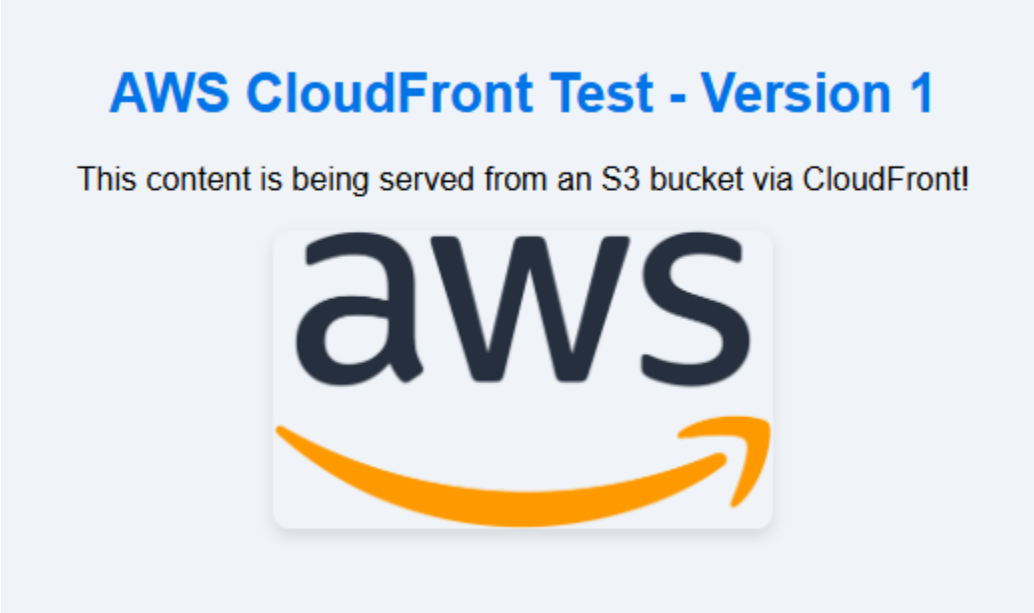
Practical - 7

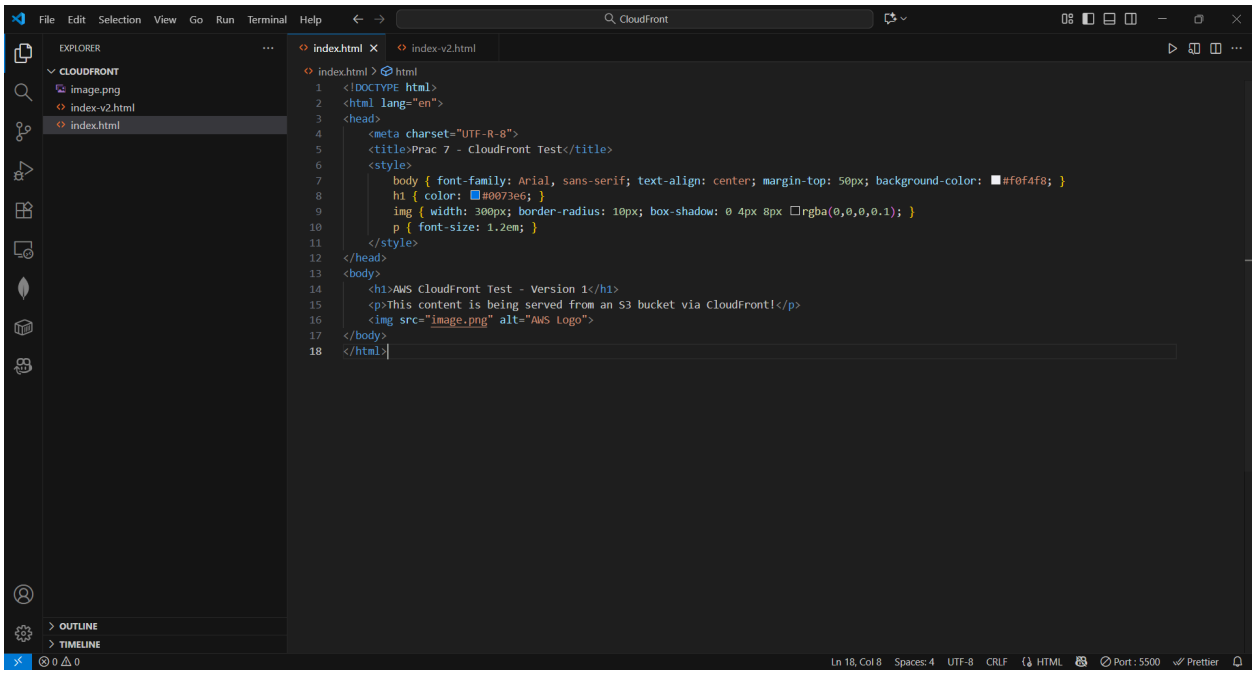
Name: Sakshi Deshmukh
PRN: 202301040191
Roll no. 158

CloudFront

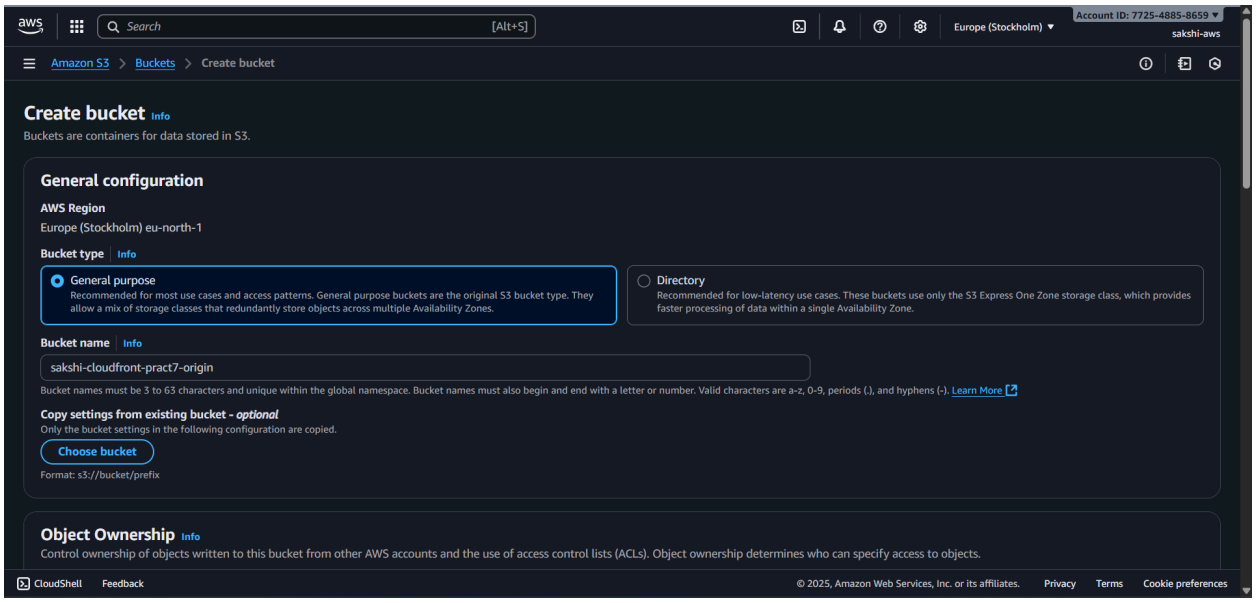
```
CloudFront ls


    Directory: D:\10_misc\CloudFront


Mode                 LastWriteTime         Length Name
----                 -------------         ------ ----
-a----         28-10-2025     19:30          49239 image.png
-a----         28-10-2025     19:31            280 index-v2.html
-a----         28-10-2025     19:30            612 index.html
```

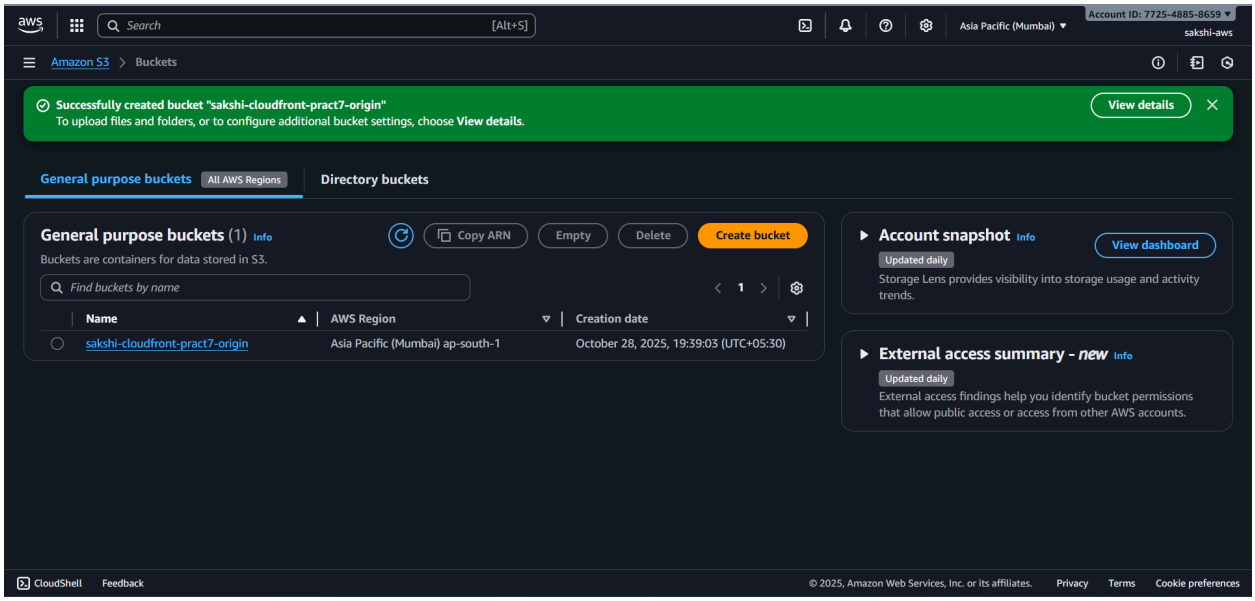
Creating necessary files



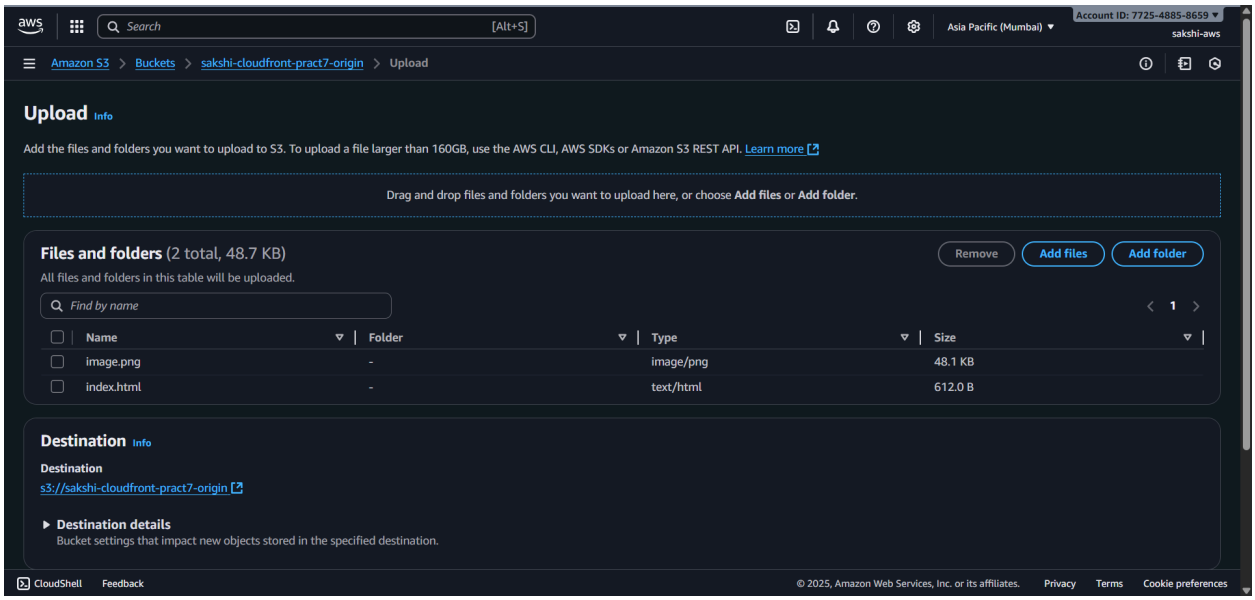


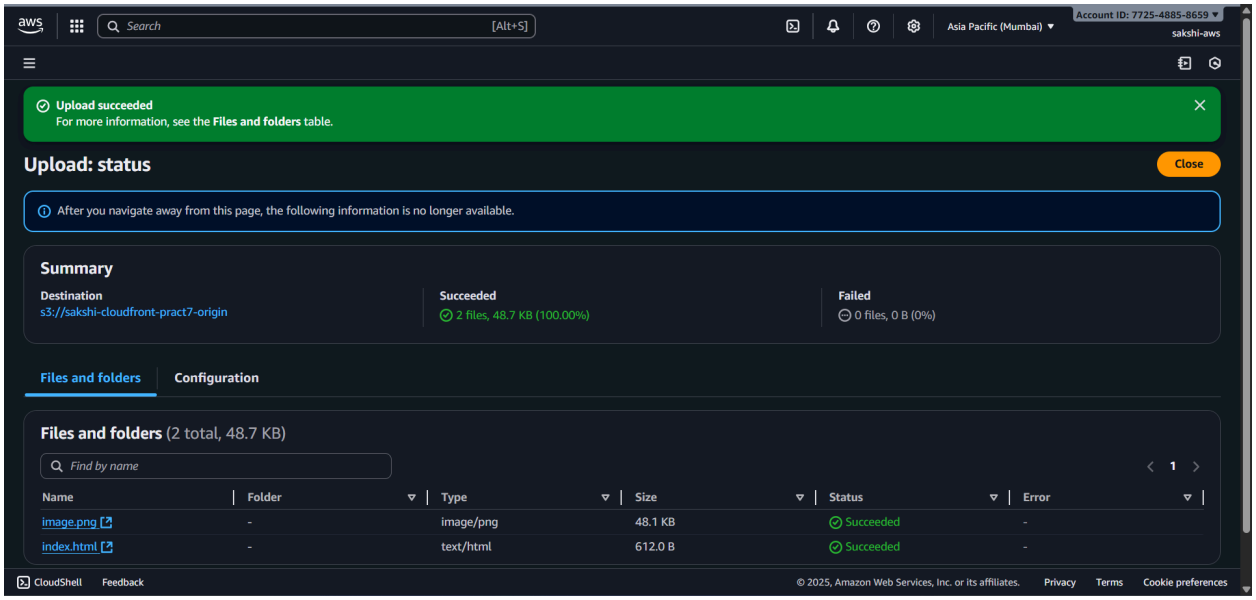
Creating and configuring S3 bucket





Uploading files in bucket




Search [Alt+S]
Asia Pacific (Mumbai)
Account ID: 7725-4885-8659
sakshi-aws
Upload succeeded
For more information, see the Files and folders table.
Upload: status
Close
After you navigate away from this page, the following information is no longer available.
Summary
Destination
s3://sakshi-cloudfront-pract7-origin
Succeeded
2 files, 48.7 KB (100.00%)
Failed
0 files, 0 B (0%)
Files and folders
Configuration
Files and folders (2 total, 48.7 KB)
Find by name
Name
Folder
Type
Size
Status
Error
image.png
-
image/png
48.1 KB
Succeeded
-
index.html
-
text/html
612.0 B
Succeeded
-
CloudShell
Feedback
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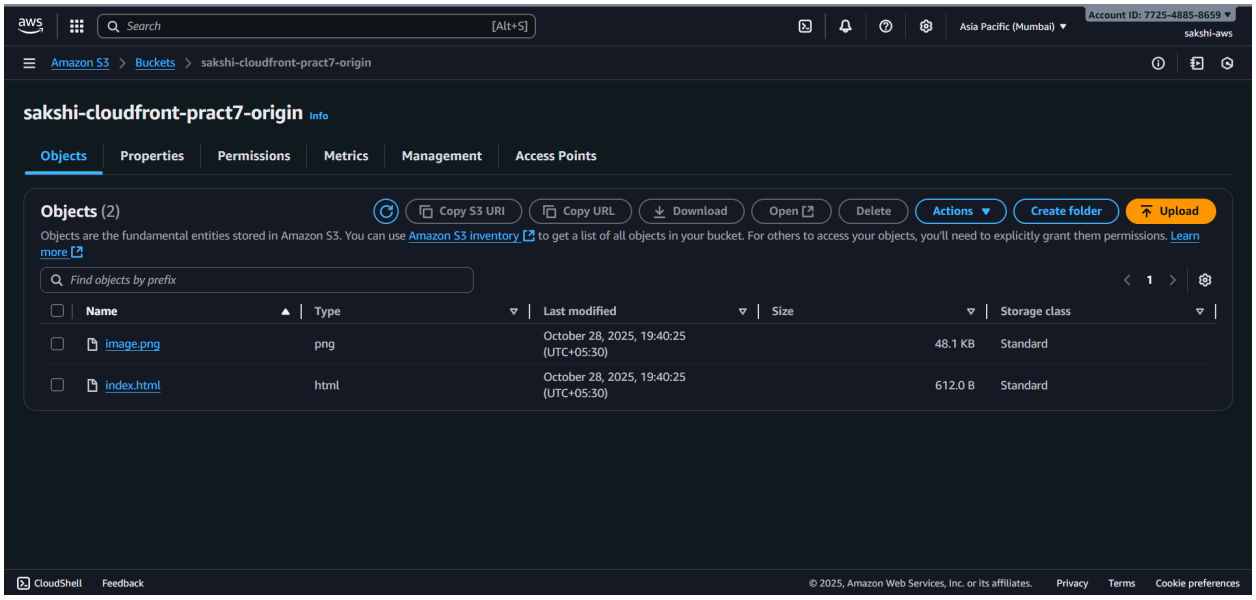
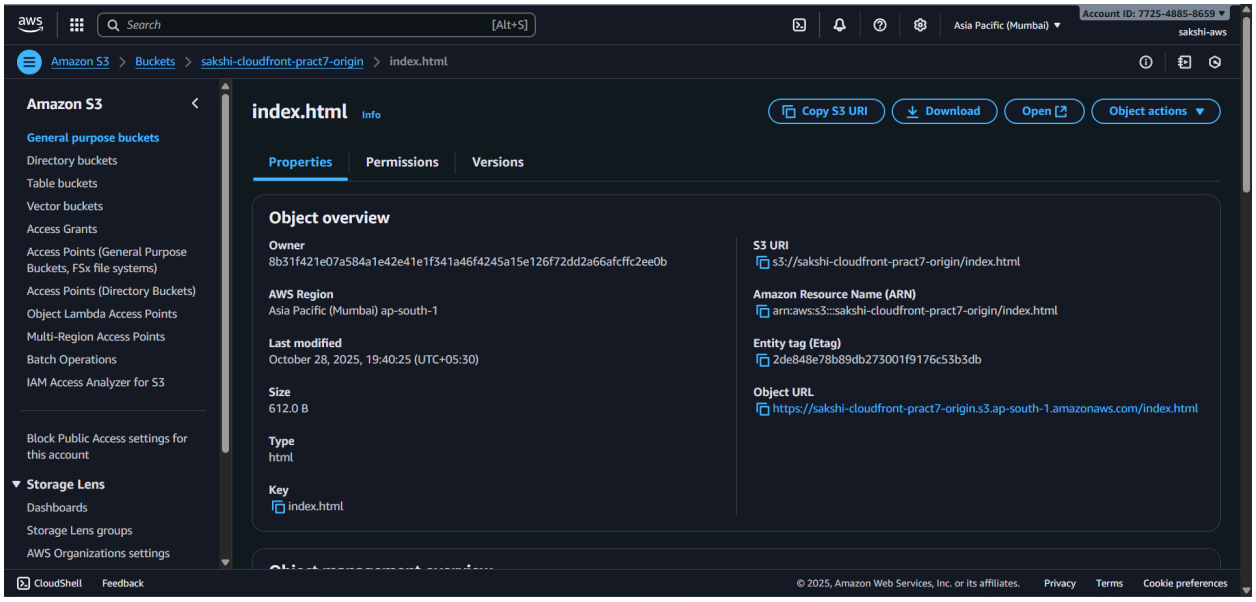
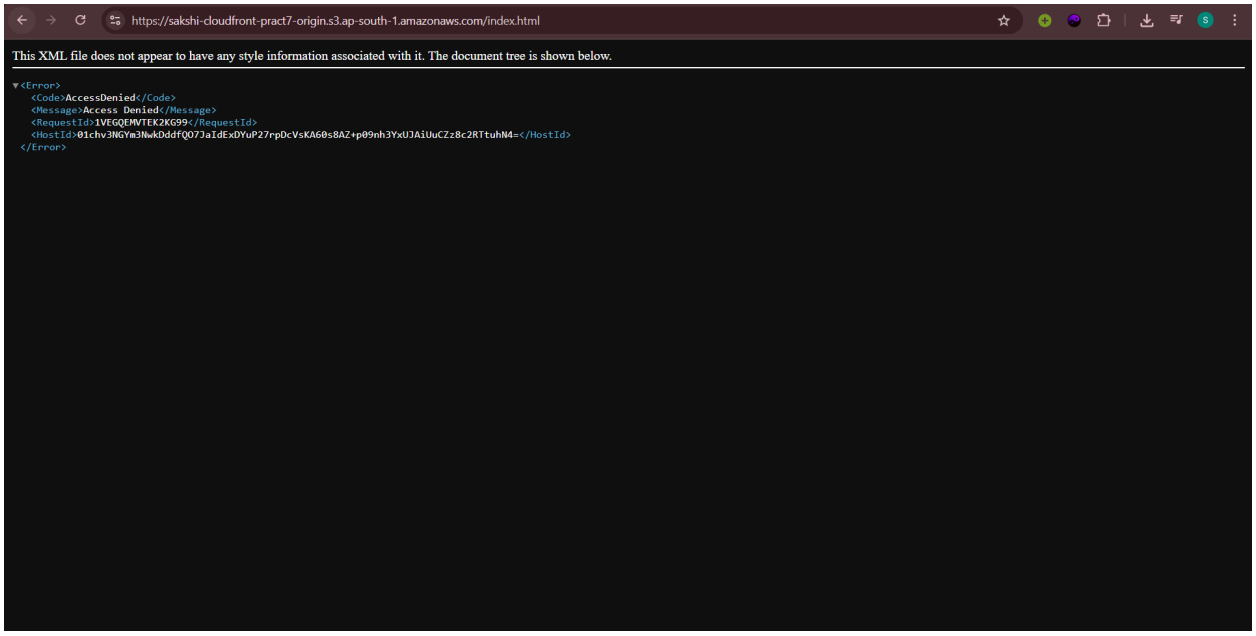
Privacy
Terms
Cookie preferences


Search [Alt+S]
Asia Pacific (Mumbai)
Account ID: 7725-4885-8659
sakshi-aws
Amazon S3
Buckets
sakshi-cloudfront-pract7-origin
sakshi-cloudfront-pract7-origin
Info
Objects
Properties
Permissions
Metrics
Management
Access Points
Objects (2)
Copy S3 URI
Copy URL
Download
Open
Delete
Actions
Create folder
Upload
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
Find objects by prefix
Name
Type
Last modified
Size
Storage class
image.png
png
October 28, 2025, 19:40:25 (UTC+05:30)
48.1 KB
Standard
index.html
html
October 28, 2025, 19:40:25 (UTC+05:30)
612.0 B
Standard
CloudShell
Feedback
© 2025, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

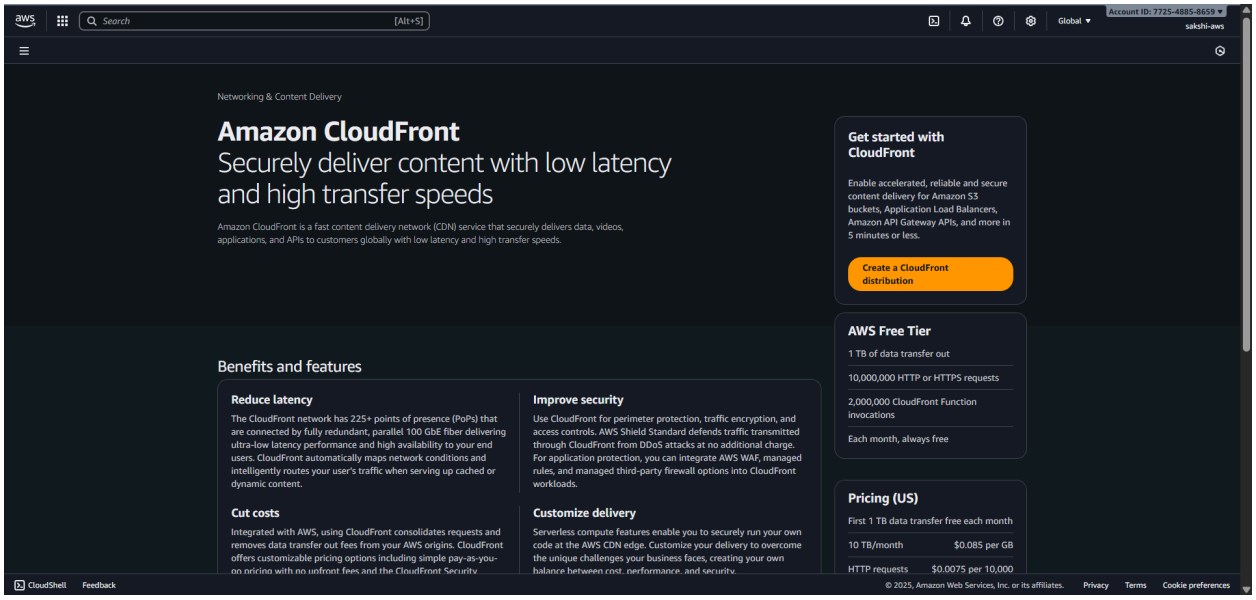
Trying to access website through object url



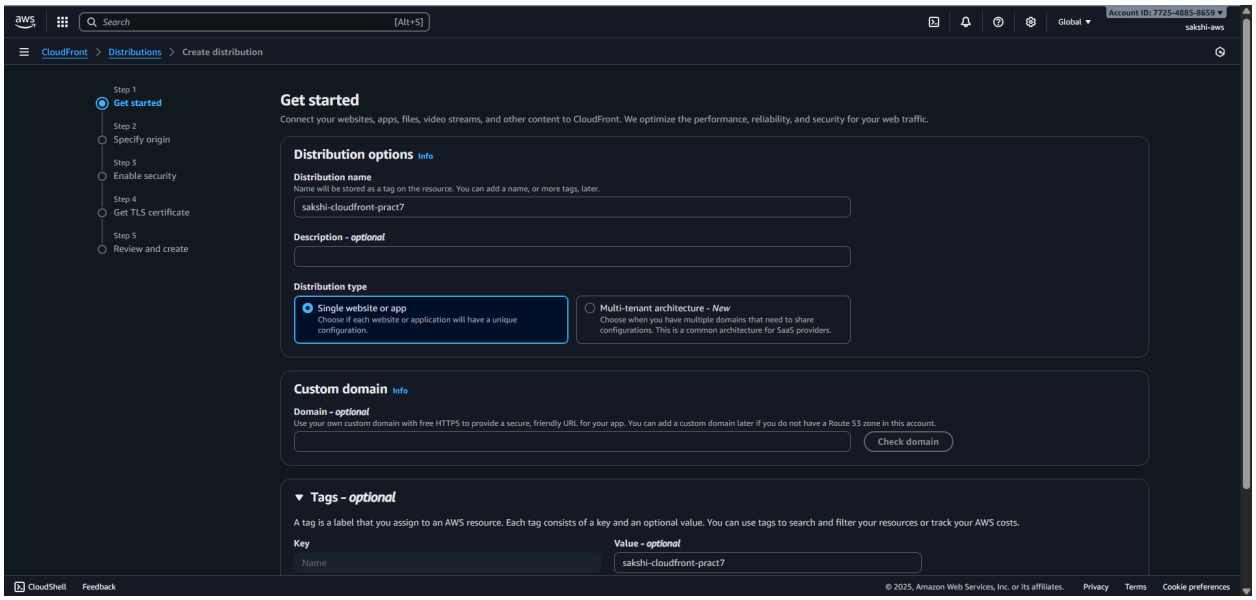
Access denied

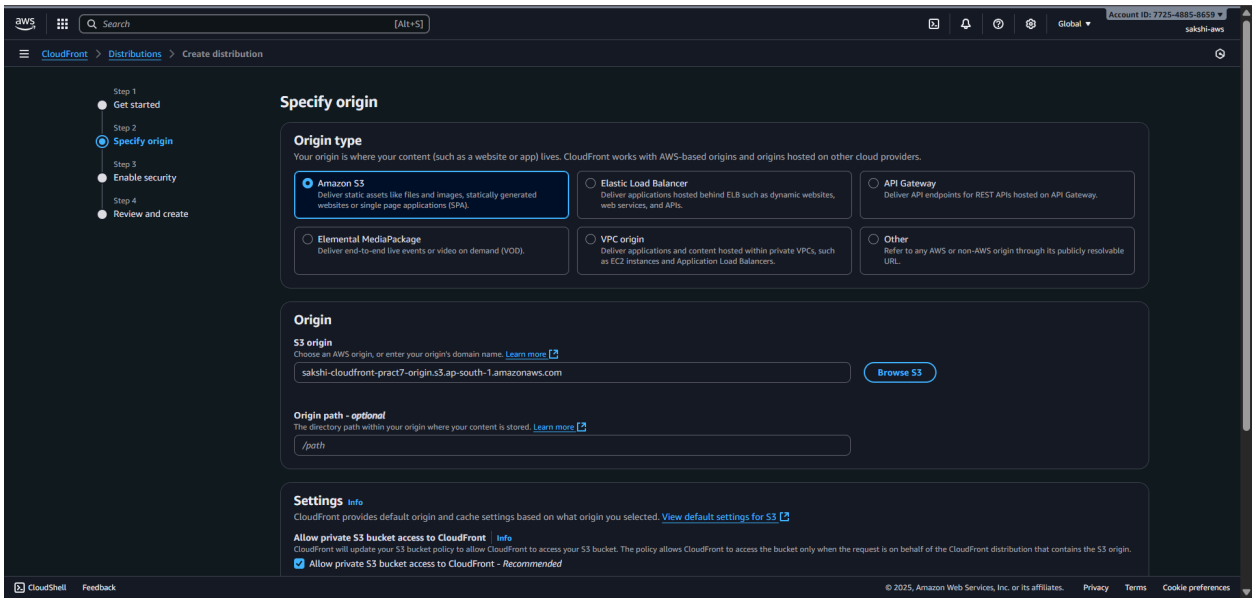


Launching cloudFront

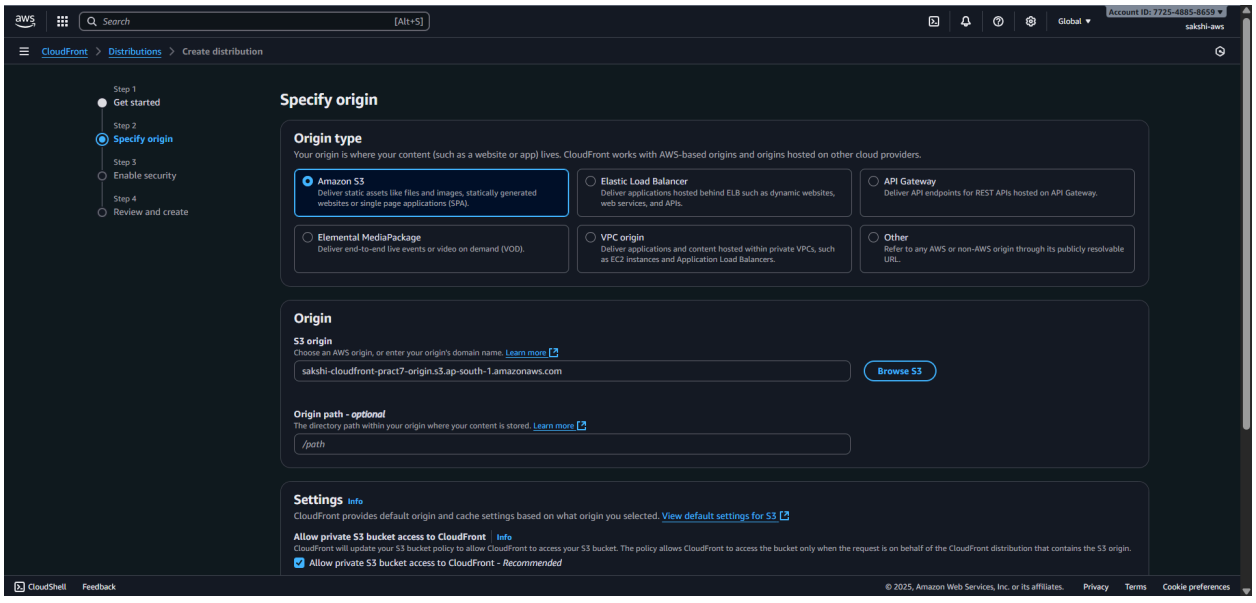


Creating distribution

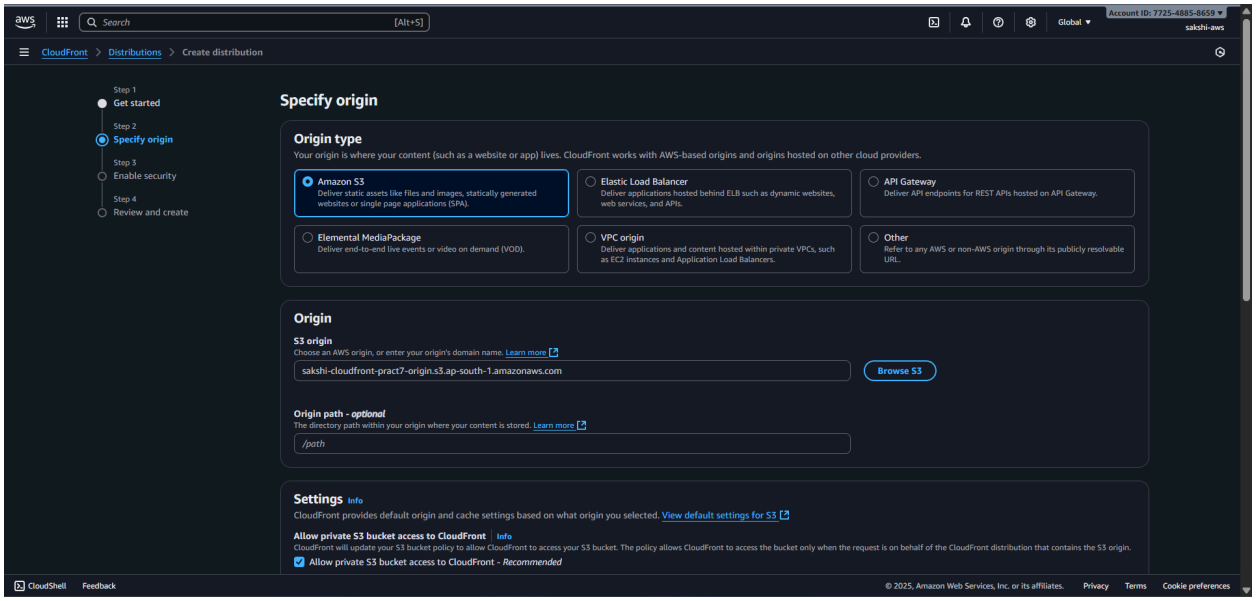


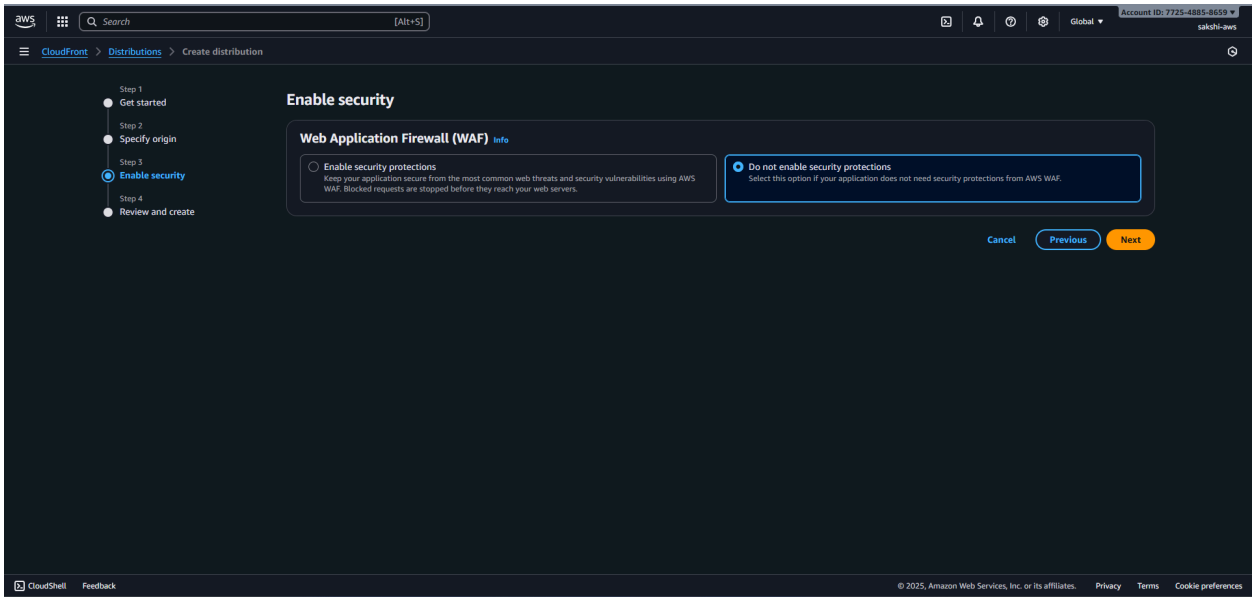


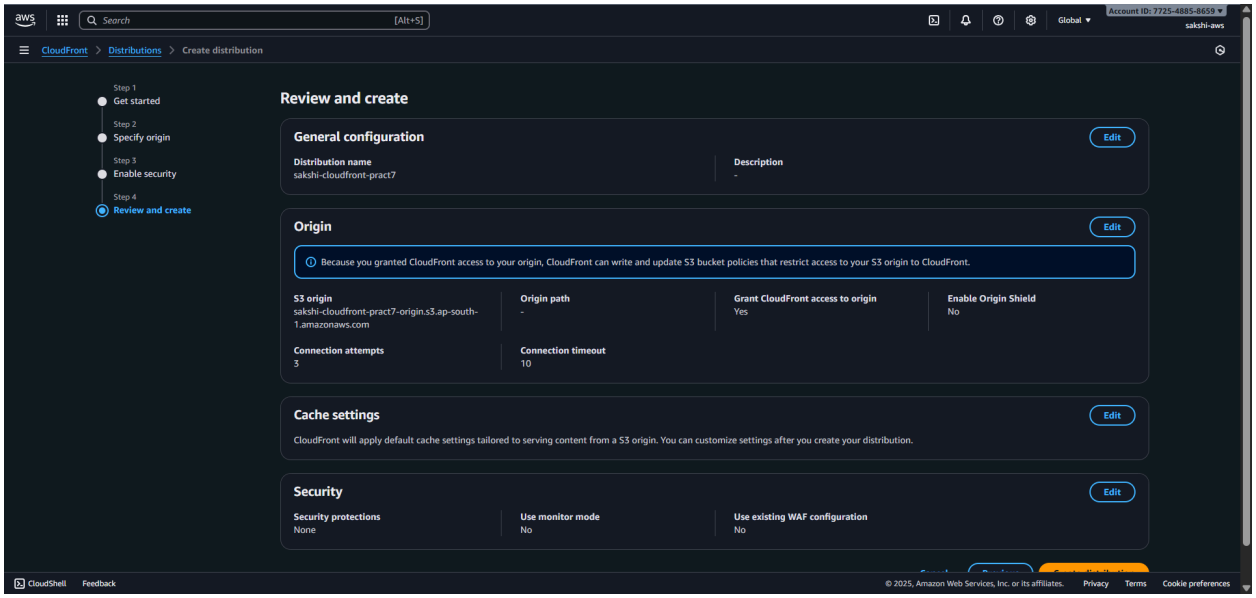
Adding S3 bucket in origin



Selecting bucket from the drop down list






Search
[Alt+S]
Global
Account ID: 7725-4885-8659
sakshi-aws
CloudFront > Distributions > Create distribution
Step 1
Get started
Step 2
Specify origin
Step 3
Enable security
Step 4
Review and create
Review and create
General configuration
Edit
Distribution name
sakshi-cloudfront-pract7
Description
-
Origin
Edit
Because you granted CloudFront access to your origin, CloudFront can write and update S3 bucket policies that restrict access to your S3 origin to CloudFront.
S3 origin
sakshi-cloudfront-pract7-origin.s3.ap-south-1.amazonaws.com
Origin path
-
Grant CloudFront access to origin
Yes
Enable Origin Shield
No
Connection attempts
3
Connection timeout
10
Cache settings
Edit
CloudFront will apply default cache settings tailored to serving content from a S3 origin. You can customize settings after you create your distribution.
Security
Edit
Security protections
None
Use monitor mode
No
Use existing WAF configuration
No
CloudShell
Feedback
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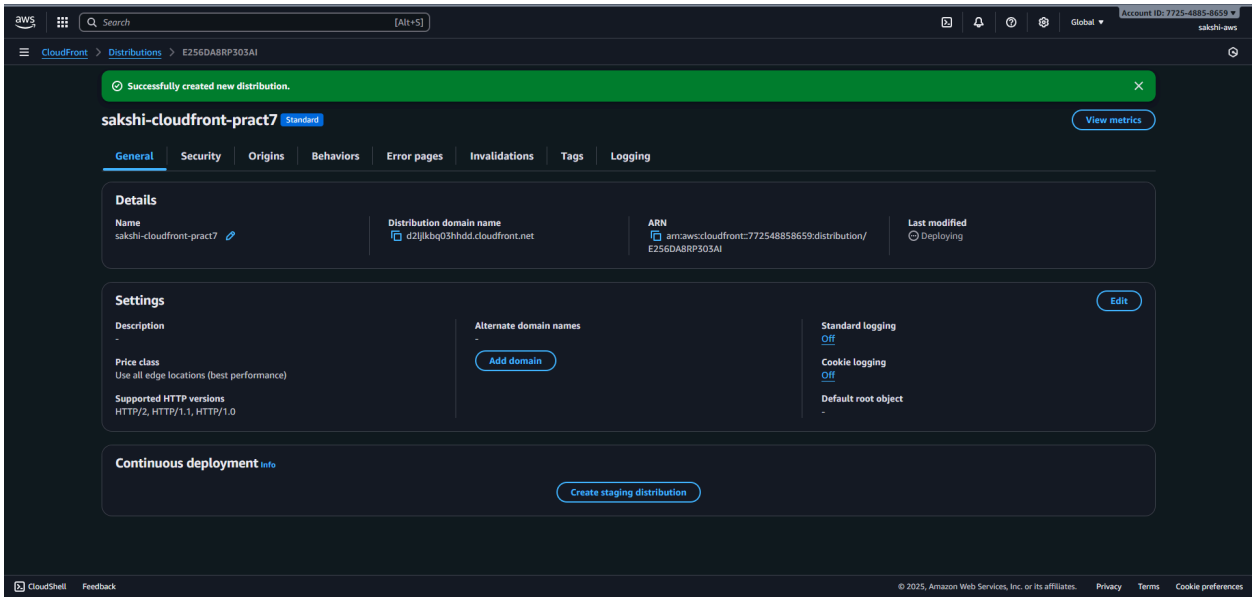
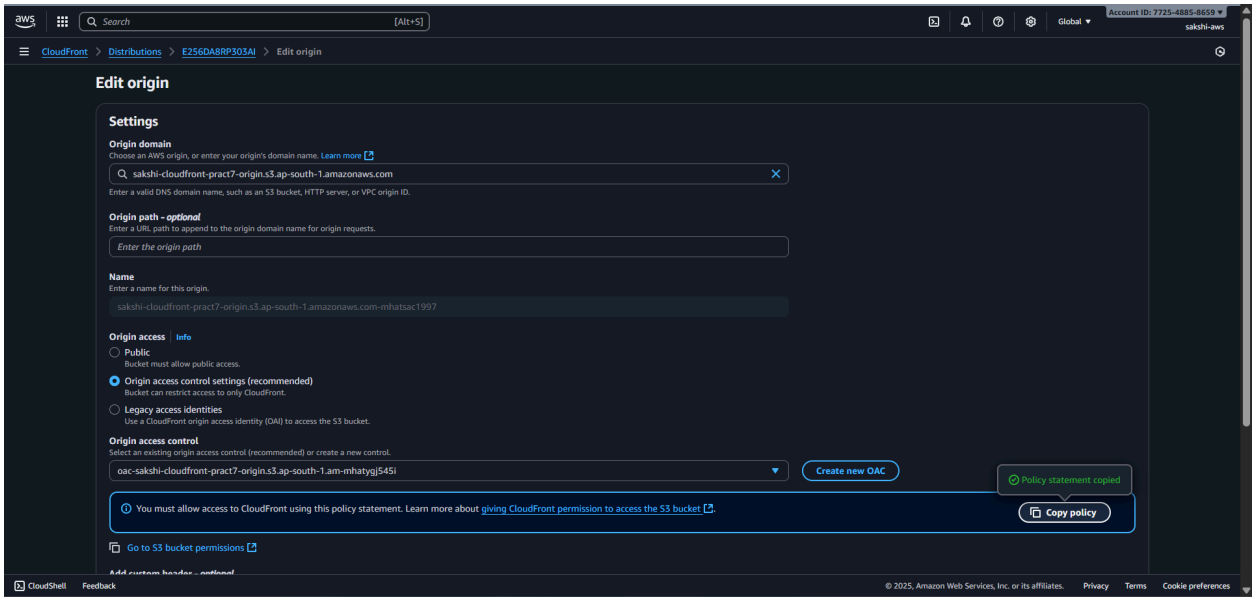
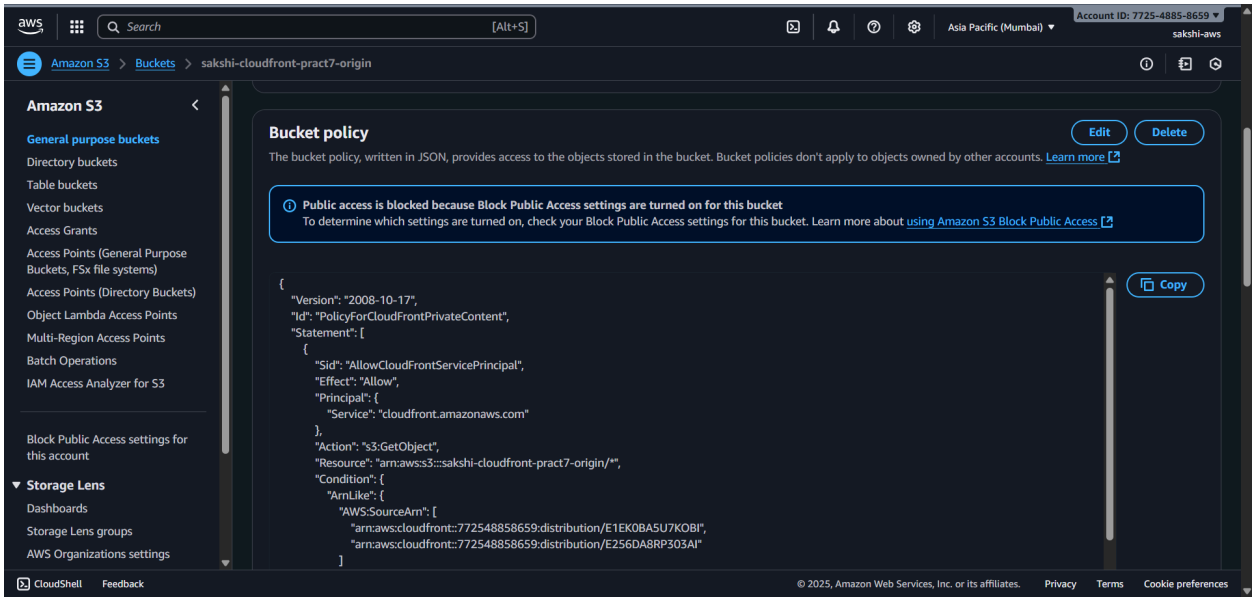
Privacy
Terms
Cookie preferences

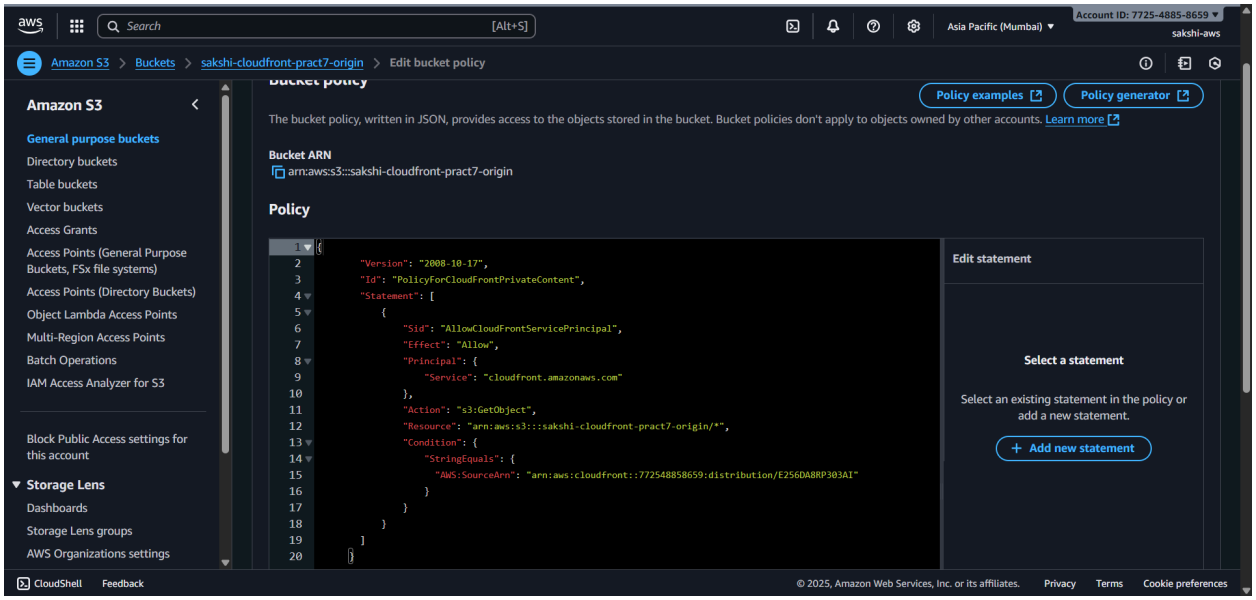

Search
[Alt+S]
Global
Account ID: 7725-4885-8659
sakshi-aws
CloudFront > Distributions > E256DA8RP303AI
Successfully created new distribution.
sakshi-cloudfront-pract7
Standard
View metrics
General
Security
Origins
Behaviors
Error pages
Invalidations
Tags
Logging
Details
Name
sakshi-cloudfront-pract7
Distribution domain name
d2ljlkbq03hhdd.cloudfront.net
ARN
arn:aws:cloudfront::772548858659:distribution/E256DA8RP303AI
Last modified
Deploying
Settings
Edit
Description
-
Price class
Use all edge locations (best performance)
Supported HTTP versions
HTTP/2, HTTP/1.1, HTTP/1.0
Alternate domain names
-
Add domain
Standard logging
Off
Cookie logging
Off
Default root object
-
Continuous deployment
Info
Create staging distribution
CloudShell
Feedback
© 2025, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences

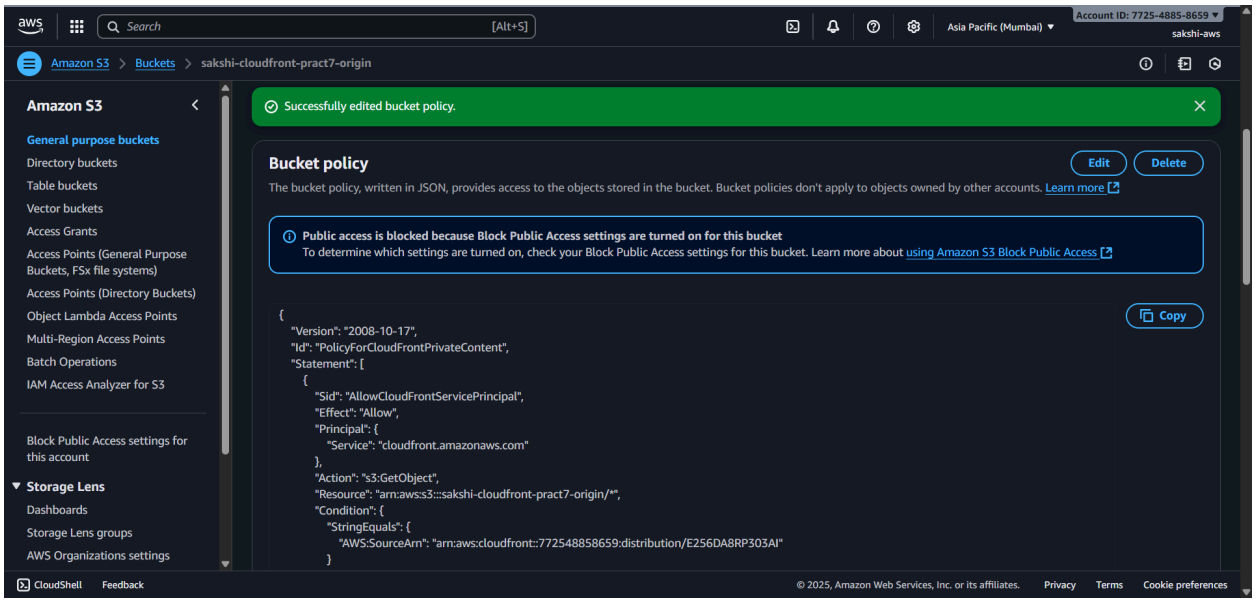
Copying policy



Editing the bucket policy




Search [Alt+S]
Asia Pacific (Mumbai)
Account ID: 7725-4885-8659
sakshi-aws
Amazon S3 > Buckets > sakshi-cloudfront-pract7-origin > Edit bucket policy
Amazon S3
General purpose buckets
Directory buckets
Table buckets
Vector buckets
Access Grants
Access Points (General Purpose Buckets, FSx file systems)
Access Points (Directory Buckets)
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
IAM Access Analyzer for S3
Block Public Access settings for this account
Storage Lens
Dashboards
Storage Lens groups
AWS Organizations settings
Policy examples
Policy generator
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
Bucket ARN
arn:aws:s3:::sakshi-cloudfront-pract7-origin
Policy
{
"Version": "2008-10-17",
"Id": "PolicyForCloudFrontPrivateContent",
"Statement": [
{
"Sid": "AllowCloudFrontServicePrincipal",
"Effect": "Allow",
"Principal": {
"Service": "cloudfront.amazonaws.com"
},
"Action": "s3:GetObject",
"Resource": "arn:aws:s3:::sakshi-cloudfront-pract7-origin/*",
"Condition": {
"StringEquals": {
"AWS:SourceArn": "arn:aws:cloudfront::772548858659:distribution/E256DA8RP303AI"
}
}
}
]
}
Edit statement
Select a statement
Select an existing statement in the policy or add a new statement.
+ Add new statement
CloudShell
Feedback
© 2025, Amazon Web Services, Inc. or its affiliates.
Privacy
Terms
Cookie preferences


Search [Alt+S]
Asia Pacific (Mumbai)
Account ID: 7725-4885-8659
sakshi-aws
Amazon S3 > Buckets > sakshi-cloudfront-pract7-origin
Amazon S3
General purpose buckets
Directory buckets
Table buckets
Vector buckets
Access Grants
Access Points (General Purpose Buckets, FSx file systems)
Access Points (Directory Buckets)
Object Lambda Access Points
Multi-Region Access Points
Batch Operations
IAM Access Analyzer for S3
Block Public Access settings for this account
Storage Lens
Dashboards
Storage Lens groups
AWS Organizations settings
Successfully edited bucket policy.
Bucket policy
Edit
Delete
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
Public access is blocked because Block Public Access settings are turned on for this bucket
To determine which settings are turned on, check your Block Public Access settings for this bucket. Learn more about using Amazon S3 Block Public Access
Copy
{
"Version": "2008-10-17",
"Id": "PolicyForCloudFrontPrivateContent",
"Statement": [
{
"Sid": "AllowCloudFrontServicePrincipal",
"Effect": "Allow",
"Principal": {
"Service": "cloudfront.amazonaws.com"
},
"Action": "s3:GetObject",
"Resource": "arn:aws:s3:::sakshi-cloudfront-pract7-origin/*",
"Condition": {
"StringEquals": {
"AWS:SourceArn": "arn:aws:cloudfront::772548858659:distribution/E256DA8RP303AI"
}
CloudShell
Feedback
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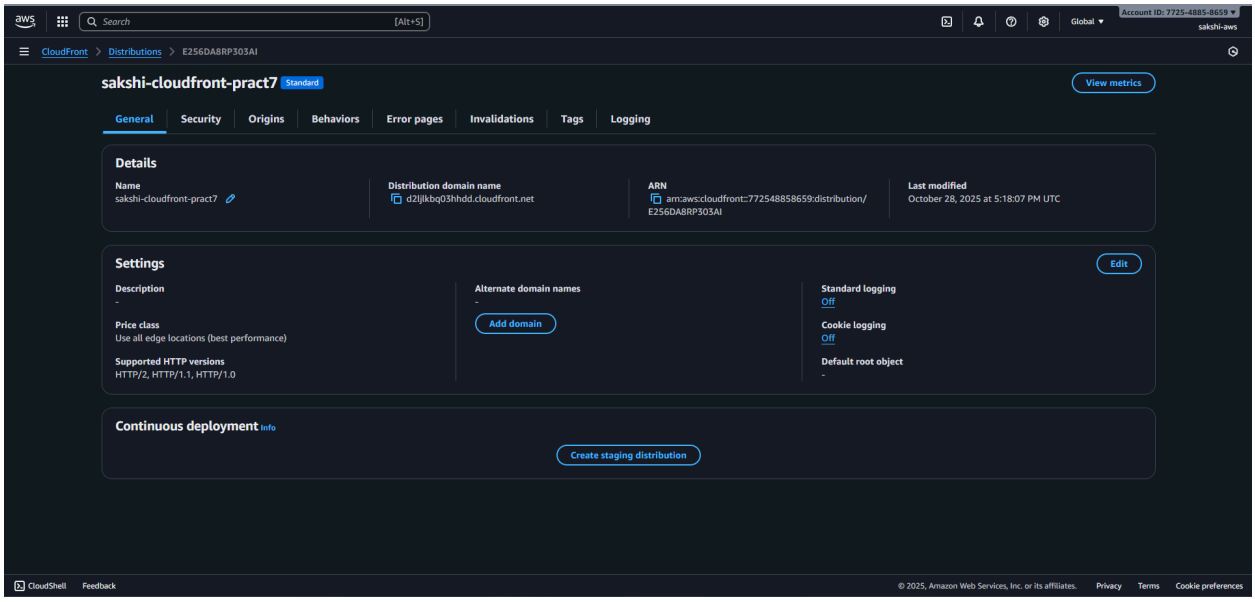
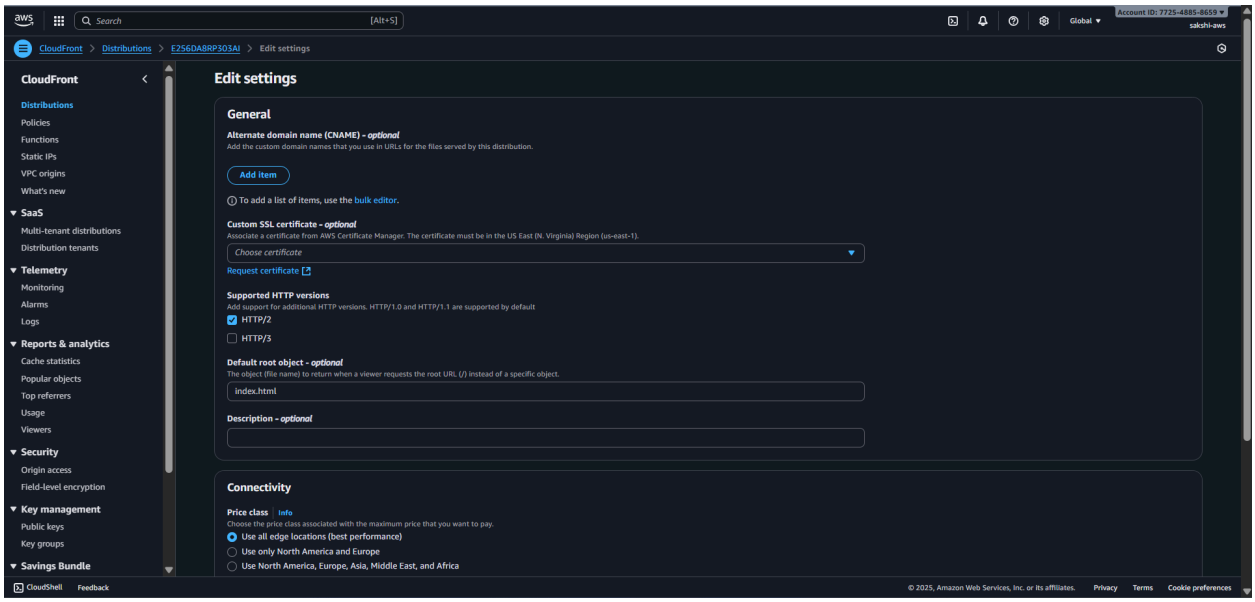
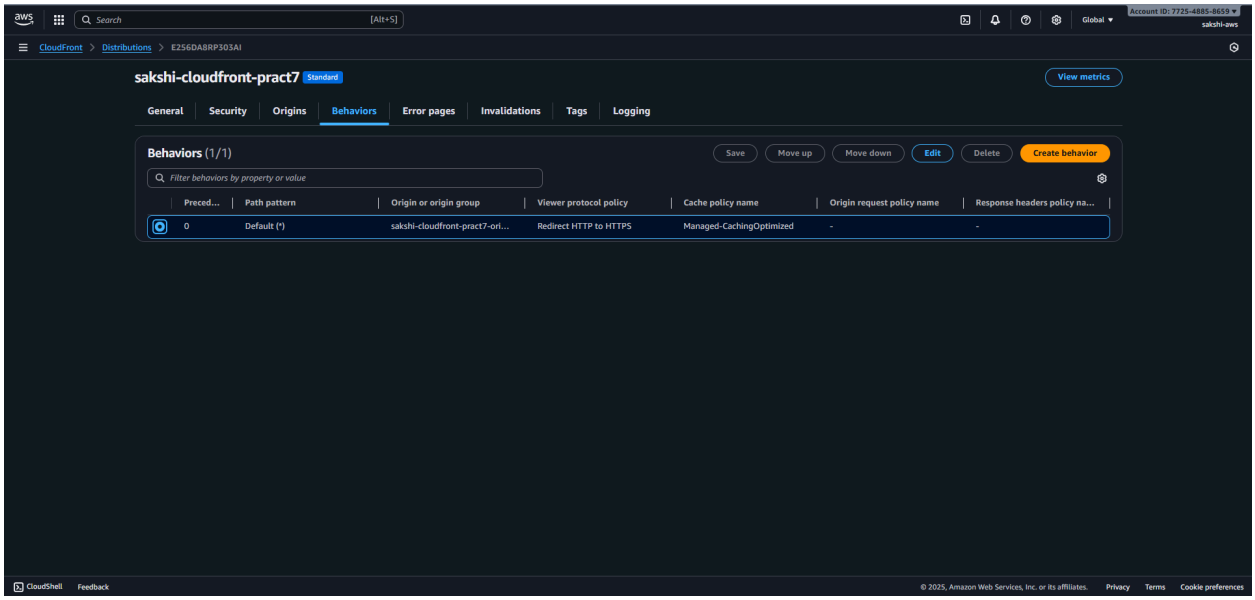
Now editing the distribution



Setting default root object




Search
[Alt+S]
Global
Account ID: 7725-4885-8659
sakshi-aws
CloudFront > Distributions > E256DA8RP303AI
sakshi-cloudfront-pract7
Standard
View metrics
General
Security
Origins
Behaviors
Error pages
Invalidations
Tags
Logging
Behaviors (1/1)
Save
Move up
Move down
Edit
Delete
Create behavior
Filter behaviors by property or value
Preced...
Path pattern
Origin or origin group
Viewer protocol policy
Cache policy name
Origin request policy name
Response headers policy na...
0
Default (*)
sakshi-cloudfront-pract7-ori...
Redirect HTTP to HTTPS
Managed-CachingOptimized
-
-
CloudShell
Feedback
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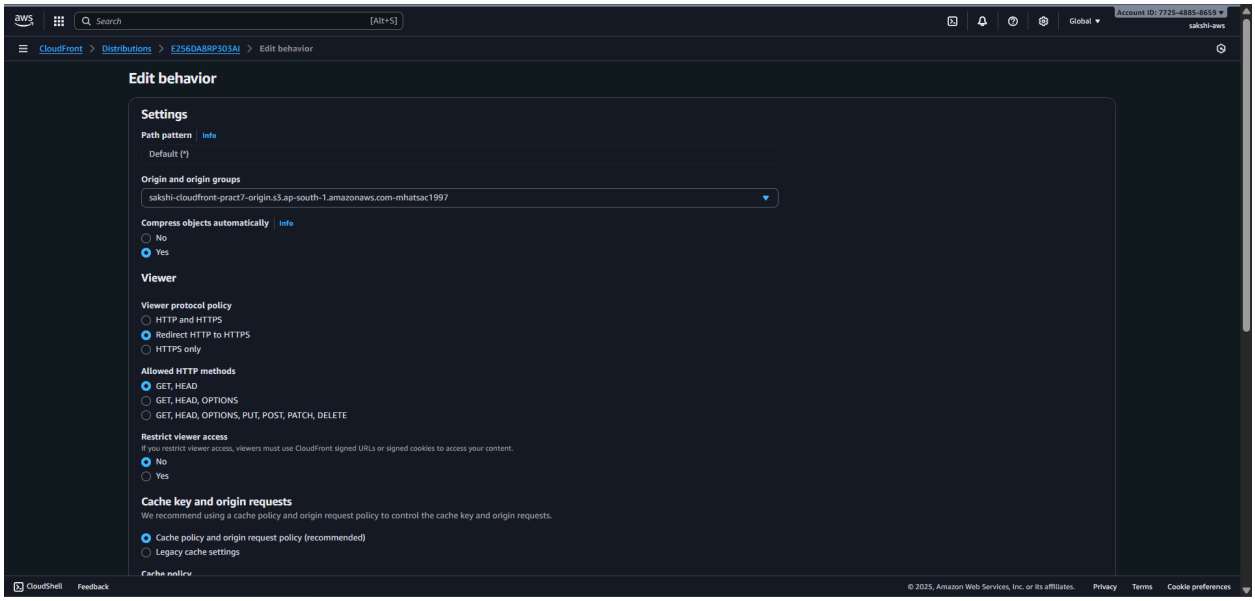
Search
[Alt+S]
Global
Account ID: 7725-4885-8659
sakshi-aws
CloudFront > Distributions > E256DA8RP303AI > Edit behavior
Edit behavior
Settings
Path pattern
Info
Default (*)
Origin and origin groups
sakshi-cloudfront-pract7-origin.s3.ap-south-1.amazonaws.com-mhatsac1997
Compress objects automatically
Info
No
Yes
Viewer
Viewer protocol policy
HTTP and HTTPS
Redirect HTTP to HTTPS
HTTPS only
Allowed HTTP methods
GET, HEAD
GET, HEAD, OPTIONS
GET, HEAD, OPTIONS, PUT, POST, PATCH, DELETE
Restrict viewer access
If you restrict viewer access, viewers must use CloudFront signed URLs or signed cookies to access your content.
No
Yes
Cache key and origin requests
We recommend using a cache policy and origin request policy to control the cache key and origin requests.
Cache policy and origin request policy (recommended)
Legacy cache settings
Cache policy
CloudShell
Feedback
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Privacy
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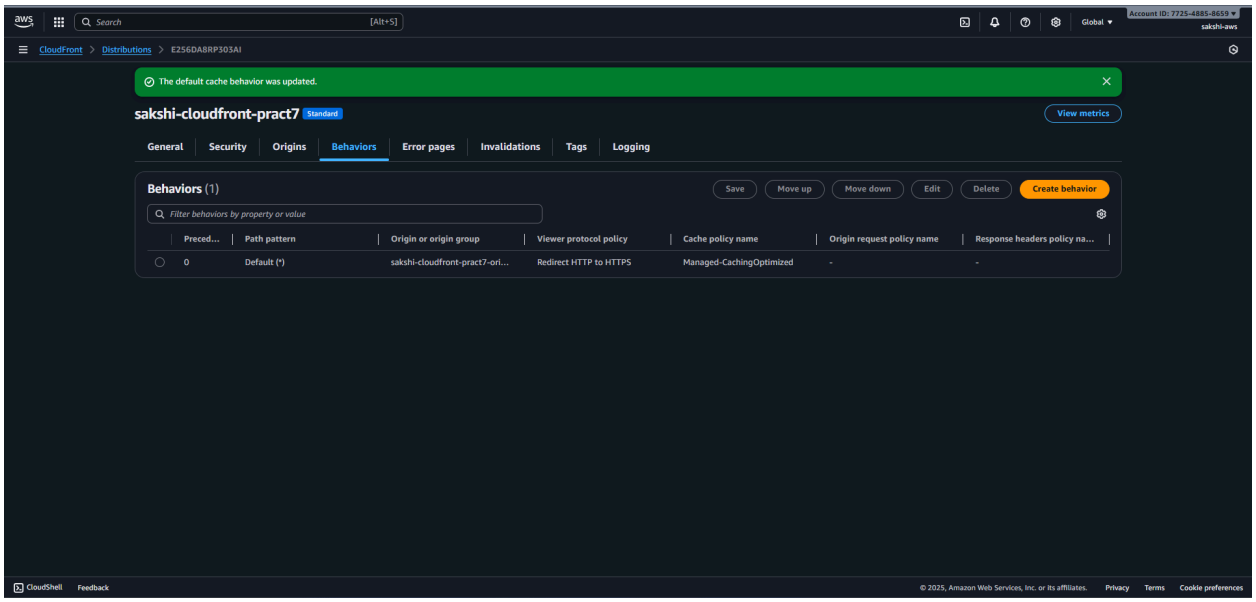
Search
[Alt+S]
Global
Account ID: 7725-4885-8659
sakshi-aws
CloudFront > Distributions > E256DA8RP303AI
The default cache behavior was updated.
sakshi-cloudfront-pract7 Standard
View metrics
General Security Origins Behaviors Error pages Invalidations Tags Logging
Behaviors (1)
Save Move up Move down Edit Delete Create behavior
Filter behaviors by property or value
Preced... Path pattern Origin or origin group Viewer protocol policy Cache policy name Origin request policy name Response headers policy na...
0 Default (*) sakshi-cloudfront-pract7-ori... Redirect HTTP to HTTPS Managed-CachingOptimized - -
CloudShell Feedback
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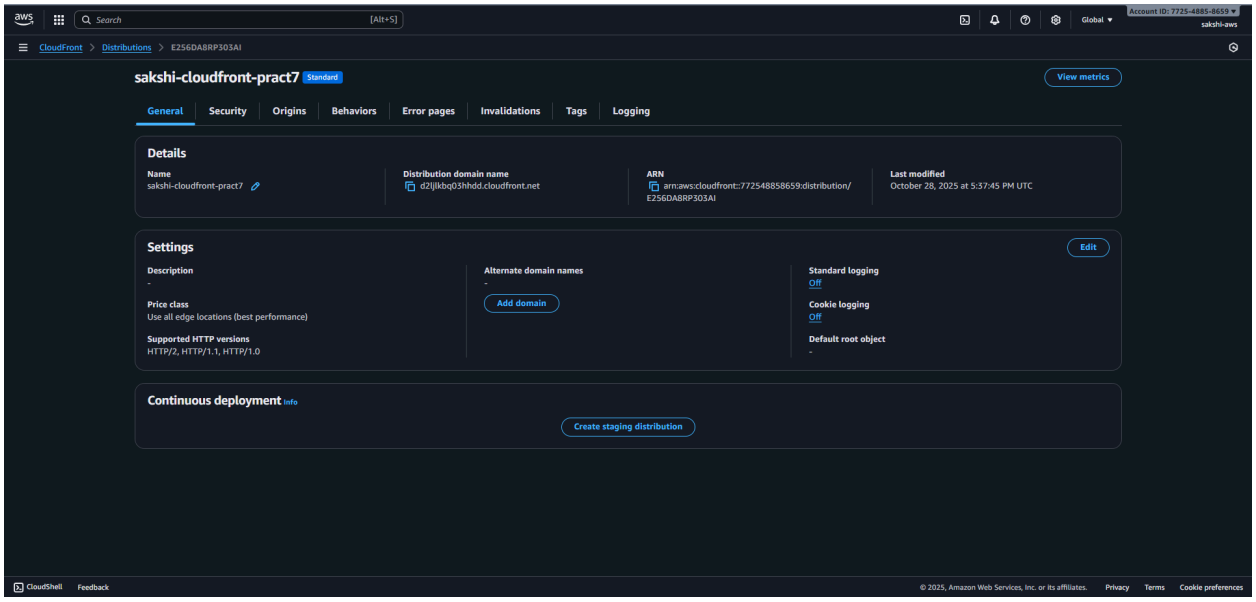
Deployed


Search
[Alt+S]
Global
Account ID: 7725-4885-8659
sakshi-aws
CloudFront > Distributions > E256DA8RP303AI
sakshi-cloudfront-pract7 Standard
View metrics
General Security Origins Behaviors Error pages Invalidations Tags Logging
Details
Name
sakshi-cloudfront-pract7
Distribution domain name
d2ljlkbq03hhdd.cloudfront.net
ARN
arn:aws:cloudfront::772548858659:distribution/E256DA8RP303AI
Last modified
October 28, 2025 at 5:37:45 PM UTC
Settings
Edit
Description
-
Price class
Use all edge locations (best performance)
Supported HTTP versions
HTTP/2, HTTP/1.1, HTTP/1.0
Alternate domain names
-
Add domain
Standard logging
Off
Cookie logging
Off
Default root object
-
Continuous deployment Info
Create staging distribution
CloudShell Feedback
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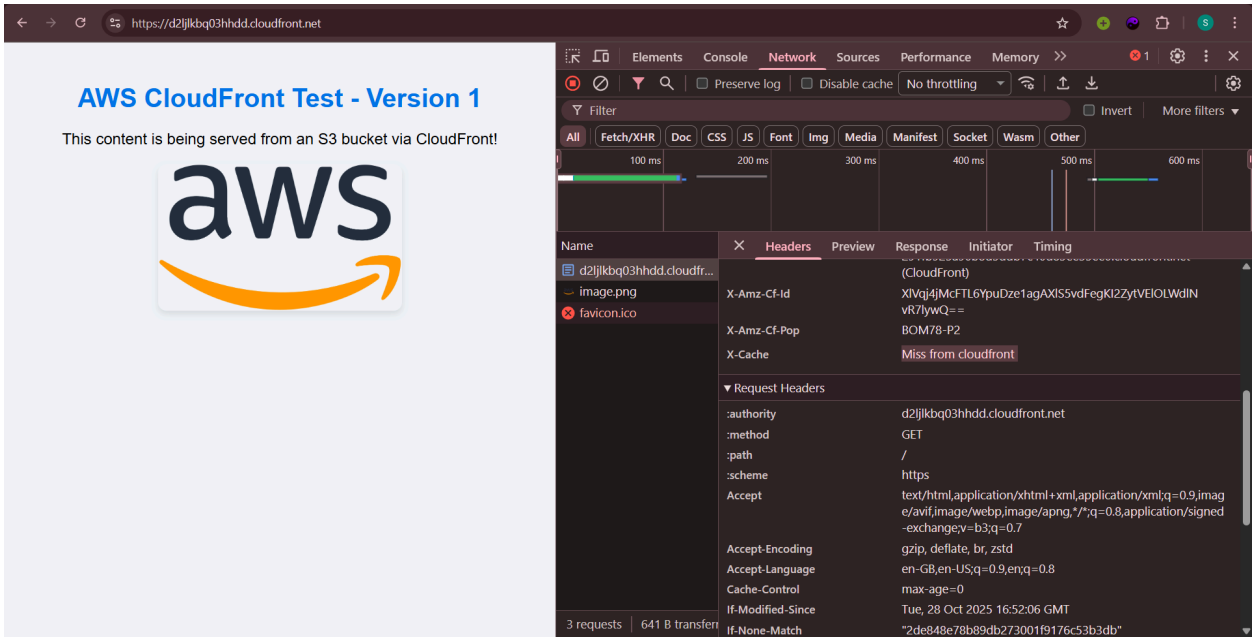
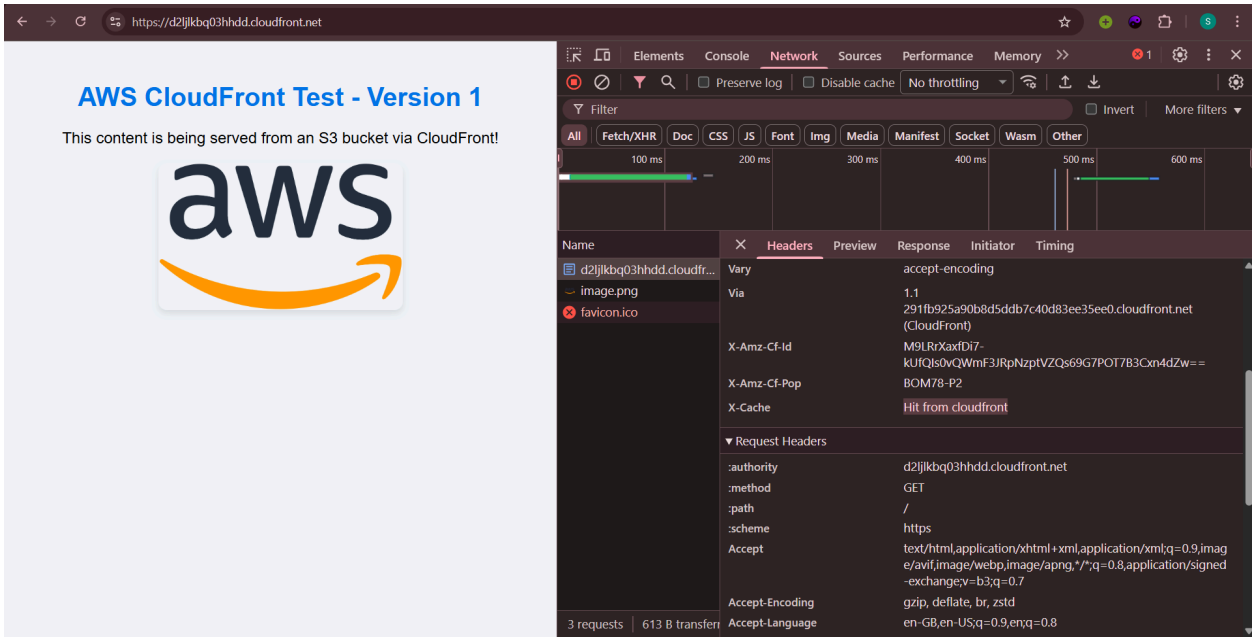
Accessible

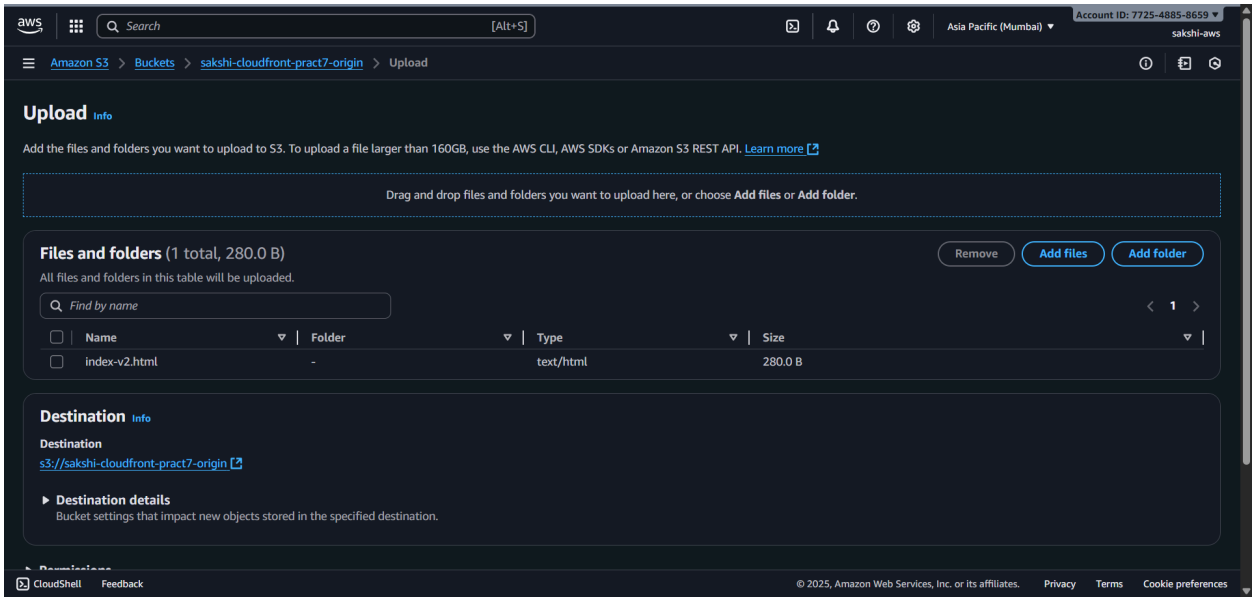
Cache missed



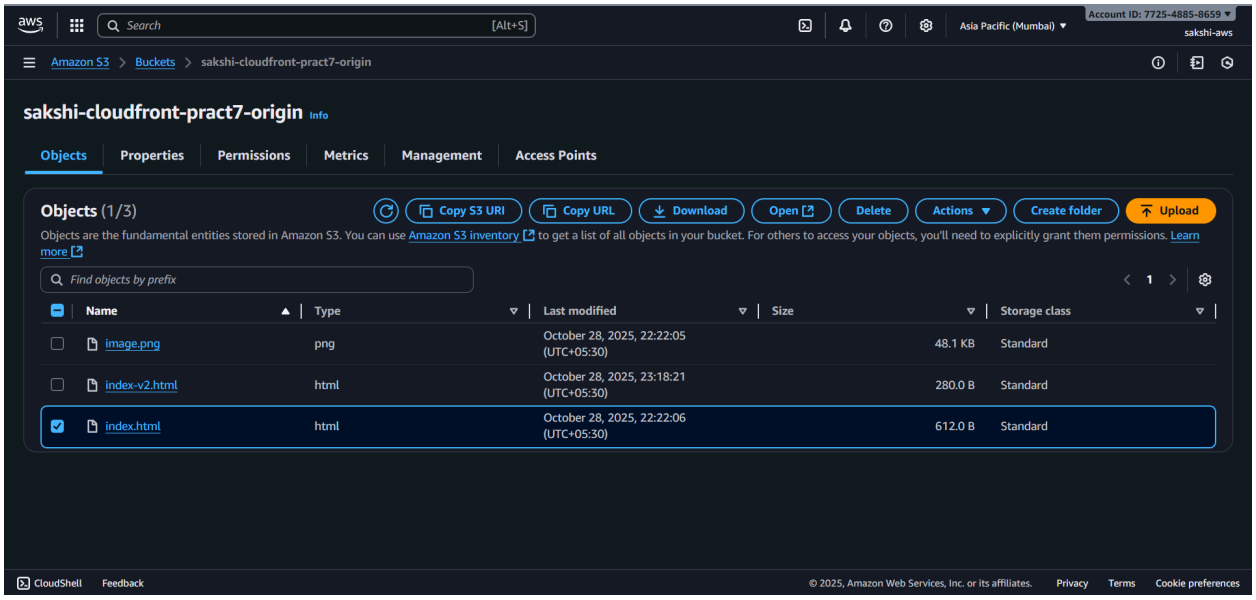
Did reload, cache hit from cloudfront



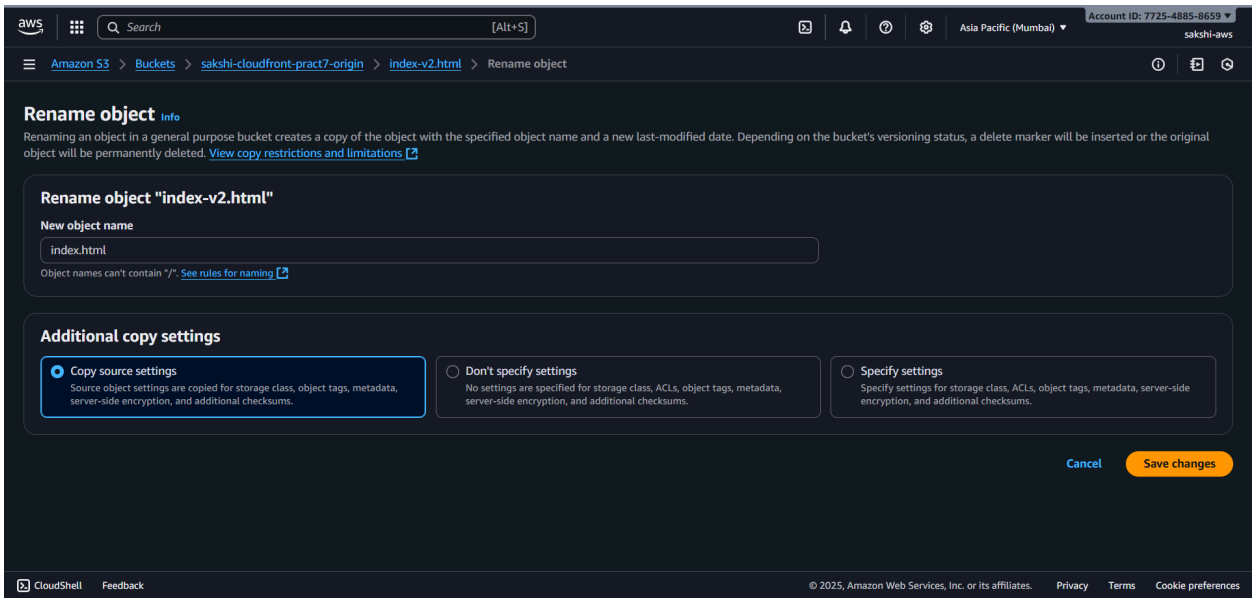
Adding new file to bucket



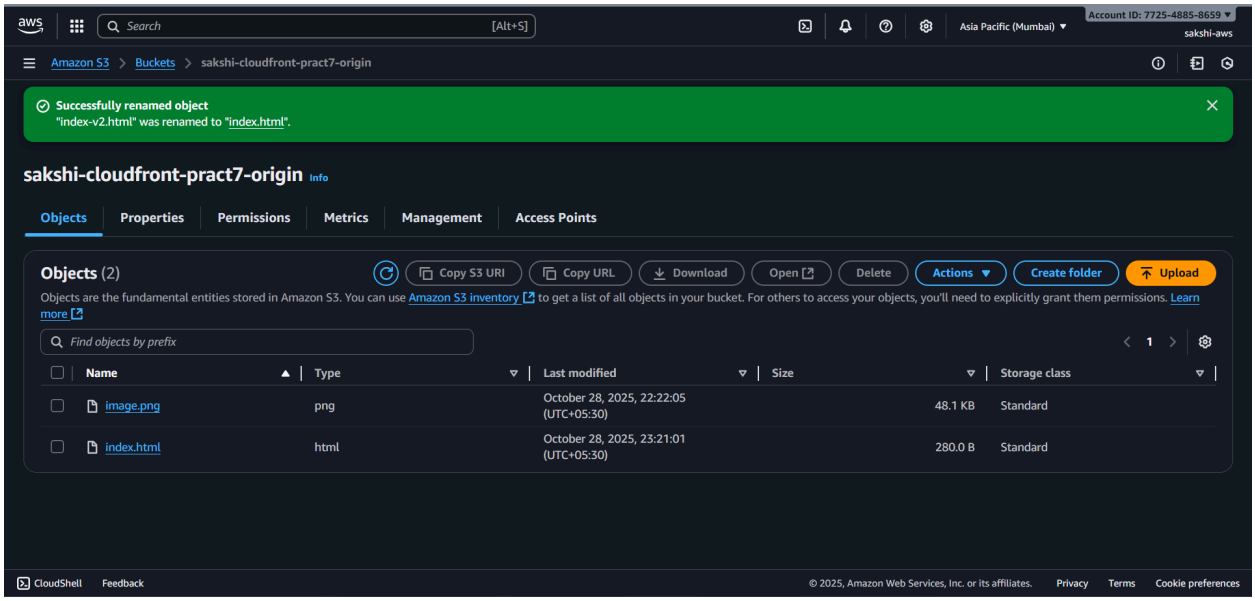
Deleting existing index.html



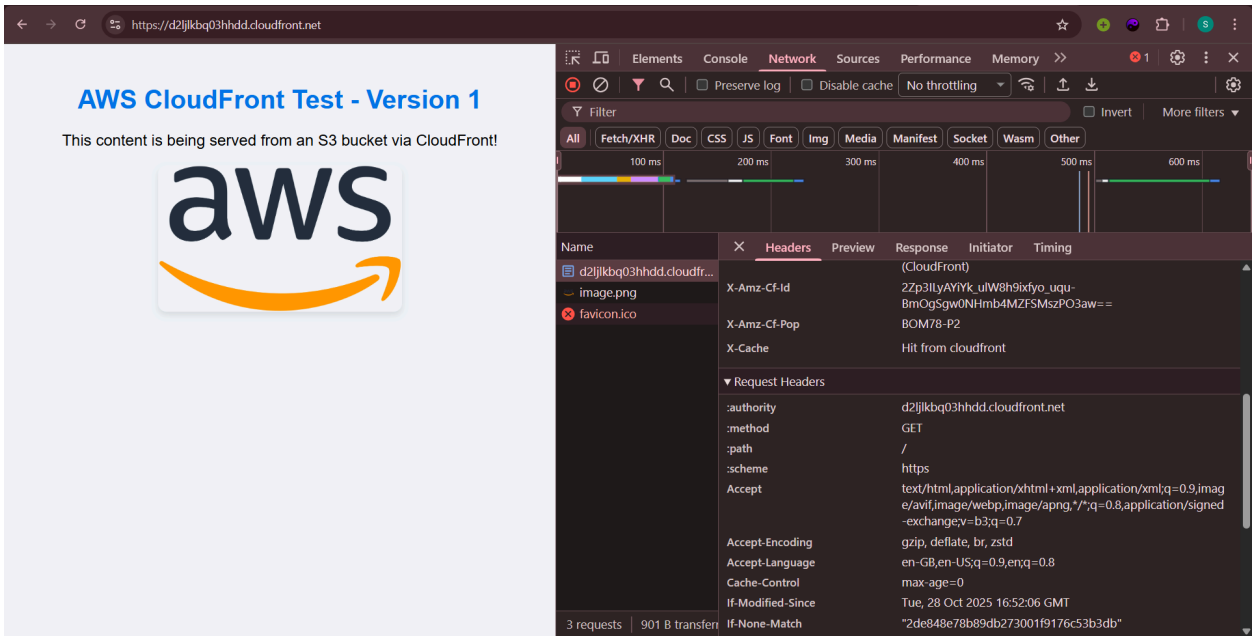
Renaming it



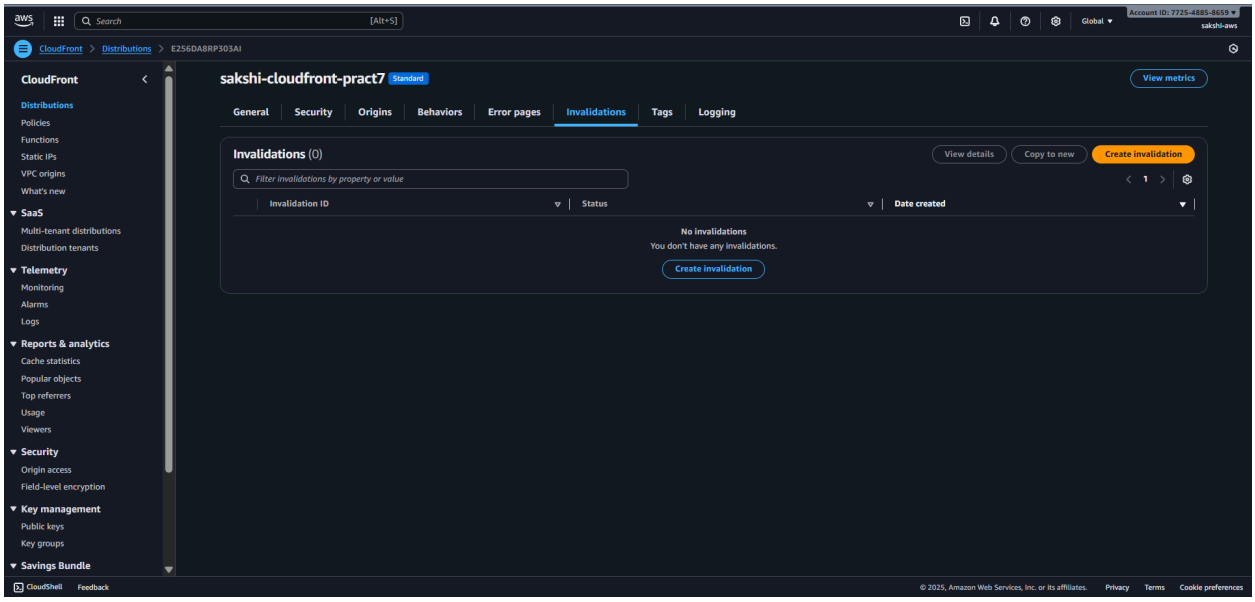
Overwriting successful



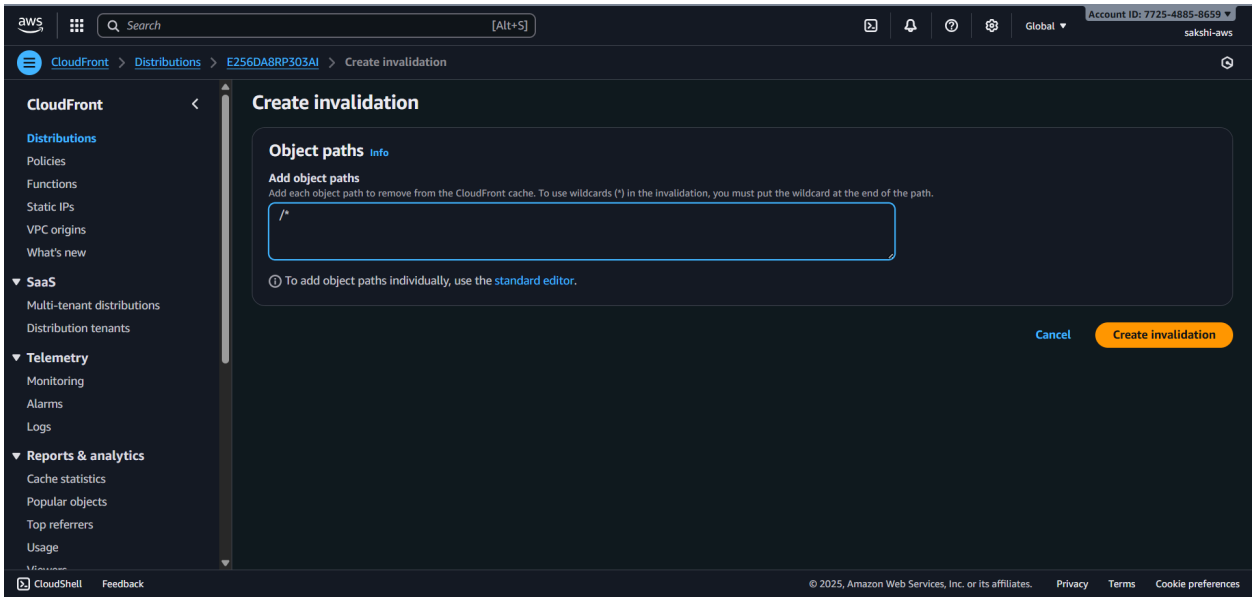
But still same on website due to caching

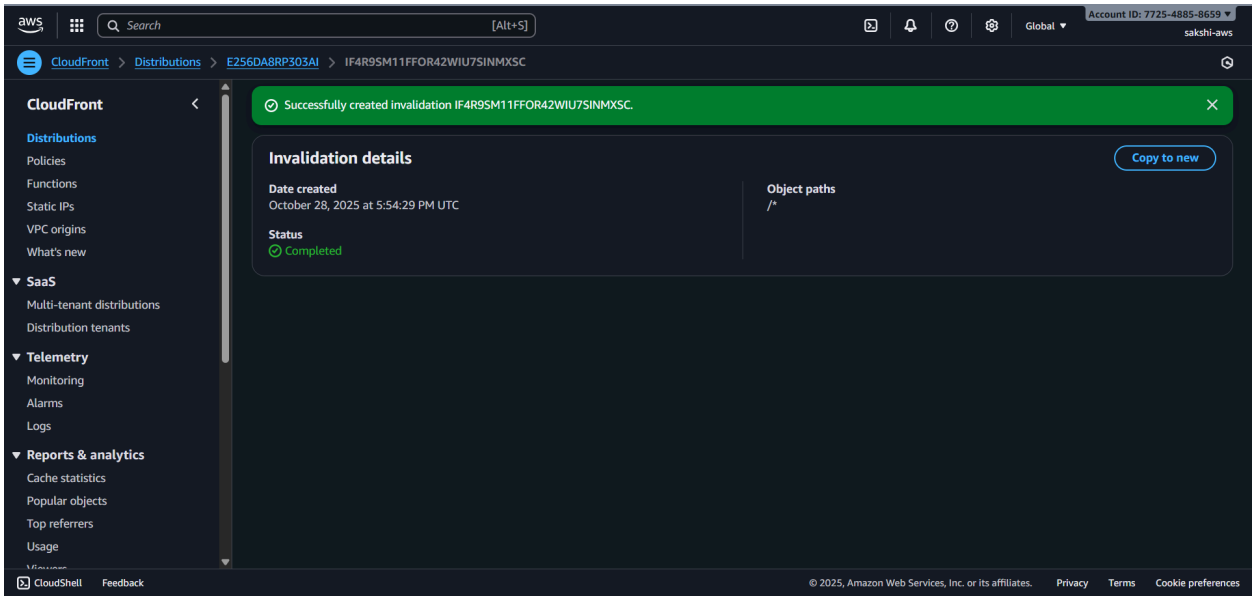


Creating invalidation



Creating invalidation covering all files





Website updated

Got cache hit on refresh