex asia , africa and these location are all connected to origin server which provides information .

Security service IAM : identity access management it allows us to access authorised person itself :

Cloud formation : we can code whole infra in one file and when we upload and run it will create whole infra for us < it is written in json

All the resources you require in an application can be deployed easily using templates. Also, you can reuse your templates to replicate your infrastructure in multiple environments. To make templates reusable, use the parameters, mappings and conditions sections in the template so that you can customize your stacks when you create them. Cloud formation is easy way to deploy infrastructure easily with the help of template.

Elastic benstalk : create a web app cant acts a server it can only host application just upload code and bingo

Lambda : it cant host wesbite its just run code

EC2> elastic benstalk > lambda , serverless computing, it saves cost as devloper don't need to pay for failed code.

Storage :

Amazon s3 ->> object storage service , more distributed the application more is the fault tolerance , file storage system which assures availability of 99.99....11 . we can also take backup , rather than storing images on actual server we can store images here and site at actual server .

Glacier : it also takes backup of files , in s3 we can get object instaneously while glacier takes time to retrieve file and its very cheap for backup 1/10th of cost , its is primarily used fo r backup ,

Amazon efs : elastic file system , it can be mounted on any operating system if we have multiple server handling our website and we want data to be same hence we will use EFS for it which can be mounted on os . it acts a sa share drive >

Storage gateway : it allows to connect on premise storage system to aws :

Json -> java script object notation -> use for parsing and storing and inter operability .

Bamboo s also for continous integration