



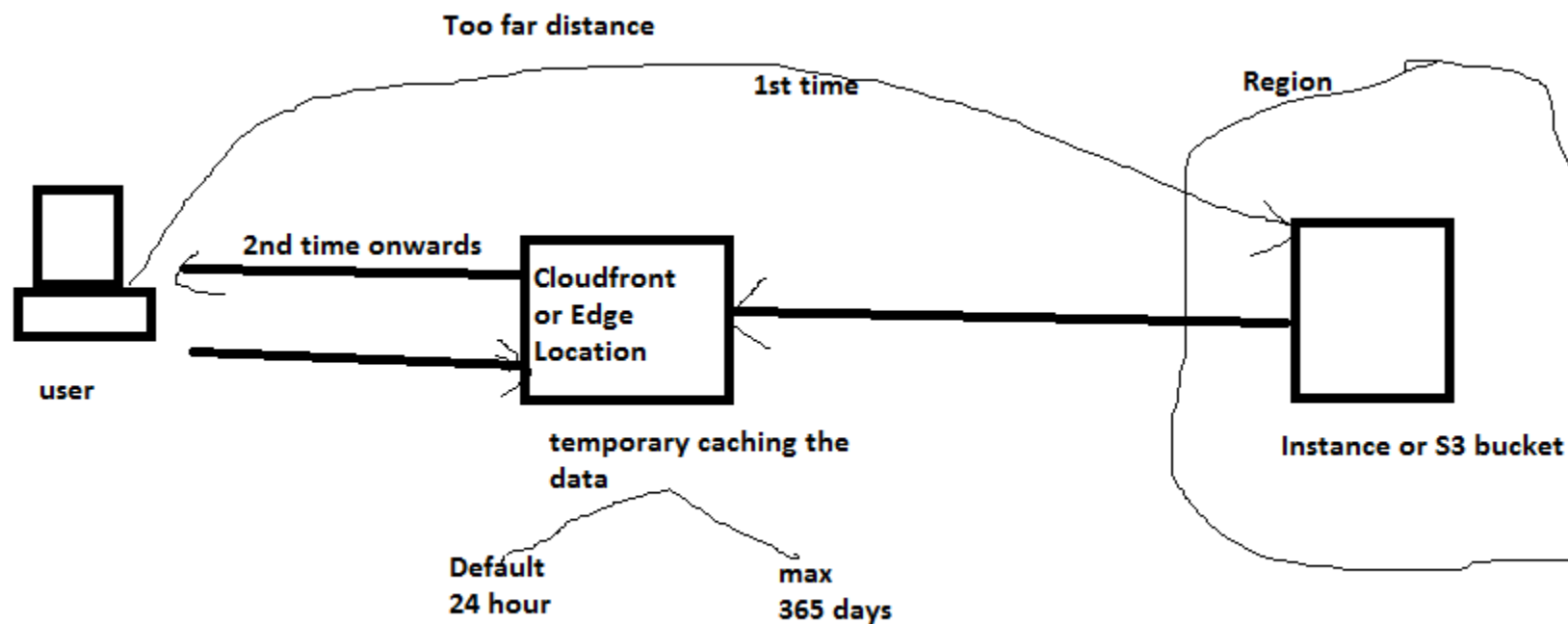
users



**Amazon
CloudFront**



Amazon S3



Topics to be covered--cloudfront

- 1) CDN Introduction
- 2) CDN configuration with S3 bucket
- 3) Geolocation – blacklist and whitelist
- 4) Accessing CDN
- 5) Speed evaluation

Amazon CloudFront

CloudFront is a **CDN (Content Delivery Network)**. It retrieves data from Amazon S3 bucket and distributes it to multiple datacenter locations. It delivers the data through a network of data centers called **edge locations**. The nearest edge location is routed when the user requests for data, resulting in lowest latency, low network traffic, fast access to data, etc.

Amazon CloudFront is a fast content delivery network (CDN) service that securely delivers data, videos, applications, and APIs to customers globally with low latency, high transfer speeds, all within a developer-friendly environment.

CloudFront is integrated with AWS – both physical locations that are directly connected to the AWS global infrastructure, as well as other AWS services.

How does CloudFront work?

- ✓ CloudFront acts as a distributed cache for your files, with cache locations around the world. It fetches your files from their source location (“origin” in CloudFront terms) and places the copies of the files in different edge locations across the Americas, Europe, Asia, Africa, and Oceania. In so doing, CloudFront speeds up access to your files for your end users.
- ✓ Why is this worth doing? Imagine, for example, that your data origin is located in Brazil and one of your customers in Japan would like to access this data. Without CloudFront (or a similar solution) this customer would need to send a request to the other side of the world, transferring the files from a very distant location. This would result in a request that’s slow to arrive to the destination as well as a slow file download. Having your customers wait longer to get data often makes for a poor customer experience.
- ✓ With CloudFront, however, the files are periodically fetched by CloudFront system from the location in Brazil and placed onto a set of servers around the world, including one in Japan. When a user in Japan goes to download the files, the request will now be served by a nearby server with lower latency, a higher download speed, and a better customer experience.

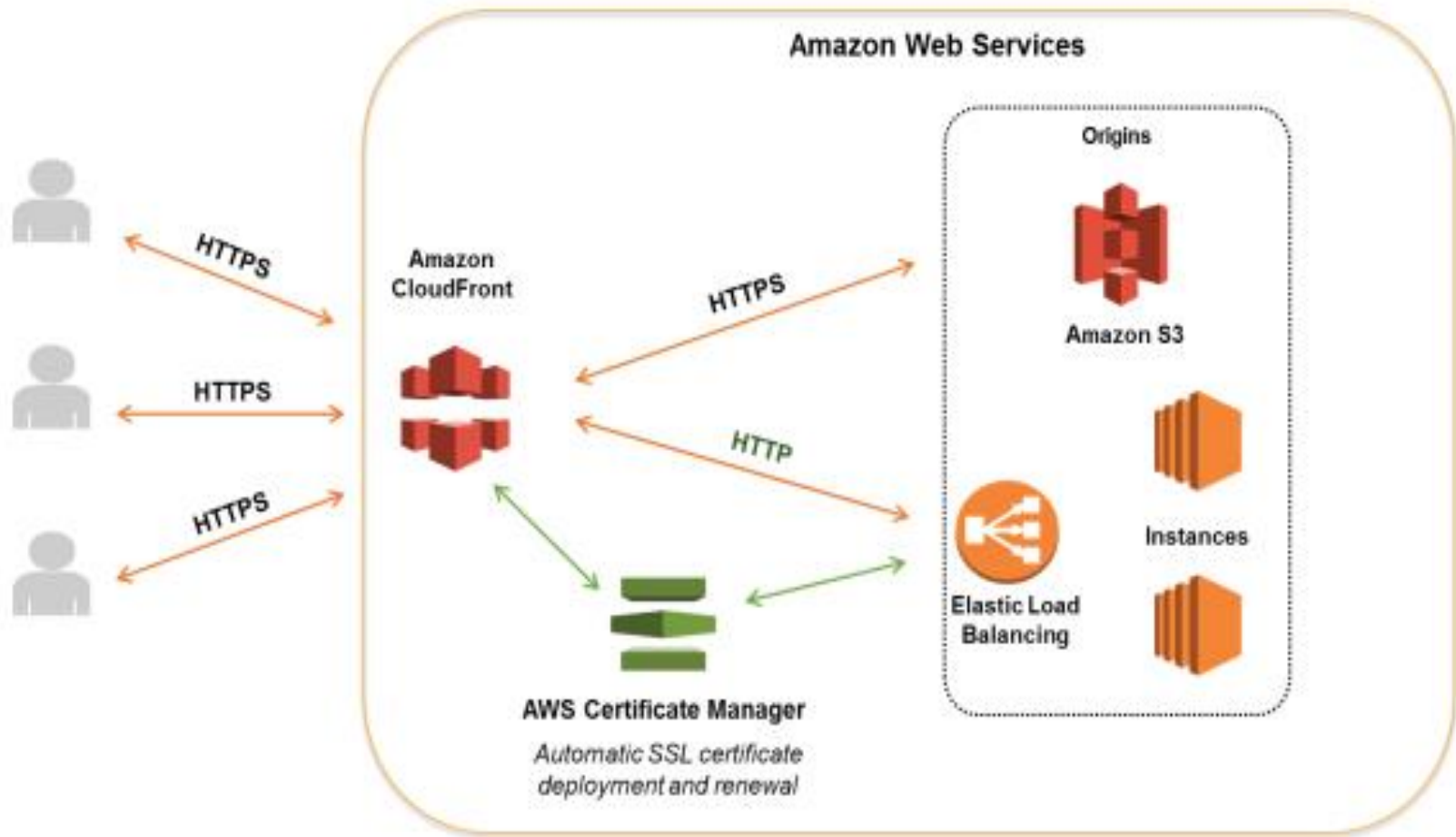


Figure 1: Secure content delivery with CloudFront and the AWS Certificate Manager

Cloudfront Lab

- 1) Create one S3 bucket and upload some files there.
- 2) EC2—Cloudfront – Create Distribution

Amazon CloudFront Getting Started

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

Create Distribution

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 to the distribution.

Get Started

RTMP

CloudFront is discontinuing support for RTMP distributions on December 31, 2020. For more information, please [read the announcement](#).

Create an RTMP distribution to speed up distribution of your streaming media files using Adobe Flash Media Server's RTMP protocol. An RTMP distribution allows 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

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Select origin Domain Name – S3 Bucket name

Create Distribution

Origin Settings

Origin Domain Name	<input type="text" value="mymumbaibucket1133.s3.amazonaws.co"/>					
Origin Path	<input type="text"/>					
Origin ID	<input type="text" value="S3-mymumbaibucket1133"/>					
Restrict Bucket Access	<input type="radio"/> Yes <input checked="" type="radio"/> No					
Origin Connection Attempts	<input type="text" value="3"/>					
Origin Connection Timeout	<input type="text" value="10"/>					
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"/>					

Default Cache Behavior Settings

Path Pattern	<input type="radio"/> Default (*)	
Viewer Protocol Policy	<input checked="" type="radio"/> HTTP and HTTPS <input type="radio"/> Redirect HTTP to HTTPS <input type="radio"/> HTTPS Only	
Allowed HTTP Methods	<input checked="" type="radio"/> GET, HEAD <input type="radio"/> GET, HEAD, OPTIONS	

Cloudfront Lab

Select price class—next-create

[Learn More](#)

Distribution Settings

Price Class Use All Edge Locations (Best Performance) ^ ⓘ

AWS WAF Web ACL

Alternate Domain Names (CNAMEs)

SSL Certificate

Use Only U.S., Canada and Europe

Use U.S., Canada, Europe, Asia, Middle East and Africa

Use All Edge Locations (Best Performance)

☒ Default CloudFront Certificate (*.cloudfront.net)

Choose this option if you want your users to use HTTPS or HTTP to access your content with the CloudFront domain name: <https://d1111111abcdef8.cloudfront.net/logo.jpg>.

Important: If you choose this option, CloudFront requires that browsers or devices support TLSv1 or later to access your content.

Enable new real-time metrics for better visibility of your traffic. [Learn more](#)

CloudFront Distributions

Create Distribution

Distribution Settings

Delete

Enable

Disable



Viewing :

Any Delivery Method ▾

Any State ▾

« < Viewing 1 to 1 of 1 Items > »

	Delivery Method	ID ▾	Domain Name	Comment	Origin	CNAMEs	Status	State	Last Modified	
<input checked="" type="checkbox"/>	Web	E2B74YDLVM718W	d236fu4cq1nqfl.c	-	mymumb	-	In Prog	Enabled	2020-08-11 17:1	

« < Viewing 1 to 1 of 1 Items > »

Cloudfront Lab

Configure Geo restriction

General

Origins and Origin Groups

Behaviors

Error Pages

Restrictions

Invalidations

Tags

If you need to prevent users in selected countries from accessing your content, you can specify either a whitelist (countries where they can access your content) or a blacklist (countries where they cannot). For more information, see [Restricting the Geographic Distribution of Your Content](#) in the *Amazon CloudFront Developer Guide*.

Edit

Viewing 1 to 1 of 1 Items

	Restriction	Status	Type	
<input checked="" type="checkbox"/>	Geo Restriction	Disabled	-	

Viewing 1 to 1 of 1 Items

Edit Geo-Restrictions

Geo-Restriction Settings

Enable Geo-Restriction ☒ Yes
☐ No



Restriction Type ☐ Whitelist
☒ Blacklist



Countries



pak

PK -- PAKISTAN

Add >>

<< Remove

PK -- PAKISTAN

Cancel

Yes, Edit

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To Delete

First Disable it –Wait for 10 min the delete it

CloudFront Distributions

[Create Distribution](#) [Distribution Settings](#) [Delete](#) [Enable](#) [Disable](#)

Viewing : Any Delivery Method ▾ Any State ▾

	Delivery Method	ID ▾	Domain Name	Comment	Origin	CNAMEs
<input type="checkbox"/>	 Web	E1IH0H88AMNEFH	d3fssydaxhdo4e.cloudfront.net	-	cdn_internal_blog.gritto.net	taylor.callsen.me