Campaign Manager 360 (formerly DoubleClick Campaign Manager or "DCM") Description of Methodology

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Introduction

The [Media Rating Council](#) (MRC) accreditation certifies that Campaign Manager, (formerly DoubleClick Campaign Manager or "DCM") ad serving technology adheres to the industry standards for ad serving and ad serving measurements, and that its processes supporting this technology are accurate. This applies to Campaign Manager's measurement technology which is used across all device types: desktop, connected TV, mobile, and tablet, in both browser and mobile apps environments.

This document is a summary of the data collection, measurement, and filtration methodologies of Campaign Manager, and its associated processes.

What is Campaign Manager accredited for?

- Display (inclusive of Rich Media) and Video Click-related metrics based on BTR Impressions – Presented as Total Net (Desktop, Mobile Web and In-App; only GIVT portion accredited)
    - Clicks
    - GIVT Clicks
    - Invalid Clicks
    - Click Rate
- Display (inclusive of Rich Media) and Video BTR Impressions metrics – Total Net of SIVT (Desktop and Mobile Web) and Net of GIVT (Mobile In-App):
    - Begin to Render Impressions
    - Invalid Begin to Render Impressions
    - GIVT Begin to Render Impressions
- Display (inclusive of Rich Media) and Video Viewable Impressions and viewability related metrics based on Begin to Render Impressions – Total Net of SIVT (Desktop and Mobile Web) and Net of GIVT (Mobile In-App):
    - Active View: Eligible Impressions
    - Active View: Measurable Impressions
    - Active View: Viewable Impressions
    - Active View: % Measurable Impressions
    - Active View: % Viewable Impressions
    - Active View: Not Viewable Impressions
    - Active View: Not Measurable Impressions
    - Active View: Impression Distribution (Viewable)
    - Active View: Impression Distribution (Not Viewable)
    - Active View: Impression Distribution (Not Measurable)
    - Invalid Active View Eligible Impressions

- - Invalid Active View Measurable Impressions
  - Invalid Viewable Impressions
  - GIVT Active View Eligible Impressions
  - GIVT Active View Measurable Impressions
  - GIVT Active View Viewable Impressions
- Video Begin to Render Impressions and related metrics – Net of GIVT (CTV)
  - Begin to Render Impressions
  - Invalid Begin to Render Impressions
  - GIVT Begin to Render Impressions
  - Inactive Impressions

As of the first quarter of 2025, Google has submitted YouTube & Partners reporting, including Demand Gen (skippable ad formats) and Programmatic Guaranteed deals video in-stream campaigns for MRC's consideration. The following metrics are included:
- Begin to Render Impressions
- Invalid Begin to Render Impressions
- GIVT Begin to Render Impressions
- Invalid Impressions
- Active View: Eligible Impressions
- Active View: Measurable Impressions
- Active View: Viewable Impressions
- Active View: % Measurable Impressions
- Active View: % Viewable Impressions
- Active View: Not Viewable Impressions
- Active View: Not Measurable Impressions
- Active View: Impression Distribution (Viewable)
- Active View: Impression Distribution (Not Viewable)
- Active View: Impression Distribution (Not Measurable)
- Invalid Active View Eligible Impressions
- Invalid Active View Measurable Impressions
- Invalid Viewable Impressions
- GIVT Active View Eligible Impressions
- GIVT Active View Measurable Impressions
- GIVT Active View Viewable Impressions

A current listing of Campaign Manager's measurements is available on the "Metrics and dimensions" page in the Campaign Manager Help Center

What is not covered in this document

Topics that are not covered under this specific accreditation include:
- Other Google ad serving solutions and products
- Other Google products and services
- Other Campaign Manager Metrics
- Active View measurement methodology
- Digital Content Label and Sensitive Topic Category methodology

What is Campaign Manager?

Campaign Manager is the part of the Google Marketing Platform (formerly DoubleClick Digital Marketing platform or "DDM"). It's used by advertisers and advertising agencies to manage digital display campaigns across websites and mobile apps. Campaign Manager includes a set of features for tracking, ad serving, targeting, verification, reporting, and attribution modeling.

Campaign Manager servers delivers advertising to websites, the mobile web, and mobile apps. When someone visits a site or app that includes Campaign Manager ad tags, the tags call the Campaign Manager ad server. Using information derived from the visitor's IP address and user agent, such as the visitor's location or operating system, Campaign Manager matches the request with the best ad to serve. Once the right ad is identified, Campaign Manager sends the creative to the webpage or app, then counts an impression for that ad. (In some cases, the impression is counted when an impression tracking pixel is requested from the Campaign Manager ad server and sent to the visitor's browser or app.) Campaign Manager reports on impressions, clicks, video metrics, and conversions are based on adserver logs.

Business Partner Qualification

All partners that use Campaign Manager need to adhere to Google's [platforms program policies](#), which prohibit invalid activity. Learn more about [invalid activity](#).

Google filters invalid traffic on an ongoing basis, and will review any business partners that receive high amounts of invalid traffic. Partners who continually generate invalid traffic in their accounts may have those accounts suspended or closed.

Core components

Trafficking

Campaign Manager Trafficking is where users create and manage their campaigns, upload creatives to Campaign Manager, and generate ad tags to send to publishers. The exact structure of the ad tags depends on how the campaign is structured, what types of creatives it includes, and the environment where the tags will be used, such as a mobile app or a particular browser type.

Ad serving

Campaign Manager ad servers respond to ad requests and perform ad selection and delivery in real time as end users visit web pages and apps.
They also record the data collected from ad requests, including URL attributes and HTTP headers. The data is stored in log files that are processed to produce reports.

Reporting

Campaign Manager processes ad server logs to generate reports that can include impression, click, rich media, and conversion data. Reports provide information about campaign performance, where ads were shown, and the audience that received the ads. Campaign Manager Report data is finalized after 8 days.

Verification

Campaign manager allows users to specify different ad blocking criteria that are taken into consideration during the ad serving process. Users can setup ad blocking using domains, subdomains, or a set of sensitive categories representing more specific forms of mature content. Campaign manager also processes ad server logs to generate reports that include other forms of brand suitability data. These reports provide information about potential content issues or brand safety violations.

Impression Measurement methodology

An impression is not counted until the user's client (browser or mobile device) sends back a ping that the ad has started to download. The MRC refers to this as "count on download." See the [MRC definition](#) for more information.

However, when prefetch tags are used, or when ads are delivered to Chrome browsers on prerendered pages, the impression is counted on delivery. Campaign Manager ad server logs indicate which counting methodology was used in each case.

Ad Blocking

Ad blocking is performed when an ad request's url matches a blacklisted domain or subdomain, or if the content of the url matches a sensitive category in the blocked list. Ad blocking can be preempted by whitelisting a particular domain, or by specifying a placement or site level opt out. Ad blocking works against urls regardless of in-app or web environment. Display impressions that are blocked will appear under the metric 'blocked impressions'.

Video impressions that are blocked will not appear in the Verification tab. Configuration for ad blocking and reporting of blocked impressions appears in the Verification component.

Continuous Play

All measured YouTube video ads are delivered in-stream. Some may be part of a playlist or autoplay feature which follow certain rules. At a high level:
- Autoplay won't start if you're connected to a mobile network and have been inactive for 30 minutes.
- On Wi-Fi, Autoplay will stop automatically after four hours.

Please refer to https://support.google.com/youtube/answer/6327615 for the latest and most accurate details on this feature.

For non-Youtube environments, refer to https://support.google.com/dcm/answer/9288446?hl=en for the continuous play parameter.

Reports

Campaign Manager reports include impressions, clicks, video metrics, and conversions based on the events in the log files. The numbers are not sample based, so there's no statistical projection. In most cases, reporting metrics are aggregated across dimensions such as advertisers, campaigns, sites, date ranges, and so on.

The impressions, clicks, rich media metrics, conversions, and other data that are recorded are presented to Campaign Manager users in several ways:
- Online interactive reporting. These reports are provided in near real time to help customers make marketing decisions, adjustments, and optimizations throughout the day.

Most data is finalized and made available before 9:00 AM daily (local time as per the user installation) seven days a week. Data coming from additional filtration processes can sometimes be delayed due to additional processing although this delay has minimal impact. A short description of this process is provided in the Activity based filtering section of this DOM.

Youtube TV, which is not MRC accredited, can be segregated from the accredited metrics on reporting dashboards using the Is YouTube TV dimension.

Local time reporting

Campaign Manager allows users to set a local time for their network for reporting purposes. The time zone selected will be respected in DDM Reporting when using a date breakdown in the Reports.

Local reporting times and publish cycles

The Campaign Manager time zone dictates what is considered a single day in DDM Reporting. Each time zone also corresponds to one of three publishing cycles, which dictate what time of day Campaign Manager data is processed and published for scheduled reports (data for non scheduled reports is refreshed constantly). New accounts have their time zone set by the Google services representative who creates the account. If this time zone is incorrect, you can contact support and ask that it be changed.

Changing your local time zone will affect data for the day on which you made the change, the previous day, and the day after. You may notice reporting discrepancies such as under or overcounting of events, and inaccuracies in conversion and reach data.

Cache busting techniques

Campaign Manager ad servers use cache busting techniques in HTTP headers, including cache control, expires, and pragma.

In addition, Campaign Manager ad tags support macros for the insertion of random numbers into URLs. These random numbers make each URL unique, thus preventing caching. This cache busting technique relies on correct publisher implementation of tags and macros. For publishers that don't support this technique, the Campaign Manager help center provides guidelines and examples for using JavaScript instead. Google recommends use of the Ins tag, as cache busting is handled by that tag type.

It is understood that certain amounts of caching may persist even with these techniques in place.

Click measurement

The measurement methodology is based on all click activity recorded, and does not utilize sampling for the purposes of click measurement. Only stage 2.2 of the IAB click referral cycle (measured clicks) are directly observed by Google. With respect to the click-referral-cycle, upon receipt of the initial click transaction by the Campaign Manager redirect server, Campaign Manager records the click and issues a non-cachable HTTP 302 redirect to the browser based on the location established by the Advertisers for the specific advertisement. This constitutes the measured click. The click measurement methodology is the same across all device types (desktop, mobile, tablet) and for browser and mobile apps unless otherwise noted.

A known limitation of this method of measuring clicks is that a network interruption may cause a user who successfully receives a 302 redirect to not be able to view the resulting advertiser web site.

The counting methodology utilized is the multiple-click-per-impression method. Consequently, to avoid inappropriate counting of navigational mistakes (e.g. multiple clicks per user), we require that the time between a given click and a previous click on the ad impression is greater than a specific period of time.

Logs are generated and processed in real-time, storing all data associated with observed HTTP transactions. Numerous variable and heuristic techniques are utilized to implement the click filtration systems, which will not be enumerated here to protect their security.

Both Google and their partners deliver the advertisements to users; however, Google maintains control over and performs the processes related to measurement and advertiser reporting of click activity. When a user clicks on an advertisement, whether delivered by Google or a partner, via any one of the products administering the product, the click activity is tracked by Campaign Manager through the Campaign Manager redirect servers.

Measurement of click activity is based on the Campaign Manager click measurement methodology, which utilizes a technology infrastructure to manage and monitor click events. A click is recorded (measured) when Campaign Manager has received an initiated click and sends the user an HTTP 302 redirect to the advertiser landing page or website (or other intermediate server such as an advertiser's agent). These measured click events are recorded to data logs within an event file system. The data log files are then accumulated, edited and compiled through fully automated processes to produce click measurement and advertiser reporting. The editing process includes the process of filtering erroneous or corrupt data, identified non-human traffic including robots and other automated processes, and other identified invalid click activity. Google requires a valid click, in order to record a valid impression. The filtered clicks are considered invalid, which means they are not billable to the advertiser. Google prepares click reports for advertisers which can be directly accessed by the respective advertiser.

Click measurements can be reported aggregated by geographical location (not subject to MRC accreditation) and device type. Geographical location is based on the user's IP address or from

a publisher-provided location (publishers must obtain user permission to provide such location). Note that some traffic may be routed through a service provider's proxy servers and so might not correctly reflect the user's actual locations (e.g., mobile carriers may proxy mobile traffic). Device type classification (computer, tablet, and mobile devices) is based on information from the HTTP header-using libraries operated by Google.

Click-Tracking

In Campaign Manager, click-tracking tags are used when the Campaign Manager customer does not track the corresponding publisher impression in Campaign Manager (for example in email newsletter or editorial link tracking, or publisher served creatives). Such clicks are not accredited by MRC, as MRC requires clicks to be directly correlated to a valid impression.

If you wish to exclude click-trackers from your reports in Campaign Manager reporting, be sure to exclude the following Ad Types, when creating Reports:
- Static click tracker
- Dynamic click tracker
- Tracking
- DART Search
- Paid Social

If you include click-tracking Ad types, the Click-Through Rate Metric will not be correctly calculated. Please review the help Center article How to report only on MRC accredited metrics

Compound tracking

Campaign Manager doesn't support compound tracking, which is the recording of data for a group of creatives or ads. Each creative is delivered and counted individually. However, customers can run reports that aggregate data for multiple ads and creatives.

Digital video impression measurement methodology

For YouTube measurement methodology, please see the Display and Video 360 Description of Methodology.

For instream and VPAID creatives, Campaign Manager does not log an impression until the video has buffered enough to start playing. This is because Campaign Manager follows the IAB's VAST standard for video ads. Other creative types use tag types that log an impression at the same time that they request content. By contrast, instream and VPAID creatives use prefetch tags, which request content first and log the impression only once the video is ready to start playing.

Image based tracking and in unit clicks

Image based tracking is used by default in Campaign Manager. Customers can implement their own custom click counting using Javascript in customized creative code. Clicks from both types still use the same spam filtering logic.

Invalid traffic: GIVT and SIVT

Google filters both general invalid traffic (GIVT) and sophisticated invalid traffic (SIVT) continuously with data-based identifiers, and activities and patterns. This includes non-human activity and suspected fraud. However, because user identification and intent cannot always be known or discerned by the publisher, advertiser or their respective agents, it is unlikely that all invalid traffic can be identified and excluded from the reported results proactively. In order to protect invalid traffic filtration processes from becoming compromised or reverse-engineered, no details of specific filtration procedures, beyond those detailed in the IVT guidelines, will be disclosed in detail, other than to auditors as part of the audit process. Customers can use the Campaign Manager reporting UI to generate high level reports to view IVT traffic (see below).

Reporting on Gross Impression and Click Metrics in Campaign Manager

In the Campaign Manager reporting UI, the Impressions and Clicks metrics do not by default include IVT. In order to calculate gross metrics, users should select the 'Impressions' and 'Clicks' metrics, and also 'Invalid Impressions' and 'Invalid Clicks' and add them together. The latter includes both SIVT and GIVT filtered traffic. If users would like to break out GIVT, they can do so by adding the following GIVT metrics
- General Invalid Traffic (GIVT) Impressions
- General Invalid Traffic (GIVT) Clicks

Filtration methodology

Both specific identification (including obeying robot instruction files, filtration lists, and publisher test clicks) and activity based filtration methods (including analyzing multiple sequential activities, outlier activity, interaction attributes, and other suspicious activity) are utilized in filtration. In addition, the following parameters apply to the filtration methodology:
- Third party filtration is not used by Google.
- Sources used for identification of nonhuman activity: Google uses the IAB/ABCe International Spiders & Robots List as well additional filters based on past robotic activities. The IAB Robots List exclude file is used.
  - Activity based filtration processes: Activity based identification involves conducting certain types of pattern analyses to identify behavior that is likely to indicate non human traffic. Google's Ad Traffic Quality team has systems in place to determine any suspicious activities and does such activity based filtering appropriately.
  - All filtration is performed 'after the fact' and passively. That is, the user (browser, robot, etc.) is provided with their request without indication their traffic has been flagged, or will otherwise be filtered and removed as Google does not want to provide any indication to the user agent that their activity has triggered any of Google's filtering mechanisms. In some cases frontend blocking is also utilized, when it is likely that the resulting ad request may lead to invalid activity. Historically less than 1% of ad requests are blocked, including at a campaign level. We have considered the range of impact to clients and estimate the median impact to be less than 0.10%, and will continue to monitor this volume.
  - Google and Campaign Manager define a list of policy based filtering criteria that reject events if they are deemed expired, corrupted, or incomplete, or if other processing failures are detected.

- When inconsistencies or mistakes are detected, processes exist to correct this data. The corruption of log files is extremely rare, but in cases where this may occur, processes exist to recover them.
- Processes have been implemented to remove activity from Google internal IP addresses.
- Filtration rules and thresholds are monitored continuously. They can be changed manually, and are updated automatically on a regular basis. As filtration processes are updated, an analysis is conducted to identify materially impacted campaigns. Google will proactively notify clients with materially impacted campaigns where appropriate and when such notification will not encourage reverse engineering of traffic filtration processes.

Note: The decision rate (GIVT and SIVT) for Campaign Manager traffic is 100% (based on the reviewed sample data).

Machine Learning

Google uses supervised machine learning techniques[1] through methods such as Classification (e.g., Neural Network approach), in which the model will predict invalid traffic (IVT) by making a yes/no decision about whether an event is invalid, and Logistic Regression, in which the model scores various activities and then an IVT decision is made based on score thresholds. Supervised machine learning models may also use tree methods and graph methods.

Data sources used for machine learning include logs of queries and interactions ("ads logs"), non-logs data that can be joined with ads logs, and a variety of other supplementary proprietary signals. Google relies on hundreds of data sources of varying sizes: the total number of records per data source ranges from thousands to trillions, depending on the data source. Trac-based models are required to be evaluated with a minimum 7 days of traffic as input data.

For active defenses Google maintains monitoring procedures over the traffic signals (training data) feeding into the models, which trigger alerts for human intervention if certain threshold bounds are not met. As a result minimal, if any, reduced accuracy is expected.

Models are continuously retrained when appropriate and practical, and model performance is regularly or continuously assessed. As a result (similar to our monitoring procedures above) minimal, if any, reduced accuracy is expected.

Biases in machine learning training and evaluation data are minimal and if they are material the IVT defense would not be approved. All machine learning projects ("launches") go through a cross-functional review process before they are approved. As part of this process, bias for the model(s) and corresponding data are evaluated, and projects must meet predetermined ad traffic quality criteria before being approved. Continuous monitoring is in place to detect the emergence of bias in models, which in turn trigger alerts and model evaluation, analysis, and updates.

Google applies a mix of machine learning and/or human intervention/review techniques on all

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[1] Supervised machine learning relies on labeled input and output data, meaning that there is an expectation for what the output of a machine learning model will be.

traffic. For some defenses Google relies on ML-based lead generation followed by human review. Other defenses start with human review data and use ML to generalize. Our application of machine learning and human intervention/review techniques is evolving, and our usage shifts
according to multiple criteria, including alerts, escalations, and organic fluctuations in types of
invalid traffic that may emerge. As a result, the distribution is not in steady state, and the "level" of reliance on either machine learning or human intervention/review fluctuates over time

Inactive Impressions Metric

Impressions (via begin to render methodology) considered inactive, are defined as served to
a device receiving ad or bid requests continuously for a session of greater than 16 hours
without a "reset" event. Sessions are reset daily at 5:00 AM, local time, and when the device goes longer than 30 minutes without a request. They are also reset by any VAST interaction
ping (for example, pause, mute, unmute, volume changes). Inactivity is currently only measured for CTV.

Device Classification Methodology

Campaign manager uses user-agent data from internal and external sources to classify device
types. Campaign manager does not rely on any 3rd party to perform the classification.

Adding report dimensions to report on MRC Accredited Metrics

If you wish to report only on MRC Accredited metrics, this help center article explains how.

Prefetch and delayed impressions (including SSAI)

Several ad creative formats, including display, rich media, interstitials and instream video, use
prefetch tags. These tags work like regular Campaign Manager ad tags, delivering a creative to
the end user. Because the video creative is only rendered when the user takes a certain action,
such as watching a video, impressions aren't counted when the code is delivered. Instead, the impression is delayed. When the video creative is rendered, it includes code that requests a
pixel from the Campaign Manager ad servers. The pixel request tells the ad server the creative
has rendered, and then the ad server counts the impression.

In some video environments, publishers use a server-side ad inserter (SSAI) to facilitate playing
content and video ads on the client device. Pixels are requested from client devices when
possible. When not possible, the SSAI observes the stream of content and ads being played on
the client device and requests the pixel from its servers on behalf of the client device at the
appropriate time. In both cases, an impression is registered by Campaign Manager. Along with certain creative formats, delayed impressions are also used for ads delivered to Chrome browsers. Campaign Manager reports on the number of times that prefetched creative code was delivered, called "code serves." Customers may find it helpful to compare code serves with the number of impressions counted.

In some circumstances, the Server side content provider (SSAI) may pass event level data to
Google, rather than Google receiving signals from the client-side device or browser.

Reporting for Open Measurement, SSAIs. And server-to-server measurement

In some cases, Campaign Manager receives data from trusted third parties via server-to-server integrations. This can include server-side ad inserters and walled garden type integrations where the data is measured by a third party using their own client side measurement, and then reported to Campaign Manager via a direct server-to-server integration. Similarly, Display & Video 360 will bid on inventory that supports the OMID (Open Measurement Interface Definition) API of IAB Tech Lab, including clients running Open Measurement SDK and third-party implementations of OMID. In these cases, Campaign Manager would not have visibility into the client-side measurement, and must trust the measurement capabilities of the third party instead.

Today, the MRC does not accredit metrics from server-to-server integrations. For metrics that are MRC accredited, Campaign Manager and Display & Video 360 (formerly DoubleClick Bid Manager or "DBM") reporting both provide a dimension called "Measurement Source." This dimension will provide three possible values: "Measured," "Provided," and "Inferred." These dimensions indicate the following:

- Measured - The data for the metric was directly measured by client code that either Google controls or with which Google has intimate familiarity, or it uses OMID data from client code that was certified by Google or IAB Tech Lab.
- Provided - The data for the metric was measured on the client by a third party who then provides the data to Google over a server-to-server integration, or it uses OMID data from client code that was not certified by Google or IAB Tech Lab.
- Inferred - The data for the metric was inferred using sound judgment, however it was not directly measured on the client. The inferred metric may originate from Google or a third party.

Only the Measured metrics should be considered accredited by the MRC.

Self announced prefetch activity

Google's experience with this data has shown that the numbers of self announced prefetch activity is low enough to be considered immaterial to our overall data set. We will continue to evaluate this type of activity and may make alternative arrangements regarding this filtering activity if future data behavior indicates that it has become material.

Filtration Subsets

Abandonment

In the event prefetched tags are not used or ad content is delivered to browsers other than Google Chrome, Google generally counts impressions when the request is received and an ad is selected. In certain situations, this could cause overstatement of impressions if the user abandons the web page after Google has selected the ad content but prior to delivery of the ad content to the page.

Ad blockers

Ad blocking software, installed on customers' devices or browsers, typically blocks ads by blocking specific domains. In such cases, no HTTP request is sent to Campaign Manager ad

servers, so Campaign Manager has no way to detect adblocking software. However, if Campaign Manager does receive an ad request, it is unlikely that the user is employing adblocking software.

In situations where users are utilizing an ad block at the page or domain level, such ad blocking techniques or software preventing these requests to the Campaign Manager domain may have no impact on the impression measurement as this situation may prevent both the ad request and the measurement, resulting in an accurate count of zero impressions. However, ad blocking software that does not block the Campaign Manager domain, but does block the location of the ad content/creative (for example, the creative server is using a different domain, another third or fourth party ad serving technology, or similar), may result in an overstatement if the ad request is processed and counted, but the browser subsequently prevents the display of the display/companion ad creative.

Autoplay and Click to play metrics

Campaign Manager provides segregation between autoplay and click to play metrics you can see how to segment reporting in this [help center article](). Approximately 20% of video traffic is auto-play.

Application focus

Google does not utilize application focus as a parameter through which the viewable status of an ad is determined. Because of this there is the possibility that overcounting of viewable impressions may occur in the event ad content is delivered into traditional desktop or mobile web browsers which are not the active application on the device.

Browser based limitations

Google is unable to detect when the browser has been configured not to render images in traditional desktop and mobile web environments. Google is also unable to detect when the ad content is in a browser that is situated partially on and partially off the monitor in Internet Explorer, Chrome, Safari and in browsers accessed using a mobile device. These may have reporting implications such as the overcounting of viewable impressions when applicable. Google is also unable to detect active tab focus in traditional desktop environments unless the following browser versions are used: Internet Explorer (version 10+), Firefox (version 10+), Chrome (version 13+), and Safari (version 7+). Use of other browsers, or earlier versions of the browsers listed here may result in the possible overcounting of viewable impressions as applicable.

Cross domain iFrames environments

Google is unable to detect when the ad content is in a resized browser in cross domain iFrame environments. This may result in the overcounting of viewable impressions in the event ad content is less than 50% viewable due to the browser being resized when measured in a cross domain iFrame environment.

Disabled image rendering

For browsers in which image rendering is disabled, an overcounting of impression events may result as the ad content would not be displayed on the browser although the ad content would be delivered to the browser and counted as an impression. In such instances, Campaign Manager will display the word "Advertisement" as alternate text in the slot where the rendered image would have appeared if enabled.

Javascript disabled environments

Campaign Manager ad tags are available in several formats, two of which employ Javascript: Javascript tags and iframe/Javascript tags. To ensure that these tags can still deliver ads to browsers and apps in which Javascript is disabled, the tags include <noscript> sections that function like Campaign Manager standard tags, using basic HTML to request an ad. This ad tag provides an image based delivery to Javascript disabled browsers. Campaign Manager is designed to count impressions and clicks correctly whether the Javascript or the <noscript> version of the tag is executed.

Large number of redirects

If a large number of redirects exist in a particular click transaction stream, (for example, after the point of measurement and before the advertiser site landing) counting differences may be experienced by downstream parties such as the advertiser.

Screensavers

Google is unable to detect when a screensaver application has been initiated. This may result in the overcounting of viewable impressions in the event ad content is covered by a screensaver.

Campaign Manager data policies

Data retention

Under Google's Data Security Policy, log data is considered confidential and often sensitive. All raw ad server logs are backed up and retained for at least six months. Processed logs in the form of aggregated metrics and reporting numbers are kept at least two years. How long reporting data is stored depends on the type of data. During the storage period, the data is available in the associated reports. After the storage period, reporting data is deleted and cannot be restored. The reporting data types and storage periods for them are documented in this help center article.

Late data, Data reissuance, missing data

In the rare event that data is late, reissued or missing, please review the following help center article on the actions Google takes, when an issue is deemed material.

Changes to Measurement Methodology

If we make changes to our Measurement Methodology, we notify customers in the Campaign

Manager User Interface, in the [Help Center](#), and through Account Manager and Support communications.

Verification and quality control

Campaign Manager engineering follows internal best practices to test every Campaign Manager component and feature, ensuring that all parts of Campaign Manager work effectively, both individually and as a complete system. Before any code is deployed to production, it goes through multiple stages of manual and automated testing in development, QA, and staging environments. Rigorous tests are performed to achieve the highest level of code quality and algorithm and logic validation to adhere to product requirements and customer expectations. With the nature of distributed computing environments, most code updates are staged. For Campaign Manager, that means that new code rolls out as first to one machine, then to a small number of machines at one location, then to all machines at that location, then to all machines across a continent, and finally to all machines worldwide.

Software engineers, on call production engineers, and site reliability engineers regularly review production configurations, traffic capacity, and machine redundancy. A separate data integrity pipeline is deployed to validate data daily against preset expectations. This process is meant to capture behavior from the customer's perspective, touching as many components end to end as possible. If any abnormalities are reported, Google engineers respond as quickly as defined by our internal service level objectives.
There is no additional human verification step before publishing reporting data each day. The data is published as designed. Alerts or data integrity issues are investigated separately.

Connected TV

There are no latency measurement limitations. The same Auto-play and continuous play rules listed above apply in CTV environments. Please note that at this time, Google receives TV's power state signal status for Android TV and tvOS, where possible.