

# CONTENT DELIVERY NETWORK (CDN)

A content delivery network (CDN) is a system of distributed servers (network) that deliver webpages and other web content to a user based on the geographic locations of the user, the origin of the webpage and a content delivery server.

Amazon CloudFront can be used to deliver your entire website, including dynamic, static, streaming, and interactive content using a global network of Amazon edge locations.

Requests for your website or application are automatically routed to the nearest edge locations instead of your servers, so content is delivered with the best possible performance.

**Origin:** This is the origin of all files that the CDN will distribute. This can be either an EC2 Instance, S3 Bucket, an ELB or Route53.

**Distribution:** This is the name given the CDN which consists of a collection of Edge Locations.

## CLOUDFRONT Distribution Types:





- **Web Distribution:** Typically used for Websites.
- **RTMP:** Used for Media Streaming.

# CLOUDFRONT DISTRIBUTION CREATION


Once you logged in to AWS management console, from the console home choose CloudFront under Storage & Content Delivery.

## Amazon Web Services

### Compute

-  **EC2**  
Virtual Servers in the Cloud
-  **EC2 Container Service**  
Run and Manage Docker Containers
-  **Elastic Beanstalk**  
Run and Manage Web Apps
-  **Lambda**  
Run Code in Response to Events






### Storage & Content Delivery

-  **S3**  
Scalable Storage in the Cloud
-  **CloudFront**  
Global Content Delivery Network
-  **Elastic File System** PREVIEW  
Fully Managed File System for EC2
-  **Glacier**  
Archive Storage in the Cloud

### Developer Tools

-  **CodeCommit**  
Store Code in Private Git Repositories
-  **CodeDeploy**  
Automate Code Deployments
-  **CodePipeline**  
Release Software using Continuous Delivery


### Management Tools

-  **CloudWatch**  
Monitor Resources and Applications
-  **CloudFormation**  
Create and Manage Resources with Templates
-  **CloudTrail**  
Track User Activity and API Usage
-  **Config**  
Track Resource Inventory and Changes
-  **OpsWorks**  
Automate Operations with Chef






### Internet of Things

-  **AWS IoT**  
Connect Devices to the Cloud

### Game Development

-  **GameLift**  
Deploy and Scale Session-based Multiplayer Games

### Mobile Services

-  **Mobile Hub**  
Build, Test, and Monitor Mobile Apps
-  **Cognito**  
User Identity and App Data Synchronization
-  **Device Farm**  
Test Android, iOS, and Web Apps on Real Devices in the Cloud
-  **Mobile Analytics**  
Collect, View and Export App Analytics
-  **SNS**  
Send and Receive Messages from the Cloud

Choose Create Distribution button to create a new one.

## Amazon CloudFront Getting Started

Either your search returned no results, or you do not have any distributions. Click the button below to create a content using a worldwide network of edge locations that provide low latency and high data transfer speeds ([learn more](#)).

Create Distribution

From the select delivery method page, choose Get Started under Web.

## Select a delivery method for your content.

### Web

Create a web distribution if you want to:

- Speed up distribution of static and dynamic content, for example, .html, .css, .php, and graphics files.
- Distribute media files using HTTP or HTTPS.
- Add, update, or delete objects, and submit data from web forms.
- Use live streaming to stream an event in real time.

You store your files in an origin — either an Amazon S3 bucket or a web server. After you create the distribution, you can add more origins

**Get Started**

### RTMP

Create an RTMP distribution to speed up distribution of your streaming media files using Adobe Flash Media Server's RTMP protocol. An end user to begin playing a media file before the file has finished downloading from a CloudFront edge location. Note the following:









- To create an RTMP distribution, you must store the media files in an Amazon S3 bucket.
- To use CloudFront live streaming, create a web distribution.

**Get Started**

Under Origin settings, specify Origin Domain name.

## Create Distribution







### Origin Settings

| Origin Domain Name     | <input type="text" value="cloudlinuxacademy.com"/>  |  |       |                      |                      |   |
|------------------------|---|---|-------|----------------------|----------------------|---|
| Origin Path            | <input type="text"/>  |  |       |                      |                      |   |
| Origin ID              | <input type="text" value="Custom-cloudlinuxacademy.com"/>   |  |       |                      |                      |   |
| Origin SSL Protocols   | <input checked="" type="checkbox"/> TLSv1.2<br><input checked="" type="checkbox"/> TLSv1.1<br><input checked="" type="checkbox"/> TLSv1<br><input type="checkbox"/> SSLv3 |  |       |                      |                      |   |
| Origin Protocol Policy | <input checked="" type="radio"/> HTTP Only<br><input type="radio"/> HTTPS Only<br><input type="radio"/> Match Viewer  |  |       |                      |                      |   |
| HTTP Port              | <input type="text" value="80"/>   |  |       |                      |                      |   |
| HTTPS Port             | <input type="text" value="443"/>  |  |       |                      |                      |   |
| Origin Custom Headers  | <table><thead><tr><th>Header Name</th><th>Value</th></tr></thead><tbody><tr><td><input type="text"/></td><td><input type="text"/></td></tr></tbody></table>               | Header Name   | Value | <input type="text"/> | <input type="text"/> |  |
| Header Name            | Value   |   |       |                      |                      |   |
| <input type="text"/>   | <input type="text"/>  |   |       |                      |                      |   |










Under Default cache behavior settings left all as defaults till Object Caching.

## Default Cache Behavior Settings

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|                               |  |   |
|-------------------------------|--|---|
| <b>Path Pattern</b>           | Default (*)  |  |
| <b>Viewer Protocol Policy</b> | <input checked="" type="radio"/> HTTP and HTTPS<br><input type="radio"/> Redirect HTTP to HTTPS<br><input type="radio"/> HTTPS Only                          |  |
| <b>Allowed HTTP Methods</b>   | <input checked="" type="radio"/> GET, HEAD<br><input type="radio"/> GET, HEAD, OPTIONS<br><input type="radio"/> GET, HEAD, OPTIONS, PUT, POST, PATCH, DELETE |  |
| <b>Cached HTTP Methods</b>    | GET, HEAD (Cached by default)  |  |
| <b>Forward Headers</b>        | <div>None (Improves Caching) ▼</div>   |  |
| <b>Object Caching</b>         | <input checked="" type="radio"/> Use Origin Cache Headers<br><input type="radio"/> Customize<br><a href="#">Learn More</a>                                   |  |

Under Object Caching, if you want to change choose Custom, then specify Minimum, maximum and Default TTL values.

|   |  |   |
|---|--|---|
| <b>Object Caching</b>   | <input checked="" type="radio"/> Use Origin Cache Headers<br><input type="radio"/> Customize |    |
|   | <a href="#">Learn More</a>   |   |
| <b>Minimum TTL</b>  | <input type="text" value="0"/>   |    |
| <b>Maximum TTL</b>  | <input type="text" value="31536000"/>  |    |
| <b>Default TTL</b>  | <input type="text" value="86400"/>   |    |
| <b>Forward Cookies</b>  | <input type="button" value="None (Improves Caching) ▼"/>                                     |    |
| <b>Forward Query Strings</b>  | <input type="radio"/> Yes<br><input checked="" type="radio"/> No (Improves Caching)          |    |
| <b>Smooth Streaming</b>   | <input type="radio"/> Yes<br><input checked="" type="radio"/> No                             |    |
| <b>Restrict Viewer Access<br/>(Use Signed URLs or Signed Cookies)</b> | <input type="radio"/> Yes<br><input checked="" type="radio"/> No                             |    |
| <b>Compress Objects Automatically</b>                                 | <input type="radio"/> Yes<br><input checked="" type="radio"/> No                             |  |
|   | <a href="#">Learn More</a>   |   |

Under Distribution Settings, from Price class drop down list choose one of the option which suits better for your application.

## Distribution Settings

Then choose Create Distribution button to create.

Distribution will start creating, you can see the status as in progress.

## CloudFront Distributions

| <div>Create Distribution</div> <div>Distribution Settings</div> <div>Delete</div> <div>Enable</div> <div>Disable</div> <div></div> |                 |                |                      |         |             |        |             |         |   |
|--|-----------------|----------------|----------------------|---------|-------------|--------|-------------|---------|---|
| Viewing : Any Delivery Method Any State <div></div> Viewing 1  |                 |                |                      |         |             |        |             |         |   |
|  | Delivery Method | ID             | Domain Name          | Comment | Origin      | CNAMEs | Status      | State   |   |
| <input type="checkbox"/>   | Web             | E2XBFMJOLTLAOC | d10febps84i6i6.cloud | -       | cloudlinuxa | -      | In Progress | Enabled | 2 |

Once completion, click on ID.

| Viewing : Any Delivery Method Any State <div></div> |                 |                |                      |         |             |        |          |  |  |
|---|-----------------|----------------|----------------------|---------|-------------|--------|----------|--|--|
|   | Delivery Method | ID             | Domain Name          | Comment | Origin      | CNAMEs | Status   |  |  |
| <input type="checkbox"/>                            | Web             | E2XBFMJOLTLAOC | d10febps84i6i6.cloud | -       | cloudlinuxa | -      | Deployed |  |  |

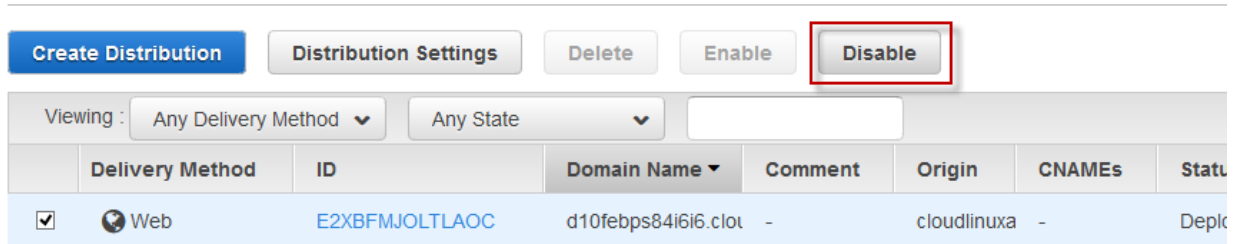
You can see the domain of your cloudfront distribution under general.

|                                 |  |   |           |             |              |               |
|---------------------------------|--|---|-----------|-------------|--------------|---------------|
| General                         |  | Origins   | Behaviors | Error Pages | Restrictions | Invalidations |
| Edit                            |  |   |           |             |              |               |
| Distribution ID                 |  | E2XBFMJOLTLAOC                                    |           |             |              |               |
| Log Prefix                      |  | -   |           |             |              |               |
| Delivery Method                 |  | Web   |           |             |              |               |
| Cookie Logging                  |  | Off   |           |             |              |               |
| Distribution Status             |  | Deployed  |           |             |              |               |
| Comment                         |  | -   |           |             |              |               |
| Price Class                     |  | Use Only US, Europe and Asia                      |           |             |              |               |
| AWS WAF Web ACL                 |  | -   |           |             |              |               |
| State                           |  | Enabled   |           |             |              |               |
| Alternate Domain Names (CNAMEs) |  | -   |           |             |              |               |
| SSL Certificate                 |  | Default CloudFront Certificate (*.cloudfront.net) |           |             |              |               |
| Domain Name                     |  | d10febps84i6i6.cloudfront.net                     |           |             |              |               |
| Custom SSL Client Support       |  | -   |           |             |              |               |
| Default Root Object             |  | -   |           |             |              |               |
| Last Modified                   |  | 2016-05-06 22:39 UTC+5:30                         |           |             |              |               |
| Log Bucket                      |  | -   |           |             |              |               |

## REMOVE CLOUDFRONT DISTRIBUTION

To remove the distribution, select the distribution then choose disable.

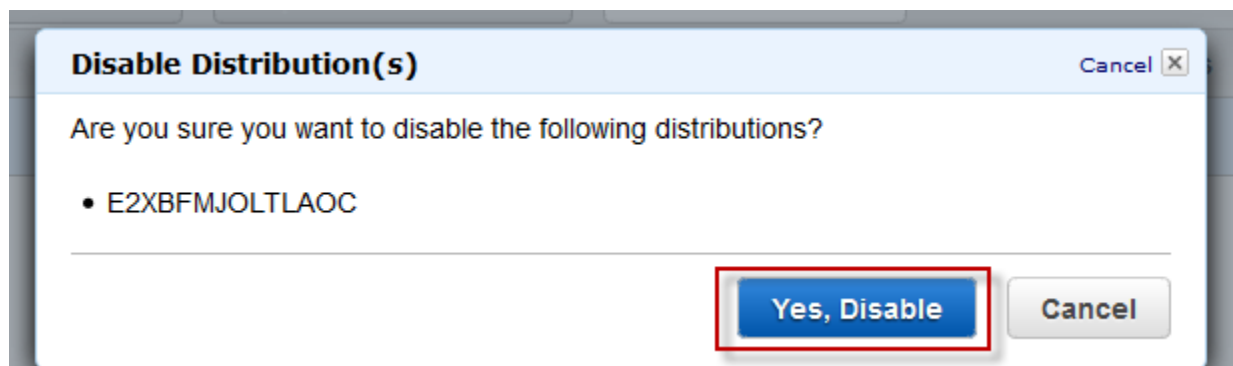
## CloudFront Distributions



The screenshot shows the CloudFront Distributions console. At the top, there are buttons: "Create Distribution", "Distribution Settings", "Delete", "Enable", and "Disable". The "Disable" button is highlighted with a red box. Below the buttons, there are filters for "Viewing : Any Delivery Method" and "Any State". A table lists the distributions. The first distribution is selected with a checkbox and has the "Disable" button highlighted with a red box.

|                                     | Delivery Method | ID             | Domain Name                   | Comment | Origin      | CNAMEs | Status   |
|-------------------------------------|-----------------|----------------|-------------------------------|---------|-------------|--------|----------|
| <input checked="" type="checkbox"/> | Web             | E2XBFMJOLTLAOC | d10febps84i6i6.cloudfront.net | -       | cloudlinuxa | -      | Deployed |

Confirm the disabling distribution.



The screenshot shows a confirmation dialog box titled "Disable Distribution(s)". It asks "Are you sure you want to disable the following distributions?" and lists "E2XBFMJOLTLAOC". At the bottom, there are two buttons: "Yes, Disable" (highlighted with a red box) and "Cancel".

It will start disabling, once done status will change to Disabled.



The screenshot shows the CloudFront Distributions console after the distribution has been disabled. The "Status" column now shows "Disabled" (highlighted with a green box) instead of "Deployed". The "State" column shows "Disabled" (highlighted with a green box) instead of "Deployed".

|                          | Delivery Method | ID             | Domain Name                   | Comment | Origin      | CNAMEs | Status   | State    | Last Modified |
|--------------------------|-----------------|----------------|-------------------------------|---------|-------------|--------|----------|----------|---------------|
| <input type="checkbox"/> | Web             | E2XBFMJOLTLAOC | d10febps84i6i6.cloudfront.net | -       | cloudlinuxa | -      | Deployed | Disabled | 2016-05       |

Choose distribution, select Delete to delete the distribution.



Create Distribution

Distribution Settings

Delete

Enable

Disable

Viewing : Any Delivery Method ▾ Any State ▾

|                                     | Delivery Method | ID             | Domain Name ▾    | Comment | Origin      | CNAMEs |
|-------------------------------------|-----------------|----------------|------------------|---------|-------------|--------|
| <input checked="" type="checkbox"/> | Web             | E2XBFMJOLTLAOC | d10feb84i6i6.clo | -       | cloudlinuxa | -      |

Confirm deletion, by clicking on Yes, Delete button.

Delete Distribution(s)

Cancel

Are you sure you want to delete the following distributions?

- E2XBFMJOLTLAOC

Yes, Delete

Cancel