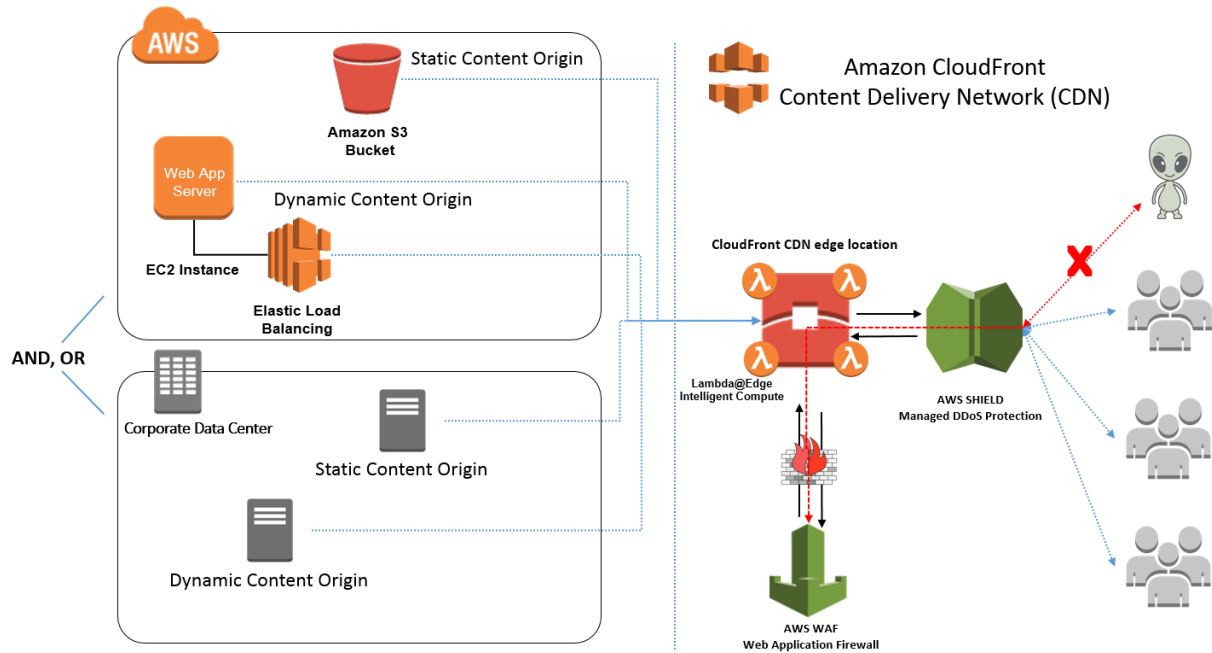


## AWS CloudFront demo by photos and docs

Intro - <https://aws.amazon.com/caching/cdn/>



1) Docs/urls:

- a) CF – <https://console.aws.amazon.com/cloudfront/home?region=us-east-1#fle:>
- b) Dev guide – <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/Introduction.html>
- c) Cache Expiration - <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/Expiration.html>
- d) Compress - <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/ServingCompressedFiles.html>
- e) Geo Restriction – <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/distribution-web-values-specify.html#DownloadDistValuesEnableIPv6>
- f) Protocols and Ciphers - <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/secure-connections-supported-viewer-protocols-ciphers.html#secure-connections-supported-ciphers>
- g) Origin Access Identity - <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/private-content-restricting-access-to-s3.html>
- h) Field Level Encryption - <https://docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/field-level-encryption.html#field-level-encryption-setting-up>
- i) Age header - <https://developer.mozilla.org/en-US/docs/Web/HTTP/Headers/Age>
- j) Lab - <https://www.qwiklabs.com/focuses/13391?parent=catalog>
  
- k) CF Whats-new –
  - <https://aws.amazon.com/about-aws/whats-new/2020/07/cloudfront-cache-key-policy/> (Cache key and Origin Request Policies)
  - <https://aws.amazon.com/about-aws/whats-new/2020/08/cloudfront-realtimelogs/> (real-time logs)

## Demo by Photos:

### 1) Easy set up

Step 1: Select delivery method  
Step 2: Create distribution

Custom SSL Certificate (example.com):  
Choose this option if you want your users to access your content by using an alternate domain name, such as <https://www.example.com>. You can use a certificate stored in AWS Certificate Manager (ACM) in the US East (N. Virginia) Region, or you can use a certificate stored in IAM.  
[Request or Import a Certificate with ACM](#)  
[Learn more about using custom SSL/TLS certificates with CloudFront.](#)  
[Learn more about using ACM.](#)

Supported HTTP Versions  
☒ HTTP/2, HTTP/1.1, HTTP/1.0  
☐ HTTP/1.1, HTTP/1.0

Default Root Object

Standard Logging ☒ On  
☐ Off

S3 Bucket for Logs

Log Prefix

Cookie Logging ☒ On  
☐ Off

Enable IPv6 ☒  
[Learn more](#)

Comment

Distribution State ☒ Enabled  
☐ Disabled

For viewer requests, choose the versions of the HTTP protocol that you want CloudFront to accept. In general, HTTP/2 is faster. CloudFront always forwards requests to the origin using HTTP/1.1.

IPv6 is a new version of the IP protocol; it's the successor to IPv4 and uses a larger address space. In general, you should enable IPv6 if you have users on IPv6 networks who want to access your content. However, there are restrictions on using IPv6 if you use signed URLs or signed cookies to restrict access to your content. For more information about these restrictions, choose "Learn more."

## 2) Many S3 bucket choices for static contents:

The screenshot shows the AWS S3 console 'Upload' wizard. The progress bar indicates the following steps: 1. Select files (checked), 2. Set permissions (checked), 3. Set properties (active), and 4. Review. The 'Storage class' section is expanded, showing a table of available storage classes. The table has columns for Storage class, Designed for, Availability Zones, Min storage duration, Min billable object size, Monitoring and automation fees, and Retrieval fees. The 'Standard' class is selected.

Storage class	Designed for	Availability Zones	Min storage duration	Min billable object size	Monitoring and automation fees	Retrieval fees
<input checked="" type="radio"/> Standard	Frequently accessed data	≥ 3	-	-	-	-
<input type="radio"/> Intelligent-Tiering	Long-lived data with changing or unknown access patterns	≥ 3	30 days	-	Per-object fees apply	-
<input type="radio"/> Standard-IA	Long-lived, infrequently accessed data	≥ 3	30 days	128KB	-	Per-GB fees apply
<input type="radio"/> One Zone-IA	Long-lived, infrequently accessed, non-critical data	≥ 1	30 days	128KB	-	Per-GB fees apply
<input type="radio"/> Glacier	Archive data with retrieval times ranging from minutes to hours	≥ 3	90 days	40KB	-	Per-GB fees apply
<input type="radio"/> Glacier Deep Archive	Archive data that rarely, if ever, needs to be accessed with retrieval times in hours	≥ 3	180 days	40KB	-	Per-GB fees apply
<input type="radio"/> Reduced Redundancy (Not recommended)	Frequently accessed, non-critical data	≥ 3	-	-	-	-

At the bottom of the wizard, there are 'Upload', 'Previous', and 'Next' buttons. Below the wizard, there are three 'Learn more' links and a 'Get started' button.

### 3) Fast activation of new CF distribution:

The screenshot shows the AWS CloudFront console interface. The left sidebar contains navigation links for Distributions, Policies, What's new, Telemetry (Monitoring, Alarms, Logs), Reports & analytics (Cache statistics, Popular objects, Top referrers, Usage, Viewers), and Security (Origin access identity, Public key, Field-level encryption). The main content area displays the configuration for a specific CloudFront distribution, E16P0IS0EBJJHP. The 'General' tab is selected, showing various settings such as Distribution ID, ARN, Log Prefix, Delivery Method, Cookie Logging, Distribution Status, Comment, Price Class, AWS WAF Web ACL, State, Alternate Domain Names (CNAMEs), SSL Certificate, Domain Name, Custom SSL Client Support, Security Policy, Supported HTTP Versions, IPv6, Default Root Object, Last Modified, and Log Bucket. The distribution status is 'InProgress'.

Property	Value
Distribution ID	E16P0IS0EBJJHP
ARN	arn:aws:cloudfront::857554160741:distribution/E16P0IS0EBJJHP
Log Prefix	-
Delivery Method	Web
Cookie Logging	Off
Distribution Status	InProgress
Comment	Walter CF test1
Price Class	Use All Edge Locations (Best Performance)
AWS WAF Web ACL	-
State	Enabled
Alternate Domain Names (CNAMEs)	-
SSL Certificate	Default CloudFront Certificate (*.cloudfront.net)
Domain Name	d2wk3iptess4v1.cloudfront.net
Custom SSL Client Support	-
Security Policy	TLSv1
Supported HTTP Versions	HTTP/2, HTTP/1.1, HTTP/1.0
IPv6	Enabled
Default Root Object	-
Last Modified	2020-09-28 09:43 UTC-7
Log Bucket	-

#### 4) Origins below = Dynamic EC2 web server + S3 buckets for static

The screenshot shows the AWS CloudFront console interface. The left sidebar contains navigation links for Distributions, Policies, What's new, Telemetry, Reports & analytics, and Security. The main content area is titled 'CloudFront Distributions > E16P0IS0EBJJHP' and has tabs for General, Origins and Origin Groups (selected), Behaviors, Error Pages, Restrictions, Invalidations, and Tags. Under the 'Origins' section, there are buttons for 'Create Origin', 'Edit', and 'Delete'. A table lists the origins:

	Origin Domain Name and Path	Origin ID	Origin Type	Origin Access
<input type="checkbox"/>	ec2-52-11-79-159.us-west-2.compute.amazonaws.com	Custom-ec2-52-11-79-159.us-west-2.compute.amazonaws.com	Custom Origin	-
<input type="checkbox"/>	qls-19134945-f386abd63a8f431d-s3bucket-kjq9fdvi6u6z.	S3-qls-19134945-f386abd63a8f431d-s3bucket-kjq9fdvi6u6z	S3 Origin	origin-access-ic

Below the origins table is the 'Origin Groups' section, which includes a description and buttons for 'Create Origin Group', 'Edit', and 'Delete'. A table for origin groups is shown, but it is empty.

Origin Group ID	Origins
-----------------	---------

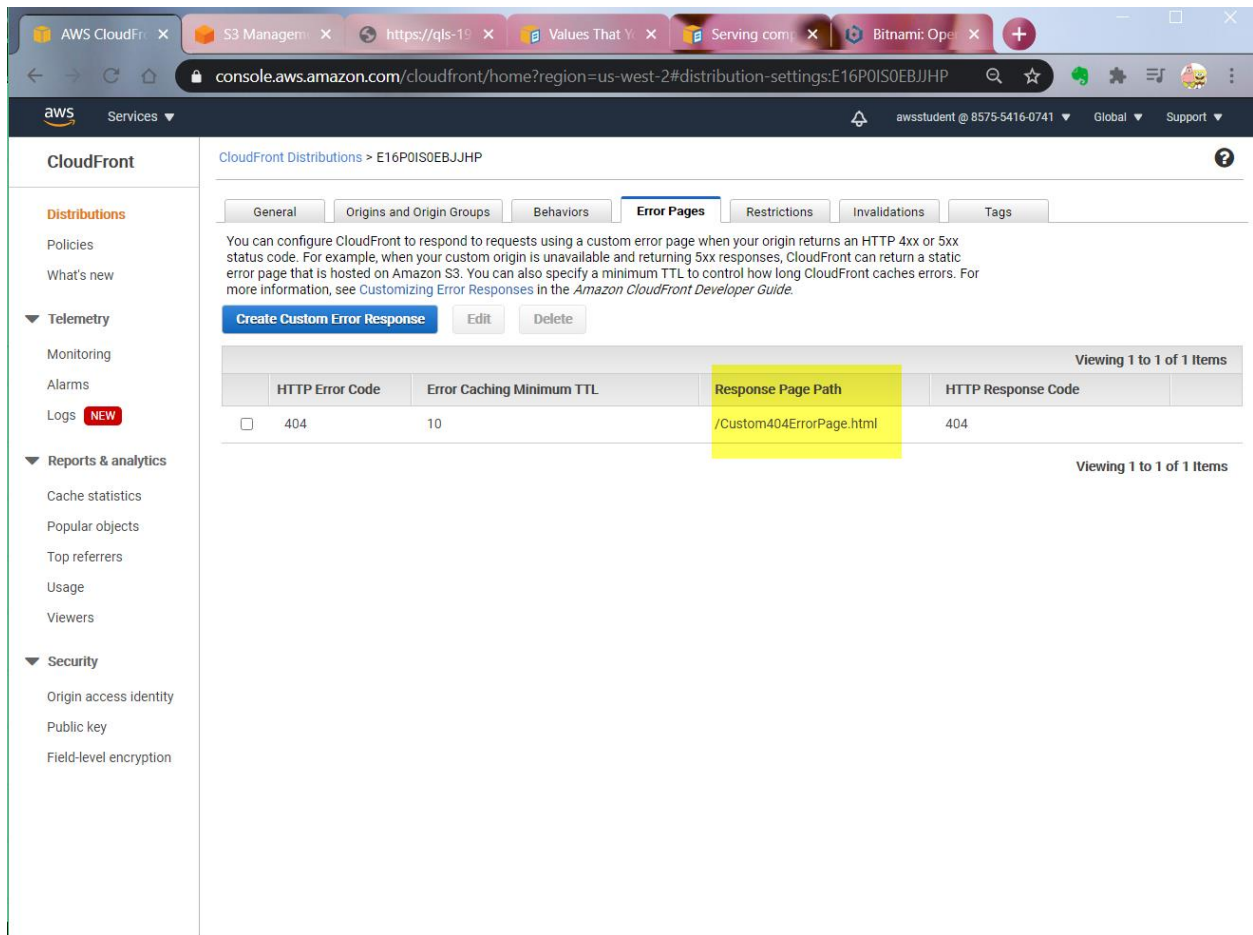
At the bottom right of the origin groups table, it says 'You don't ha'.

## 5) Diff cache and other behaviors:

The screenshot shows the AWS CloudFront console interface. The left sidebar contains navigation links for Distributions, Policies, What's new, Telemetry, Reports & analytics, and Security. The main content area is titled 'CloudFront Distributions > E16P0IS0EBJJHP' and shows the 'Behaviors' tab. A table lists the cache behaviors for the distribution.

	Precedence	Path Pattern	Origin or Origin Group	Viewer Protocol P	Cache Policy N	Origin Request Policy	Trusted Sign
<input type="checkbox"/>	0	*.gif	Custom-ec2-52-11-79-159.us-west-2.compu	HTTP and HTTPS	-	-	-
<input type="checkbox"/>	1	/Custom*Ei	S3-qls-19134945-f386abd63a8f431d-s3bucl	HTTP and HTTPS	-	-	-
<input type="checkbox"/>	2	Default (*)	Custom-ec2-52-11-79-159.us-west-2.compu	HTTP and HTTPS	-	-	-

## 6) Error page customization:



The screenshot displays the AWS CloudFront console interface. The left sidebar contains navigation links for CloudFront, Distributions, Policies, What's new, Telemetry, Reports & analytics, and Security. The main content area shows the 'Error Pages' tab for a specific CloudFront distribution. A descriptive text explains how to configure custom error pages for HTTP 4xx or 5xx status codes. Below this, there are buttons to 'Create Custom Error Response', 'Edit', and 'Delete'. A table lists the configured error responses, with one entry for HTTP 404 status code, a minimum TTL of 10, and a custom response path. The 'Response Page Path' cell is highlighted in yellow.

CloudFront Distributions > E16P0IS0EBJJHP

General | Origins and Origin Groups | Behaviors | **Error Pages** | Restrictions | Invalidations | Tags

You can configure CloudFront to respond to requests using a custom error page when your origin returns an HTTP 4xx or 5xx status code. For example, when your custom origin is unavailable and returning 5xx responses, CloudFront can return a static error page that is hosted on Amazon S3. You can also specify a minimum TTL to control how long CloudFront caches errors. For more information, see [Customizing Error Responses](#) in the *Amazon CloudFront Developer Guide*.

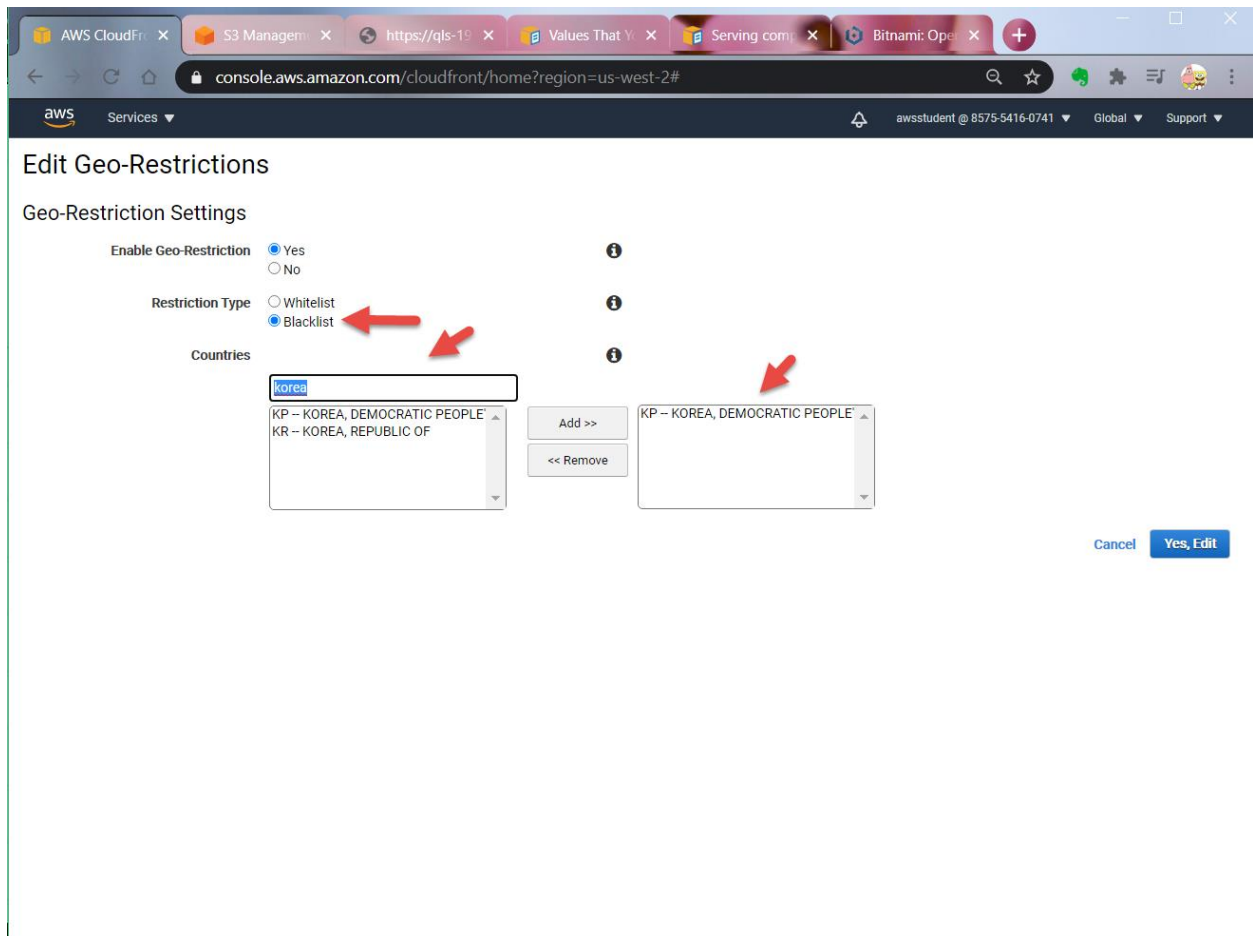
Create Custom Error Response | Edit | Delete

	HTTP Error Code	Error Caching Minimum TTL	Response Page Path	HTTP Response Code
<input type="checkbox"/>	404	10	/Custom404ErrorPage.html	404

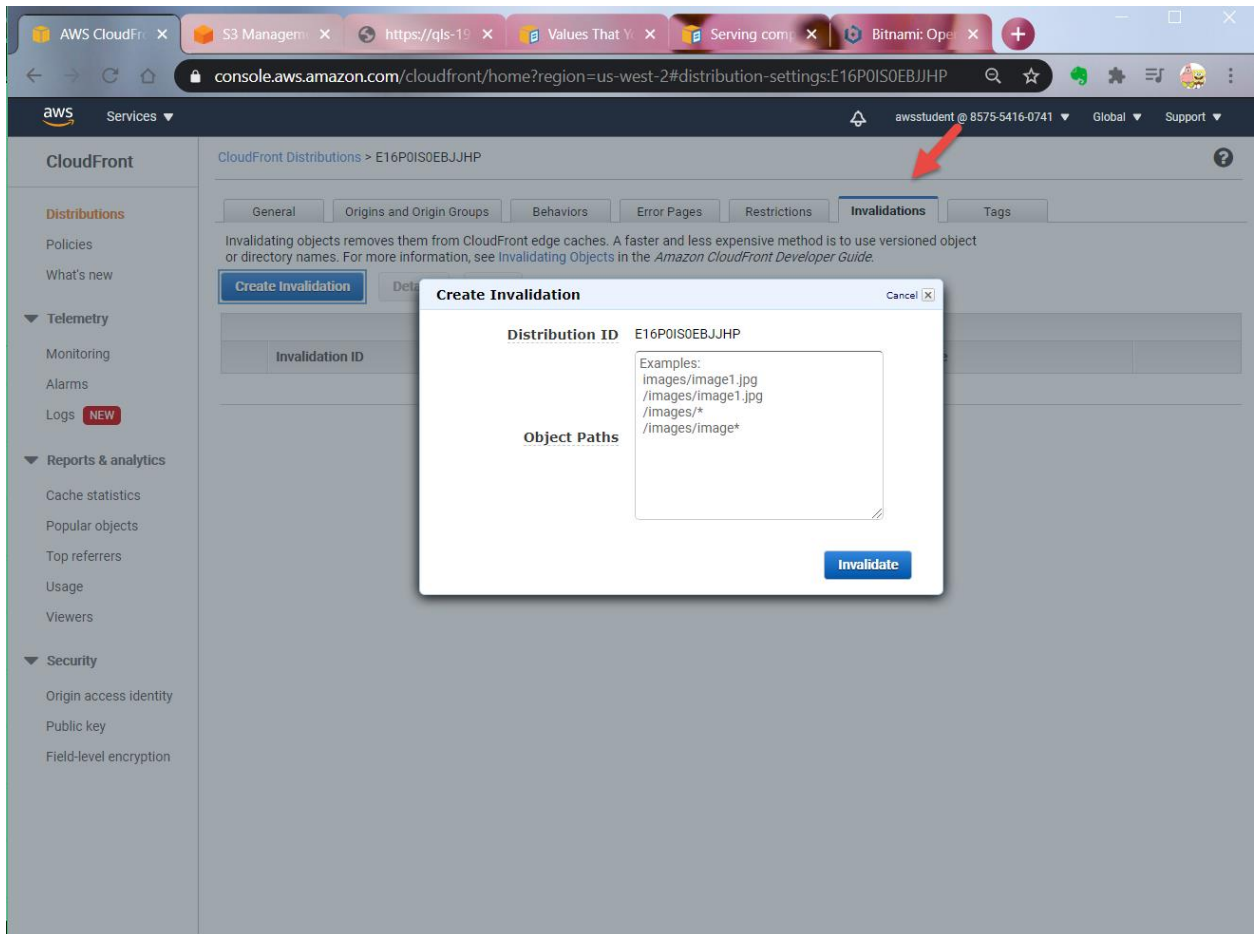
Viewing 1 to 1 of 1 Items



## 7) Easy Geo Restriction:



## 8) Easy purge/invalidation:



## 9) CF Policies :

The screenshot shows the AWS CloudFront console interface. The left sidebar contains a navigation menu with the following items: Distributions, Policies (highlighted with a red arrow), What's new, Telemetry (Monitoring, Alarms, Logs with a 'NEW' badge), Reports & analytics (Cache statistics, Popular objects, Top referrers, Usage, Viewers), and Security (Origin access identity, Public key, Field-level encryption). The main content area displays the details for the 'Managed-CachingOptimized' policy. The breadcrumb navigation at the top reads 'CloudFront > Policies > Managed-CachingOptimized', with 'Policies' and 'Managed-CachingOptimized' highlighted by red arrows. The 'Info' section shows the 'Name' as 'Managed-CachingOptimized' (highlighted by a red arrow) and the 'Comment' as 'Default policy when CF compression is enabled'. The 'TTL Settings' section shows 'Minimum TTL' as 1, 'Maximum TTL' as 31536000, and 'Default TTL' as 86400. The 'Cache key contents' section states that the cache key includes headers, cookies, and query strings. Below this, a table shows 'Headers' as None, 'Cookies' as None, and 'Query strings' as None. The 'Cache compressed objects (uses Accept-Encoding header)' section shows 'Caching gzip objects' as enabled (checked) with an 'Info' link (highlighted by a red arrow), and 'Not caching brotli objects' as disabled (unchecked) with an 'Info' link.

CloudFront

Distributions

**Policies**

What's new

▼ Telemetry

Monitoring

Alarms

Logs **NEW**

▼ Reports & analytics

Cache statistics

Popular objects

Top referrers

Usage

Viewers

▼ Security

Origin access identity

Public key

Field-level encryption

CloudFront > Policies > Managed-CachingOptimized

**Managed-CachingOptimized**

**Info**

Name	Comment
Managed-CachingOptimized	Default policy when CF compression is enabled

**TTL Settings**

Minimum TTL	Maximum TTL	Default TTL
1	31536000	86400

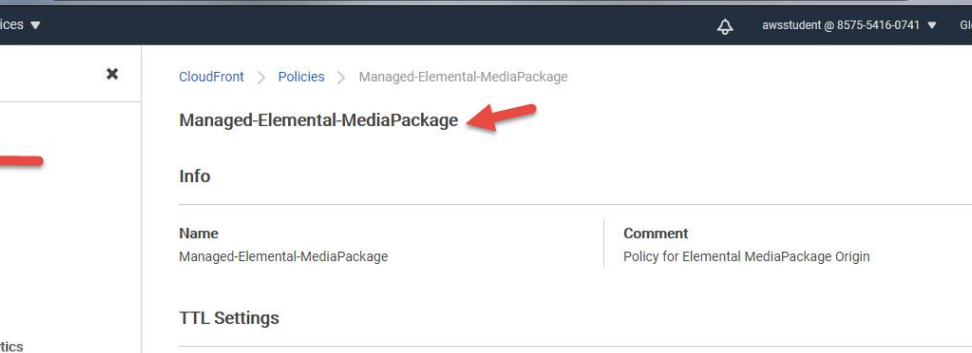
**Cache key contents**

The cache key includes the headers, cookies, and query strings in the cache policy, as follows:

Headers	Cookies	Query strings
None	None	None

**Cache compressed objects (uses Accept-Encoding header)**

- ✓ Caching gzip objects [Info](#)
- ✗ Not caching brotli objects [Info](#)



The screenshot displays the AWS CloudFront console interface. In the left-hand navigation pane, the 'Policies' link is highlighted with a red arrow. The main content area shows the details for the 'Managed-Elemental-MediaPackage' policy. A red arrow points to the policy name. The 'Info' section shows the policy name and a comment. The 'TTL Settings' section shows the minimum, maximum, and default TTL values. The 'Cache key contents' section shows the cache key includes the headers, cookies, and query strings in the cache policy.

Managed-Elemental-MediaPackage		
<b>Info</b>		
<b>Name</b>	<b>Comment</b>	
Managed-Elemental-MediaPackage	Policy for Elemental MediaPackage Origin	
<b>TTL Settings</b>		
<b>Minimum TTL</b>	<b>Maximum TTL</b>	<b>Default TTL</b>
0	31536000	86400
<b>Cache key contents</b>		
The cache key includes the headers, cookies, and query strings in the cache policy, as follows:		
<b>Headers</b>	<b>Cookies</b>	<b>Query strings</b>
Whitelist	None	Whitelist
origin		aws.manifestfilter
		start
		end
		m
<b>Cache compressed objects (uses Accept-Encoding header)</b>		
<input checked="" type="checkbox"/> Caching gzip objects <a href="#">Info</a>		
<input type="checkbox"/> Not caching brotli objects <a href="#">Info</a>		

## 10) What's New in CF:

The screenshot shows the AWS CloudFront console interface. On the left is a navigation sidebar with categories: CloudFront, Telemetry, Reports & analytics, and Security. The 'What's new' link under CloudFront is highlighted. The main content area is titled 'What's New' and lists several announcements with red arrows pointing to their titles:

- 08/31/2020**  
**Amazon CloudFront announces real-time logs**  
Starting today, you can enable real-time logs for your CloudFront distributions. The real-time logs have additional fields when compared to the standard access logs and are more configurable. The real-time logs are published to your Kinesis Data Streams and you can choose the fields you need as well as choose to enable logs for select cache behaviors. For more information, [read the announcement](#) and the [CloudFront Developer Guide](#).
- 07/24/2020**  
**Amazon CloudFront adds additional geolocation headers for more granular geotargeting**  
Additional geolocation headers are now available in Amazon CloudFront. To use these new headers, see the [CloudFront Developer Guide](#). Learn more about the new cache and origin request policies in [our blog](#).
- 07/21/2020**  
**Amazon CloudFront announces support for cache policies and origin request policies**  
You can now more granularly control the query string, header, and cookie values that are included in the cache key and in requests that CloudFront sends to your origin. You control these settings with *policies*—a *cache policy* to control the cache settings, and an *origin request policy* to control the requests that CloudFront sends to your origin. For more information, [read the announcement](#) and the [CloudFront Developer Guide](#).
- 07/17/2020**  
**Amazon CloudFront announces new TLS 1.2 security policy for viewer connections**  
Amazon CloudFront now supports a new security policy, TLSv1.2\_2019, which includes only the following ciphers: ECDHE-RSA-AES128-GCM-SHA256, ECDHE-RSA-AES128-SHA256, ECDHE-RSA-AES256-GCM-SHA384, ECDHE-RSA-AES256-SHA384. To learn more about this new policy and ciphers supported refer to [CloudFront's documentation](#).
- 06/11/2020**  
**Amazon CloudFront enables configurable origin connection attempts and origin connection timeouts**  
You can now configure the number of [connection attempts](#) CloudFront will make to your origin and the [origin connection timeout](#) for each attempt. In addition, the CloudFront [origin response timeout](#) range has been expanded and you can now change the value from 1 to 60 seconds, where previously the minimum value was 4 seconds. These two new configurations can be individually set for any type of origin within your CloudFront distribution and can also be used to further enhance the responsiveness and availability of your multi-origin application when coupled with CloudFront [Origin Failover](#). To learn more about these new configurations, refer to [CloudFront's documentation](#).
- 04/24/2020**

## 11) Sample CF headers:

The screenshot displays a web browser window with a forum page on the left and a network request inspector on the right. The forum page, titled "yourdomain.com", includes sections for "Quick links", "Board index", "Your first category", "Your first forum", "LOGIN • REGISTER", "WHO IS ONLINE", "BIRTHDAYS", and "STATISTICS". The network inspector shows a list of requests, with the selected request being a GET request for a CSS file. The request details are as follows:

- Request URL:** http://d2wk3iptess4v1.cloudfront.net/phpbb/styles/prosilver/theme/buttons.css
- Request Method:** GET
- Status Code:** 200 OK
- Remote Address:** [2600:9000:2202:6800:1f:3b6a:e740:21]:80
- Referrer Policy:** no-referrer-when-downgrade

The response headers are also visible:

- Accept-Ranges:** bytes
- Age:** 18
- Connection:** keep-alive
- Content-Encoding:** gzip
- Content-Length:** 1574
- Content-Type:** text/css
- Date:** Mon, 28 Sep 2020 16:54:36 GMT
- ETag:** "1836-508b0acec8000-gzip"
- Last-Modified:** Tue, 25 Nov 2014 15:36:32 GMT
- Server:** Apache
- Vary:** Accept-Encoding
- Via:** 1.1 5b475307685b5cecd0df414286f5438.cloudfront.net (CloudFront)
- X-Amz-Cf-Id:** YB7Vd6VrXdTTMoj177ZLFq\_uTX14bt2TShpWX3PGSHDj17Z2FXJ\_pg==
- X-Amz-Cf-Pop:** SF020-C1
- X-Cache:** Hit from cloudfront

Still http1.1 in request, not http2 ?

The screenshot shows a web browser window with a forum page. The page has a blue header with the text 'yourdomain.c' and a navigation menu. The main content area displays a login/register form, user statistics, and a list of forum topics. The network tab is open, showing a list of requests. The selected request is for 'ajax.js?assets\_version=2' from 'Server: Apache'. The request headers show 'Accept: \*/\*', 'Accept-Encoding: gzip, deflate', 'Accept-Language: en-US,en;q=0.9,zh-CN;q=0.8,zh-TW;q=0.7,zh;q=0.6', 'Cache-Control: no-cache', 'Connection: keep-alive', 'DNT: 1', 'Host: d2wk3iptess4v1.cloudfront.net', 'Pragma: no-cache', 'Referer: http://d2wk3iptess4v1.cloudfront.net/phpbb/index.php?sid=ec30ec827aca3da6367abe40d037a445', and 'User-Agent: Mozilla/5.0 (iPhone; CPU iPhone OS 13\_2\_3 like Mac OS X) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/13.0.3 Mobile/15E148 Safari/604.1'. The query string parameters are also visible.

yourdomain.c

Quick links FAQ

Board index

It is currently Mon Sep 28, 2020 12:00 AM

Your first category

Your first forum  
Description of your first forum.  
Topics: 1

LOGIN • REGISTER

Username:

Password:

I forgot my password Remember me

WHO IS ONLINE

In total there are 3 users online :: 1 registered users (based on users active over the past 15 minutes) Most users ever online was 3 on Mon Sep 28, 2020 12:00 AM

Registered users: **user**  
Legend: **Administrators**, **Global moderator**

BIRTHDAYS

No birthdays today

STATISTICS

Total posts 1 • Total topics 1 • Total members 1 member **user**

Network

Filter: ☐ Hide data URLs ☒ Preserve log ☒ Disable cache ☒ Online ☐ Blocked Requests

100 ms 200 ms 300 ms 400 ms 500 ms 600 ms 700 ms 800 ms 900 ms 1000 ms 1100 ms 1200 ms 13

Name

ajax.js?assets\_version=2  
/phpbb/styles/prosilver/template

bg\_button.gif  
/phpbb/styles/prosilver/theme/images

bg\_header.gif  
/phpbb/styles/prosilver/theme/images

bg\_list.gif  
/phpbb/styles/prosilver/theme/images

buttons.css  
/phpbb/styles/prosilver/theme

colours.css  
/phpbb/styles/prosilver/theme

common.css  
/phpbb/styles/prosilver/theme

content.css  
/phpbb/styles/prosilver/theme

core.js?assets\_version=2  
/phpbb/assets/javascript

cp.css  
/phpbb/styles/prosilver/theme

favicon.ico

forms.css  
/phpbb/styles/prosilver/theme

Server: Apache

Vary: Accept-Encoding

Via: 1.1 cf87164db1b955269be430fb1ff37d75.cloudfront.net (CloudFront)

X-Amz-Cf-Id: X9IMGuaOfGy\_SH8PKhkGxRLPQ2q1yWg1Z77VjIj1Vh0\_NZ8enNVTlw==

X-Amz-Cf-Pop: SF020-C1

X-Cache: Hit from cloudfront

X-Frame-Options: SAMEORIGIN

Request Headers view source

Accept: \*/\*

Accept-Encoding: gzip, deflate

Accept-Language: en-US,en;q=0.9,zh-CN;q=0.8,zh-TW;q=0.7,zh;q=0.6

Cache-Control: no-cache

Connection: keep-alive

DNT: 1

Host: d2wk3iptess4v1.cloudfront.net

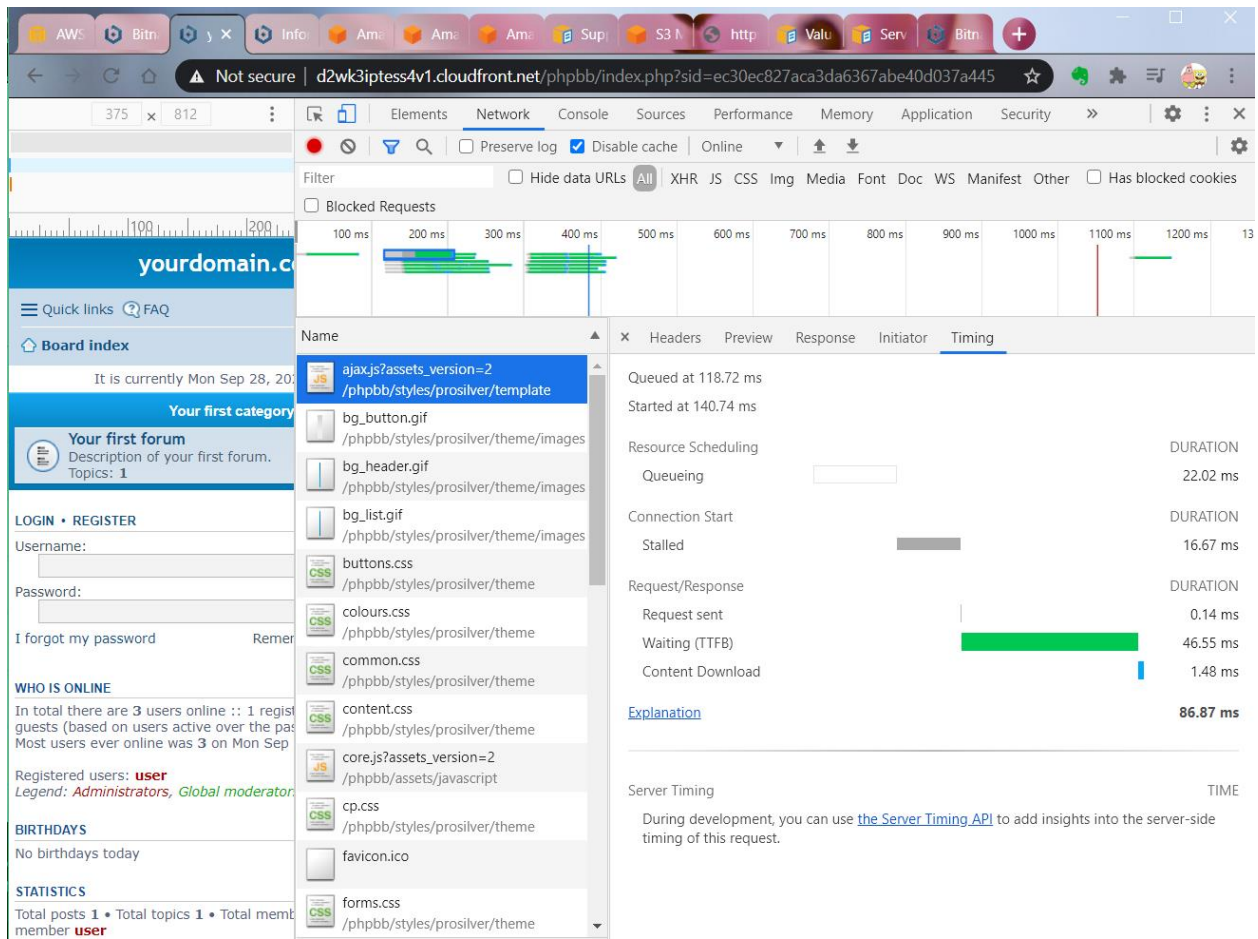
Pragma: no-cache

Referer: http://d2wk3iptess4v1.cloudfront.net/phpbb/index.php?sid=ec30ec827aca3da6367abe40d037a445

User-Agent: Mozilla/5.0 (iPhone; CPU iPhone OS 13\_2\_3 like Mac OS X) AppleWebKit/605.1.15 (KHTML, like Gecko) Version/13.0.3 Mobile/15E148 Safari/604.1

Query String Parameters view source view URL encoded

## Fast timing:





## TLS 1.2

Overview

Main origin (secure)

- https://d2wk3iptess4v1.cloudfront.net

Security overview

This page is secure (valid HTTPS).

- Certificate - valid and trusted**  
The connection to this site is using a valid, trusted server certificate issued by Bitdefender Personal CA, Net-Defender.  
[View certificate](#)
- Connection - secure connection settings**  
The connection to this site is encrypted and authenticated using TLS 1.2, ECDHE\_ECDSA with X25519, and AES\_128\_GCM.
- Resources - all served securely**  
All resources on this page are served securely.

yourdomain.com

Quick links FAQ

Board index

It is currently Mon Sep 28, 2015 12:00 PM

Your first category

Your first forum  
Description of your first forum.  
Topics: 1

LOGIN • REGISTER

Username:

Password:

I forgot my password Remember me

WHO IS ONLINE

In total there is 1 user online :: 0 registered users, 1 guest (based on users active over the past 15 minutes)  
Most users ever online was 3 on Mon Sep 28, 2015 11:00 AM

Registered users: No registered users  
Legend: Administrators, Global moderator

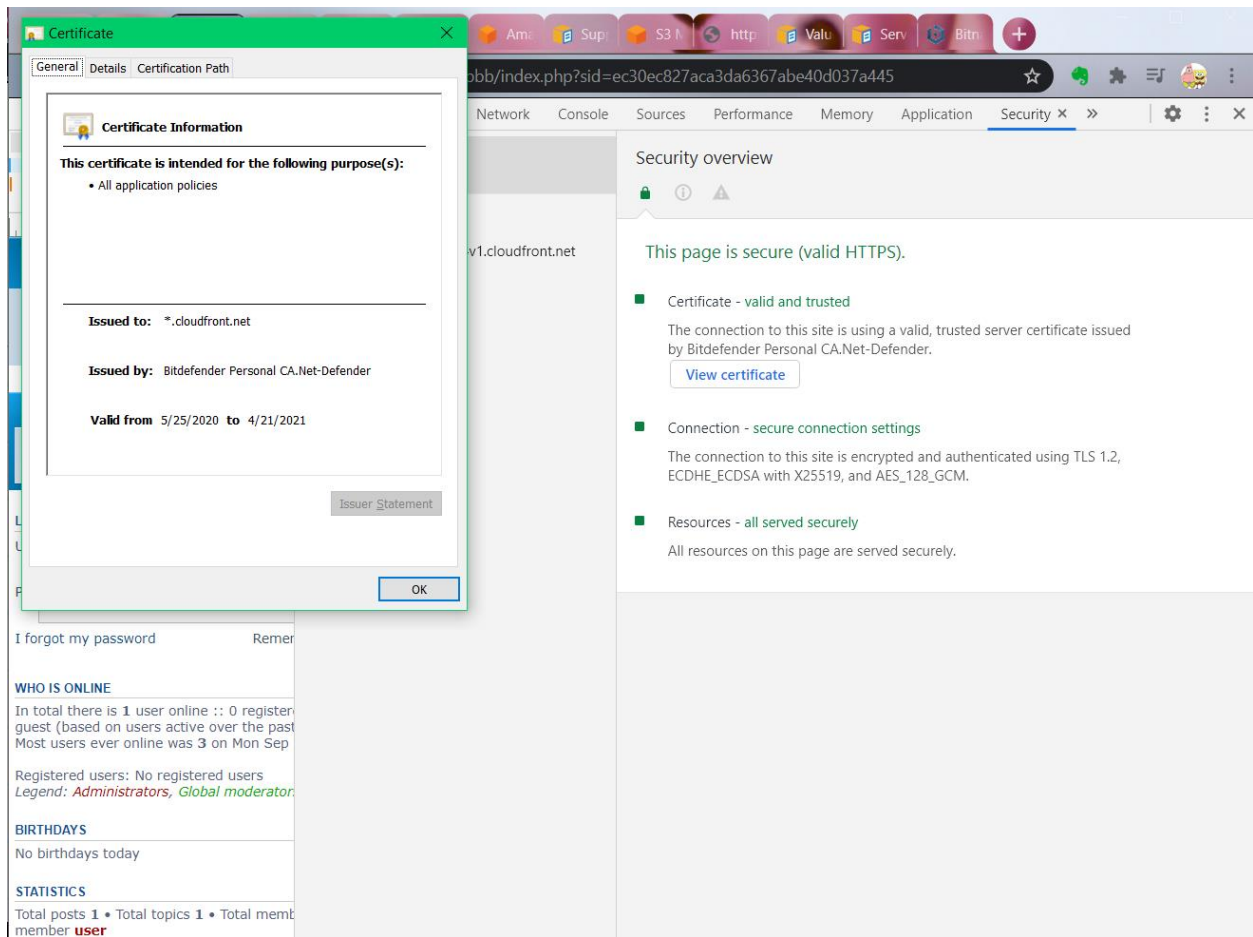
BIRTHDAYS

No birthdays today

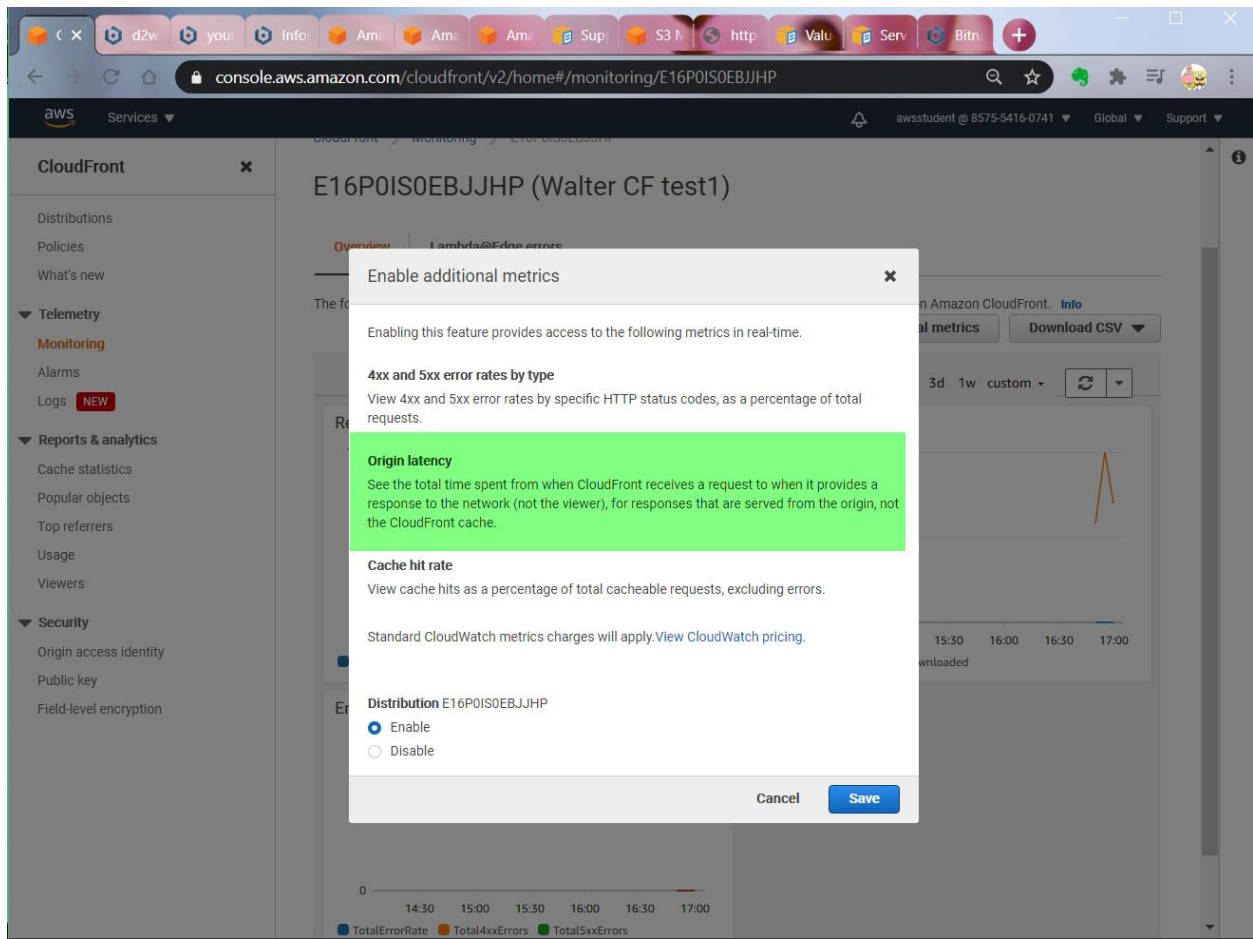
STATISTICS

Total posts 1 • Total topics 1 • Total members 1 user

CF default SSL cert:



## 12) Add more metrics



Popular objects:

CloudFront

Distributions

Policies

What's new

▼ Telemetry

Monitoring

Alarms

Logs NEW

▼ Reports & analytics

Cache statistics

Popular objects

Top referrers

Usage

Viewers

▼ Security

Origin access identity

Public key

Field-level encryption

## CloudFront Popular Objects Report

Start Date2020-09-15

Web DistributionE16P0IS0EJJHP (ec2-52-11-79)

Update

CSV

End Date2020-09-28

The following report shows selected values from CloudFront access logs for the 50 most popular objects by number of requests. The Popular Objects report is available only for web distributions that had activity during the specified period and that have not been deleted. For information about how columns in the table map to columns in the access logs and about how the popularity of objects is calculated, see [CloudFront Popular Objects Report](#).

Show Details

↺ ⚙ ⓘ

Viewing 1 to 46 of 46 items

	Object	Requests	Hits	Misses	Hits %	Bytes Fr	Total Bytes (Ac	Incom				
1	/phpbb/styles/prosilver/theme/imag	8	7	1	87.50%	1.43 KB	11.50 KB	0	⌵	⌵	⌵	⌵
2	/phpbb/styles/prosilver/theme/imag	8	7	1	87.50%	693 B	5.47 KB	0	⌵	⌵	⌵	⌵
3	/phpbb/styles/prosilver/theme/imag	8	7	1	87.50%	570 B	4.51 KB	0	⌵	⌵	⌵	⌵
4	/phpbb/styles/prosilver/theme/imag	8	7	1	87.50%	1.13 KB	9.07 KB	0	⌵	⌵	⌵	⌵
5	/phpbb/styles/prosilver/theme/imag	8	7	1	87.50%	644 B	5.09 KB	0	⌵	⌵	⌵	⌵
6	/phpbb/styles/prosilver/theme/cont	8	7	1	87.50%	3.80 KB	30.47 KB	0	⌵	⌵	⌵	⌵
7	/phpbb/styles/prosilver/theme/butto	8	7	1	87.50%	2.04 KB	16.39 KB	0	⌵	⌵	⌵	⌵
8	/phpbb/styles/prosilver/template/for	8	7	1	87.50%	7.09 KB	56.77 KB	0	⌵	⌵	⌵	⌵
9	/phpbb/styles/prosilver/theme/style	7	6	1	85.71%	0.75 KB	5.27 KB	0	⌵	⌵	⌵	⌵
10	/phpbb/styles/prosilver/theme/respc	7	6	1	85.71%	2.83 KB	19.89 KB	0	⌵	⌵	⌵	⌵
11	/phpbb/styles/prosilver/theme/print	7	6	1	85.71%	1.63 KB	11.49 KB	0	⌵	⌵	⌵	⌵
12	/phpbb/styles/prosilver/theme/links	7	6	1	85.71%	1.64 KB	11.55 KB	0	⌵	⌵	⌵	⌵
13	/phpbb/styles/prosilver/theme/imag	7	6	1	85.71%	1.44 KB	10.12 KB	0	⌵	⌵	⌵	⌵

### 13) Origin access identity

The screenshot shows the AWS Management Console interface for the 'Origin Access Identity' page. The left sidebar contains navigation links for CloudFront, Distributions, Policies, What's new, Telemetry, Monitoring, Alarms, Logs, Reports & analytics, Cache statistics, Popular objects, Top referrers, Usage, Viewers, Security, Origin access identity (highlighted), Public key, and Field-level encryption. The main content area displays the 'Origin Access Identity' page with buttons for 'Create Origin Access Identity', 'Edit', and 'Delete'. A modal dialog titled 'Edit Origin Access Identity' is open, showing the following information:

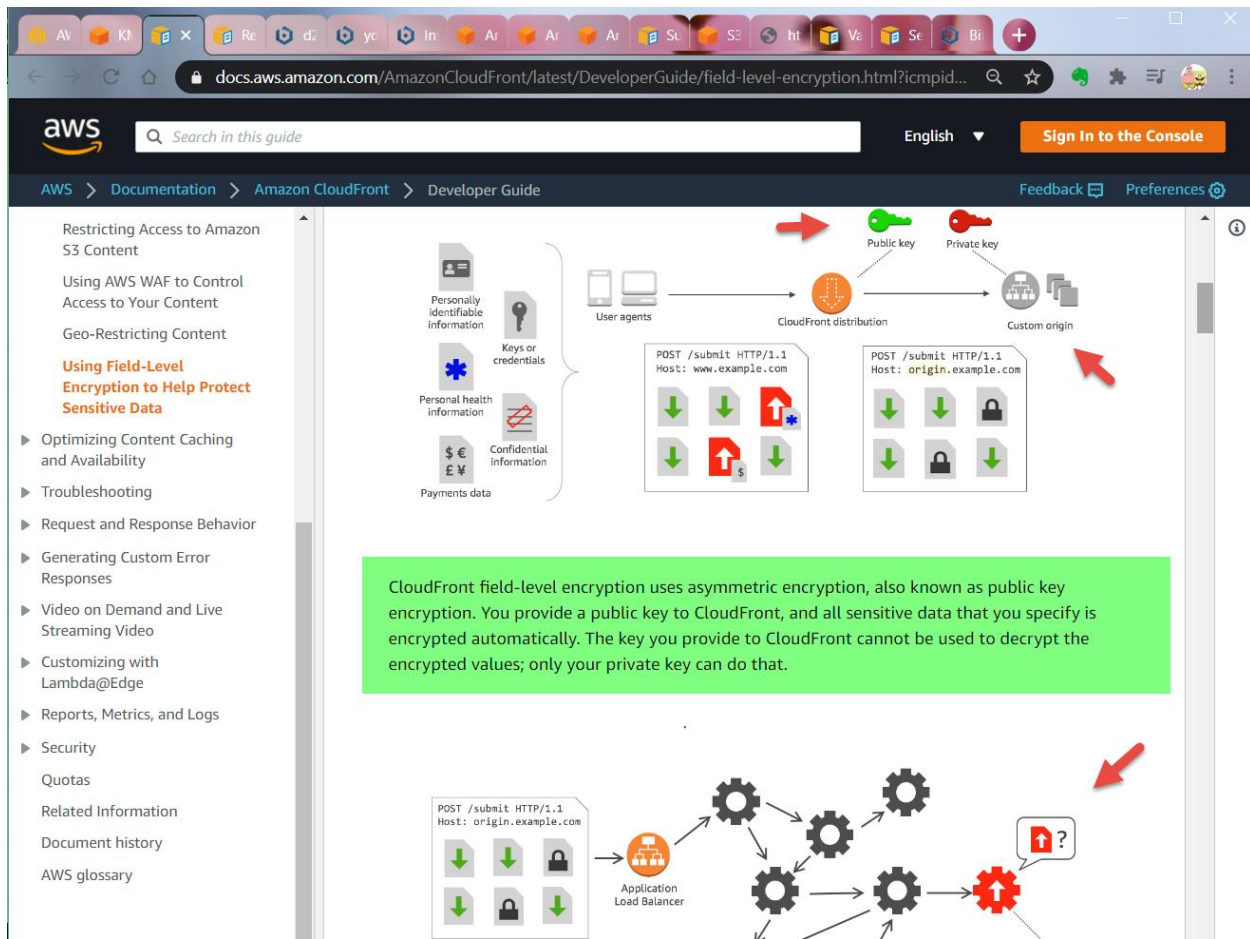
**Origin Access ID:** E2V0D7PXNGAGYD

**Amazon S3 Canonical User ID:** bbe41be31485ba63c6652cda0ebad4a2ac9a43364d80aeb5b0f56c95c50d96d5c8b77afcfb9cebfc9df106ca3ccb8c03

**Comment:** access-identity-1

The modal also includes a 'Yes, Edit' button and a 'Cancel' button. The background shows a table with one item, 'access-identity-1', and a 'Viewing 1 to 1 of 1 Items' message.

## 14) Field level encryption setup:



Easy setup:



AVxKMRe dzycInArArArSuS3htVSeBr+

docs.aws.amazon.com/AmazonCloudFront/latest/DeveloperGuide/field-level-encryption.html#field-l...

aws

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Quotas

Related Information

Document history

AWS glossary

Setting Up Field-Level Encryption

Follow these steps to get started using field-level encryption. To learn about quotas (formerly known as limits) on field-level encryption, see [Quotas](#).

- Step 1: Create an RSA Key Pair
- Step 2: Add Your Public Key to CloudFront
- Step 3: Create a Profile for Field-Level Encryption
- Step 4: Create a Configuration
- Step 5: Add a Configuration to a Cache Behavior

Step 1: Create an RSA Key Pair

To get started, you must create an RSA key pair that includes a public key and a private key. The public key enables CloudFront to encrypt data, and the private key enables components at your origin to decrypt the fields that have been encrypted. You can use OpenSSL or another tool to create a key pair. The key size must be 2048 bits.

For example, if you're using OpenSSL, you can use the following command to generate a key pair with a length of 2048 bits and save it in the file `private_key.pem`:

```
openssl genrsa -out private_key.pem 2048
```

The resulting file contains both the public and the private key. To extract the public key from that file, run the following command:

Us

Kl

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d2

yc

In

Ar

Ar

Ar

Su

S3

ht

Ve

Se

Bi

console.aws.amazon.com/cloudfront/home?region=us-east-1#publickey:

aws Services

awsstudent @ 85

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Origin access identity

Public key

Field-level encryption

CloudFront public key getting started

Add public keys to use with CloudFront features such as field-level encryption.

Add public key

Add public key

Cancel

Type a name for your public key, then copy and paste the key value in the Key value field, including -----BEGIN PUBLIC KEY----- and -----END PUBLIC KEY----- . If you like, add a comment, such as an expiration date.

Key name

walter-test1

Key value

-----BEGIN PUBLIC KEY-----  
MIIBIjANBgkqhkiG9w0BAQEFAAOCA  
Q8AMIIBCGKCAQEAx1JirED9+CS5g  
MqyWOhs  
ebmjzXwBBwwZ63815CTUnrrzcta5K  
hz0ZoNw+SO/5zVe+6Xeuxb1Ff/oyU  
yx7JTH  
BYNWvheS6KoPrSXZql1GnnZb/QYtj  
hBdMV0QFYICtZE0UTJcSCwdACblfR  
dx0JN+  
17mCJRdWS/n5YklBn/BmRzWAKiqy  
sXBjLzqxPsR3auSfd4c9C4jRV29WOf  
UA+Jy+  
xrhQRPeoH7GYrsCriHbMJal1z2d8/d  
h1t0lrSVYIK+dovYv7ihR31vn.lccVuk

Comment

walter-cf-public-key1