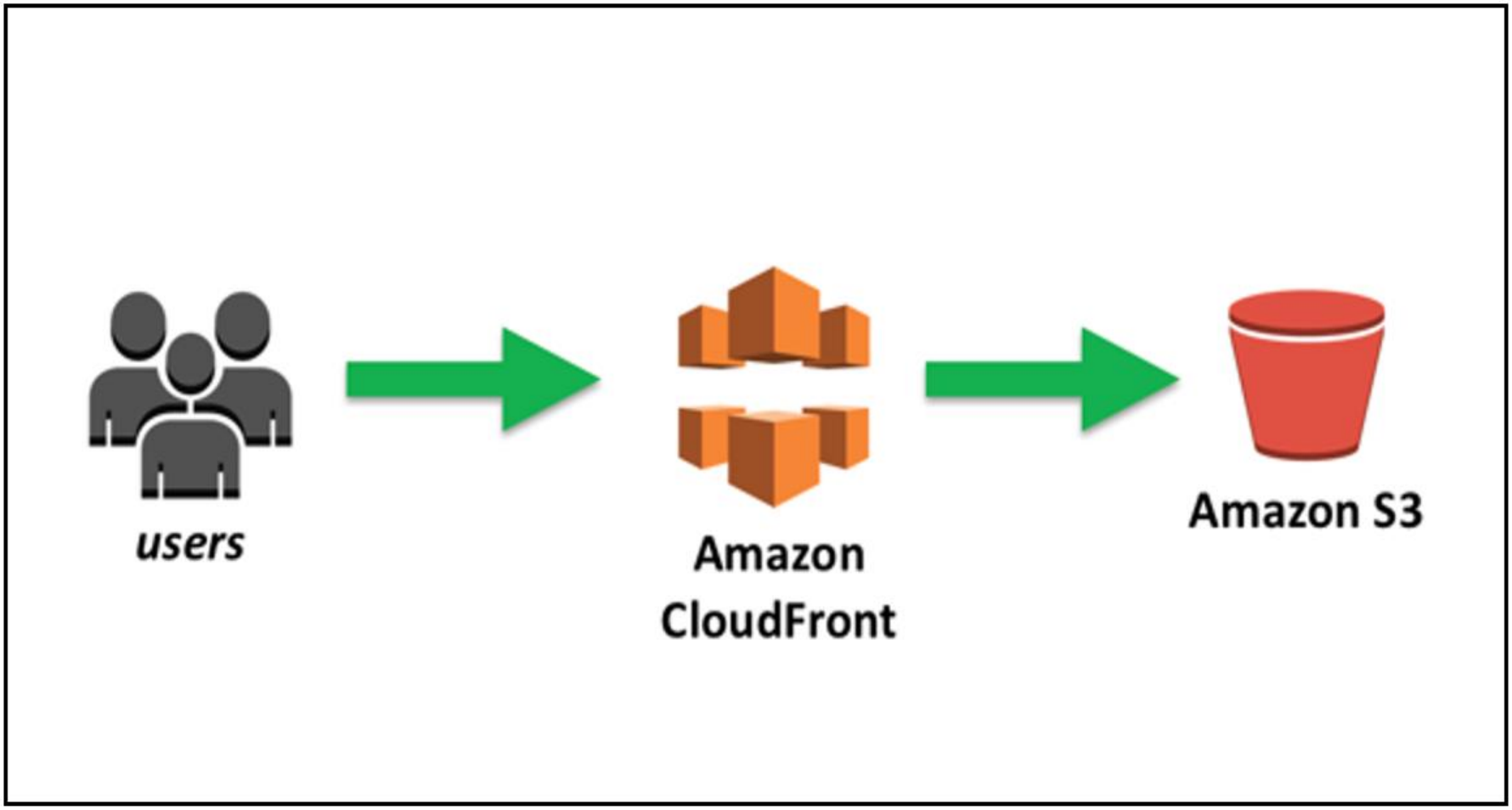
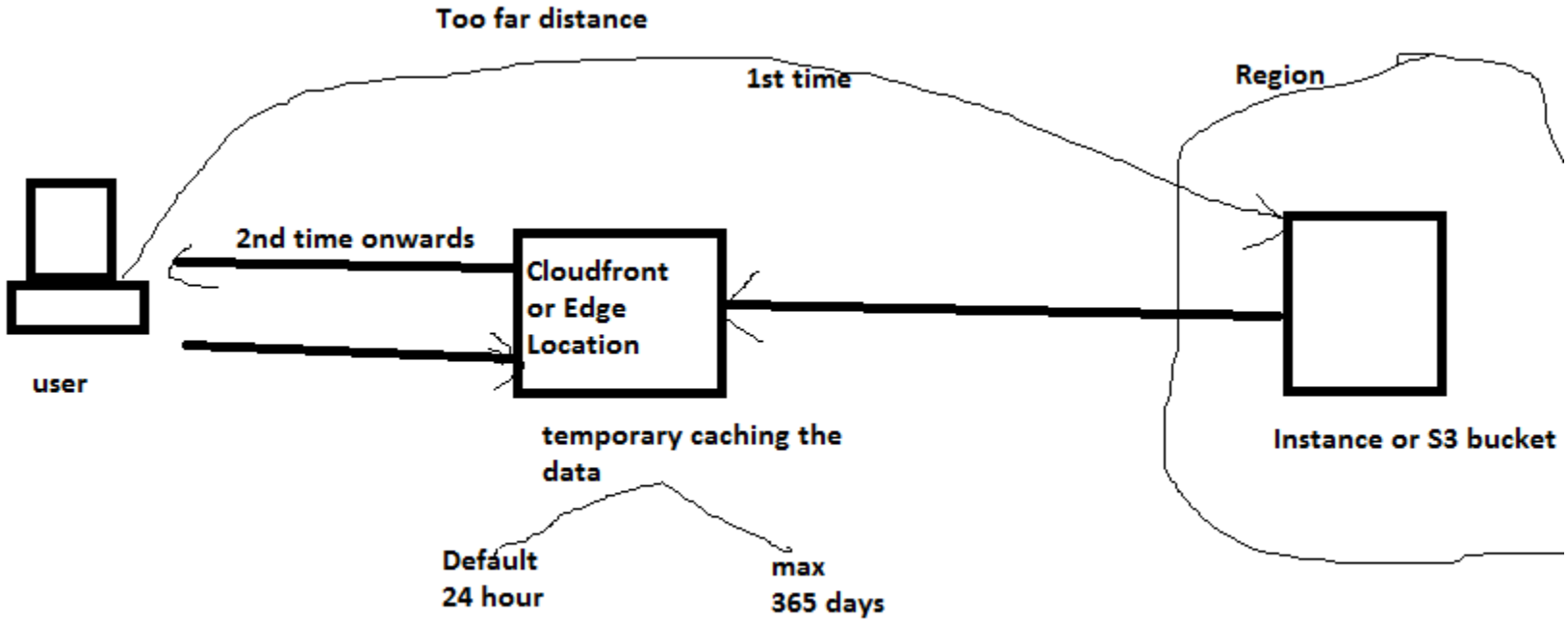

users
Amazon
CloudFront
Amazon S3


Too far distance
1st time
Region
2nd time onwards
Cloudfront
or Edge
Location
user
temporary caching the
data
Instance or S3 bucket
Default
24 hour
max
365 days

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.

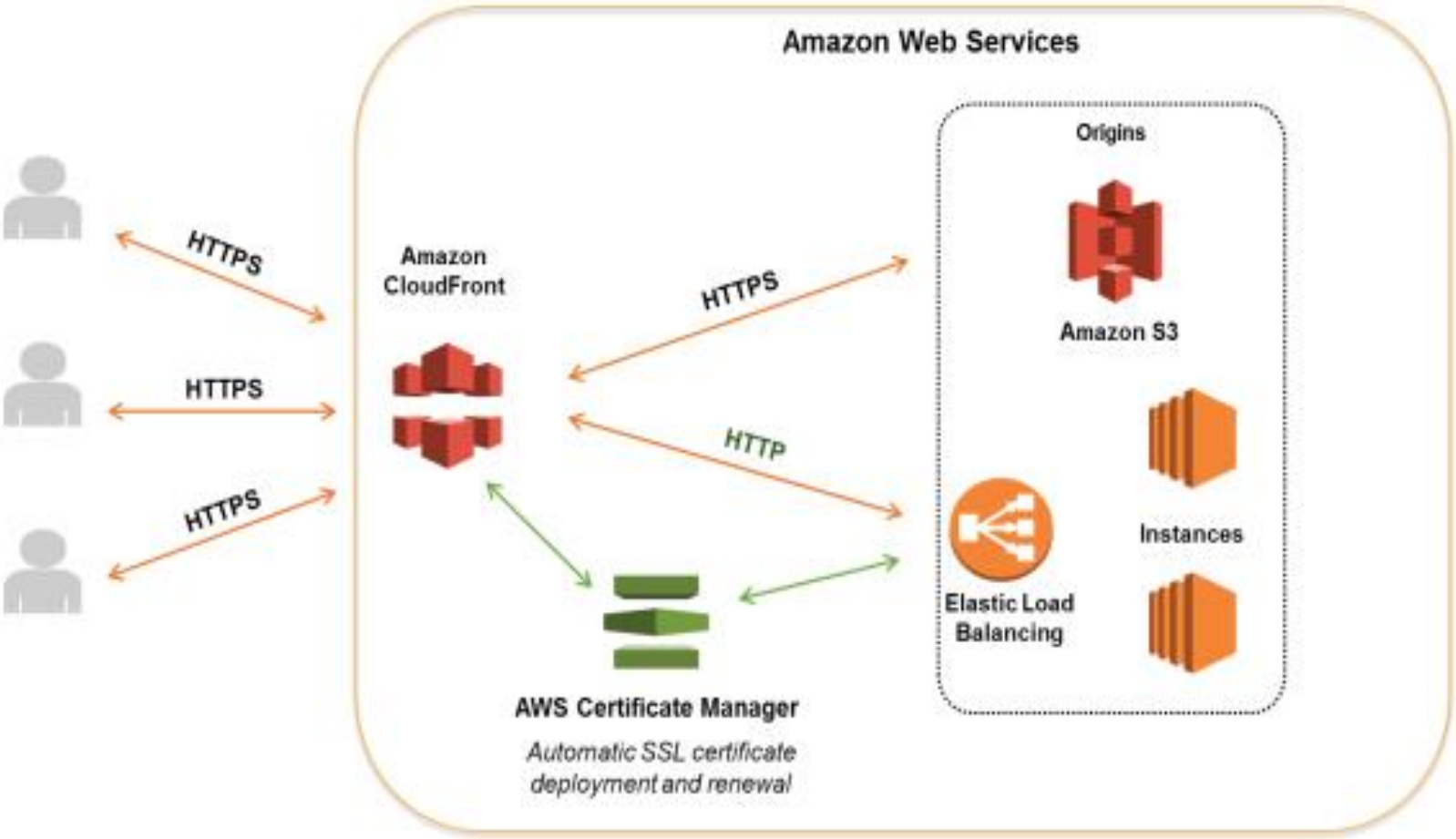


Figure 1: Secure content delivery with CloudFront and the AWS Certificate Manager

Cloudfront Lab

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

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.

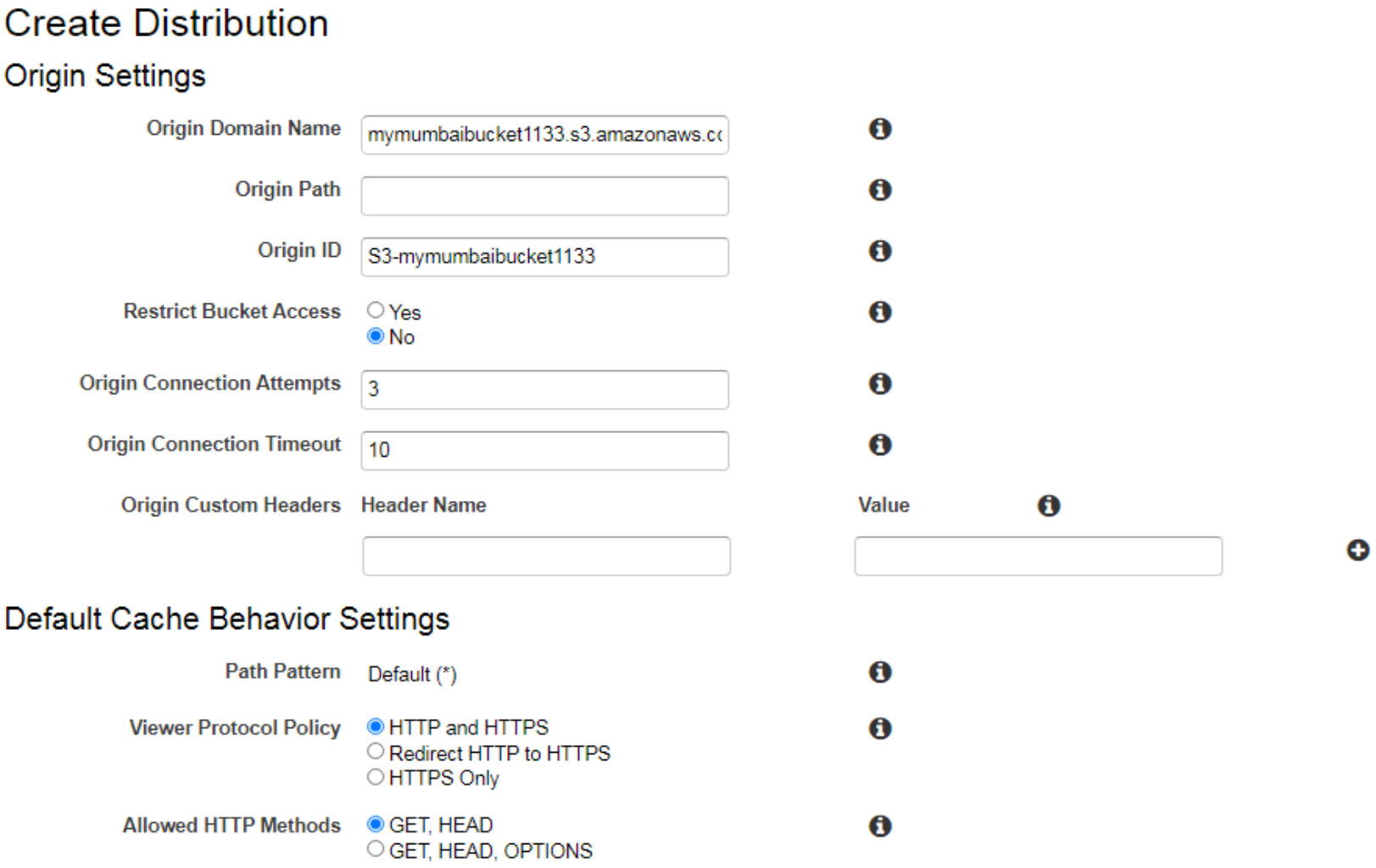
Create an RTMP distribution to speed up distribution of your streaming media files using Adobe Flash Media Server's RTMP protocol. An RTMP distribution allows user to begin playing a media file before the file has finished downloading from a CloudFront edge location. Note the following:

- 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

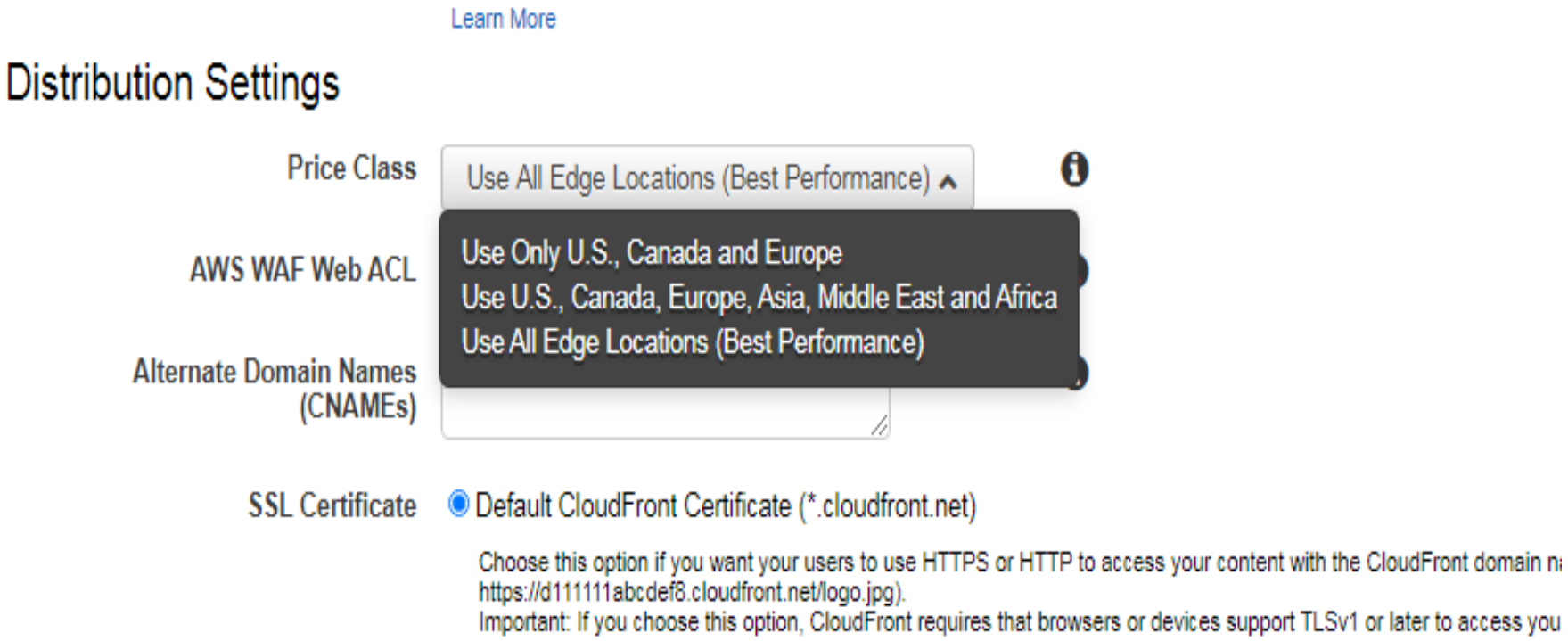
Cloudfront Lab

Select origin Domain Name – S3 Bucket name



Cloudfront Lab

Select price class—next-create



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

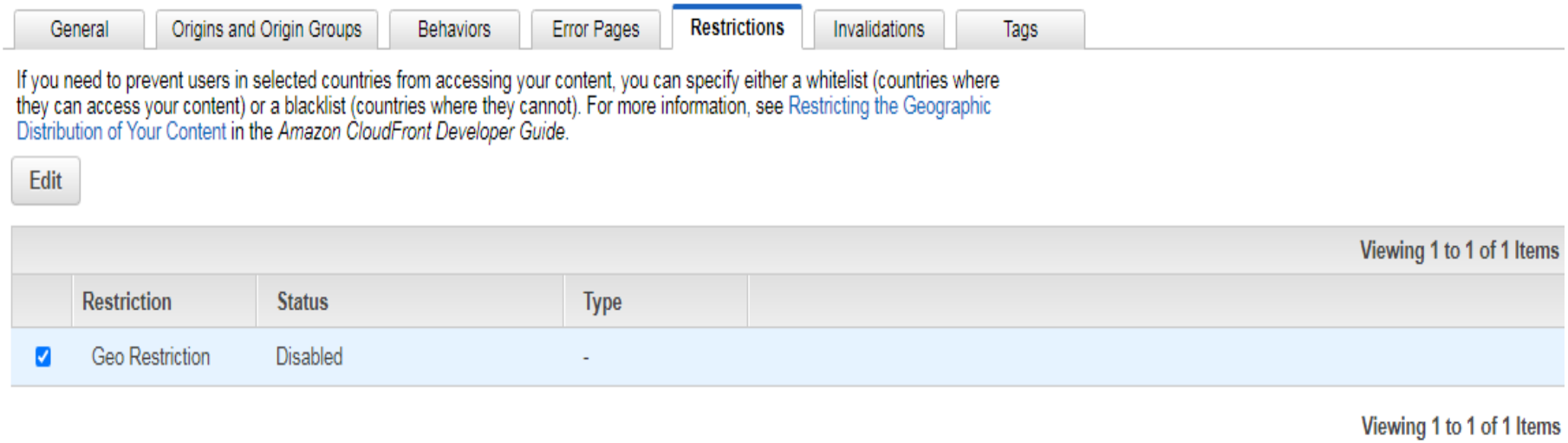
Viewing 1 to 1 of 1 Items

Delivery Method	ID	Domain Name	Comment	Origin	CNAMEs	Status	State	Last Modified
Web	E2B74YDLVM718W	d236fu4cq1nqfl.c	-	mymumba	-	In Prog	Enabled	2020-08-11 17:1

Viewing 1 to 1 of 1 Items

Cloudfront Lab

Configure Geo restriction



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

Cloudfront Lab

To Delete

First Disable it –Wait for 10 min the delete it