Assignment 6

Q)Write any application(web/hpc) of your choice which supports google cloud platform PaaS). Document the code with supporting screenshots.

To deploy a web page to AWS, you can use the Amazon Simple Storage Service (S3) as a hosting platform. Here is an overview of the steps you can follow to deploy your web page to S3:

1. Create an AWS account. If you don't already have an AWS account, you will need to create one in order to use the S3 service. You can create an AWS account by visiting the AWS website and following the prompts.

2. Create an S3 bucket. An S3 bucket is a logical container for storing objects in S3. To create an S3 bucket, you can use the AWS Management Console, the AWS CLI, or theS3 API.

3. Upload your web page to the S3 bucket. You can use the AWS Management Console, the AWS CLI, or the S3 API to upload your web page and any other assets (such as images, JavaScript files, and CSS files) to the S3 bucket.

4. Configure the S3 bucket to host a static website. To serve your web page as a static website, you will need to enable static website hosting for the S3 bucket and specify the name of the HTML file that will be used as the index document.

5. Test the website. Once you have configured the S3 bucket to host a static website, you can test the website by visiting the website endpoint URL provided by S3. The website endpoint URL will be in the format http://<bucket-name>.s3- website.<region>.amazonaws.com, where <bucket-name> is the name of your S3 bucket and <region> is the region where your bucket is located.

Here are more detailed instructions for each step:

Step 1: Create an AWS account

1. Go to the AWS homepage and click the "Create a free account" button.
2. Follow the prompts to create an AWS account. You will need to provide your email address, password, and billing information.
3. Once you have created your account, sign in to the AWS Management Console.

Step 2: Create an S3 bucket

1. In the AWS Management Console, navigate to the S3 service.
2. Click the "Create bucket" button.
3. Enter a unique name for your bucket and select a region for the bucket.
4. Click the "Create" button to create the bucket.

Step 3: Upload your web page to the S3 bucket

1. In the AWS Management Console, navigate to the S3 service.
2. Click on the name of your S3 bucket.
3. Click the "Upload" button.Click the "Add files" button and select your web page and any other assets you want toupload.
4. Click the "Start upload" button to begin the upload process.

Step 4: Configure the S3 bucket to host a static website

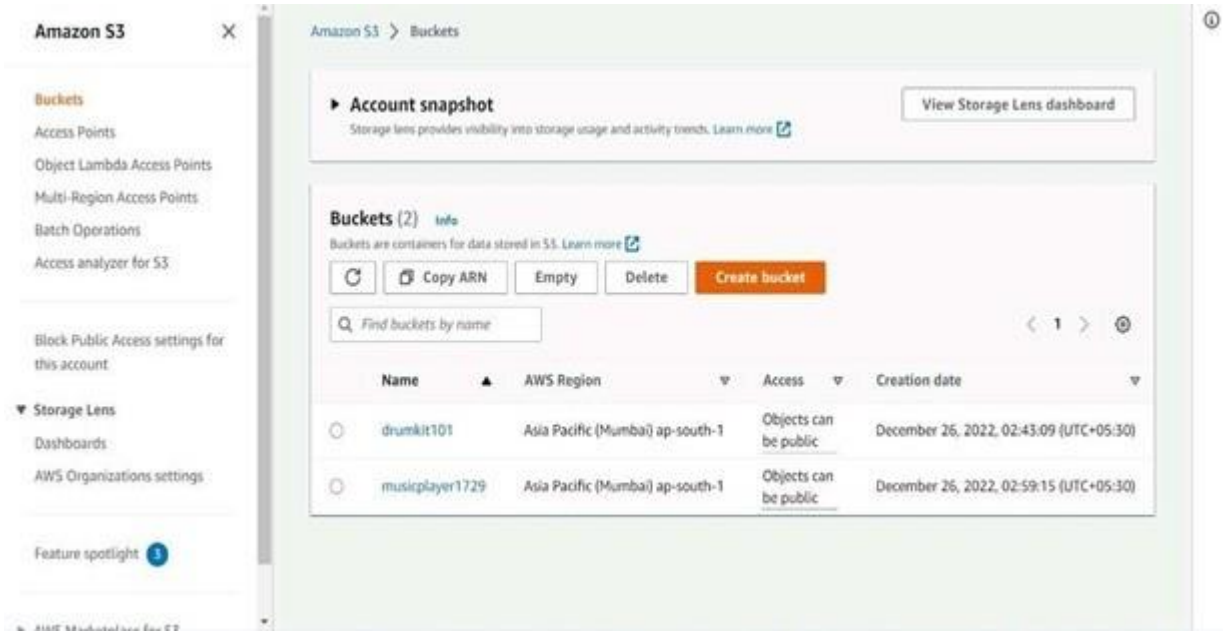
1. In the AWS Management Console, navigate to the S3 service.
2. Click on the name of your S3 bucket.
3. Click the "Properties" tab and then click the "Static website hosting" option.
4. Select the "Use this bucket to host a website" option.
5. Enter the name of the HTML file that will be used as the index document in the "Index document" field.
6. Click the "Save".

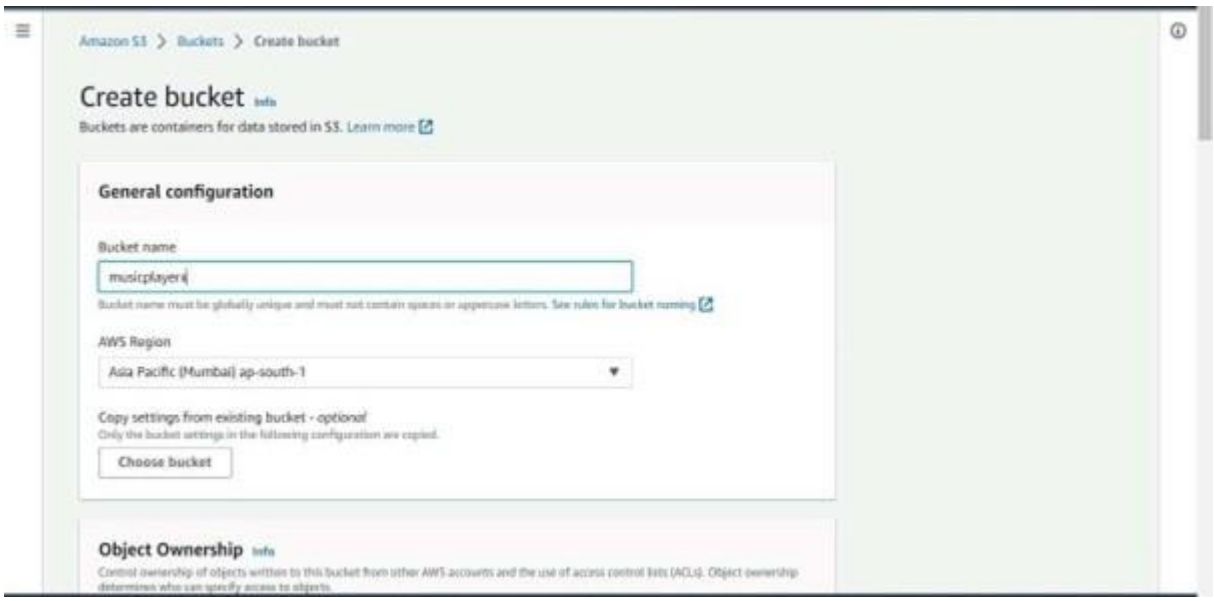
After clicking the "Save" button in the process of configuring the S3 bucket to host a static website, the changes you made will be saved and the S3 bucket will be configured to host a static website.

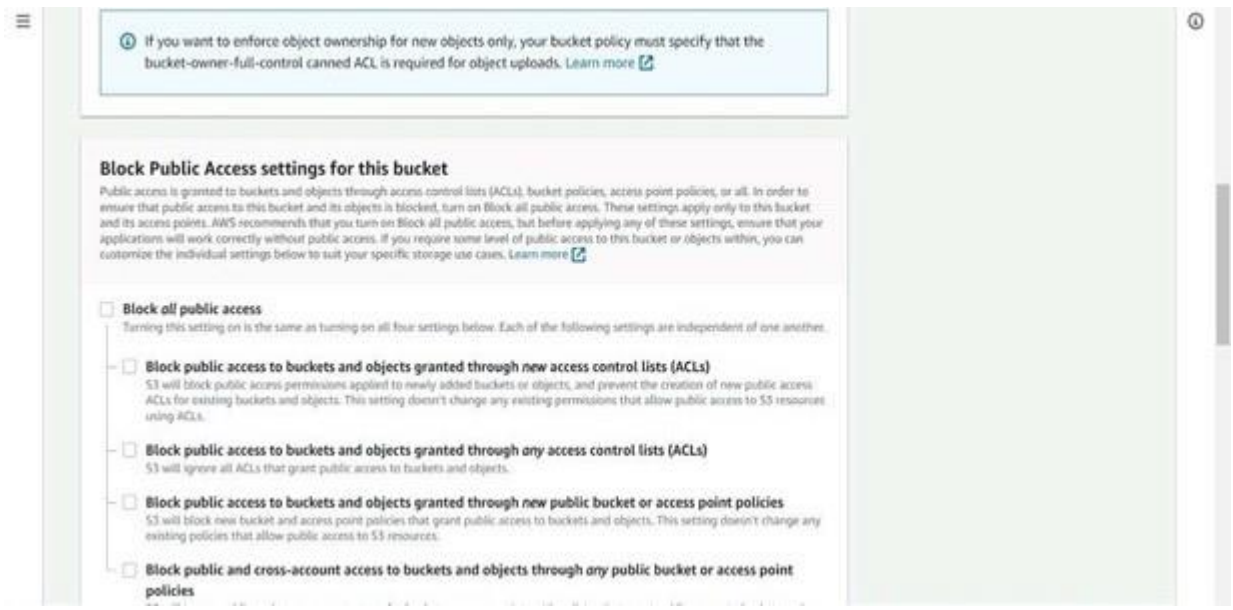
Once the S3 bucket is configured to host a static website, you can access the website by visiting the website endpoint URL provided by S3. The website endpoint URL will be in the format http://<bucket-name>.s3-website.<region>.amazonaws.com, where <bucket-name> is the nameof your S3 bucket and <region> is the region where your bucket is located.

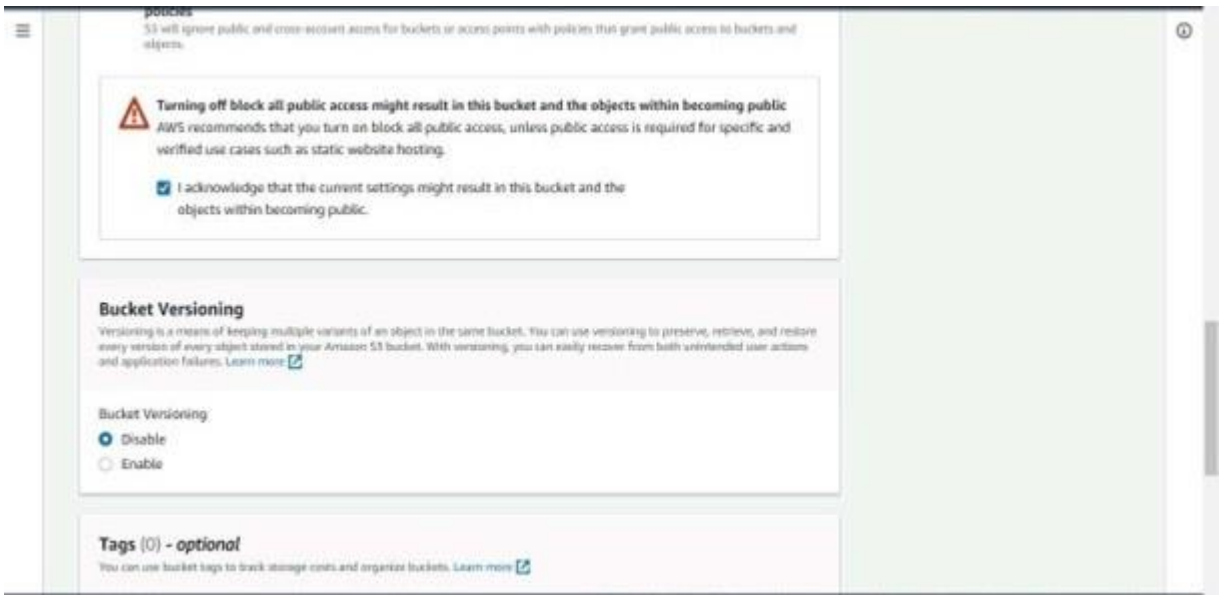
For example, if your bucket name is "my-website" and the region is "us-east-1", the website endpoint URL would be : http://musicplayer1729.s3-website.ap-south-1.amazonaws.com/

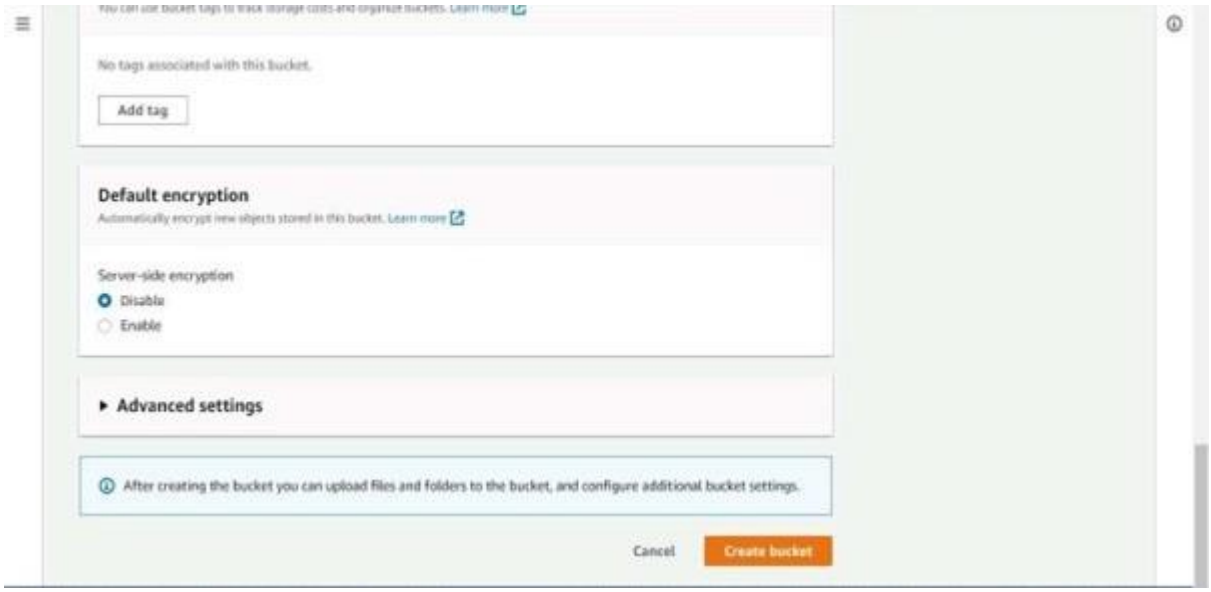
Here are some screenshots that illustrate the process of configuring an S3 bucket to host a static website using the AWS Management Console:

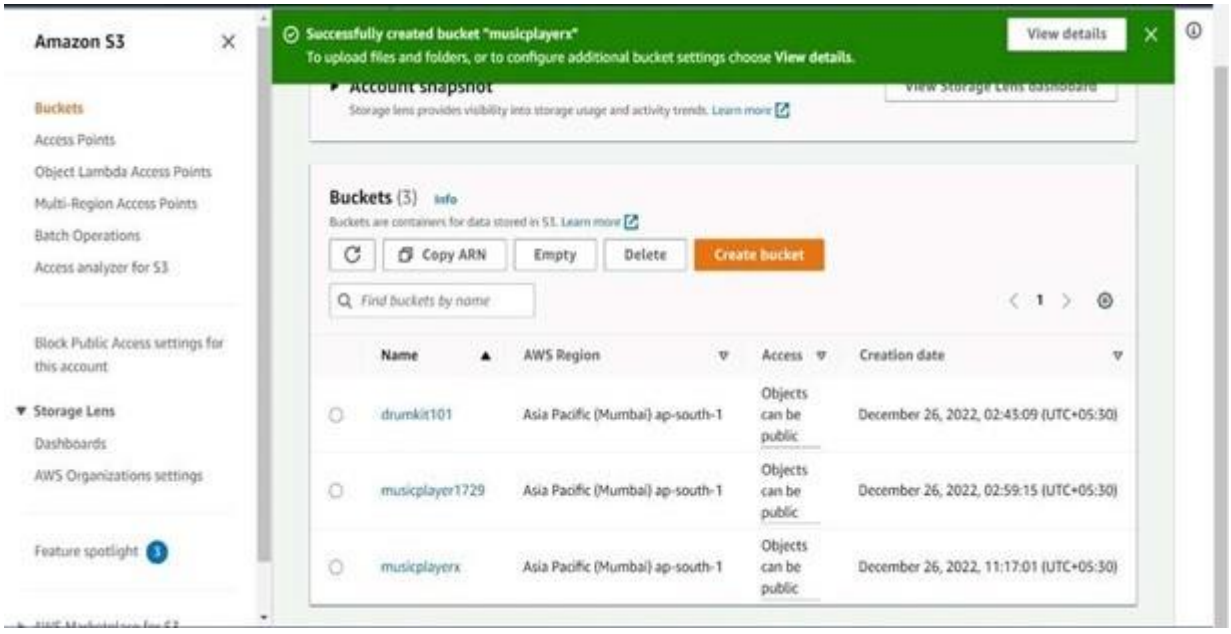

Amazon S3
Buckets
Access Points
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
Access analyzer for S3
Block Public Access settings for this account
Storage Lens
Dashboards
AWS Organizations settings
Feature spotlight
Amazon S3 > Buckets
Account snapshot
Storage lens provides visibility into storage usage and activity trends. Learn more
View Storage Lens dashboard
Buckets (2) 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
drumkit101
Asia Pacific (Mumbai) ap-south-1
Objects can be public
December 26, 2022, 02:43:09 (UTC+05:30)
musicplayer1729
Asia Pacific (Mumbai) ap-south-1
Objects can be public
December 26, 2022, 02:59:15 (UTC+05:30)

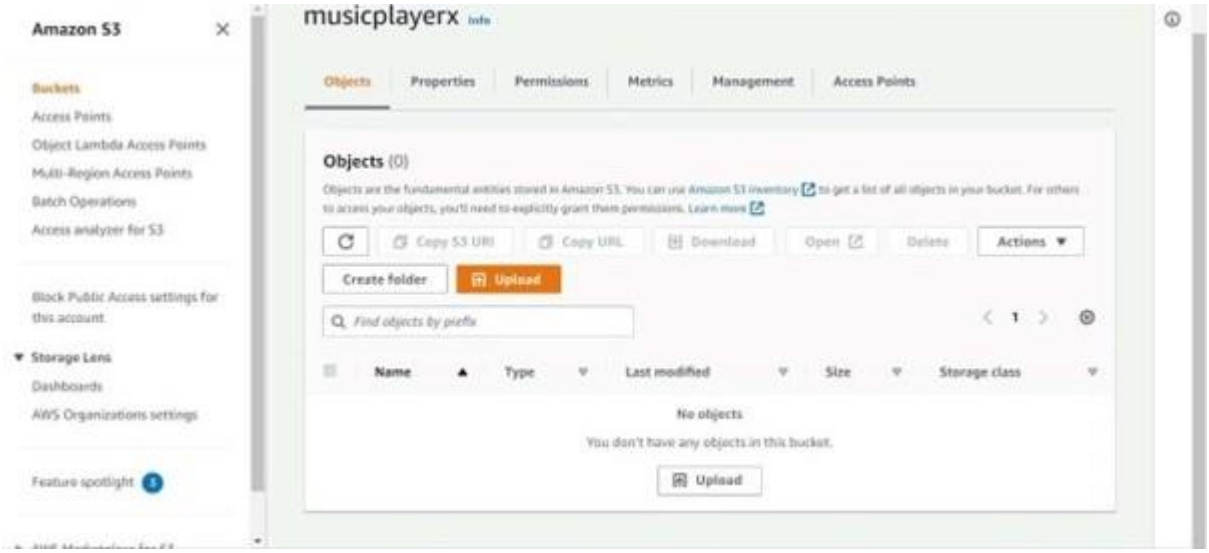

Amazon S3 > Buckets > Create bucket
Create bucket Info
Buckets are containers for data stored in S3. Learn more
General configuration
Bucket name
musicplayer4
Bucket name must be globally unique and must not contain spaces or uppercase letters. See rules for bucket naming
AWS Region
Asia Pacific (Mumbai) ap-south-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.

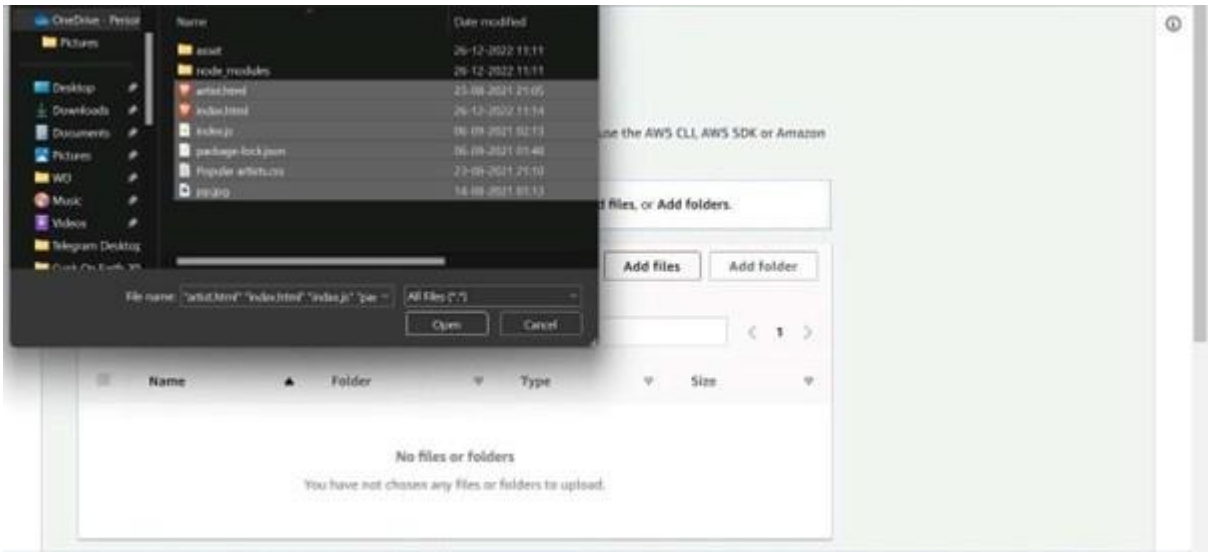

If you want to enforce object ownership for new objects only, your bucket policy must specify that the bucket-owner-full-control canned ACL is required for object uploads. Learn more
Block Public Access settings for this bucket
Public access is granted to buckets and objects through access control lists (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

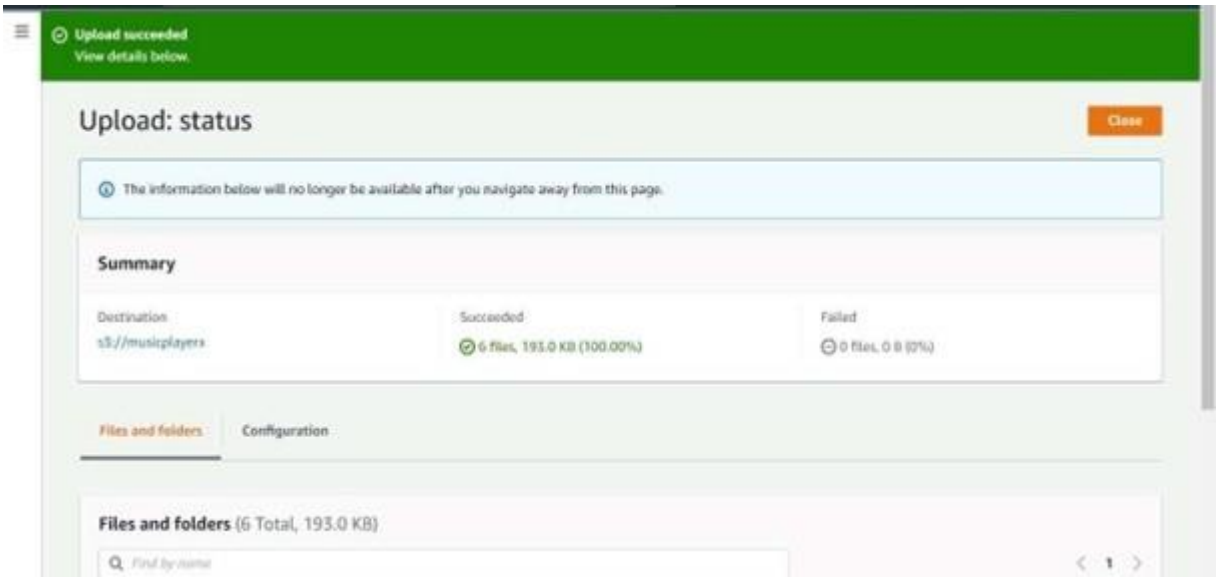

Turning off block all public access might result in this bucket and the objects within becoming public
AWS recommends that you turn on block all public access, unless public access is required for specific and verified use cases such as static website hosting.
I acknowledge that the current settings might result in this bucket and the objects within becoming public.
Bucket Versioning
Bucket Versioning
Disable
Enable
Tags (0) - optional
You can use bucket tags to track storage costs and organize buckets. Learn more

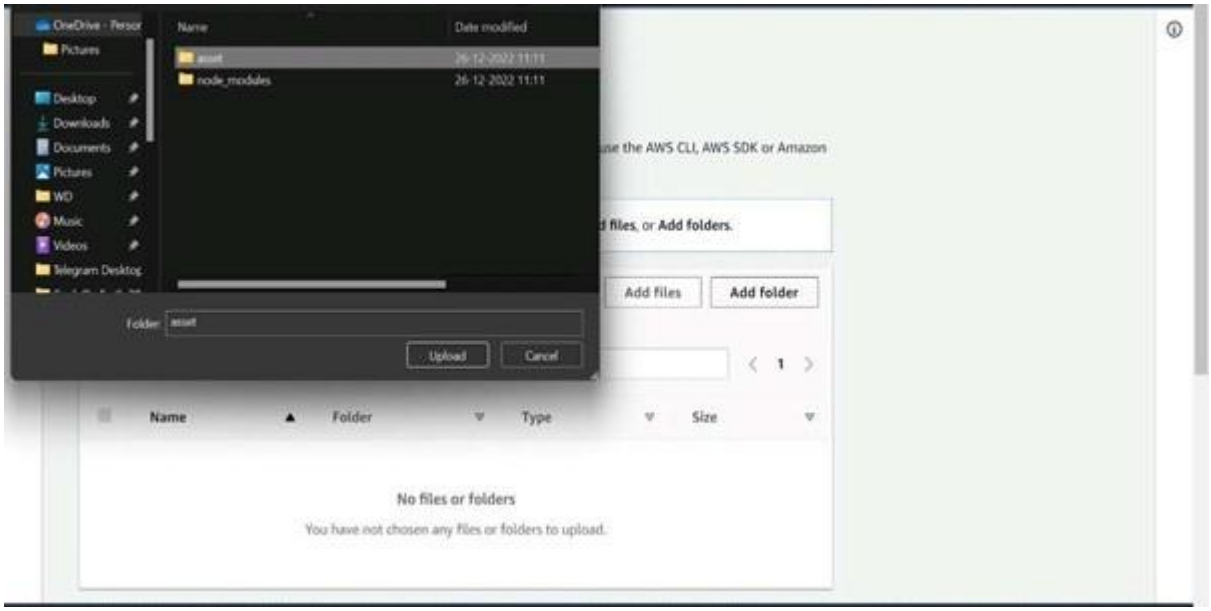

No tags associated with this bucket.
Add tag
Default encryption
Automatically encrypt new objects stored in this bucket. Learn more
Server-side encryption
Disable
Enable
Advanced settings
After creating the bucket you can upload files and folders to the bucket, and configure additional bucket settings.
Cancel
Create bucket

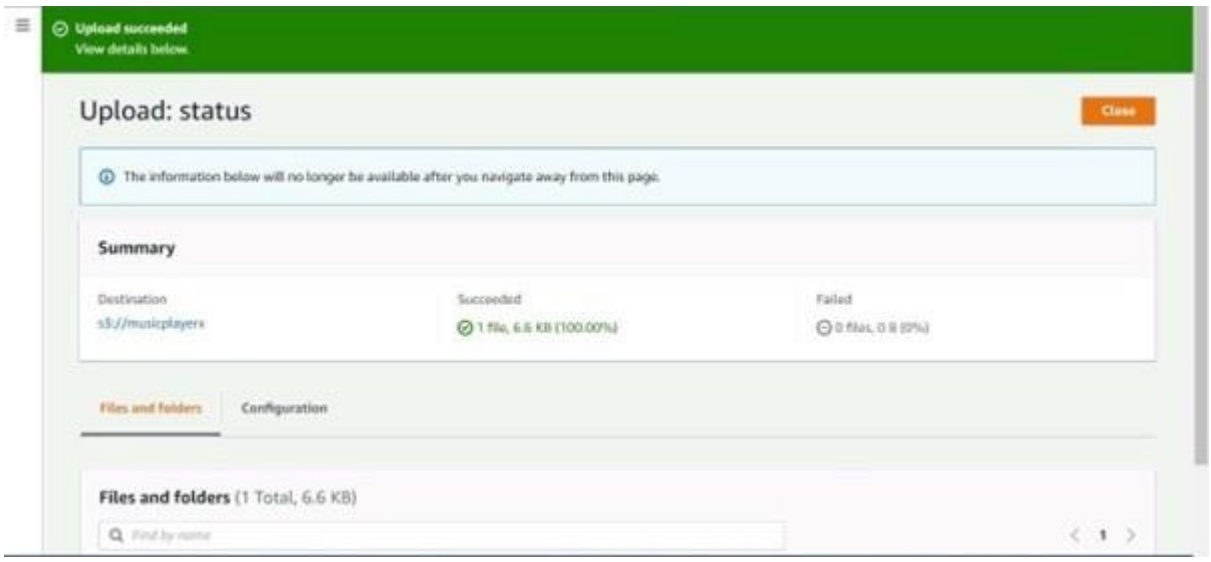

Amazon S3
Buckets
Access Points
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
Access analyzer for S3
Block Public Access settings for this account
Storage Lens
Dashboards
AWS Organizations settings
Feature spotlight
Successfully created bucket "musicplayerx"
To upload files and folders, or to configure additional bucket settings choose View details.
View details
Account snapshot
Storage lens provides visibility into storage usage and activity trends. Learn more
Buckets (3) 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
drumkit101
Asia Pacific (Mumbai) ap-south-1
Objects can be public
December 26, 2022, 02:43:09 (UTC+05:30)
musicplayer1729
Asia Pacific (Mumbai) ap-south-1
Objects can be public
December 26, 2022, 02:59:15 (UTC+05:30)
musicplayerx
Asia Pacific (Mumbai) ap-south-1
Objects can be public
December 26, 2022, 11:17:01 (UTC+05:30)

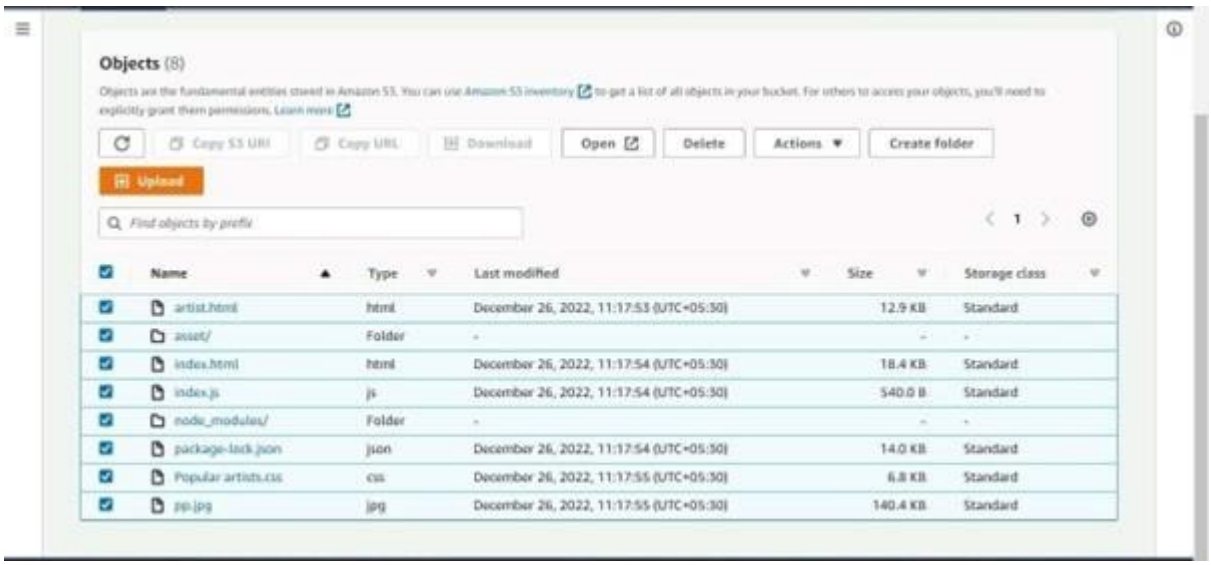

Amazon S3
Buckets
Access Points
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
Access analyzer for S3
Block Public Access settings for this account
Storage Lens
Dashboards
AWS Organizations settings
Feature spotlight
musicplayerx Info
Objects
Properties
Permissions
Metrics
Management
Access Points
Objects (0)
Copy S3 URI
Copy URL
Download
Open
Delete
Actions
Create folder
Upload
Find objects by prefix
Name
Type
Last modified
Size
Storage class
No objects
You don't have any objects in this bucket.
Upload

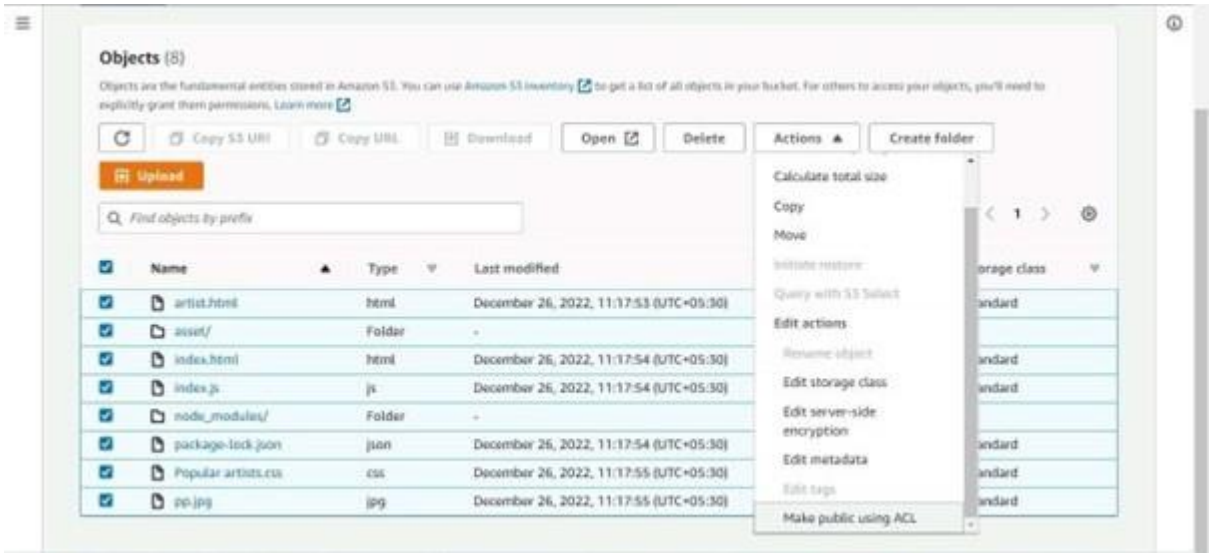

Add files
Add folder
Name
Folder
Type
Size
No files or folders
You have not chosen any files or folders to upload.

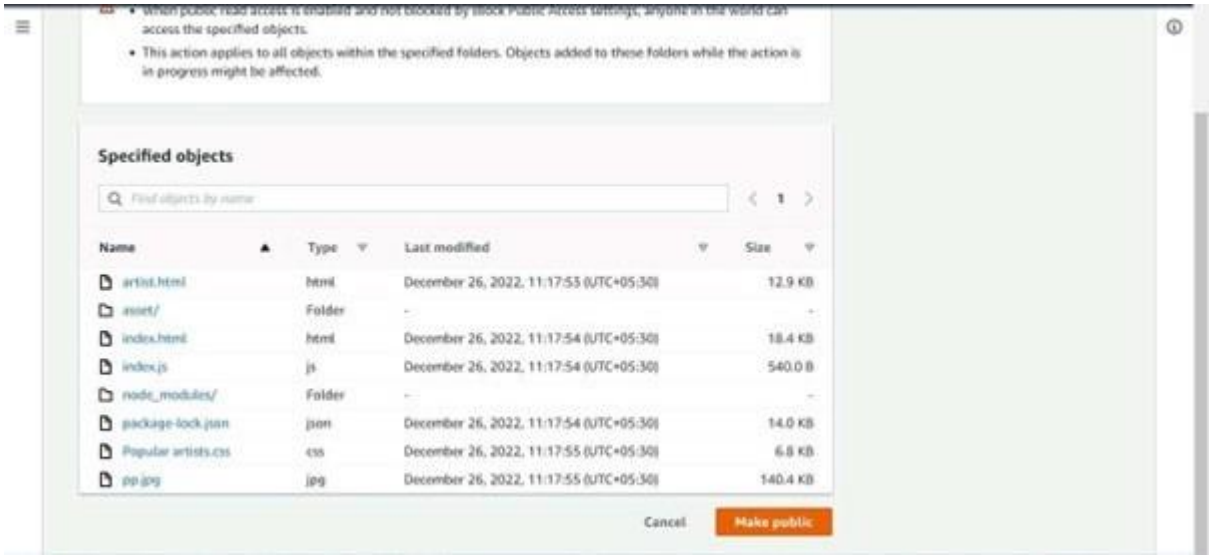

Upload succeeded
View details below.
Upload: status
Close
The information below will no longer be available after you navigate away from this page.
Summary
Destination
Succeeded
Failed
6 files, 193.0 KB (100.00%)
Files and folders
Configuration
Files and folders (6 Total, 193.0 KB)

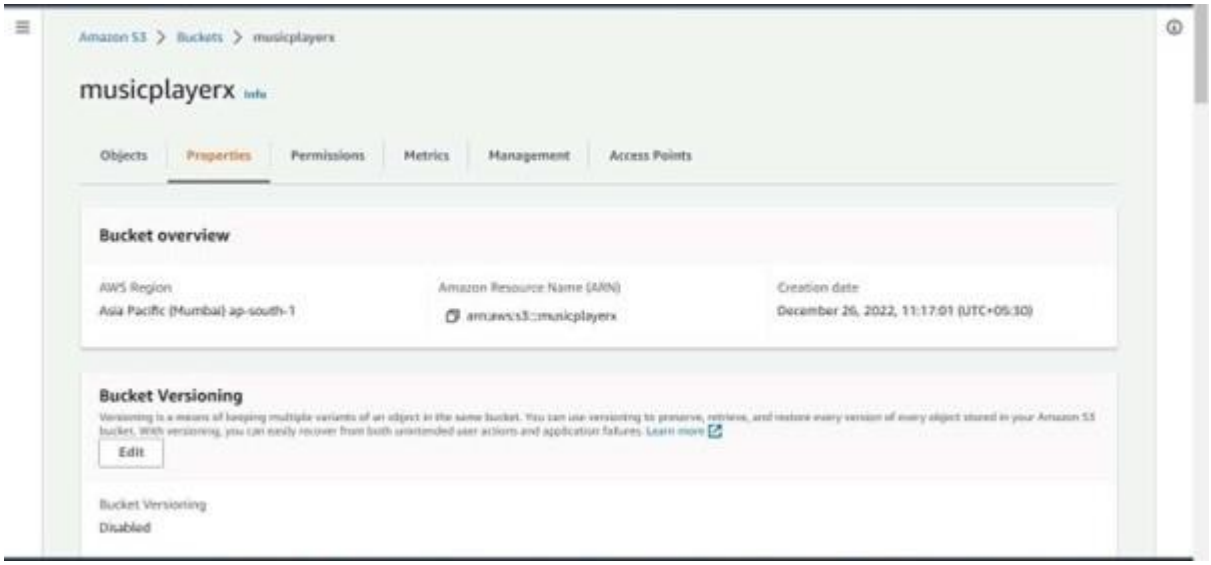

Name
Date modified
asset
26-12-2022 11:11
node_modules
26-12-2022 11:11
Folder: asset
Upload
Cancel
files, or Add folders.
Add files
Add folder
Name
Folder
Type
Size
No files or folders
You have not chosen any files or folders to upload.

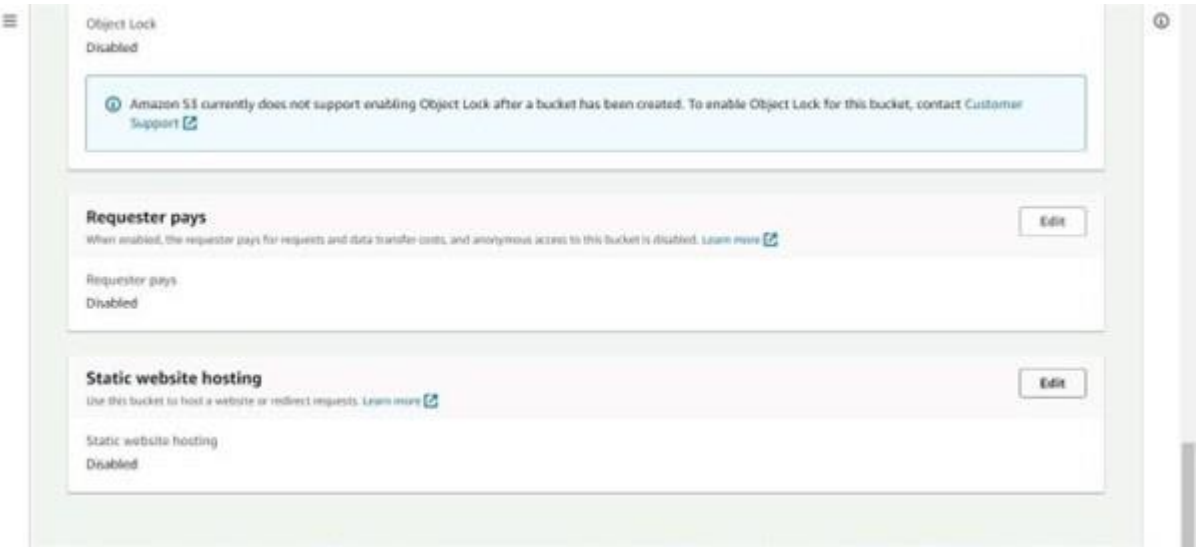

Upload succeeded
View details below.
Upload: status
Close
The information below will no longer be available after you navigate away from this page.
Summary
Destination
s3://musicplayerx
Succeeded
1 file, 6.6 KB (100.00%)
Failed
0 files, 0 B (0%)
Files and folders
Configuration
Files and folders (1 Total, 6.6 KB)

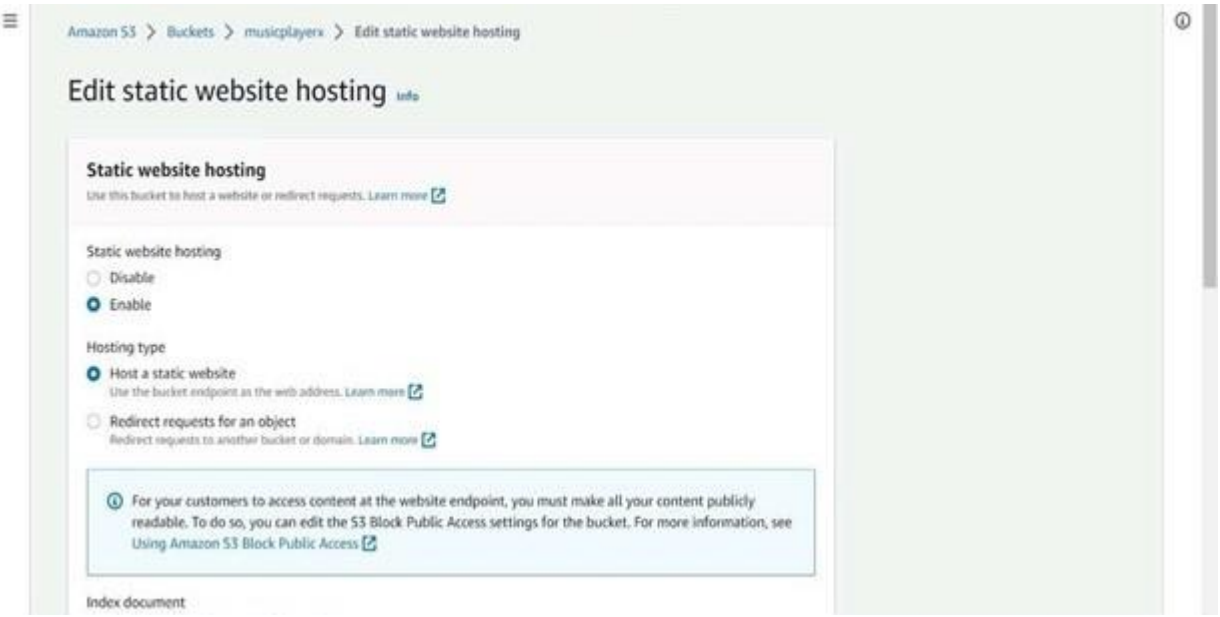

Objects (8)
Copy S3 URI
Copy URL
Download
Open
Delete
Actions
Create folder
Upload
Find objects by prefix
Name
Type
Last modified
Size
Storage class
artist.html
html
December 26, 2022, 11:17:53 (UTC+05:30)
12.9 KB
Standard
asset/
Folder
index.html
html
December 26, 2022, 11:17:54 (UTC+05:30)
18.4 KB
Standard
index.js
js
December 26, 2022, 11:17:54 (UTC+05:30)
540.0 B
Standard
node_modules/
Folder
package-lock.json
json
December 26, 2022, 11:17:54 (UTC+05:30)
14.0 KB
Standard
Popular artists.css
css
December 26, 2022, 11:17:55 (UTC+05:30)
6.8 KB
Standard
pp.jpg
jpg
December 26, 2022, 11:17:55 (UTC+05:30)
140.4 KB
Standard

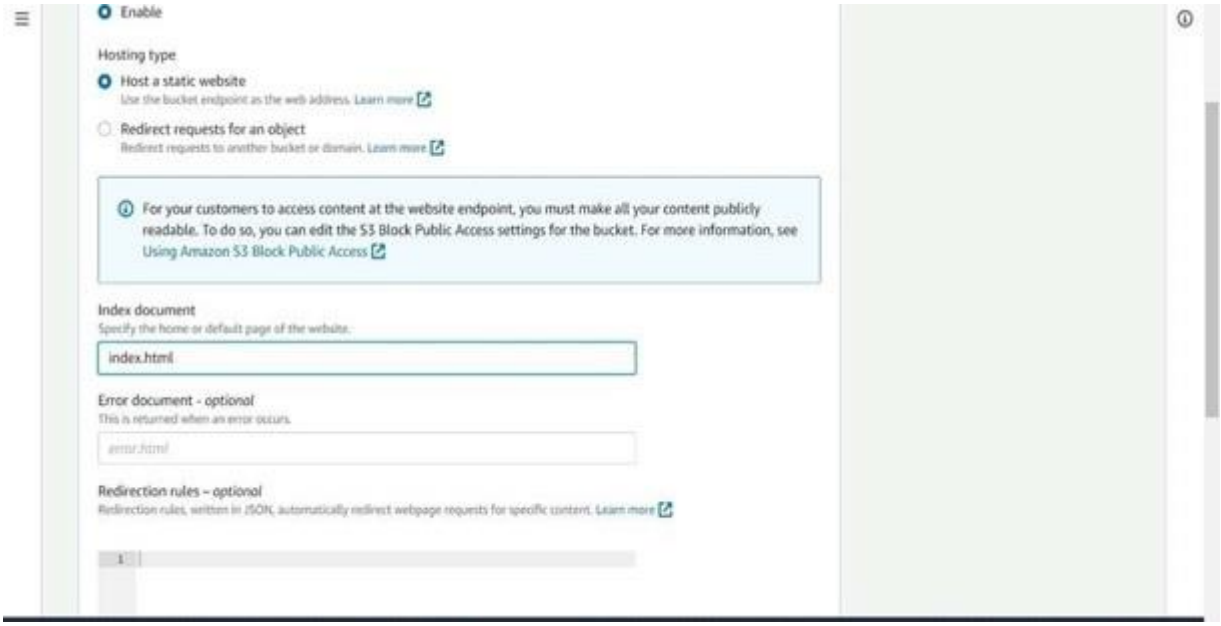

Objects (8)
Copy S3 URI
Copy URL
Download
Open
Delete
Actions
Create folder
Upload
Find objects by prefix
Name
Type
Last modified
artist.html
html
December 26, 2022, 11:17:53 (UTC+05:30)
asset/
Folder
index.html
html
December 26, 2022, 11:17:54 (UTC+05:30)
index.js
js
December 26, 2022, 11:17:54 (UTC+05:30)
node_modules/
Folder
package-lock.json
json
December 26, 2022, 11:17:54 (UTC+05:30)
Popular artists.css
css
December 26, 2022, 11:17:55 (UTC+05:30)
pp.jpg
jpg
December 26, 2022, 11:17:55 (UTC+05:30)
Calculate total size
Copy
Move
Edit actions
Edit storage class
Edit server-side encryption
Edit metadata
Make public using ACL

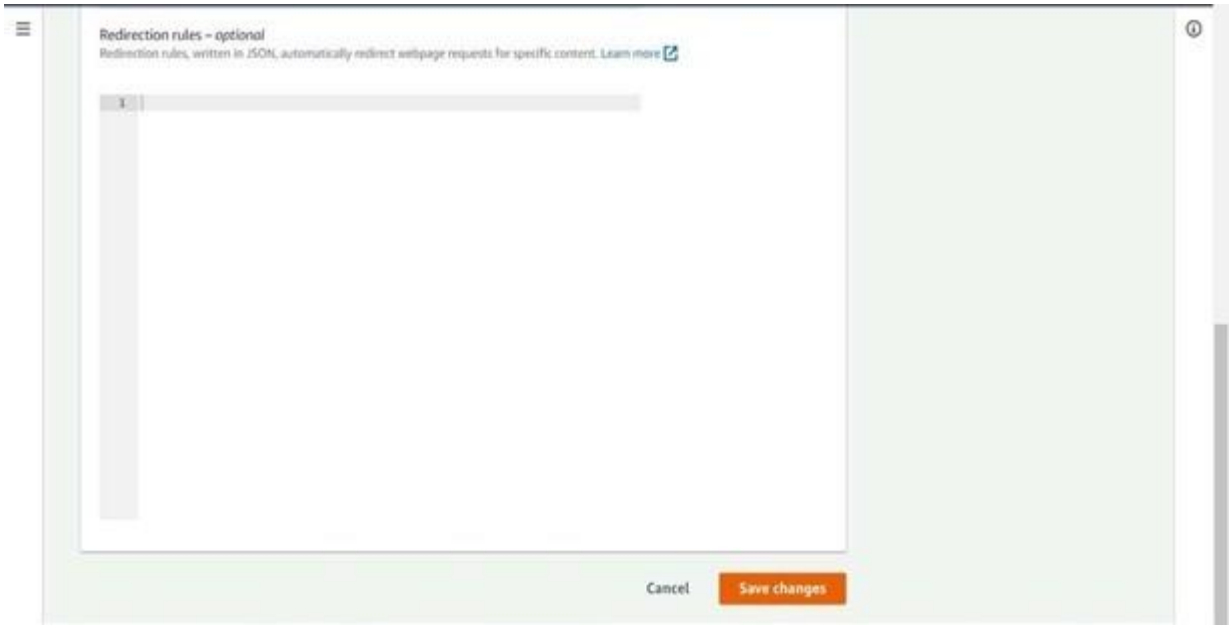

access the specified objects.
This action applies to all objects within the specified folders. Objects added to these folders while the action is in progress might be affected.
Specified objects
Find objects by name
Name
Type
Last modified
Size
artist.html
html
December 26, 2022, 11:17:53 (UTC+05:30)
12.9 KB
asset/
Folder
index.html
html
December 26, 2022, 11:17:54 (UTC+05:30)
18.4 KB
index.js
js
December 26, 2022, 11:17:54 (UTC+05:30)
540.0 B
node_modules/
Folder
package-lock.json
json
December 26, 2022, 11:17:54 (UTC+05:30)
14.0 KB
Popular artists.css
css
December 26, 2022, 11:17:55 (UTC+05:30)
6.8 KB
pp.jpg
jpg
December 26, 2022, 11:17:55 (UTC+05:30)
140.4 KB
Cancel
Make public

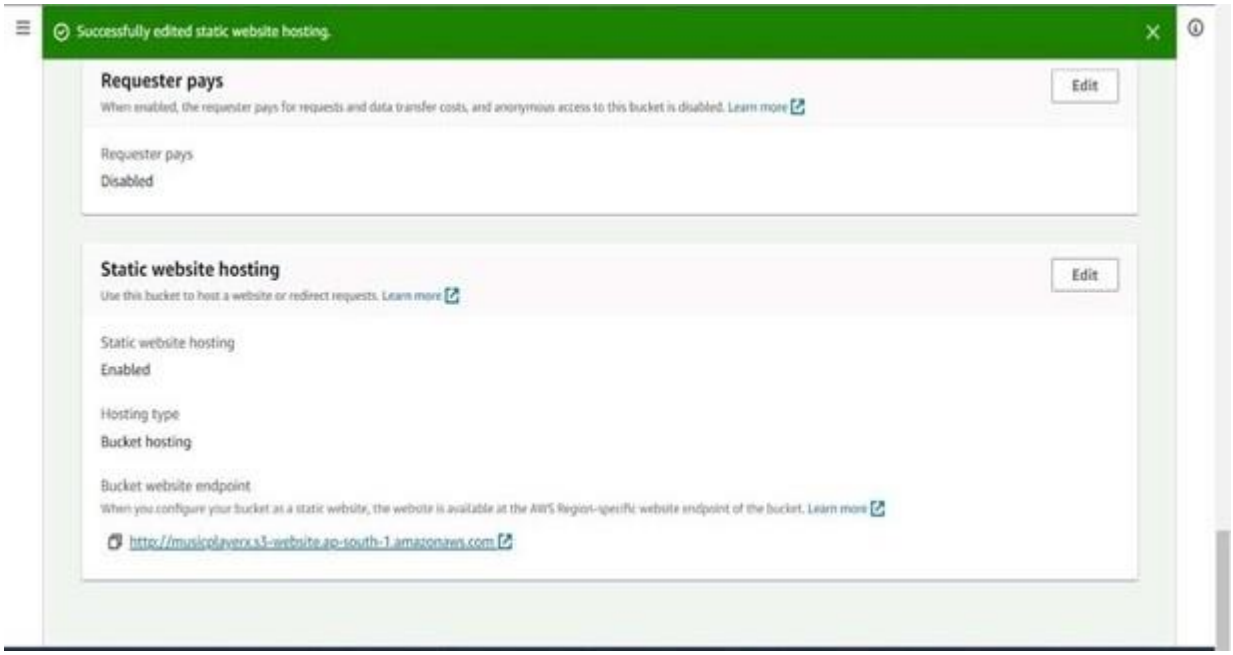

Amazon S3 > Buckets > musicplayerx
musicplayerx Info
Objects
Properties
Permissions
Metrics
Management
Access Points
Bucket overview
AWS Region
Asia Pacific (Mumbai) ap-south-1
Amazon Resource Name (ARN)
arn:aws:s3:::musicplayerx
Creation date
December 26, 2022, 11:17:01 (UTC+05:30)
Bucket Versioning
Edit
Bucket Versioning
Disabled

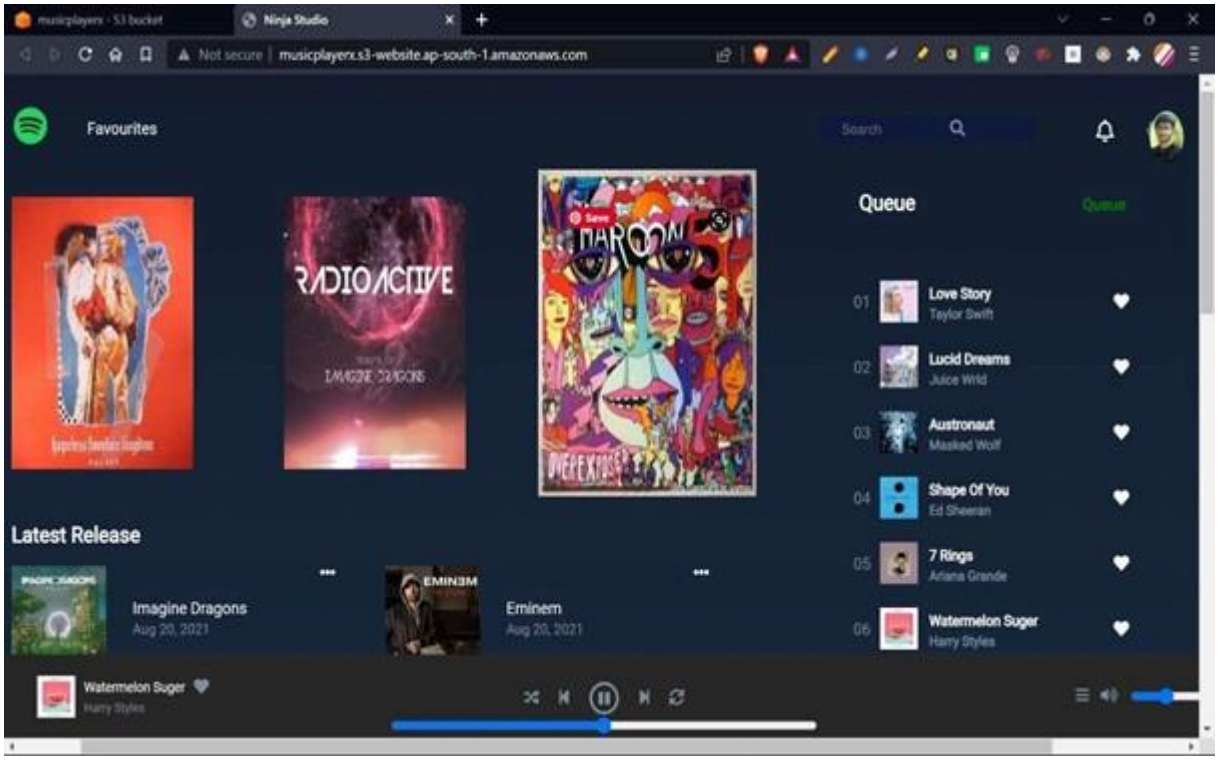

Object Lock
Disabled
Amazon S3 currently does not support enabling Object Lock after a bucket has been created. To enable Object Lock for this bucket, contact Customer Support
Requester pays
When enabled, the requester pays for requests and data transfer costs, and anonymous access to this bucket is disabled. Learn more
Edit
Requester pays
Disabled
Static website hosting
Use this bucket to host a website or redirect requests. Learn more
Edit
Static website hosting
Disabled

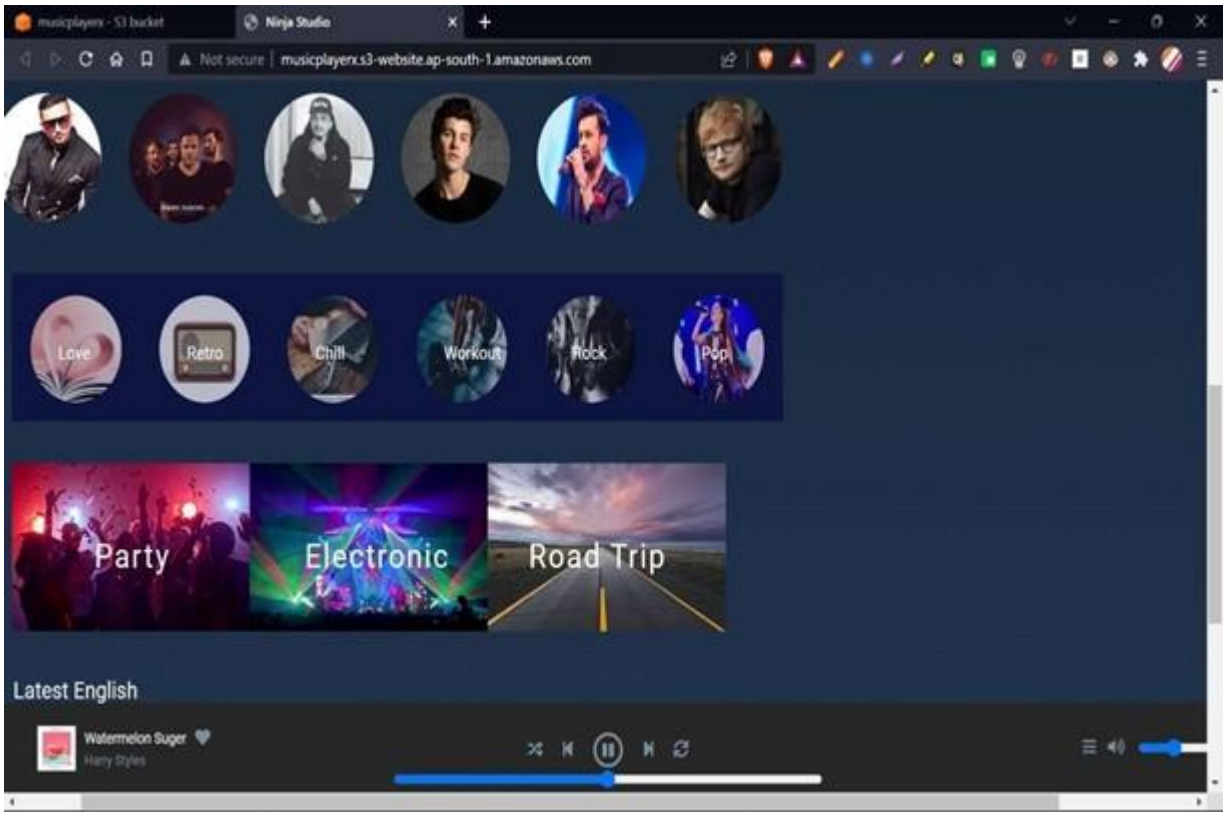

Amazon S3 > Buckets > musicplayerx > Edit static website hosting
Edit static website hosting Info
Static website hosting
Use this bucket to host a website or redirect requests. Learn more
Static website hosting
Disable
Enable
Hosting type
Host a static website
Use the bucket endpoint as the web address. Learn more
Redirect requests for an object
Redirect requests to another bucket or domain. Learn more
For your customers to access content at the website endpoint, you must make all your content publicly readable. To do so, you can edit the S3 Block Public Access settings for the bucket. For more information, see Using Amazon S3 Block Public Access
Index document


Enable
Hosting type
Host a static website
Use the bucket endpoint as the web address. Learn more
Redirect requests for an object
Redirect requests to another bucket or domain. Learn more
For your customers to access content at the website endpoint, you must make all your content publicly readable. To do so, you can edit the S3 Block Public Access settings for the bucket. For more information, see Using Amazon S3 Block Public Access
Index document
Specify the home or default page of the website.
index.html
Error document - optional
This is returned when an error occurs.
error.html
Redirection rules – optional
Redirection rules, written in JSON, automatically redirect webpage requests for specific content. Learn more
1


Redirection rules – optional
Redirection rules, written in JSON, automatically redirect webpage requests for specific content. Learn more
1
Cancel
Save changes


Successfully edited static website hosting.
Requester pays
When enabled, the requester pays for requests and data transfer costs, and anonymous access to this bucket is disabled. Learn more
Edit
Requester pays
Disabled
Static website hosting
Use this bucket to host a website or redirect requests. Learn more
Edit
Static website hosting
Enabled
Hosting type
Bucket hosting
Bucket website endpoint
When you configure your bucket as a static website, the website is available at the AWS Region-specific website endpoint of the bucket. Learn more
http://musicplayerx.s3-website.ap-south-1.amazonaws.com


musicplayerx - S3 bucket
Ninja Studio
Not secure | musicplayerx.s3-website.ap-south-1.amazonaws.com
Favourites
Search
Queue
Queue
01 Love Story Taylor Swift
02 Lucid Dreams Juice Wrld
03 Austronaut Masked Wolf
04 Shape Of You Ed Sheeran
05 7 Rings Ariana Grande
06 Watermelon Suger Harry Styles
Latest Release
Imagine Dragons
Aug 20, 2021
Eminem
Aug 20, 2021
Watermelon Suger
Harry Styles


musicplayerx - S3 bucket
Ninja Studio
Not secure | musicplayerx.s3-website.ap-south-1.amazonaws.com
Love
Retro
Chill
Workout
Rock
Pop
Party
Electronic
Road Trip
Latest English
Watermelon Suger
Harry Styles