

Control for CloudFlare - Installation and Preparations

Installation

- Backup your web directory and Magento 2 store database;
- Download Control for CloudFlare® installation package;
- Copy files to /app/Firebear/CloudFlare/ folder (**create it if not exist!**)
- Navigate to your store root folder in the SSH console of your server:

cd path_to_the_store_root_folder

run:

```
1 | php -f bin/magento module:enable Firebear_CloudFlare
```

```
1 | composer require firebearstudio/cloudflare
```

then:

```
1 | php -f bin/magento setup:upgrade
```

and:

```
1 | php -f bin/magento setup:static-content:deploy
```

- Flush store cache; log out from the backend and log in again.

```
1 | php -f bin/magento cache:clean
```

Preparations

Please note that before using the Control for CloudFlare® Magento 2 module, you should run several preparation steps. First of all, it is necessary to set up CloudFlare® for the Magento domain. The whole procedure is fully described here: [Using CloudFlare with Magento](#). If you are not using the CloudFlare® solution yet, [Sign Up](#) and give it a go.

Now, you should add your CloudFlare® API key to the Magento 2 admin. To get the API identifier, perform the following actions:

- First of all, go to the CloudFlare® website and login to your CloudFlare® account.
- Visit "[My Settings](#)".

- Find the “API Key” section and hit the “View API Key” button.

Note that the API from your personal account will never work instead of the Hosting API. For further details, visit this page: [Where do I find my CloudFlare API key.](#)

The extension’s section aimed at a CloudFlare® API key is described below in Extension Configuration & Settings: API Access details.

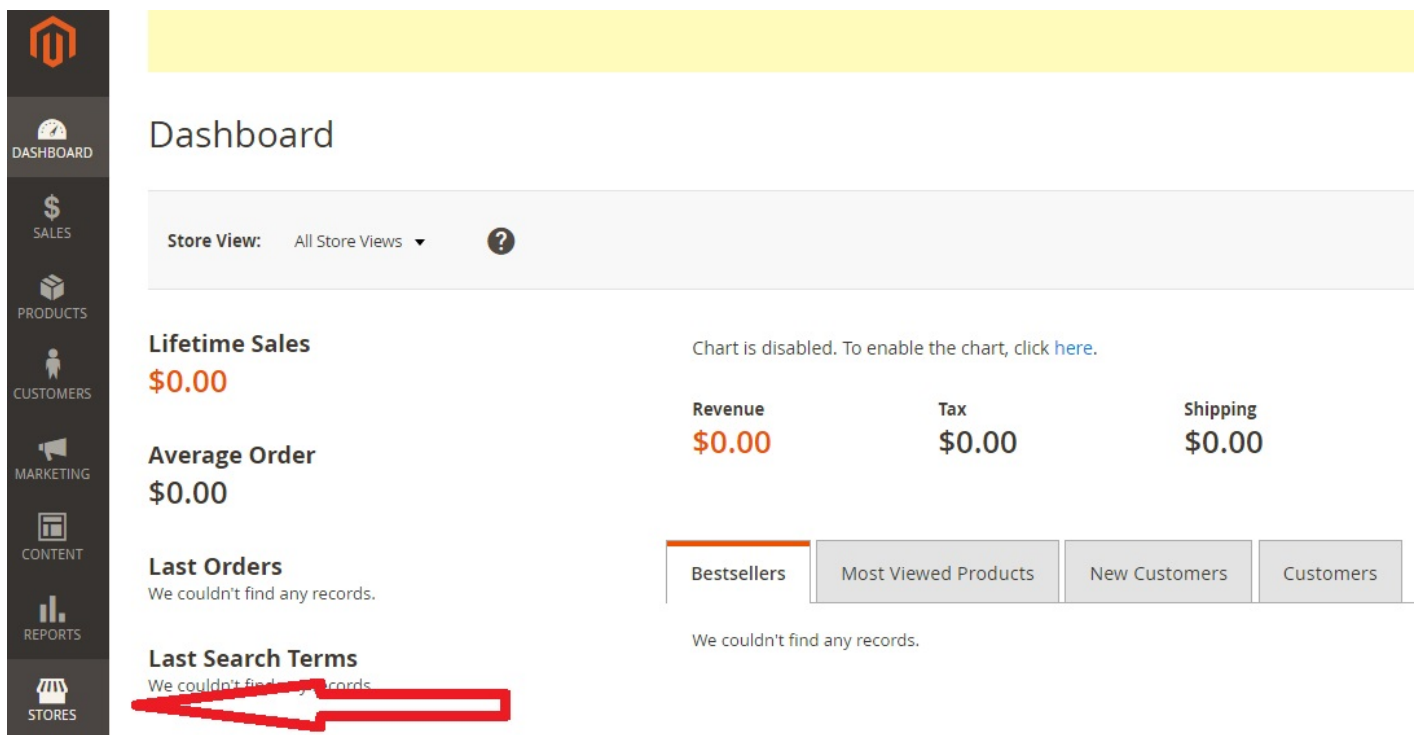
Manual

Now, let’s look at three core groups of CloudFlare® settings available in the Magento 2 admin.

Extension Configuration & Settings

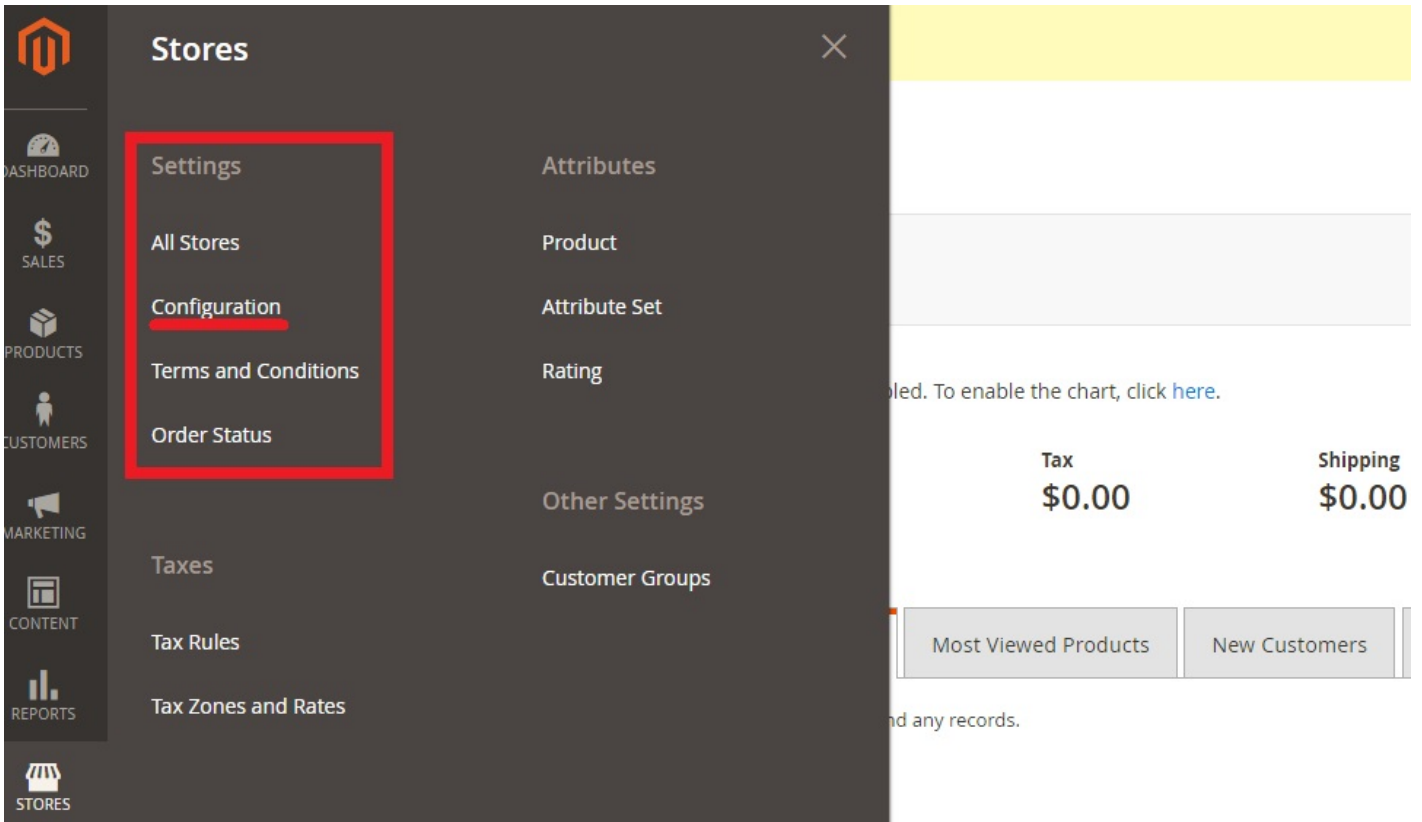
All Control for CloudFlare® Magento 2 extension configurations and settings are available under **Stores -> Configuration -> Firebear -> CloudFlare.**

Choose the Stores option from the right vertical menu.



The screenshot shows the Magento 2 admin dashboard. On the left is a vertical sidebar menu with icons and labels for various sections: DASHBOARD, SALES, PRODUCTS, CUSTOMERS, MARKETING, CONTENT, REPORTS, and STORES. The STORES option is highlighted with a red box and a red arrow pointing to it. The main content area shows the Dashboard for 'All Store Views'. It includes sections for Lifetime Sales (\$0.00), Average Order (\$0.00), Last Orders (no records), and Last Search Terms (no records). A table shows Revenue (\$0.00), Tax (\$0.00), and Shipping (\$0.00). There are also tabs for Bestsellers, Most Viewed Products, New Customers, and Customers.

Then, go to the Configuration option available in Settings (top left group).



Next, find the FIREBEAR tab (it is situated under the GENERAL tab) and choose CloudFlare Control.

Configuration

Store View: Default Config ?

GENERAL ^

General

Web

Design

Currency Setup

Store Email Addresses

Contacts

Reports

Content Management

New Public Reporting

COUNTRY OPTIONS

STATE OPTIONS

LOCALE OPTIONS

STORE INFORMATION

SINGLE-STORE MODE

FIREBEAR v

The CloudFlare control screen is divided into 3 sections: API Access details; Zone Settings; and Threat control.

Configuration

Store View: Default Config ▾ ?

GENERAL ▾	API Access details
FIREBEAR ▲	Zone Settings
CloudFlare Control	Threat control
CATALOG ▾	
CUSTOMERS ▾	
SALES ▾	
SERVICES ▾	
ADVANCED ▾	

API Access details

In API Access details you should enter your email address (it should be associated with your CloudFlare account) into the E-Mail field; specify the aforementioned API key in the API Key field; and leave your domain name. Next, click the “Check & load current settings” to integrate your CloudFlare® account with the Magento 2 admin.

Configuration Save Config

GENERAL ▾

FIREBEAR ▲

CloudFlare Control

CATALOG ▾

CUSTOMERS ▾

SALES ▾

SERVICES ▾

ADVANCED ▾

API Access details ⊞

E-Mail [STORE VIEW]
E-Mail associated with cloudflare account.

API Key [STORE VIEW]
This is the CloudFlare API key made available on your Account page.

Domain Name [STORE VIEW]

Once you check you API access, please click Save Setting for begin use extension. If you continue get error about wrong API access, try click Save Config and then check & load settings again.
IMPORTANT NOTE: If you update settings from CloudFlare admin, you should always click this button for get updated settings before change it from Magento!

Once you've checked your API access, click Save Setting to activate the extension. If you continue getting errors about wrong API access, try to click Save Config and then check & load settings once again.

IMPORTANT NOTE: If you update settings from your CloudFlare® admin, always click the same button to update everything before performing any changes from the Magento 2 backend!

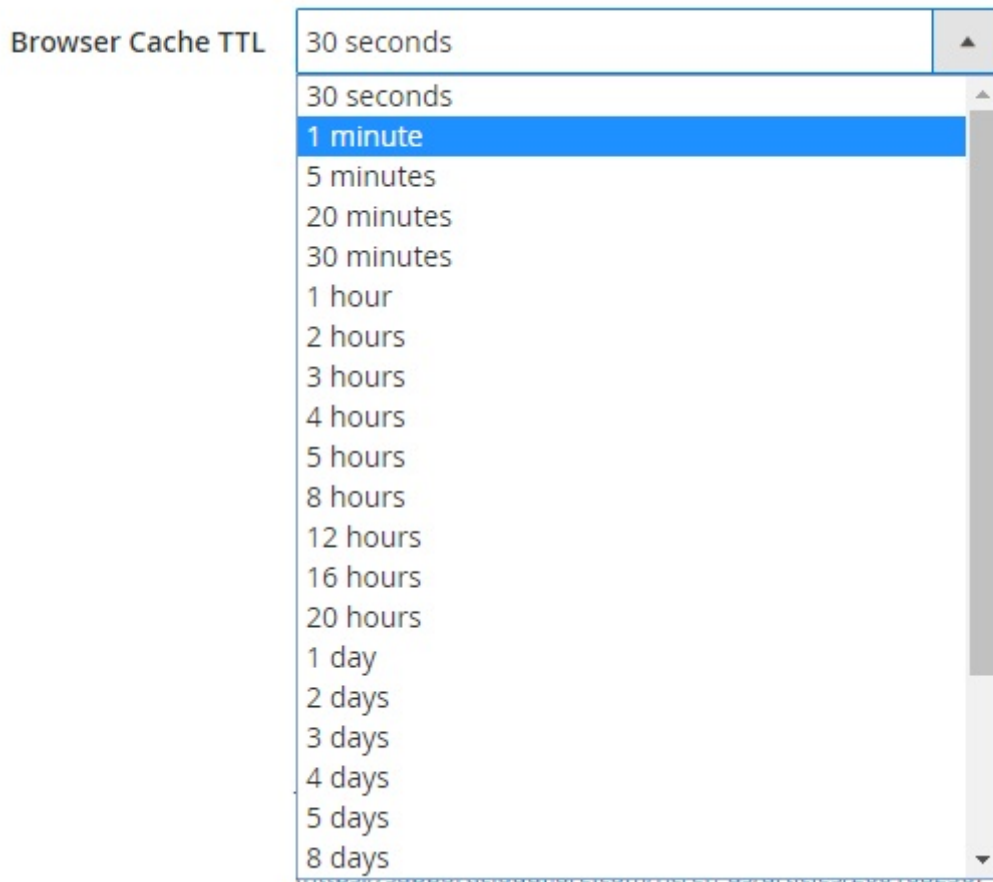
Zone Settings

The Zone Settings section provides you with the ability to adjust your overall security and performance profiles. After performing any changes here, always click the Save Config button, which is available in the right upper corner! Below, we describe each option available in the section.

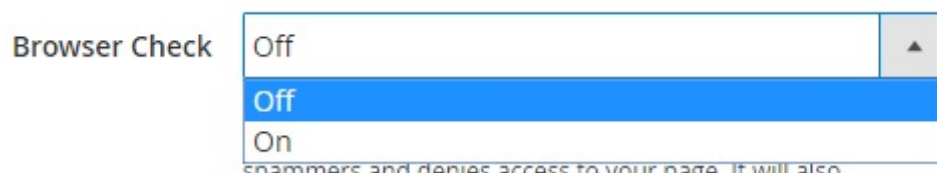
Always Online. If you enable this option, your Magento 2 website will be available even when the server is offline. CloudFlare® will serve all necessary files from cache. Note that it only keeps a limited version of your site in this situation. A message at the top of the page informs visitors that they are in offline browsing mode.



Browser Cache TTL. This option lets you choose a period of time for CloudFlare-cached resources to be remain on visitors' computers. Control for CloudFlare® Magento 2 provides the ability to choose between 30 seconds and 1 year. Note that a high value decreases load times for visitors who already were on your ecommerce storefront.



Browser Check. Turn this option on, and you will prevent problems caused by abuse bots, crawlers, and visitors. The system will look for HTTP headers abused most commonly by spammers, denying access to your page.



Cache Level lets you set CloudFlare's CDN to cache static content. You can choose among three options:

- No Query String – the system delivers resources from cache in case there is no query string;
- Ignore Query String – the same resource is delivered to everyone independent of the query string;
- Standard – this one is the most aggressive option. It is designed to deliver a different resource each time a new change to the query string occurs.

It is also necessary to mention that CloudFlare does not cache HTML content, so it is recommended to create an appropriate Page Rule for static HTML content.

Cache Level

No Query String	▲
No Query String	
Ignore Query String	
Standard	

Challenge TTL. This option lets you specify time a visitor can stay on your website after successfully completing a CAPTCHA or another challenge. The Control for CloudFlare® Magento 2 extension lets you choose several options between 5 minutes and 1 year. It is recommended not to set this interval less than 15 minutes.

Challenge TTL

5 minutes	▲
5 minutes	
15 minutes	
30 minutes	
45 minutes	
1 hour	
2 hours	
3 hours	
4 hours	
8 hours	
16 hours	
1 day	
1 week	
1 month	
1 year	

Development Mode. Enable the Development Mode to make changes to your Magento 2 website. As a result, you will bypass CloudFlare's accelerated cache as well as slow your ecommerce store down. Use the option for making changes to cacheable content – you will see them right away. Note that the development mode automatically turns off after 3 hours.

Development Mode

Off	▲
Off	
On	

Email Obfuscation. Protect your online storefront from email harvesters and bots by enabling this option: it hides email addresses from bots, keeping them visible to normal visitors.

Email Obfuscation

Off	▲
Off	
On	

Enable Error Pages. In case you enable this option, CloudFlare® proxies customer error pages on both 502 and 504 errors on origin server, so the default CloudFlare error page is no longer shown. Note that the feature does not work with 522 errors.

Enable Error Pages

Off	▲
Off	
On	

error page. This does not apply to 522 errors and is limited to

Enable Query String Sort. If you enable this option, CloudFlare® treats files with the same query strings as the same file. The query strings order does not matter. The feature is limited to Enterprise Zones.

Enable Query String Sort

Off	▲
Off	
On	

This is limited to Enterprise Zones.

Hotlink Protection. This is a very useful option, because it helps you prevent other websites from sucking up your bandwidth by creating pages that utilize images hosted on your Magento 2 store. Note that the feature lets people download and view images from your pages, but prevents websites to steal them.

Hotlink Protection

Off	▲
Off	
On	

that use images hosted on your site. Anytime a request for an

IP Geolocation. By turning on IP Geolocation you enable CloudFlare to geolocate visitors to your website, consequently the system is able to pass the country code to you. The feature works for both IPv4 and IPv6 addresses.

IP Geolocation

Off	▲
Off	
On	

(<https://support.cloudflare.com/hc/en-us/articles/200168236>)

IPv6. This one enables IPv6 on all CloudFlare enabled subdomains. Note that in your DNS settings they are marked by an orange cloud.

IPv6

Off	▲
Off	
On	

Minify. Under this subsection, you are able to turn on automated JavaScript, CSS, and HTML minification.

Don't forget to hit Save.

Minify ▲

Javascript

▼

CSS

▼

HTML

Automatically minify certain assets for your website.
(<https://support.cloudflare.com/hc/en-us/articles/200168196>)

Mobile Redirect. As for the Mobile Redirect options, they let you redirect mobile visitors to a mobile-optimized sub-domain. You choose an existing sub-domain (here, you should specify sub-domain prefix to redirect mobile visitors to). Note that the sub-domain must already exist. Then, you should choose between two options: Keep Path or Drop Path. The first option lets you keep the current page path and redirect to the mobile sub-domain URL root. The second one provides the ability to drop it. Next, you can enable/disable the feature. Don't forget to save changes.

Mobile Redirect ▼

Which subdomain prefix you wish to redirect visitors on mobile devices to (subdomain must already exist).

▲

Keep Path

Drop Path

to the same page on the mobile subdomain

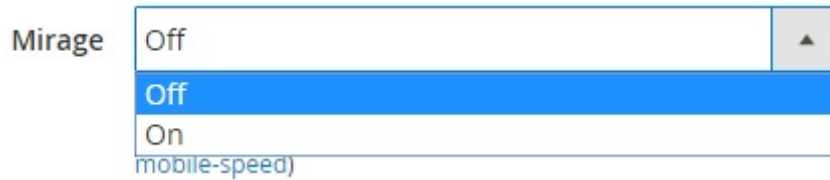
▼

Whether or not the mobile redirection is enabled

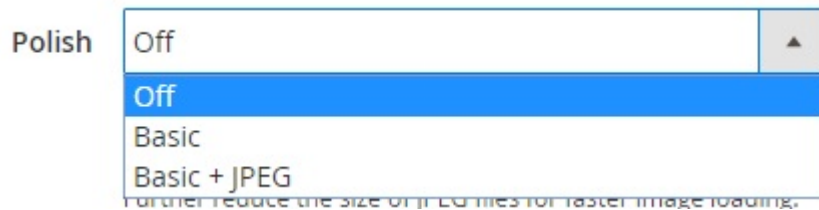
Automatically redirect visitors on mobile devices to a mobile-optimized subdomain. (<https://support.cloudflare.com/hc/en-us/articles/200168336>)

Mirage. This feature makes the life of your mobile customers easier. By turning it on, you improve user experience on small devices by activating the delivery of smaller images for devices with smaller screens; and

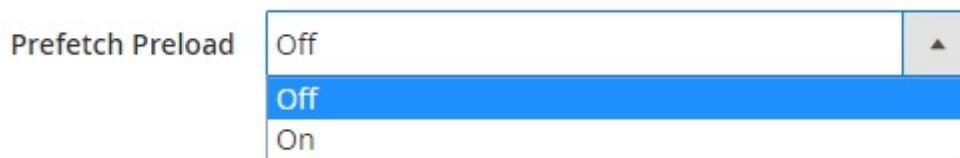
enabling “lazy load”, so the images are loaded only when they appear in the viewport.



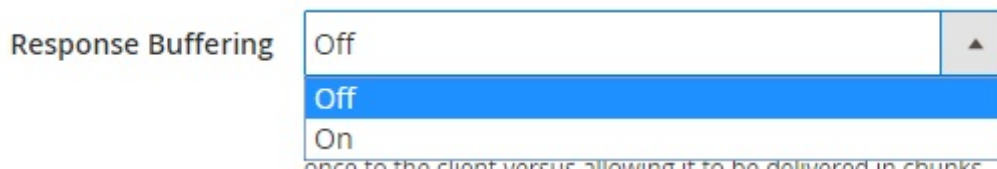
Polish. When enabled, it strips metadata and compresses images, consequently, you increase page speed. There are two options available: Basic and Basic + JPEG. In case of Basic (Lossless), the system reduces the size of PNG, JPEG, and GIF files without any impact on visual quality. If you choose Basic + JPEG (Lossy), CloudFlare® will reduce the size of JPEG files even more. Larger JPEGs will be converted to progressive images: a lower-resolution images are loaded first, and only then their higher-resolution versions. Note that this approach is not recommended for hi-res photography websites.



Prefetch Preload. If you activate this feature, CloudFlare prefetches URLs included in the response headers. Note that the functionality is limited to Enterprise Zones.



Response Buffering. With the help of this option, you can seamlessly enables or disables responses buffering from the proxied server right in your Magento 2 admin. Note that the whole payload can be buffered in order to deliver it at once to the client. The default configuration of the proxied server enables it streaming directly, so it is not buffered by CloudFlare. The feature is limited to Enterprise Zones only.



Rocket Loader. We've already mentioned Rocket Loader several times, so it's time to describe the feature. Being a general-purpose asynchronous JavaScript loader, it is coupled with a virtual browser. As a result, Rocket Loader can safely run any JS code after window.onload. Consequently, by turning Rocket Loader on, you improve a web page's window.onload time. Note that it speeds up only pages with JavaScript. Control for CloudFlare® for Magento 2 lets you choose Automatic Mode, so no configuration is required after turning

it on. Alternatively, you can choose Manual Mode and specify a particular script to be executed. Don't forget to add the "data-cfasync='true'" attribute to the script tag. As a result, while passing through CloudFlare, Rocket Loader will be enabled for that particular script. As for other JavaScript, it will be executed without CloudFlare® interacting with the script.

Rocket Loader

Off	▲
Off	
Automatic	
Manual	

Security Header (HSTS). HSTS options consists of 4 fields. First, you should specify whether strict transport security is enabled or not. Then, it is necessary to set maximum age of the strict transport security. Native settings require to use seconds, but our module provides you with the ability to choose between 1 and 2 days. Next, you should decide whether you want to include all subdomains for strict transport security or not. The last field lets you choose whether to include 'X-Content-Type-Options: nosniff' header or not. Don't forget to hit the Save button.

Security Header (HSTS)

No	▼
----	---

Whether or not strict transport security is enabled

1 day	▲
1 day	
2 days	

No	▼
----	---

Include all subdomains for strict transport security

No	▼
----	---

Whether or not to include 'X-Content-Type-Options: nosniff' header

Save

CloudFlare security header for a zone.

Security Level. Above, we've mentioned that CloudFlare® offers 5 levels of security. And you can choose what level to use right here. Set a security profile for your Magento 2 website, and the system will automatically adjust each of the security settings. Alternatively, you can use a custom profile to adjust each setting manually.

Security Level

Off	▲
Off	
Essentially Off	
Low	
Media	
High	
I'm Under Attack!	

Server Side Exclude. This feature lets you hide sensitive content from suspicious visitors, while ordinary visitors can still see it. By enabling the option, you wrap the content with CloudFlare SSE tags. As a result, you can hide your phone number or email address. Note that SSE works only with HTML, so for enabled HTML minification, you won't see any SSE tags in your HTML source, but SSE will still function.

Server Side Exclude

Off	▲
Off	
On	

SSL. SSL options let you control both whether your visitors can browse your Magento 2 website over a secure connection and how CloudFlare connects to your origin web server. As for available settings, you can turn off the feature (the least secure approach); choose "Flexible" if your web server cannot accept HTTPS connections; choose "Full" for a self-signed SSL certificate; and "Full (strict)" for a valid SSL certificate (the most secure option).

SSL

Off	▲
Off	
Flexible	
Full	
Full (strict)	

TLS Client Auth. This is an Enterprise Only feature that requires CloudFlare to connect to your origin server via a client certificate. You can turn it on/off as well as disable/enable modification for the zone on the basis of your CloudFlare plan. Don't forget to save changes here.

TLS Client Auth

Value of the zone setting

Whether or not this setting can be modified for this zone (based on your CloudFlare plan level)

TLS Client Auth requires CloudFlare to connect to your origin server using a client certificate (Enterprise Only)

True Client IP. Due to this feature, you allow customer to use True Client IP – the Akamai feature – in the headers the system sends to the origin. Note that the functionality is limited to Enterprise Zones.

True Client IP

Enterprise Zones.

TLS 1.2. Here, you can turn on the Crypto TLS 1.2 feature. Note that it prevents the usage of previous versions and is limited to Enterprise and Business Zones only.

TLS 1.2

Zones.

Web Application Firewall (WAF). This feature is also mentioned above. Our Control for CloudFlare® Magento 2 extension lets you enable it right in the Magento 2 admin. If you are not familiar with WAF, note that it examines HTTP requests to your website, inspecting both GET and POST requests. The feature is designed to filter out illegitimate traffic from all your visitors. When the CloudFlare WAF sees suspicious user behavior, it challenge the web visitor with a CAPTCHA. In case of a failed challenge, all users actions are stopped. As a result all illegitimate traffic is blocked before reaching your origin web server.

Web Application Firewall (WAF)

Threat control

You can find full Threat control in your CloudFlare admin. As for Control for CloudFlare®, it enables you to specify Whitelist/Blacklist/Unlist IPs. Enter the IP and hit an appropriate button (Challenge, Blacklist, or Whitelist) to add/remove entered IP to/from the list. The button below shows a list of IP address which hit your site. All addresses are classified by type and shown in a new browser tab.

Threat control

You can find Threat control in CloudFlare admin -> you domain analytics Threat control. [Learn more...](#)

Whitelist/Blacklist/Unlist IPs / IP :

[STORE VIEW]

Challenge

Blacklist

[STORE VIEW]

Whitelist

Please click one of buttons above for add/remove entered IP from list.

Show a list of IP address which hit your site classified by type.

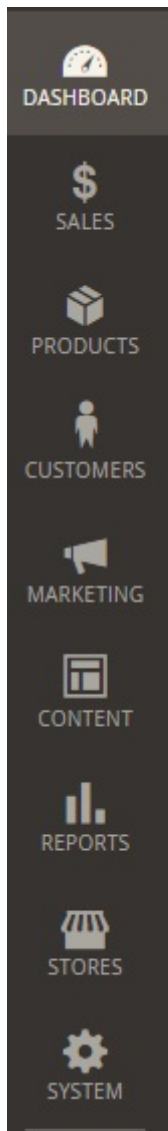
Show IP list

IP list be opened in new browser tab.

Cache Management

Our Control for CloudFlare® Magento 2 extension adds dedicated buttons to flush CloudFlare cache and individual file's cache on the Magento 2 cache control page. New buttons are available under System -> Cache Management.

Choose System settings from the vertical menu on the left.



Dashboard

Store View: All Store Views ▾



Lifetime Sales

\$0.00

Average Order

\$0.00

Last Orders

We couldn't find any records.

Last Search Terms

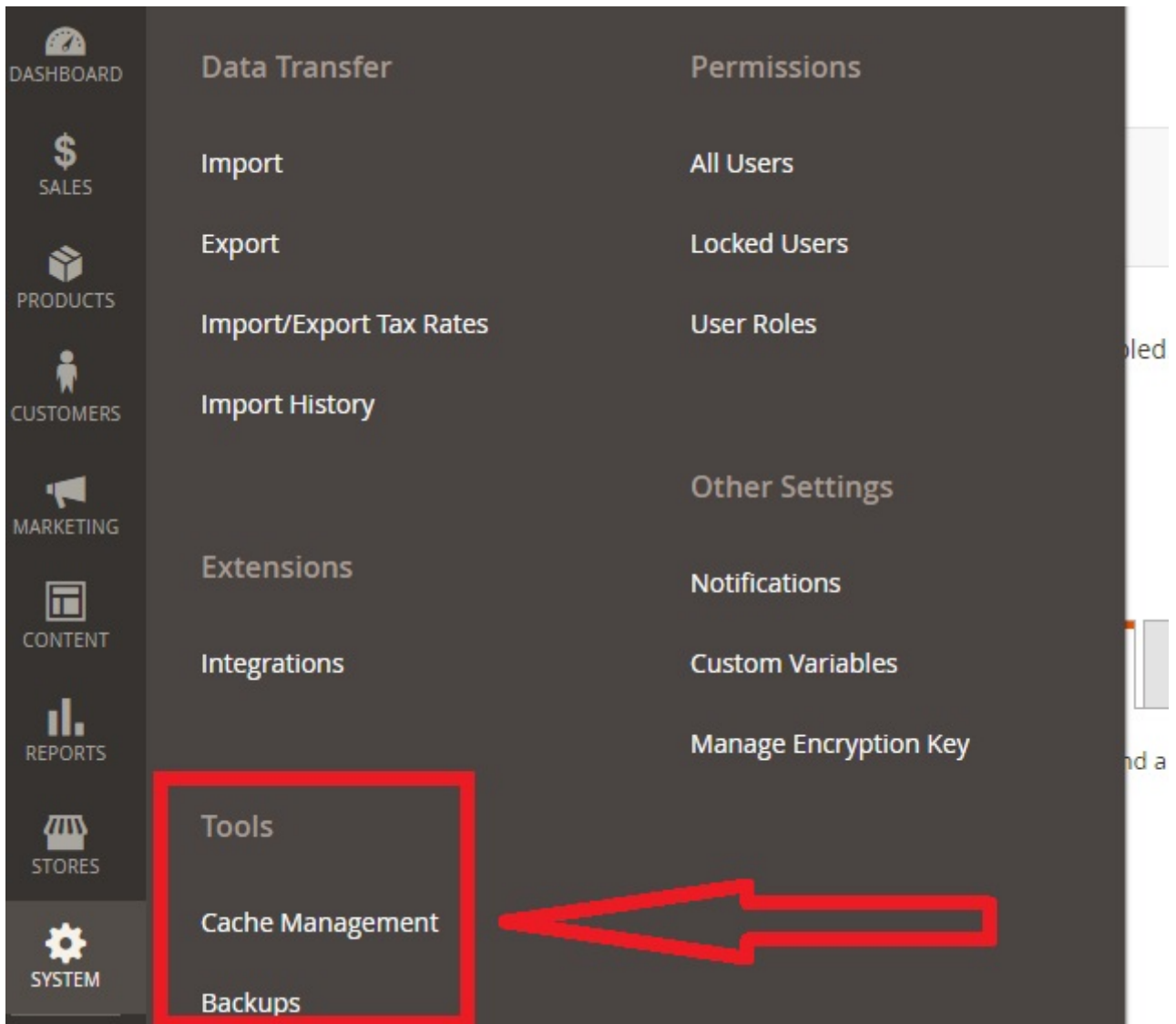
We couldn't find any records.

Top Search Terms

We couldn't find any records.



Under the Tools section, find Cache Management options.



On the Cache Management screen, scroll down to the bottom of the page.

Cache Management

Search, Notifications, User: admin

Flush Cache Storage

Flush Magento Cache

Refresh Submit 12 records found

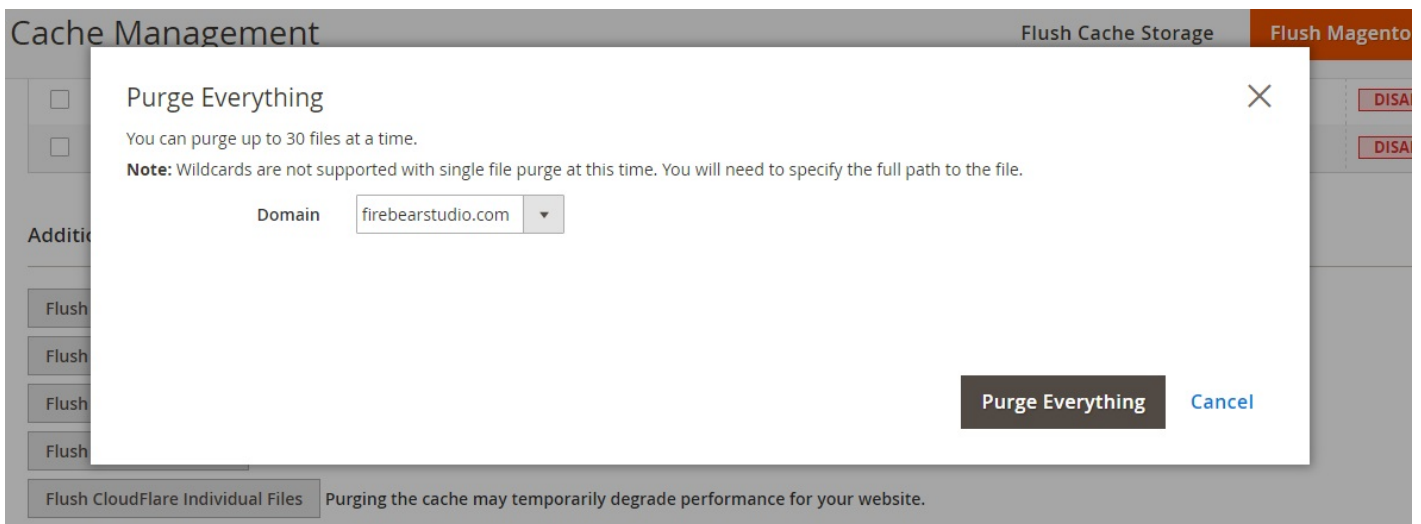
<input type="checkbox"/>	Cache Type	Description	Tags	Status
<input type="checkbox"/>	Configuration	Various XML configurations that were collected across modules and merged.	CONFIG	DISABLED
<input type="checkbox"/>	Layouts	Layout building instructions.	LAYOUT_GENERAL_CACHE_TAG	DISABLED
<input type="checkbox"/>	Blocks HTML output	Page blocks HTML.	BLOCK_HTML	DISABLED
<input type="checkbox"/>	Collections Data	Collection data files.	COLLECTION_DATA	DISABLED
<input type="checkbox"/>	Reflection Data	API interfaces reflection data.	REFLECTION	DISABLED
<input type="checkbox"/>	Database DDL operations	Results of DDL queries, such as describing tables or indexes.	DB_DDL	DISABLED
<input type="checkbox"/>	EAV types and attributes	Entity types declaration cache.	EAV	DISABLED

In the Additional Cache Management section, you can see the following CloudFlare buttons: **Flush CloudFlare Cache** and **Flush CloudFlare Individual Files**.

Additional Cache Management

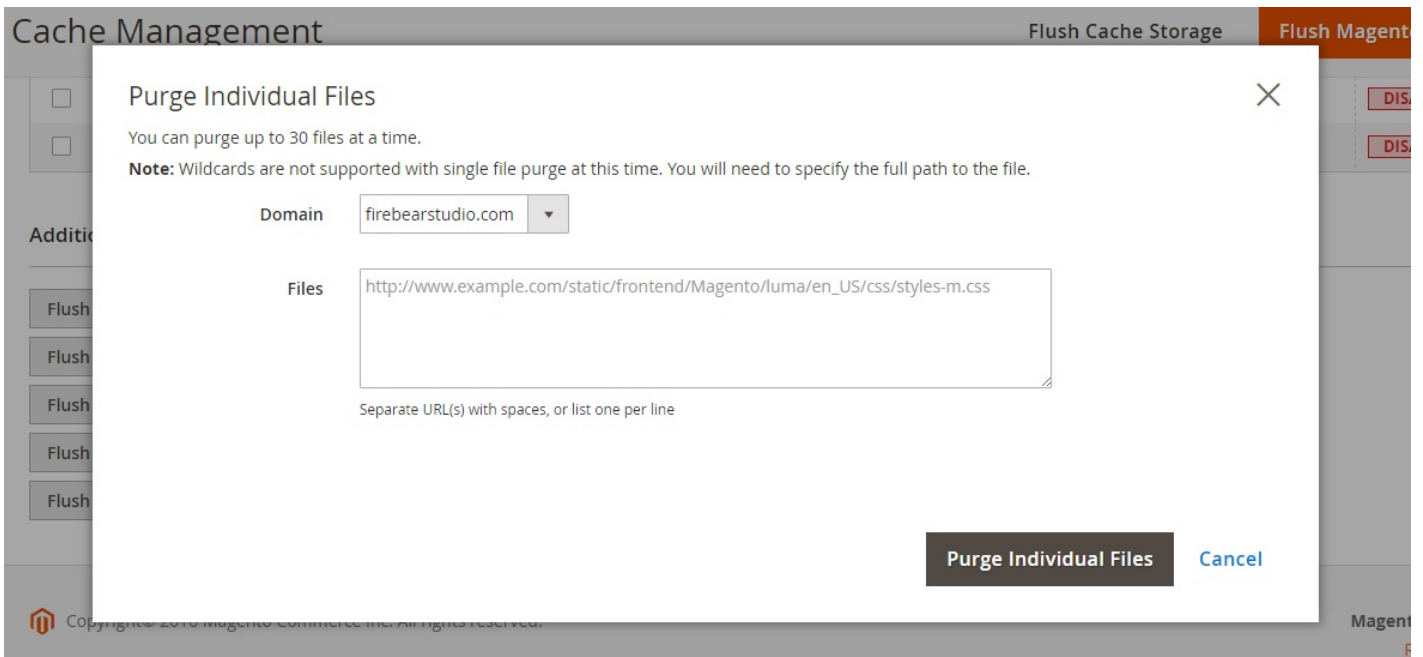
Flush Catalog Images Cache	Pregenerated product images files
Flush JavaScript/CSS Cache	Themes JavaScript and CSS files combined to one file.
Flush Static Files Cache	Preprocessed view files and static files
Flush CloudFlare Cache	Purging the cache may temporarily degrade performance for your website.
Flush CloudFlare Individual Files	Purging the cache may temporarily degrade performance for your website.

Hit the Flush CloudFlare Cache button and you will see the following window:



The extension lets you purge up to 30 files at a time. Please note that it is necessary to choose a domain to purge everything.

Now, we'd like to draw your attention to the Purge Individual Files features. Hit the appropriate button, and you will get the following window:

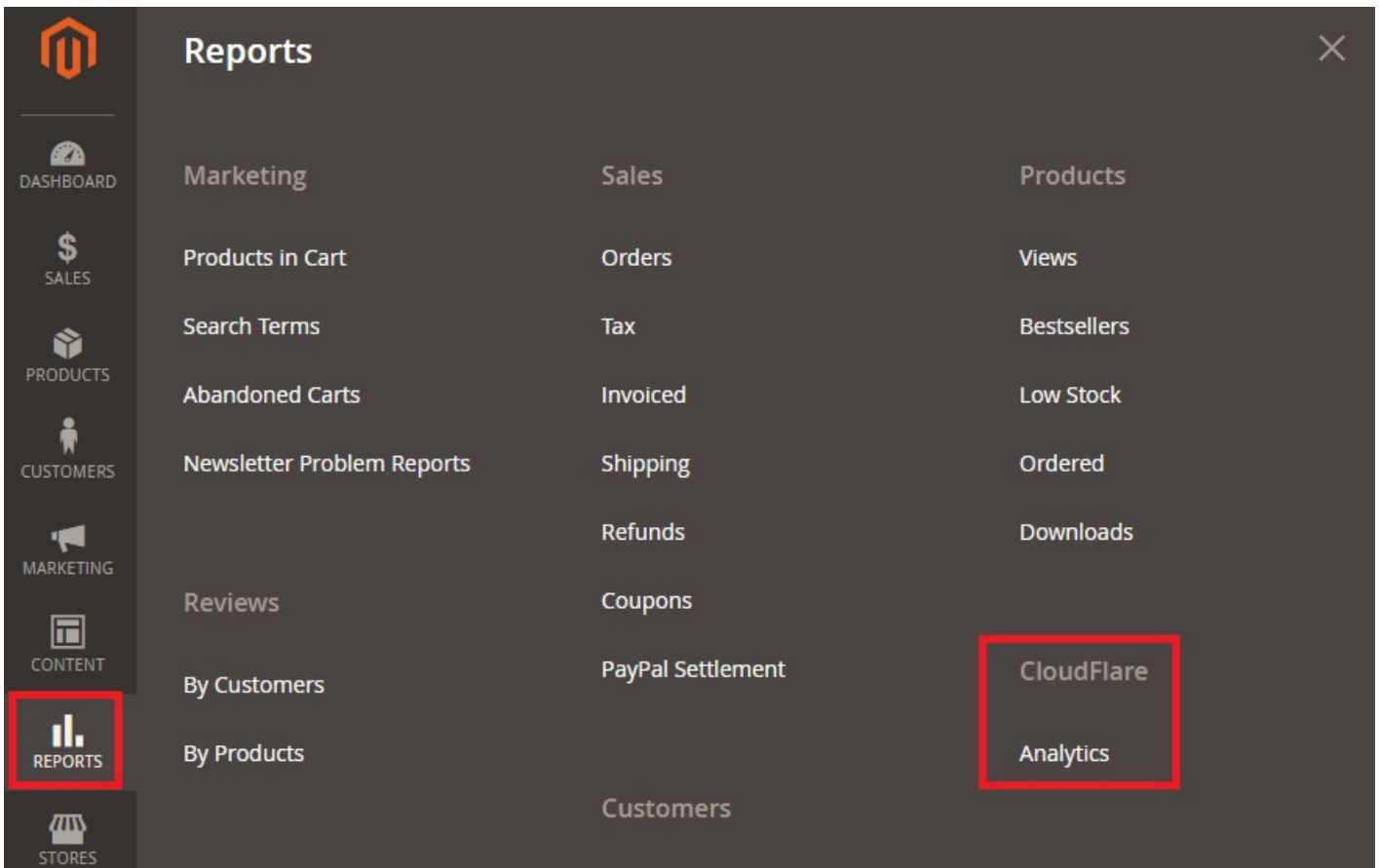


The system also lets you purge up to 30 files. You can choose a domain and specify exact files. It is possible to separate URLs with spaces; alternatively, you can list one URL per line.

CloudFlare Analytics

The last section of our manual is related to CloudFlare Analytics. You can find the appropriate screen under Reports -> CloudFlare Analytics:

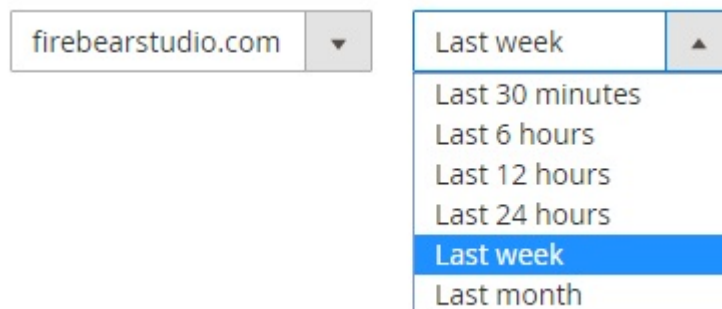
- Hit the Reports button from the left vertical menu.
- In the third column, you can see the CloudFlare section with only one option available: Analytics.
- Hit the Analytics option.



All CloudFlare stats are divided into 4 groups: Requests, Bandwidth, Unique Visitors, and Threats.



All stats can describe various periods: last 30 minutes, hour, 6, 12, 24 hours, week, month. Besides, you can switch between all your websites.



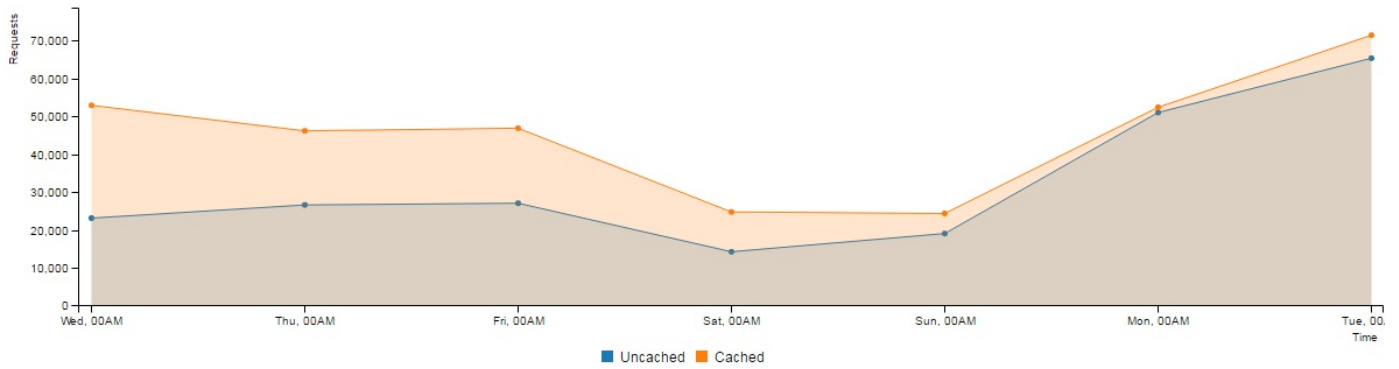
Requests tab

On the Requests tab, there is a diagram that illustrates both cached and uncached requests.

Total Requests
Last week
545,478

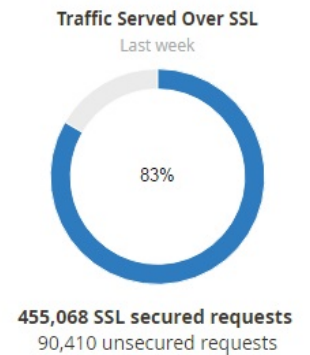
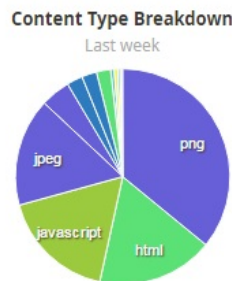
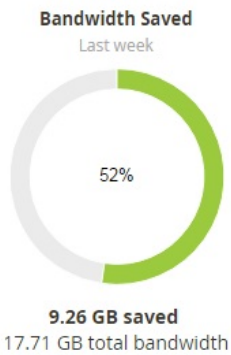
Cached Requests
Last week
318,986

Uncached Requests
Last week
226,492



Above the diagram, you can see total number of requests for the chosen period of time, as well as cached and uncached requests.

Below the diagram, there are three sections that appear on other tabs. The first section includes three pie diagrams that show saved bandwidth, content type breakdown, and traffic served over SSL.



The next section contains information about the total number of stopped threats, types of threats mitigated, and total page views.

Total Threats Stopped
Last week

0

Types of Threats Mitigated
Last week

--

Total Page Views
Last week

65,385

The last section consists of three tables: Top Threat Origins; Top Traffic Origins; and Top Crawlers/Bots.

Top Threat Origins

Last week

Country	Requests
No threats detected	

Top Traffic Origins

Last week

Country	Traffic
United States	139,154
India	63,093
Germany	31,817
Ukraine	28,894
Netherlands	27,450
United Kingdom	24,645
Vietnam	22,651
France	20,457
Russia	17,086

Top Crawlers/Bots

Last week

Crawler/Bot	Pages Crawled
Bingbot	5,618
Yandexbot	4,675
Googlebot	2,991
Baiduspider	150
Twitterbot	113
Applebot	50
Facebookexternalhit	32
Msnbot	25
LinkedInbot	8

Bandwidth Tab

And this is how the Bandwidth tab looks like:

Total Bandwidth

Last week

18 GB

Cached Bandwidth

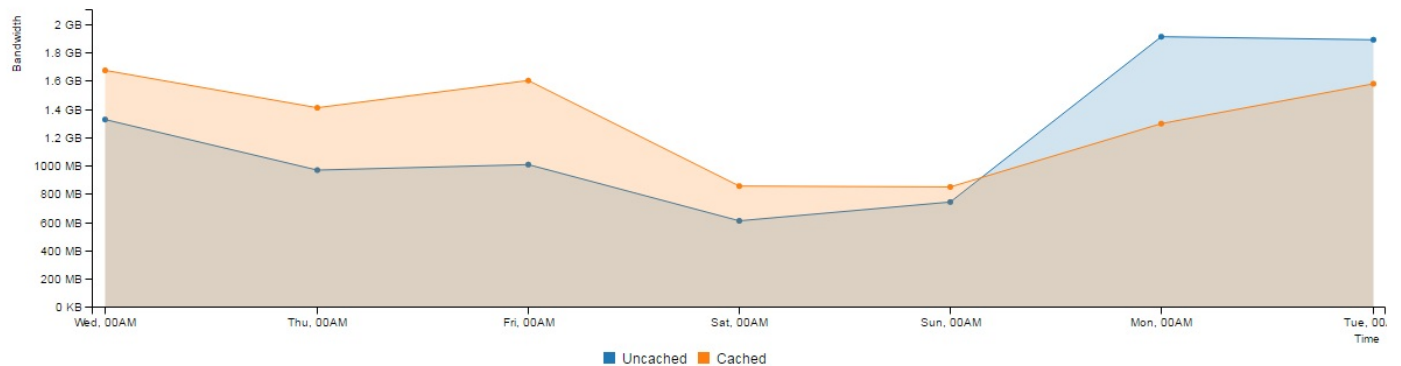
Last week

9 GB

Uncached Bandwidth

Last week

8 GB



There is a diagram with both cached and uncached bandwidth, as well as data on total, cached, and uncached bandwidth for the specified period of time.

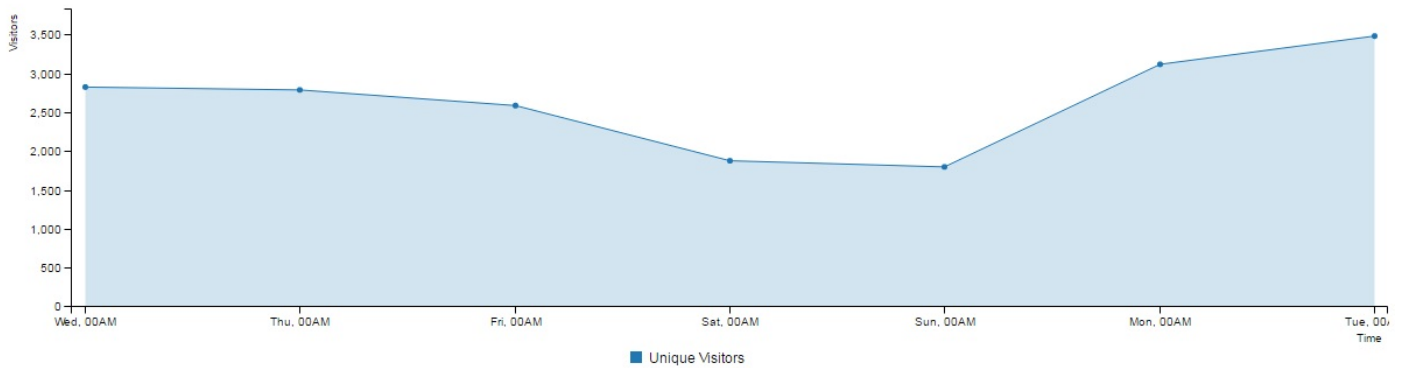
Unique Visitors Tab

On the Unique Visitors tab, you can see the total number of unique visitors as well as their maximum and minimum number for the specified period of time.

Total Unique Visitors
Last week
12,396

Maximum Unique Visitors
Last week
3,482

Minimum Unique Visitors
Last week
1,797



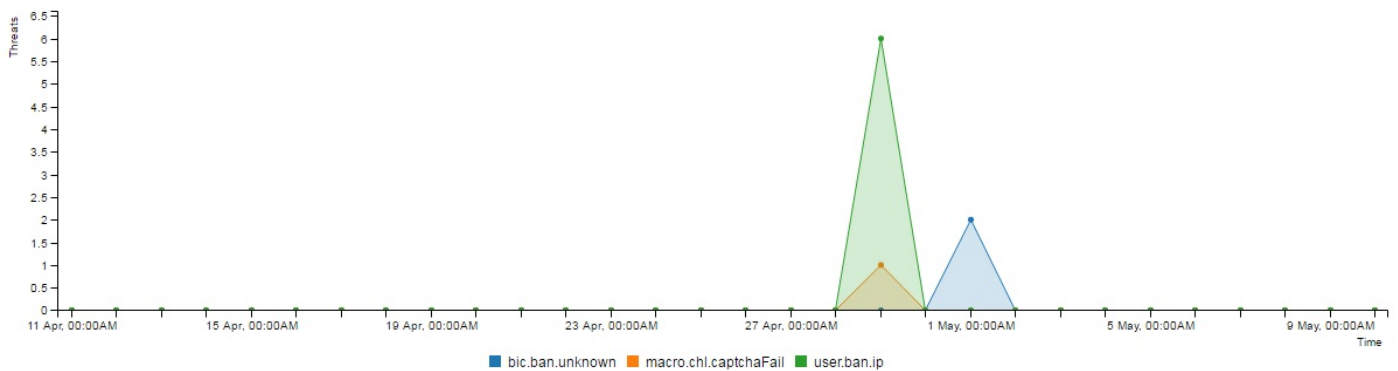
Threats Tab

As for the Threats tab, it illustrates the total number of threats, top country from where threats come from, and top threat types. The diagram shows when each threat occurred.

Total Threats
Last month
9

Top Country
Last month
RU (7)

Top Threat Type
Last month
user.ban.ip



Final Words

This is how the module works. We hope our Control for CloudFlare® Magento 2 Extension Manual was helpful, but if you have any questions, feel free to ask us in comments – we are always here willing to help you.

For further information, consultation, or to request individual new features use [our contact form!](#)