# **Video streaming**

***Step1:*** Createan S3 Bucket**:**

>Go to the [Amazon S3 Console](https://s3.console.aws.amazon.com/s3/).

>Click on **Create Bucket** and provide a unique name (e.g., my-video-streaming-bucket).

>Choose a region (closer to your target audience for lower latency).

>Leave the other settings default and click **Create**

***Step2:*** Upload files or video

select Upload and upload files or videos to the s3 Bucket.

<>To ensure your videos are streamed in various resolutions (1080p, 720p, 480p) and formats (HLS, DASH, etc.), you'll need to transcode them.

***Step3:*** Create a CloudFront Distribution

> Go to the [CloudFront Console](https://console.aws.amazon.com/cloudfront/).

>Click on **Create Distribution**.

>Choose **Web** as the distribution type.

>In the **Origin Settings**, set the **Origin Domain Name** to the name of your S3 bucket (e.g., my-video-streaming-bucket.s3.amazonaws.com).

>Enable **Origin Access Control (OAC)** to restrict direct access to the S3 bucket and allow only CloudFront to serve files.

>Set the **Default Cache Behavior** (e.g., set the allowed HTTP methods, enable caching, etc.).

>Under **Distribution Settings**, set **Price Class** (e.g., use all regions or specific regions) and enable **SSL** if necessary.

>Click **Create Distribution**.

***Step4:*** Configure the S3 Bucket Policy

>Set a bucket policy to allow CloudFront access but prevent public access directly to S3:

>Go to the S3 bucket, click on Permissions.

>Under Bucket Policy, add permissions for CloudFront to access the bucket (using OAC).

<>Configure transcoding presets (HLS, MP4, etc.).

***Step5:*** Enable Adaptive Bitrate Streaming (HLS/DASH).

To improve the user experience, especially on different devices and network conditions, set up **Adaptive Bitrate Streaming** using the HLS protocol.

**Step 6:** Build the Front-End to Stream Videos.

> Use an HTML5 video player, such as **Video.js**, to embed the video into your website.

>Finally copy the DNS of the cloud front from the Details

>And also copy the DNS of the uploaded file.

> Open a new tab, paste the first DNS, use a "/" (slash), and then paste the second one, then press Enter.