Edgecast

Report Builder

edgecast

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About This Guide

Report Builder
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Table of Contents

Report Builder

Introduction

Report Builder is designed to generate customized reports that contain CDN usage data relevant to your business needs. It allows you to:

- Define a report by selecting a custom time period, delivery platform(s), and the set of data that will be included in the report.
- Export report data as a comma-separated values (CSV) file.
- Schedule email delivery of report data as a CSV or JSON attachment.

Note: The primary function of these reports is to assess performance and gather data on CDN usage. These reports should not be used for billing purposes.

Note: Please contact your account manager to activate Report Builder.

Data Retention

Report Builder retains your data for at least 7 days. Your plan determines whether log data will be stored for a longer time period (i.e., 7, 30, or 45 days).

Tip: Contact your account manager to upgrade your plan.

Details:

Report Builder's data retention policy varies by your plan and the time interval for aggregated log data. Report Builder aggregates log data in:

- 5 minute intervals and stores this type of data for 7 days.
  Example:
  00:00 - 00:05 | 00:05 - 00:10 | 00:10 - 00:15
- Daily intervals and stores this data according to your plan's data retention policy (i.e., 7, 30, or 45 days).

Quick Start

Export report data through the following steps:

1. Create a report that identifies the time period, the delivery platform, and the type of data (i.e., metrics and dimensions) that will be reported.
2. Click **Download**.
3. Optional. Save the report for future use by clicking **Save**.

Key Terms

Definitions for key terms are provided below.

Term	Description
CSV / JSON	Report Builder can generate a file that contains report data that matches the criteria (i.e., time period, time interval, delivery platform, metrics, and dimensions) defined in a report. The format for this file may either be: • **CSV:** Comma-separated values. Reports in CSV format contain a header line that identifies the metric or dimension corresponding to each column. Each subsequent row provides statistical data for each unique combination of dimensions. **Note:** String values may be enclosed within double-quotation marks. • **JSON:** JavaScript Object Notation. Reports in JSON format contain an array of objects. Each object contains key-value pairs for each unique combination of dimensions. **Note:** Generate reports using JSON format via our REST API or by scheduling report delivery via email.

Term	Description
Record	A record is represented by a line in a CSV file or an object within a JSON file. A record contains report data that identifies each unique combination of dimensions. A report may be manually assigned up to two dimensions (e.g., Country Code and Edge CNAME). **Important:** A record will only be included within the CSV file when at least one metric is set to a non-zero value. Missing records is not an indicator of data loss. **Note:** If a time interval has been defined, then the **Time** dimension will be automatically included in the report. This may cause the report to contain up to three dimensions. Please refer to the **Time Interval (Granularity)** section below for more information. For example, if a report has been assigned the "Country Code" and "Edge CNAME" dimensions, then it may contain the following records: • Requests from the US to "cdn.example.com." • Requests from Canada to "cdn.example.com." • Requests from the US to "cdn2.example.com."
Fields	A field is a generic term for: • **Metrics:** Metrics measure the rate or the total number of times that a particular attribute occurred over a given record. • **Dimensions:** Dimensions describe an attribute of a request and are typically used to correlate the desired set of requests with metrics. **Note:** The first line in a CSV file is a comma-separated list of fields that define how data is organized within the CSV.

Time

A report's date range determines the set of data that will be included in it, while a report's granularity (i.e., time interval) determines the scope of each individual record.

Time Periods

Each report must be assigned a relative or fixed time period via the **Date Range** option. This time period defines a start and end date/time for the data that will be included when generating report data.

Definitions for each available time period are provided below.

Time Period	Start Date/Time	End Date/Time
Today	Current date at 12:00:00 AM (UTC)	Current date/time (UTC)
Yesterday	Yesterday at 12:00:00 AM (UTC)	Today at 12:00:00 AM (UTC)
Last 7 Days	A week ago at the current time (UTC)	Today at the current time (UTC)
Last 30 Days	30 days ago at the current time (UTC)	Today at the current time (UTC)
Last 45 Days	45 days ago at the current time (UTC)	Today at the current time (UTC)
This Month	The 1st of the current month at 12:00:00 AM (UTC)	Current date/time (UTC)
Last Month	The 1st of the previous month at 12:00:00 AM (UTC)	The first day of the current month at 12:00:00 AM (UTC)
Custom Range	The start date at 12:00:00 AM (UTC)	The day after the end date at 12:00:00 AM (UTC)

Note: A request will be included in the report when it is completed at or after the start date/time and before the end date/time.

Time Intervals (Granularity)

If a time interval (e.g., 5 minutes, hourly, or daily) has been selected via the **Granularity** option, then the **Time** dimension will be automatically included upon generating a report. In which case, each record covers a single time interval. Time intervals are described below.

Time Interval	Start Time	End Time
5 Minutes	**Time** dimension (UTC)	**Time** dimension (UTC) + 5 minutes
Hourly	**Time** dimension (UTC)	**Time** dimension (UTC) + 1 hour
Daily	12:00:00 AM (UTC)	The subsequent day at 12:00:00 AM (UTC)
Weekly	Monday at 12:00:00 AM (UTC) **Note:** The first record's start time is the report's start date at 12:00:00 AM (UTC)	Monday of the following week at 12:00:00 AM (UTC) **Note:** The last record's end time is the report's end date at 12:00:00 AM (UTC).
Monthly	The 1st of the month at 12:00:00 AM (UTC). **Note:** The first record's start time is the report's start date at 12:00:00 AM (UTC)	The 1st of the subsequent month at 12:00:00 AM (UTC) **Note:** The last record's end time is the report's end date at 12:00:00 AM (UTC).

Note: The **Time** dimension always indicates a record's start time.

Key information:

- If a time interval is not defined by the **Granularity** option, then each record covers the entire report's time period.
- The set of available time intervals varies according to the selected time period. For example, a report for less than 7 days will allow you to select a five minute, hourly, or daily time interval, while a report for the last 45 days only allows daily, weekly, or monthly time intervals.

  Note: This behavior is due to our data retention policy.

- A record will only be included within a report when at least one metric is set to a non-zero value. Missing records are not an indicator of data loss.
- A request will be included in a record when it is completed at or after the start time and before the end date/time.

Filters

Filter a report to only include records that contain a dimension that matches a specific condition. Specify a condition by setting an operation and the value to which it will be applied.

Operation	Description
Contains	Checks whether the dimension contains the specified value.
Does Not Contain	Checks whether the dimension does not contain the specified value.
Does Not End With	Checks whether the dimension does not end with the specified value.
Does Not Equal	Checks whether the dimension is not an exact match for the specified value.
Does Not Match	Checks whether the dimension does not match the RE2-compatible regular expression.
Does Not Start With	Checks whether the dimension does not start with the specified value.
Ends With	Checks whether the dimension ends with the specified value.
Equals	Checks whether the dimension is an exact match for the specified value.
Greater Than	Checks whether the dimension is greater than the specified value.
Greater Than or Equal To	Checks whether the dimension is greater than or equal to the specified value.
In	Checks whether the dimension is an exact match for one or more value(s) selected from a list.
Less Than	Checks whether the dimension is less than the specified value.
Less Than or Equal To	Checks whether the dimension is less than or equal to the specified value.
Like	Checks whether the dimension matches the specified pattern. Use the following wildcards when defining this pattern: • **_:** Use an underscore to match exactly one character. • **%:** Use a percent sign to match zero or more characters.
Matches	Checks whether the dimension matches a RE2-compatible regular expression.
Not In	Checks whether the dimension does not match any of the values selected from a list.

Operation	Description
Not Like	Checks whether the dimension does not match the specified pattern. Use the following wildcards when defining this pattern: • **_:** Use an underscore to match exactly one character. • **%:** Use a percent sign to match zero or more characters.
Starts With	Checks whether the dimension starts with the specified value.

Administering Reports

A report identifies requests and the set of data that will be included upon being generated.

To create a report

1. Navigate to the **Report Builder** page by pointing to the **More** menu and then selecting **Report Builder**.
2. Click **Add Report**.
3. Under the **Name** option, assign a name to the report.
4. Define the report's time period by specifying a:
   - **Relative Time Period:** Click within the **Date Range** option and then select the desired relative time period (e.g., Today, Last 7 days, or Last 30 days).

     Tip: This predefined time period is relative to the date on which report data is generated.

   - **Fixed Date Range:** Click within the **Date Range** option and then select **Custom Range**. Click on the desired start date, click on the desired end date, and then click **Apply**.

     Important: Report data is only available up to the last 45 days. Reports that reference dates older than 45 days will return partial or no data. This may occur inadvertently when downloading data for an old report that has been assigned a fixed date range.
5. Optional. Under the **Granularity** option, select a time interval (e.g., Hourly, Daily, or Weekly).

   Reminder: The set of available time intervals varies according to the selected time period.

   Reminder: If a time interval is not defined, then each record will cover the report's entire time period.

6. Optional. From the **Row Limit** option, select the maximum number of rows/lines (e.g., 30,000) that may be included in a report.

   Note: Data that exceeds the specified row limit will be excluded from the report. Include this data within a report by either specifying a smaller date range or by increasing the value assigned to the **Row Limit** option.

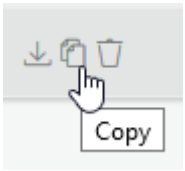
7. From the **Metrics** tab, select a metric from the **Metric** option.
8. Optional. Add another metric to the report by clicking **Add another metric** and then selecting the desired metric. Repeat this step as needed.
9. Optional. Add a dimension by clicking the **Dimensions** tab and then selecting a dimension from the **Dimension** option.
10. Optional. Add another dimension to the report by clicking **Add another dimension** and then selecting the desired dimension. Repeat this step as needed.
11. Optional. Filter the data that may be included in the report.
    i. Click the **Filters** tab.
    ii. Under the **Filter** option, select the dimension by which report data will be filtered.
    iii. Under the **Operation** option, choose the operation that will be applied to the value that will be specified in the next step.
    iv. Under the **Value** option, type the desired value.

    Tip: Filter by delivery platform by setting the **Filter** option to "Platform," the **Operation** option to "In," and then selecting the desired delivery platform(s) from the **Value** option.

12. Click **Save**.
13. Optional. Click **Download** to download report data.

To copy a report

1. Navigate to the **Report Builder** page by pointing to the **More** menu and then selecting **Report Builder**.
2. Hover over the desired report and then click the copy icon.



3. A copy of the selected report will be created and named using the following syntax:

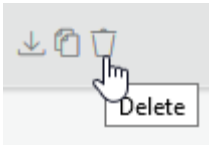
```
Copy of {Report Name} - #
```

To modify a report

1. Navigate to the **Report Builder** page by pointing to the **More** menu and then selecting **Report Builder**.
2. Select the desired report.
3. Make the desired changes to the report.
4. Optional. Click **Download** to download report data.
5. Click **Save** to save your changes.

To delete a report

1. Navigate to the **Report Builder** page by pointing to the **More** menu and then selecting **Report Builder**.
2. Hover over the desired report and then click the delete icon.



3. Click **OK** to confirm the deletion.

To download report data

1. Navigate to the **Report Builder** page by pointing to the **More** menu and then selecting **Report Builder**.
2. Hover over the desired report and then click the download icon.

Tip: An alternative download method is to open the desired report and then click **Download** from the **Details** tab.

To view sample report data

1. Navigate to the **Report Builder** page by pointing to the **More** menu and then selecting **Report Builder**.
2. Select the desired report.
3. Verify the report's configuration.
4. Click **Save** to save changes to the report.
5. Click the **Sample Data** tab.

Important: The **Sample Data** tab contains data sampled from your traffic. This data is not meant to be representative of your traffic and it will not match the data provided within our reports.

Scheduling Report Delivery

Reports may be generated and delivered via email on a recurring basis.

Key information:

- Each email will contain the following properties:
    - **Sender:** Reports will be delivered from report-builder@verizonmedia.com.
    - **Subject Line:** We construct the subject line for each email upon generating the report. This subject line consists of a base subject line, as defined by the **Subject** option, followed by the report's start and end date/time as determined by the **Date Range** option.
      Subject line syntax:
      {Base Subject Line} {Start Date/Time} – {End Date/Time}
      Date/Time syntax:
      {YYYY} –{MM}-{DD}T{hh}:{mm}:{ss}Z

      Note: Specify a subject line that is a 100 characters or less.
    - **Body:** The email's body is determined by the **Message** option.
    - **Attachment:** The report will be attached to the email as a JSON or a comma-separated values (CSV) file as determined by the **Document Format** option.

      File name syntax:
      {Base File Name}_{Start Date/Time}_{End Date/Time}.[csv|json]
      Date/Time syntax:
      {YYYY} –{MM}-{DD}T{hh}_{mm}_{ss}Z

      Note: A report's file name will not exceed 255 characters.

- Deliver report data using one of the following frequencies:

Frequency	Description
Daily	Sends a report every day at the scheduled time (UTC).
Weekly	Sends a report every Monday at the scheduled time (UTC).
Bimonthly	Sends a report on the 1st and the 15th of the month at the scheduled time (UTC).
Monthly	Sends a report on the 1st of the month at the scheduled time (UTC).

Note: Scheduling the delivery of a report whose date range is set to "This Month" may generate reports containing minimal or no data. For example, delivering this type of report on a bimonthly or monthly schedule will contain minimal or no data on the 1st of the month. Consider setting the report's date range to "Last Month."

Reports are generated at midnight (UTC) according to the above schedule. If a report is scheduled to be delivered/generated on the 1st of the month, then a report whose date range is set to "This Month" will only report data for requests that completed at exactly midnight (UTC) on the first of the month.

- Schedule report delivery to continue indefinitely or define a specific date on which delivery will stop.
- Test your report delivery configuration by sending a test email.

To schedule report delivery via email

1. Navigate to the **Report Builder** page by pointing to the **More** menu and then selecting **Report Builder**.
2. Select the desired report.
3. Click the **Share** tab.
4. From the **Subject** option, type the email's base subject line.

   Note: Specify a base subject line that is 100 or less characters.

5. From the **Message** option, type the email's body.

   Note: Specify a message that is 100 or less words.

6. From the **Sent to** option, select each email address to which this report will be delivered on a regular basis.

   Note: You may only select an email address associated a MCC user account.

7. From the **Document Name** option, verify the base file name of the email attachment.

8. From the **Document Format** option, select whether report data will be formatted as CSV or JSON data.
9. Define a delivery schedule.
    i. From the **Frequency of Report** option, select how often reports will be generated and delivered via email.
    ii. From the **Delivery Time** option, select the time at which reports will be generated and delivered via email.
    iii. From the **Start** option, select the start date for report delivery.
    iv. Determine whether report delivery will:
        - **End on a specific date:** Clear the **Never** option and then select the desired date from the **End** option.
        - **Continue indefinitely:** Mark the **Never** option.
10. Optional. Test your delivery configuration by select a recipient from the **Test Email Address** option and then clicking **Send a Test Email**.
11. Verify that the **Share Status** option is set to "ON."
12. Click **Save**.
13. Click **Cancel** to return to the **Report Builder** landing page.

Metrics and Dimensions

Metrics and dimensions determine the set of statistics that will be included within a report. Additionally, you may filter a report by a specific dimension.

Note: The Time dimension is automatically included when a time interval is set via the **Granularity** option.

Metrics

A metric measures the rate, an amount, or the total number of times that a particular attribute occurred over a given record. Measurements are performed on requests that meet the following conditions:

- **Time Period:** The request was initiated between the report's start and end date.
- **Time Interval:** The request was initiated during the current record's time interval (i.e., granularity).

  Reminder: If a time interval was not defined, then each record covers the report's entire time period.

- **Delivery Platform:** The request corresponds to a delivery platform that was enabled on the report.
- **Filter:** The request meets any filter requirements that have been applied to the report.
- **Dimensions:** If the report contains one or more dimensions, then the request must satisfy all dimension criteria defined within the current record.
  For example, if the current record contains "Country Code" set to "US" and "Edge CNAME" set to "cdn.example.com," then metrics for the current record will only measure requests to "cdn.example.com" that originate from the United States.

Definitions for each metric are provided below.

Metric	Description
2xx Rate status_2xx_percentage	Indicates the percentage of requests that resulted in a 2xx response code.
2xx Responses status_2xx	Indicates the total number of requests that resulted in a 2xx response code.
3xx Rate status_3xx_percentage	Indicates the percentage of requests that resulted in a 3xx response code.
3xx Responses status_3xx	Indicates the total number of requests that resulted in a 3xx response code.
4xx Error Rate status_4xx_percentage	Indicates the percentage of requests that resulted in a 4xx response code.
4xx Responses status_4xx	Indicates the total number of requests that resulted in a 4xx response code.
5xx Error Rate status_5xx_percentage	Indicates the percentage of requests that resulted in a 5xx response code.
5xx Responses status_5xx	Indicates the total number of requests that resulted in a 5xx response code.
Bytes In bytes_in	Indicates the total number of bytes read.
Cache Hit Ratio cache_hit	Indicates the percentage of cacheable requests that were served directly from cache to the requester.
Cache Hits cache_hit_percentage	Indicates the total number of cacheable requests that were served directly from cache to the requester.
Cache Miss Ratio cache_miss	Indicates the percentage of requests that were served from an origin server or an Origin Shield server.
Cache Misses cache_miss_percentage	Indicates the total number of requests that were served from an origin server or an Origin Shield server.

Metric	Description
Completed Downloads completed_downloads	Indicates the total number of times that assets were downloaded completely to a client. In calculating whether a request is a "complete download," we take the following into consideration: • A request must return a 200 OK or a 206 Partial Content status code. • Byte-Range Requests: We will: ▪ Ensure that they provide full coverage for the requested asset. ▪ Sum up the total data transferred for all requests for the same asset that originate from the same client. The amount of data transferred must be equal to or greater than the file size. **Note:** If compression has been enabled on your account, then the recorded file size may be larger than the total bytes transferred. This may lead to inaccurate data.
CONFIG_NOCACHE config_nocache	Indicates the number of requests that were not cached due to the customer's CDN configuration. The payload for each of these requests was served directly from the origin server.
Data Transferred bytes_out	Indicates the total amount of data transferred to clients. **Note:** Define the units for this metric upon its selection.
Download Attempts download_attempts	Indicates the total number of unique requests. This statistic is calculated by summing the following types of requests: ▪ All requests that result in a 200 OK. ▪ All byte-range requests for the start of an asset (e.g., bytes=0-499) that result in a 206 Partial Content. **Note:** This field does not take into account whether the client downloaded the entire asset.
File Size file_size	Indicates the total size, in bytes, for all assets. **Note:** File size is determined by the request's payload and does not include header data.
Requests request_count	Indicates the total number of requests that meet the report's criteria. **Note:** A request occurs whenever CDN content is requested, regardless of the status code returned to the client.

Metric	Description
TCP_CLIENT_REFRESH_MISS tcp_client_refresh_miss	Indicates the number of requests issued by an HTTP client (e.g., browser) that forced an edge server to retrieve a new version of a stale asset from the origin server.
TCP_EXPIRED_HIT tcp_expired_hit	Indicates the number of requests for an asset with an expired time to live (TTL) that was served directly from the POP to the client.
TCP_EXPIRED_MISS tcp_expired_miss	Indicates the number of requests that result in a newer version of an expired cached asset being served.
TCP_HIT tcp_hit	Indicates the number of requests served directly from the POP to the client.
TCP_MEM_HIT tcp_mem_hit	Reserved for future use.
TCP_MISS tcp_miss	Indicates the number of requests for content that was not cached on the POP closest to the client.
TCP_PARTIAL_HIT tcp_partial_hit	Indicates the number of requests that resulted in a partially cached asset.
TCP_PARTIAL_MISS tcp_partial_miss	Reserved for future use.
Total Time total_time	Indicates the average amount of time, in milliseconds, that it took our CDN to serve an asset to a client.
Transfer Rate transfer_rate	Indicates the sum of the rate at which edge servers delivered content to HTTP clients (e.g., web browsers). **Note:** Define the units for this metric upon its selection.
UNCACHEABLE uncacheable	Indicates the number of requests that could not be cached due to Cache-Control or Expires headers. The payload for each of these requests was served directly from the origin server.

Dimensions

A dimension describes an attribute of a request and typically correlates the desired set of requests with metrics.

Note: Filter a report by selecting a dimension under the **Filter** option and then determining the condition that requests must satisfy in order to be included in the report.

Dimension	Description
AS Org client_as_org	Identifies requests by the organization corresponding to the client's ASN.
ASN client_asn	Indicates the Autonomous System Number (ASN) associated with the client's IP address.
Cache Status cache_status	Identifies requests by cache status code (e.g., TCP_HIT and TCP_MISS).
City client_city	Indicates the city from which the request originated.
Content Type content_type	Indicates the media type (aka content type) for the body of the requested content. **Example:** image\/png
Continent Code continent_code	Identifies requests by one of the following continent codes: • **AF:** Africa • **AN:** Antarctica • **AS:** Asia • **EU:** Europe • **NA:** North America • **OC:** Oceania • **SA:** South America
Country Code country_code	Identifies requests by country code (e.g., US, MX, and CA).
Edge CNAME host	Identifies requests by edge CNAME.
HTTP Method method	Identifies requests by HTTP method (e.g., GET, HEAD, and POST).

Dimension	Description
HTTP Status Code status	Identifies requests by the HTTP status code (e.g., 200, 206, 301, etc.) for the response generated by an origin server, origin shield server, ADN gateway server, or an edge server.
ISP client_isp	Indicates the Internet Service Provider (ISP) associated with the client's IP address.
Leaf Directory leaf_directory	Identifies requests by the CDN URL path to the parent directory of the requested content. **Example:** Sample request: https://wpc.0001.edgecastcdn.net/800001/marketing/events/widgets/logo.png The leaf directory for the above request is: /800001/marketing/events/widgets
Origin origin	Identifies requests by the origin server on which the requested content resides. Valid values are: • **EdgeCast:** CDN storage • ***Directory Name*:** Customer origin traffic is identified by the customer origin's **Directory Name** option.
Platform platform	Identifies requests by delivery platform. Valid values are: • **cache:** HTTP Large • **wac:** HTTP Small • **adn:** ADN
POP pop	Identifies the POP that handled the client's request by its three-letter abbreviation.

Dimension	Description
Proxy Type proxy_type	Indicates the type of server to which an edge server forwarded a request. Valid values are: • **NONE:** Indicates that the request was served directly from the edge of our network and therefore it was not proxied to another server. • **MIDGRESS:** Indicates that an edge server proxied the request to a different CDN server. **Examples:** ▪ The request was proxied to an Origin Shield or an ADN Gateway server. ▪ The request was proxied to a peer edge server due to hotfiling. • **ORIGIN:** Indicates that the request was proxied to either of the following servers: ▪ An external web server associated with a customer origin configuration. ▪ A CDN storage server.
Region client_region	Indicates the geographical region (e.g., state or province) from which the request originated.
Root Directory root_directory	Identifies requests by the directory that immediately follows the content access point. **Example:** Sample request: https://wpc.0001.edgecastcdn.net/800001/marketing/events/widgets/logo.png The root directory for the above request is: events
Time date_time	Identifies requests by the time interval during which the request was initiated. Key information: • This field identifies start time for the current record's time interval. • The length of this time interval is determined by the **Granularity** option. • This field is automatically included when a time interval is defined via the **Granularity** option. **Syntax:** *M*/*D*/*YYYY h*:*mm*:*ss* am|pm

Dimension	Description
TLS Version tls_version	Identifies QUIC requests or the version of the TLS protocol through which the client securely communicated with our network. Valid values are: TLSv*Version* | QUIC **Note:** A blank value is reported for requests that do not use QUIC or TLS.
Traffic Type traffic_type	Describes the type of traffic corresponding to the request. Valid values are: • **STANDARD:** Indicates that an edge server served the request either from cache or by requesting it from the origin server. • **MIDGRESS:** Indicates that a different CDN server served the response to an edge server. **Examples:** ▪ An Origin Shield or an ADN Gateway server served the request to an edge server either from cache or by requesting it from the origin server. ▪ The request was spawned from custom logic defined within a Lua script. ▪ A peer edge server served the request to an edge server due to hotfiling.
URI Scheme scheme	Identifies requests by URI scheme (i.e., http or https).
URL path	Identifies requests by the CDN URL path of the requested content. **Example:** Sample request: https://wpc.0001.edgecastcdn.net/800001/marketing/events/widgets/logo.png The CDN URL path for the above request is: /800001/marketing/events/widgets/logo.png
User Agent user_agent	Identifies request by user agent as determined by the User-Agent request header.