

Cloud Practical – Elastic Transcoder

Step 1 :-Search S3 And Go To create bucket

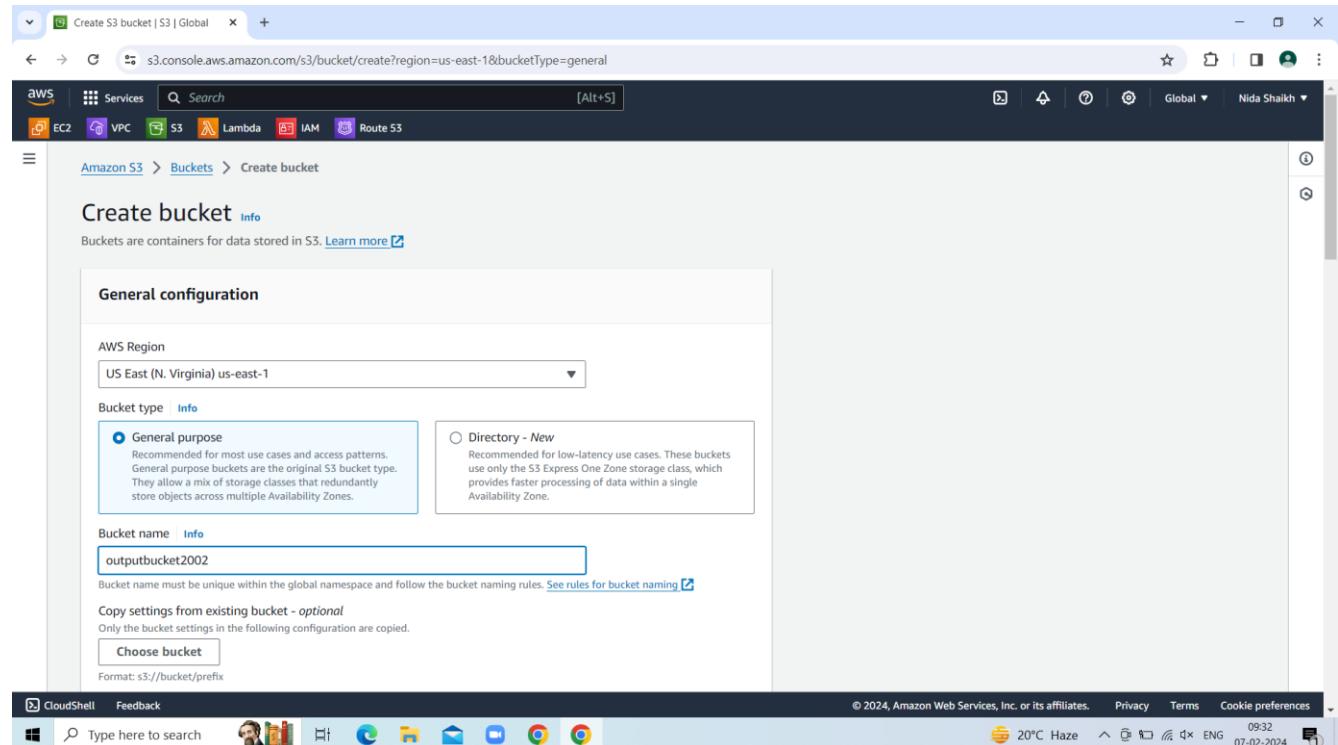
The screenshot shows the AWS S3 console homepage. At the top, there's a search bar with 's3.console.aws.amazon.com/s3/get-started?region=eu-north-1'. Below the search bar, the AWS navigation bar includes 'Services' (selected), EC2, VPC, S3 (highlighted in orange), Lambda, IAM, and Route 53. The main content area features the Amazon S3 logo and the tagline 'Store and retrieve any amount of data from anywhere'. A call-to-action button 'Create a bucket' is visible. On the right, there's a 'Pricing' section with information about no minimum fees and a link to the Simple Monthly Calculator. At the bottom, there's a 'How it works' section with a video thumbnail titled 'Introduction to Amazon S3'.

Step 2 :- Create input bucket

The screenshot shows the 'Create S3 bucket' wizard. The first step, 'Select region', has 'US East (N. Virginia) us-east-1' selected. The second step, 'Bucket type', has 'General purpose' selected. The third step, 'Bucket name', has 'inputbucket2002' entered. The fourth step, 'Object Ownership', has 'ACLs disabled (recommended)' selected. The fifth step, 'Configure website hosting', is partially visible at the bottom. The bottom of the screen shows the Windows taskbar with various pinned icons and the system tray indicating 'Air: Moderate' and the date '07-02-2024'.

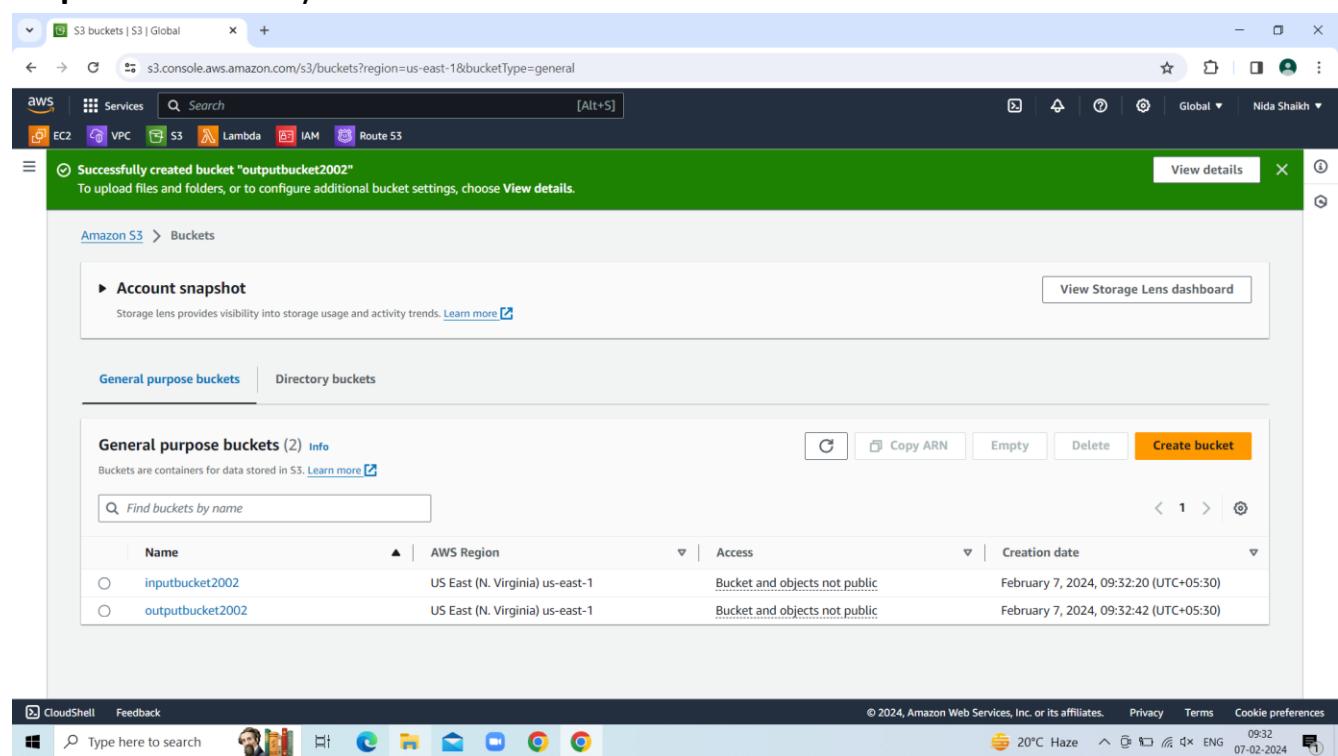
NIDA SHAIKH

Step 3 :- Create output bucket



The screenshot shows the 'Create bucket' wizard in the AWS S3 console. The 'General configuration' step is selected. The 'Bucket name' field contains 'outputbucket2002'. The 'AWS Region' dropdown is set to 'US East (N. Virginia) us-east-1'. Under 'Bucket type', the 'General purpose' option is selected, with a note about its use for low-latency access. The 'Copy settings from existing bucket - optional' section is present but empty.

Step 4 :- Successfully Created both buckets



The screenshot shows the 'Buckets' page in the AWS S3 console. A green success message at the top states 'Successfully created bucket "outputbucket2002"'. Below it, the 'Account snapshot' section is visible. The 'General purpose buckets' tab is selected, showing a table with two entries:

Name	AWS Region	Access	Creation date
inputbucket2002	US East (N. Virginia) us-east-1	Bucket and objects not public	February 7, 2024, 09:32:20 (UTC+05:30)
outputbucket2002	US East (N. Virginia) us-east-1	Bucket and objects not public	February 7, 2024, 09:32:42 (UTC+05:30)

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Step 5 :- Upload Files from add files and Go To Upload (Input bucket)

The screenshot shows the AWS S3 console interface for uploading objects to an input bucket. The top section displays the file selection screen with a single MP4 video file named "countdown_--2637 (540p).mp4". The destination is set to "s3://inputbucket2002". The "Upload" button is highlighted in orange.

Destination:
s3://inputbucket2002

Destination details:
Bucket settings that impact new objects stored in the specified destination.

Permissions:
Grant public access and access to other AWS accounts.

Properties:
Specify storage class, encryption settings, tags, and more.

Upload

Upload succeeded

The message "Upload succeeded" is displayed in a green banner at the top. Below it, a note says: "The information below will no longer be available after you navigate away from this page." The "Summary" section shows the upload details: Destination "s3://inputbucket2002", Status "Succeeded" (1 file, 1.4 MB (100.0%)), and Failed (0 files, 0 B (0%)).

Files and folders (1 Total, 1.4 MB)

Name	Folder	Type	Size	Status	Error
countdown_--...	-	video/mp4	1.4 MB	Succeeded	-

Configuration

The bottom section of the screenshot shows the Windows taskbar with various pinned icons and system status indicators.

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Step 6 :-Search Elastic Transcoder

The screenshot shows the AWS CloudSearch interface with a search query of 'elastic'. The results are categorized under 'Services' and 'Marketplace'. Under 'Services', 'Elastic Transcoder' is highlighted with a callout box. Other services listed include 'Elastic Beanstalk', 'Elastic Container Service', and 'Elastic Container Registry'. Under 'Marketplace', 'Elastic Cloud (Elasticsearch Service)' and 'Rackspace Elastic Engineering' are shown.

Step 7 :-Create new Pipeline

The screenshot shows the AWS Elastic Transcoder home page. At the top, there is a banner for 'AWS Elemental MediaConvert'. Below it, the main heading is 'Welcome to Amazon Elastic Transcoder'. A prominent blue button labeled 'Create a new Pipeline' is centered. To its left, a sub-section titled 'Amazon Elastic Transcoder at a glance' provides an overview of the service's components: 'Create a pipeline', 'Create a preset. (Optional)', and 'Create a job'. Each section includes a small icon and a brief description. On the right side, there is an 'Additional Information' sidebar with links to 'Getting Started with Elastic Transcoder', 'Documentation', 'All Elastic Transcoder Resources', and 'Forums'.

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The screenshot shows the AWS Elastic Transcoder console with the URL us-east-1.console.aws.amazon.com/elastictranscoder/home?region=us-east-1#create-pipeline. The page is titled "Create New Pipeline".

Pipeline Name: video convert

Input Bucket: inputbucket2002

IAM Role: Elastic_Transcoder_Default_Role

Configuration for Amazon S3 Bucket for Transcoded Files and Playlists:

- Bucket:** outputbucket2002
- Storage Class:** Standard

[+ Add Permission](#)

Configuration for Amazon S3 Bucket for Thumbnails:

- Bucket:** outputbucket2002
- Storage Class:** Standard

[+ Add Permission](#)

Notifications (Optional)

Encryption (Optional)

The screenshot shows the AWS Elastic Transcoder console with the URL us-east-1.console.aws.amazon.com/elastictranscoder/home?region=us-east-1#create-pipeline. The page is titled "Create New Pipeline".

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- Bucket:** outputbucket2002
- Storage Class:** Standard

[+ Add Permission](#)

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- Storage Class:** Standard

[+ Add Permission](#)

Configuration for Amazon S3 Bucket for Thumbnails:

- Bucket:** outputbucket2002
- Storage Class:** Standard

[+ Add Permission](#)

Notifications (Optional)

Encryption (Optional)

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Step 8 :- Go to Create pipeline

The screenshot shows the AWS Elastic Transcoder console with the 'Create Pipeline' wizard. The first step, 'Configuration for Amazon S3 Bucket for Transcoded Files and Playlists', is displayed. It shows a bucket named 'outputbucket2002' set to Standard storage class. Below this, the 'Configuration for Amazon S3 Bucket for Thumbnails' step is shown, also with a bucket named 'outputbucket2002' and Standard storage class. There are sections for 'Notifications (Optional)' and 'Encryption (Optional)'. At the bottom right, there are 'Cancel' and 'Create Pipeline' buttons.

Step 9 :- Create a new job

The screenshot shows the AWS Elastic Transcoder console with the 'Create New Job' step. On the left, a sidebar lists 'Pipelines', 'Jobs', and 'Presets'. The main area displays the summary of a pipeline named 'video convert'. The pipeline ARN is 'arn:aws:elastictranscoder:us-east-1:514277200771:pipeline/1707278882570-39uu24'. The pipeline ID is '1707278882570-39uu24', status is 'Active', and the input bucket is 'inputbucket2002'. Below the summary, there are sections for 'Configuration for Amazon S3 Bucket for Transcoded Files and Playlists', 'Configuration for Amazon S3 Bucket for Thumbnails', 'Job Details', 'Permissions', 'Notifications', and 'Encryption'. At the top right, there are buttons for 'Edit', 'Pause', 'Activate', and 'Remove'.



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The screenshot shows the AWS Elastic Transcoder console interface. At the top, there are two tabs: "Upload objects - S3 bucket input" and "Elastic Transcoder | us-east-1". The main content area is titled "Create a New Transcoding Job".

Pipeline: video convert

Output Key Prefix: output/

Input Details (1 of 1):

- Input Key:** countdown_-_2637 (540p).mp4
- Decryption Parameters:** None (selected)
- Available Settings:** Clip, Input Captions
- Add Another Input** button

Output Details (1 of 1):

- Preset:** System preset: HLS 2M
- Segment Duration:** 10
- Output Key:** [empty field]

Output Details (2 of 3):

- Preset:** System preset: HLS Video - 1.5M
- Segment Duration:** 10
- Output Key:** HLS 15M
- Segment Filename Preview:** HLS 15M00000.ts
- Create Thumbnails:** No (selected)
- Output Rotation (Clockwise):** auto
- Encryption Parameters:** To protect your HLS Outputs, add an HLSv3 or HLSv4 playlist along with Content Protection information.
- Available Settings:** Output Captions

Watermarks:

- Preset Watermark Id:** Select One...

At the bottom of the browser window, the status bar shows: © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences 20°C Haze 09:38 07-02-2024

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The screenshot shows the AWS Elastic Transcoder console interface. At the top, there are three tabs: "Upload objects - S3 bucket input", "Elastic Transcoder | us-east-1", and "Free Tier | Billing and Cost Man...". The main content area displays the "Create a New Transcoding Job" page.

Pipeline: video convert

Output Key Prefix: output/

Input Details (1 of 1):

- Input Key:** countdown_-_2637 (540p).mp4
- Decryption Parameters:** None (radio button selected)
- Available Settings:** Clip, Input Captions (checkboxes)
- Add Another Input** (+ Add Another Input)

Output Details (1 of 3):

- Preset:** System preset: HLS Video - 2M
- Segment Duration:** 10
- Output Key:** HLS 20M

At the bottom right of the page, there is a link: "- Remove Output".

The browser's address bar shows the URL: us-east-1.console.aws.amazon.com/elastictranscoder/home?region=us-east-1#create-job.

The browser status bar indicates: © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences 20°C Haze 09:42 07-02-2024.

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The screenshot shows the AWS Elastic Transcoder console with the URL us-east-1.console.aws.amazon.com/elastictranscoder/home?region=us-east-1#create-job. The page is titled "Output Details (3 of 3)".

Preset Watermark Id: Select One... (dropdown menu)

Output Details (3 of 3):

- Preset:** System preset: HLS Video - 1M
- Segment Duration:** 10
- Output Key:** HLS 10M
- Segment Filename Preview:** HLS 10M00000.ts
- Create Thumbnails:** No Yes
- Output Rotation (Clockwise):** auto
- Encryption Parameters:** To protect your HLS Outputs, add an HLSv3 or HLSv4 playlist along with Content Protection information.
- Available Settings:** Output Captions

Watermarks: (dropdown menu)

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Step 10 :- Go to Create new job

The screenshot shows the AWS Elastic Transcoder console with the URL us-east-1.console.aws.amazon.com/elastictranscoder/home?region=us-east-1#create-job. The page is titled "Create New Job".

Playlist (1 of 1):

- Master Playlist Name:** primary
- Playlist Format:** HLSv3
- Outputs in Master Playlist:** HLS 20M, HLS 15M, HLS 10M
- Content Protection:** None HLS AES PlayReady DRM

User Metadata (Optional):

Create New Job (button)

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The screenshot shows the AWS Elastic Transcoder job details page. At the top, there are three tabs: "Upload objects - S3 bucket input", "Elastic Transcoder | us-east-1", and "Free Tier | Billing and Cost Man...". The "Elastic Transcoder | us-east-1" tab is active.

The main content area has a dark header bar with the AWS logo, "Services", "Search", and "[Alt+S]". Below the header, the navigation menu includes EC2, VPC, S3, Lambda, IAM, and Route 53. The user is signed in as "N. Virginia" and "Nida Shaikh".

The page displays the following information:

- Summary:**
 - ARN: arn:aws:elastictranscoder:us-east-1:514277200771:job/1707279224606-659qmp
 - Job ID: 1707279224606-659qmp
 - Pipeline: video convert
 - Pipeline ID: 1707278882570-39uu24
 - Job Status: Submitted
 - Output Key Prefix: output/
- Inputs:**
 - Input Key: countdown_-_2637 (540p).mp4
 - Frame Rate
 - Resolution
 - File Size
 - Captions Merge Policy
 - Duration
 - Clip Start Time
 - Clip Duration
- Outputs:**
 - Preset: System preset: HLS Video - 2M
 - Preset ID: 1351620000001-200015
 - Status: Submitted
 - Output Key: HLS 20M
 - Presets Details
 - Output Resolution
 - Output Rotation (Clockwise) auto
 - Frame Rate
 - File Size
 - Watermarks
 - Album Art Merge Policy
 - Caption Formats
 - Preset: System preset: HLS Video - 1.5M
 - Preset ID: 1351620000001-200025
 - Status: Submitted
 - Output Key: HLS 15M

The bottom of the page includes a search bar, CloudShell, Feedback, and a footer with copyright information: © 2024, Amazon Web Services, Inc. or its affiliates. Privacy Terms Cookie preferences. It also shows the date 07-02-2024 and time 09:44.

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The screenshot shows the AWS Elastic Transcoder console with two tabs open: "Upload objects - S3 bucket input" and "Elastic Transcoder | us-east-1". The main content area displays job details for two separate transcoding jobs. Each job has sections for "Caption Formats", "Output Key", "Status Details", "Output Resolution", "Output Rotation", "Frame Rate", "File Size", and "Watermarks". The second job also includes an "Album Art Merge Policy". At the bottom, there are sections for "Playlists", "User Metadata", and "Job Timing". The browser status bar at the bottom right shows the date as 07-02-2024.

Pipelines

Jobs

Presets

Caption Formats

Preset	System preset: HLS Video - 1.5M	Preset ID	1351620000001-200025
Output Key	HLS 15M	Status	Submitted
Status Details		Output Duration	
Output Resolution		Thumbnail Filename Pattern	
Output Rotation (Clockwise)	auto	Segment Duration	10.0
Frame Rate		Applied Color Space Conversion	
File Size			
Watermarks		Album Art Merge Policy	

Caption Formats

Preset	System preset: HLS Video - 1M	Preset ID	1351620000001-200035
Output Key	HLS 10M	Status	Submitted
Status Details		Output Duration	
Output Resolution		Thumbnail Filename Pattern	
Output Rotation (Clockwise)	auto	Segment Duration	10.0
Frame Rate		Applied Color Space Conversion	
File Size			
Watermarks		Album Art Merge Policy	

Caption Formats

Playlists

Master Playlist Name	Playlist Format	Output Key List	Status	Status Details
primary	HLSv3	HLS 20M, HLS 15M, HLS 10M	Submitted	

User Metadata

Job Timing

Submit Time	2024-02-07T09:43:44+0530	Time in Queue
Start Time		Transcoding Time
Finish Time		

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Step 11 :- Go to primary file

Name	Type	Last modified	Size	Storage class
HLS 10M.m3u8	m3u8	February 7, 2024, 09:43:50 (UTC+05:30)	145.0 B	Standard
HLS 10M0000.ts	ts	February 7, 2024, 09:43:50 (UTC+05:30)	948.4 KB	Standard
HLS 15M.m3u8	m3u8	February 7, 2024, 09:43:49 (UTC+05:30)	145.0 B	Standard
HLS 15M0000.ts	ts	February 7, 2024, 09:43:49 (UTC+05:30)	1.4 MB	Standard
HLS 20M.m3u8	m3u8	February 7, 2024, 09:43:49 (UTC+05:30)	145.0 B	Standard
HLS 20M0000.ts	ts	February 7, 2024, 09:43:49 (UTC+05:30)	2.0 MB	Standard
primary.m3u8	m3u8	February 7, 2024, 09:43:51 (UTC+05:30)	314.0 B	Standard

Step 12 :- Search cloudfront

Amazon CloudFront

Securely deliver content with low latency and high transfer speeds

Get started with CloudFront

Enable accelerated, reliable and secure content delivery for Amazon S3 buckets, Application Load Balancers, Amazon API Gateway APIs, and more in 5 minutes or less.

Create a CloudFront distribution

Benefits and features

Reduce latency

The CloudFront network has 225+ points of presence (PoPs) that are connected by fully redundant, parallel 100 GbE fiber links for ultra-low latency delivery.

Improve security

Use CloudFront for perimeter protection, traffic encryption, and access controls. AWS Shield Standard defends traffic from distributed denial-of-service (DDoS) attacks.

AWS Free Tier

1 TB of data transfer out

10,000,000 HTTP or HTTPS requests

2,000,000 CloudFront Function invocations

Each month, always free

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Step 13 :- Create distribution

The screenshot shows the 'Create distribution' wizard in the AWS CloudFront console. The 'Origin' configuration step is selected. The 'Origin domain' field contains 'outputbucket2002.s3.us-east-1.amazonaws.com'. The 'Origin path - optional' field is empty. The 'Name' field contains 'outputbucket2002.s3.us-east-1.amazonaws.com'. Under 'Origin access', the 'Origin access control settings (recommended)' option is selected. The bottom right corner of the window shows the date and time as '07-02-2024 09:46'.

Step 14 :- Create new OAC

The screenshot shows the 'Create new OAC' wizard in the AWS CloudFront console. The 'Name' field contains 'outputbucket2002.s3.us-east-1.amazonaws.com'. The 'Description - optional' field is empty. Under 'Signing behavior', the 'Sign requests (recommended)' option is selected. Under 'Origin type', the 'S3' option is selected. The bottom right corner of the window shows the date and time as '07-02-2024 09:47'.

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Step 15 :- Select new OAC

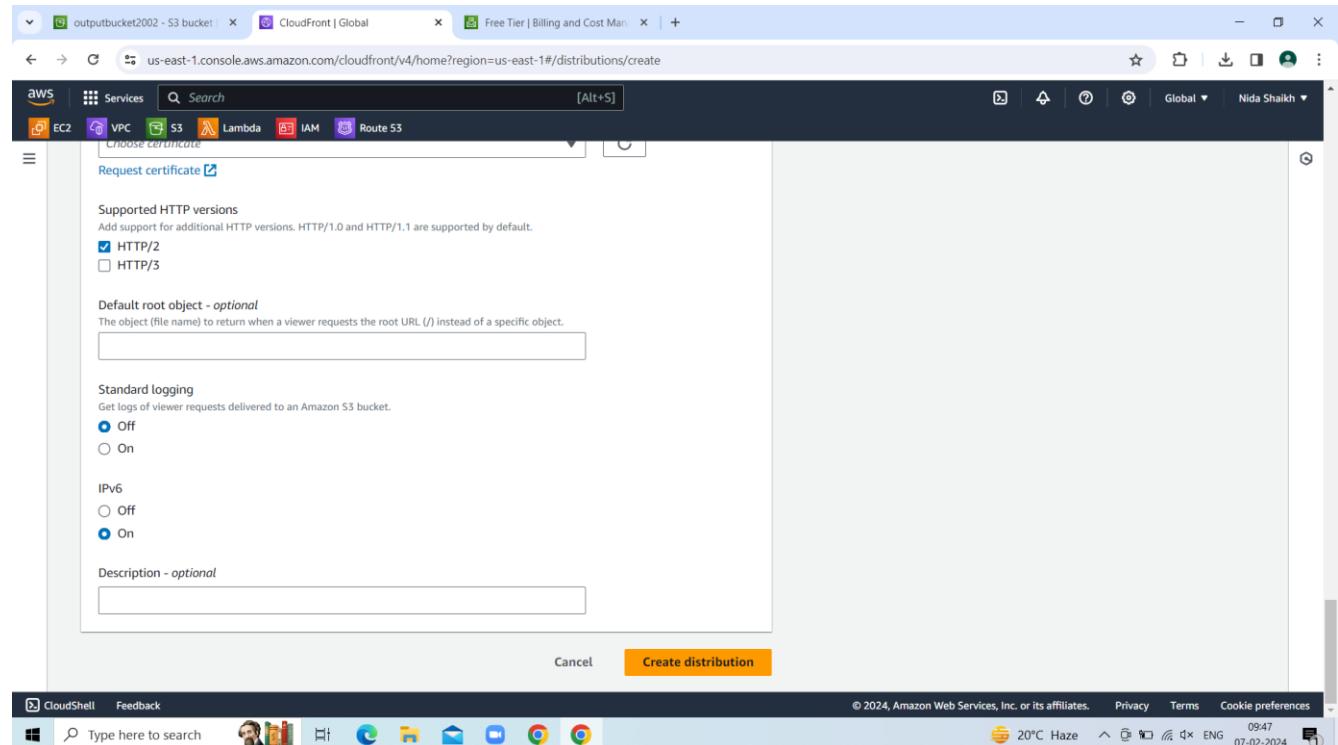
The screenshot shows the 'CloudFront | Global' tab selected in the browser. The URL is us-east-1.console.aws.amazon.com/cloudfront/v4/home?region=us-east-1#/distributions/create. The AWS navigation bar includes EC2, VPC, S3, Lambda, IAM, and Route 53. The main content area is titled 'Bucket must allow public access.' It contains two radio button options: 'Origin access control settings (recommended)' (selected) and 'Legacy access identities'. Under 'Origin access control', there is a dropdown menu set to 'outputbucket2002.s3.us-east-1.amazonaws.com' and a 'Create new OAC' button. A yellow warning box states: 'You must update the S3 bucket policy. CloudFront will provide you with the policy statement after creating the distribution.' Below this, there is a section for 'Add custom header - optional' with an 'Add header' button. Under 'Enable Origin Shield', the 'No' option is selected. There is also a 'Additional settings' link.

Step 16 :- Do not enable WAF

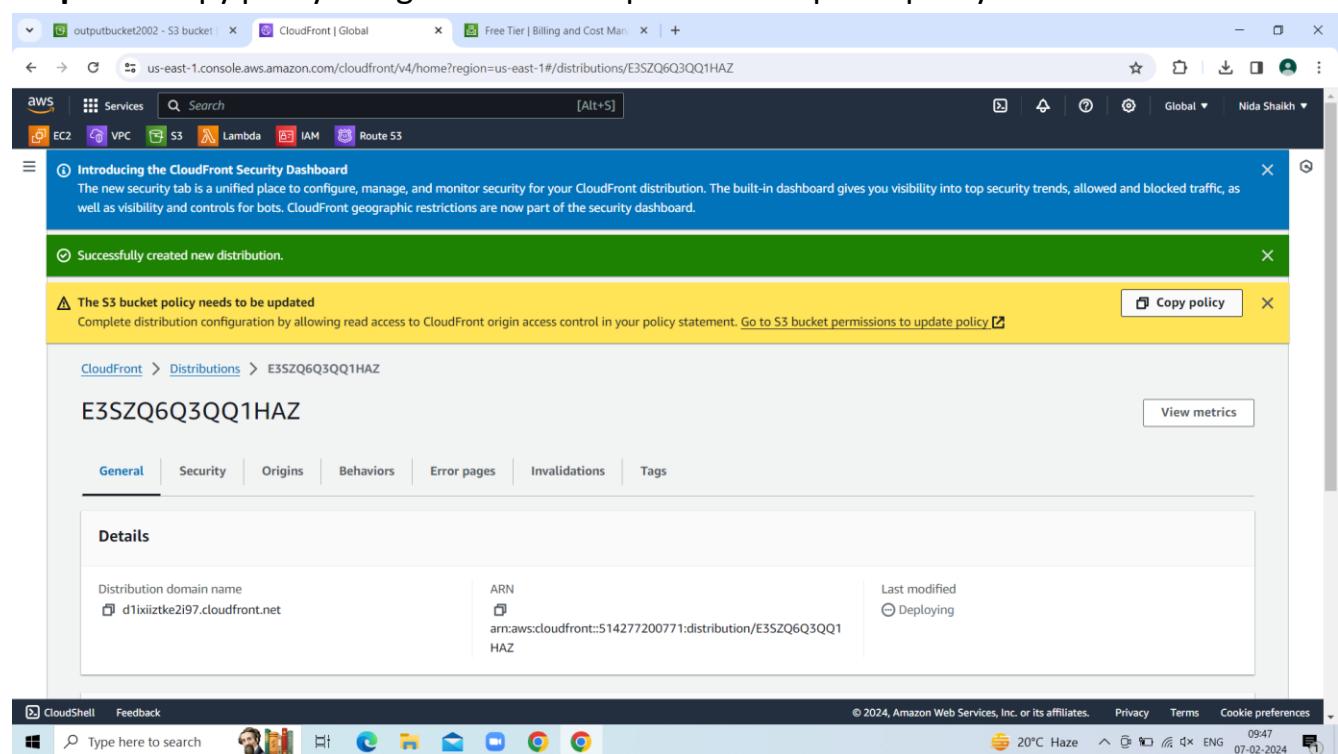
The screenshot shows the 'CloudFront | Global' tab selected in the browser. The URL is us-east-1.console.aws.amazon.com/cloudfront/v4/home?region=us-east-1#/distributions/create. The AWS navigation bar includes EC2, VPC, S3, Lambda, IAM, and Route 53. The main content area shows four dropdown menus for 'Viewer request', 'Viewer response', 'Origin request', and 'Origin response', all set to 'No association'. Below this, the 'Web Application Firewall (WAF)' section has two radio button options: 'Enable security protections' (unchecked) and 'Do not enable security protections' (checked). A note next to the checked option says: 'Select this option if your application does not need security protections from AWS WAF. Blocked requests are stopped before they reach your web servers.' At the bottom, there is a 'Settings' section with a 'Price class' dropdown set to 'Use all edge locations (best performance)'.

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Step 17 :- Go to create distribution



Step 18 :- Copy policy and go to s3 bucket permission update policy



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Step 19 :- Paste bucket policy

The screenshot shows the AWS S3 Bucket Policy editor. On the left, there's a sidebar with navigation links like Buckets, Access Grants, Access Points, 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, and Feature spotlight. The main area is titled "Bucket policy" and contains a JSON code editor. The JSON code is as follows:

```
1 [ {  
2     "Version": "2008-10-17",  
3     "Id": "PolicyForCloudFrontPrivateContent",  
4     "Statement": [  
5         {  
6             "Sid": "AllowCloudFrontServicePrincipal",  
7             "Effect": "Allow",  
8             "Principal": {  
9                 "Service": "cloudfront.amazonaws.com"  
10            },  
11             "Action": "s3:GetObject",  
12             "Resource": "arn:aws:s3:::outputbucket2002/*",  
13             "Condition": {  
14                 "StringEquals": {  
15                     "AWS:SourceArn": "arn:aws:cloudfront::514277200771:distribution/E3SZQ6Q3QQ1HAZ"  
16                 }  
17             }  
18         }  
19     ]  
20 }
```

To the right of the code editor, there's a "Policy examples" button, a "Policy generator" button, and a "Edit statement" button. Below the code editor, there's a section titled "Select a statement" with a "Add new statement" button. At the bottom right, there's a note about the copyright year 2024 and the AWS logo.

Step 20 :- Copy s3 url /output.....

The screenshot shows the AWS S3 Object details page for the file "primary.m3u8". The URL is <https://outputbucket2002.s3.amazonaws.com/output/primary.m3u8>. The object was last modified on February 7, 2024, at 09:43:51 (UTC+05:30) and has a size of 314.0 B. The type is m3u8. The object overview table includes the following information:

Owner	S3 URI
nidasaihk99637	s3://outputbucket2002/output/primary.m3u8
AWS Region	Amazon Resource Name (ARN)
US East (N. Virginia) us-east-1	arn:aws:s3:::outputbucket2002/output/primary.m3u8
Last modified	Entity tag (Etag)
February 7, 2024, 09:43:51 (UTC+05:30)	b235c72b44207cfb1dcc60f38687486f
Size	Object URL
314.0 B	https://outputbucket2002.s3.amazonaws.com/output/primary.m3u8
Type	
m3u8	
Key	

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Step 21 :- Copy distribution DNS and paste on chrome give / and paste s3 url

