



Web Analytics Definitions

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Preface

The Official WAA Definition of Web Analytics

Web Analytics is the measurement, collection, analysis and reporting of Internet data for the purposes of understanding and optimizing Web usage.

With accountability comes measurement, which in turn creates the need for metrics. In order for metrics to be effective, they must be based on a common set of terms, definitions, and practices. The Web Analytics Association (WAA) was founded to promote a global understanding of web analytics. The WAA strives to connect and empower an informed and involved web analytics community. The association's goals are to disseminate and provide access to web analytics best practices, up-to-date information, and key resources to its members and to the greater analytics community. The WAA established the Standards Committee to rationalize variations within the analytics community, and to create a standard terminology for the analytics community.

The intent of the Committee is to create a publication that sets benchmarks for the various measurement concepts, and to recommend that the community follows these standards as closely as possible. Due to the relative youth of our industry, we understand that variations in metrics currently exist from tool to tool. In these cases, openness and transparency are strongly encouraged, especially where metrics are not in agreement with the established standard. The end goal is to have true metrics standards and uniform adoption of these standards throughout our industry.

The Committee is made up of members from all walks of web analytics life – vendors, practitioners, consultants, end-users – and so the final document is an amalgamation of various perspectives arrived at through a consensus. The Committee is very grateful to its members for volunteering their time in laying the foundation that will tremendously benefit the web analytics community.



Feedback

The WAA Standards Committee welcomes comments on the content of this publication. This document is a living document, and is intended to change as the needs of the analytics community evolve.

This document will remain in “draft” state, and open for public comment, until December 31, 2008.

How to contribute feedback:

1. Go to <http://waablog.webanalyticsassociation.com/2008/09/new-standards-d.html> and create a comment, or follow a link from that post to a specific definition, and join in the conversation.

OR

2. Contact Angie Brown and Judith Pascual at standards@webanalyticsassociation.org if you would like to provide feedback via email.

All comments received will be reviewed and changes will be made as deemed appropriate by the Committee. The Committee is the final arbiter of all standards it publishes.



Introduction

The primary objective behind creating the Web Analytics Definitions publication is to create a consensual view on terms, concepts and measurement related issues. It is written for anyone who has an interest in web analytics -- established practitioners, those wanting to set in place an analytics program, or for people who are just getting into the field of Web analytics and are interested in learning more about the fundamentals. It is also intended to be useful for analysts who are just beginning to engage with a new analytics tool, or who are evaluating different vendors, empowering them to better recognize differences between tools.

The original iteration of this document was meant to establish standard definitions on fundamental concepts and terms important in our industry and provide meaningful classifications for certain collections. The current iteration not only adds four new definitions, but reflects the results of a comprehensive review of the original definitions. A new feature is the highlighting of meaningful differences in the way our common tools calculate different metrics, and we recommend the practitioner ask their vendor for specifics. Where we are able to recognize meaningful difference in the way common tools handle certain concepts, we have highlighted these differences and recommend the analyst ask their vendor how their tool performs the calculations. This document has been reviewed by the Interactive Advertising Bureau (IAB) and reflects their input.

This document does not currently address a wide range of Social Media measurements. A joint subcommittee between the WAA's Standards, and Social Media Committees is currently making progress on this front.

So what will one learn from reading this publication?

- Readers will enhance their current knowledge of web analytics, putting them in a stronger position when either looking for web analytics tools or when changing from one tool to another.
- Readers will have the opportunity to compare WAA definitions with how their vendor calculates a measurement and understand any differences.

This publication is organized as follows. The first section gives an 'Overview of the Definition Framework' wherein we talk about the type of metrics. That leads to the 'Assumptions and Qualifications' section that briefly talks about some key assumptions made during the creation of this publication. Following the assumptions, we start defining the metrics:

- Building Block Terms
- Visit Characterization
- Visitor Characterization
- Engagement
- Conversion

In conclusion, this publication addresses key foundational and derived metrics and methods of measuring them. The goal of this publication is not to focus or track compliance across the industry or provide recommendations on how to get compliant. However, our vision is that in the near future the web analytics community will have a true standard for all metrics and total compliance. Our goal is to encourage the community in moving in this direction so if a reader and/or a vendor sees that their current measurement deviates from what is in this publication,



they be transparent about it and share with the community in what form or fashion the measurement deviates.

This document is an update of the August 2007 publication.



Definition Framework Overview

There are two types of Web analytics metrics – counts and ratios:

Count — The most basic unit of measure; a single number, not a ratio. Often a whole number (Visits = 12,398), but not necessarily (Total Sales= \$52,126.37.). Some metrics cannot be summed across time and/or within a report. See metric definitions for specific limitations.

Ratio — A derived metric, obtained by dividing one number by another. The result is usually not a whole number. Because it's a ratio, "per" is typically in the name, such as "Page Views per Visit." Most ratios used in web analytics are not summable.

Another type of definition is included for terms that describe concepts instead of numbers.

Dimension - A component or category of data. Metrics (counts and ratios) are measured across dimensions.

All metrics can apply to three different universes:

Aggregate — Representative of the entire site.

Segmented — A subset of the site traffic for a defined period of time, filtered in some way to gain greater analytical insight: e.g., by campaign (e-mail, banner, PPC, affiliate), by visitor type (new vs. returning, repeat buyers, high value), by referrer.

Individual — Activity of a single Web visitor for a defined period of time.

Assumptions and Qualifications

There are certain statements and qualifications that can be added to every definition and therefore would become repetitive and redundant. This states those conditions that apply to every definition unless explicitly stated otherwise in the definition or comments.

All measures and metrics assume that they relate to an action by a human visitor. This is implied by the reference to unique visitor in many of the definitions. The types of non-human "visitors" include robots, spiders and website crawlers that periodically scan or methodically download (scrape) content from a website. Many identify themselves via the user agent in the HTTP request that allows the website to provide a different version of the content to aid search engines and content aggregators. However there are many that do not identify themselves and can be confused with human traffic. Each web analytic provider has various techniques for identifying and filtering this traffic.

The definitions in this document assume the provider has successfully extracted the traffic due to actual human visitor behavior, to the extent possible.

Building Block Terms

Building block terms include four main metrics, Unique Visitors, Visit/Sessions, Page Views, and Events that make up the foundation for all web measures. These measures can be used either as a unique value by themselves or as the denominator within various formulas. The following definitions are provided as infrastructure on which to build upon.

Building block terms

Page

Type: Dimension

Calculation:

An analyst definable unit of content.

Notes:

Most web analytics tools allow the client to specify what types of files or requests qualify as a “page.” Certain technologies including (but not limited to) Flash, AJAX, media files, downloads, documents, and PDFs do not follow the typical page paradigm but may be definable as pages (and their access counted as a page view) in specific tools.

Ask your vendor:

Are pages analyst configurable?

What types of requests are treated as “pages” by default?



Building block terms

Page View

Type: Count

Calculation:

The number of times a page was viewed.

Notes:

Content, such as XML feeds (RSS or Atom) and emails, that can be delivered to both web browsers and non-browser clients are not typically counted as page views because the request or receipt of the content does not always correspond to the content being displayed. As an alternative, image based page tags can be placed inside such content to track the views of all or portions of the content.

Web server responses returning status codes indicating the requested content was missing (400 to 499) or there was a server error (500 to 599) should not be counted as a page view unless the web server has been configured to return a real page in the same response with the status code. Returning a page such as a site map, search page or support request form instead of the default missing or error messages is configurable in the most widely used web serving applications (Apache and IIS).

Web server responses returning status codes indicating redirection to another page (300 to 399) are also not typically counted as page views but can be used to track events such as click-throughs with systems specifically designed to use the redirect as a counting mechanism. Most redirect counting is done with a status code of 302.

Within the status codes that indicate a successful response (200 to 299) there are few status codes which also may or may not be counted as a page view: The 202 status code (Accepted) is returned in cases where the request has been accepted by the server and the server might or might not return content to the request at a later time. It is not possible from this response to determine if the content was ever sent so it would typically be excluded from page view counts. The 204 status code (No Reponse) tells the web browser there is no content to return but no error has occurred so the browser should stay on the page prior to the request. It is essentially a non-event. The 206 status code (Partial Download) usually occurs with the delivery of larger file downloads such as PDFs. This code indicates that only a part of the file was delivered so it typically should not be counted as a page view.

Filtering by status codes to remove requests that should not be counted is generally needed only when processing raw web server log files and is not usually needed in page tag based implementations. Vendors do make different distinctions in deciding what should be counted. Consult your tool provider for more information on your implementation.

Ask your vendor:

Are Flash and other Rich Internet Application advances considered to be page views by default?



Building block terms

Visits (Sessions)

Type: Count

Calculation:

A visit is an interaction, by an individual, with a web site consisting of one or more requests for a page. If an individual has not taken another action (typically additional page views) on the site within a specified time period, the visit will terminate by timing out.

Notes:

Different tool providers use different methodologies to track sessions. Ask your tool provider how this metric is computed. A typical time-out period for a visit is 30 minutes, but this time period is configurable in many web analytics applications. If you use online advertising on your site, note that upcoming Interactive Advertising Bureau (IAB) guidelines on audience reach measurement will make a 30-minute inactivity time-out a requirement.

A visit typically consists of one or more page views. However, in the case of sites where interaction consists solely of file downloads, streaming media, Flash, or other non-HTML content, a request for this content may or may not be defined as a “page” in a specific web analytics program but could still be viewed as a valid request as part of a visit. The key is that a visitor interaction with the site is represented.

Visits can be added together over time, but not over page views or over groups of content, because one visit can include multiple page views.

Ask your vendor:

If activity consists only of non-page activity, is it counted as a visit?

What is your default timeout?

Are visits cut-off after any length of time?

If you resume activity after a timeout, how is that handled?

Site activity --> (2 hours) --> Resume site activity

How many visits is this?

If two visits, what is the referrer of the second visit?

Does the tool count a new session on external referrer?

Google search --> Your site --> Yahoo search --> Your site

How many visits is this? What is(are) the visit referrer(s)?



Building block terms

Unique Visitors

Type: Count

Calculation:

The number of inferred individual people (filtered for spiders and robots), within a designated reporting timeframe, with activity consisting of one or more visits to a site. Each individual is counted only once in the unique visitor measure for the reporting period.

Notes:

Authentication, either active or passive, is the most accurate way to track unique visitors. However, because most sites do not require a user login, the most predominant method of identifying unique visitors is via a persistent cookie that stores and returns a unique id value, introducing inaccuracies from cookie deletion, shared computers, browsing from multiple browsers or computers, etc. Because different methods are used to track unique visitors, you should ask your tool provider how they calculate this metric.

This metric is analogous to the “Unique Browser” metric used in the advertising industry. However, because the word “Browser” in a web analytics tool typically refers to a program visitors use to access a website (e.g. Internet Explorer or FireFox), the Unique Visitor designation is used to reduce confusion. Note that upcoming IAB guidelines on audience reach measurement will require conversion of raw cookie-based counts to include methodologies and/or panel-based measurements to correct for inaccuracies in cookie tracking. For this reason, Unique Visitor measurements as used in web analytics and as used in advertising may be significantly different.

Ask your vendor:

What technologies are used by your tool to calculate unique visitors?

By default, are persistent cookies used to count unique visitors?

- 3rd party?
- 1st party?
- Authenticated user cookie?

How are unique visitors counted if cookies are blocked or not logged?

Are estimated visitors from blocked cookies included in your unique visitors counts?

Given the functionalities of your tool, are there situations that would cause one visitor to be counted multiple times:

- Counted via authenticated + unauthenticated?
- When a maximum amount of data that can be stored around a cookie or database key is reached?
- Other situations?

Are cookie-based estimates adjusted to account for cookie deletion?



Building block terms

Event

Type: Dimension and/or Count

Calculation:

Any logged or recorded action that has a specific date and time assigned to it by either the browser or server.

Notes:

Events are activities that happen within a page, for example: ad impressions, starting and completing transactions, changing form fields, starting multimedia views, etc. Events can also be associated with advanced web technologies, such as Ajax and Flash.

Because an Event can be both a dimension and a count, a web analytics report may show “number of events” (event as a count), or it may show specific events and how many page views, visits, or unique visitors were associated with the events (event as a dimension).

Ask your vendor:

Ask your vendor if any events are reported by default and whether custom events can be tracked.

Visit Characterization Terms

The terms in this section describe the behavior of a visitor during a website visit. Analyzing these components of visit activity can identify ways to improve a visitor's interaction with the site.

Visit characterization terms

Entry Page

Type: Dimension

Calculation:

The first page of a visit.

Notes:

Entry page is the first page in the visit regardless of how the sessions are calculated. Different sessionization methods may give different results.

Entry page is typically presented as a list of URLs or their page titles, showing the top entry pages and the number of visits for which each was an entry. Because each visit contains at least one "page," the total number of entry pages equals the total number of visits for any given time frame.

Entry page should not be equated or confused with landing page.

Example:

In a scenario that follows, if all this activity takes place within the default session timeout:
Yahoo --> <first page view of the session> --> Google --> <another page view within the same session>

Both pages on your site can be counted as landing pages, but only the first page viewed in the visit is an entry page, since each visit has only one entry.

Visit characterization terms

Landing Page

Type: Dimension

Calculation:

A page view intended to identify the beginning of the user experience resulting from a defined marketing effort.

Notes:

Landing pages are often optimized for specific keywords, audiences, or calls to action. Since they represent a touch point or an opportunity to present your message to the visitor, they have a particular importance in conveying information to motivate the visitor to become more engaged with the site.

A landing page is not necessarily an entry page although it could be. For many sites using search ads, the visitor may return several times during a session. A useful metric may be number of landing pages per session which indicates the degree that visitors move on and off a web site.

Typically Landing Page is used in on-line marketing channels to describe the call to action of an advertisement. Special parameters are sometimes used, alone or in combination with the referring URL, to identify the marketing channel or tactic responsible for the lead.

In some situations, it may be appropriate to limit landing pages to only those pages with an external referrer.

Example:

In a scenario that follows, if all this activity takes place within the default session timeout:
Yahoo --> <first page view of the session> --> Google --> <another page view within the same session>

Both pages on your site can be counted as landing pages, but only the first page viewed in the visit is an entry page, since each visit has only one entry.



Visit characterization terms

Exit Page

Type: Dimension

Calculation:

The last page on a site accessed during a visit, signifying the end of a visit/session.

Notes:

In a tabbed or multi-window browser environment it should still be the final page accessed that is recorded as the Exit Page though it cannot be definitively known that this was the last page the visitor viewed. Contact your vendor for information regarding your specific implementation.

Because each visit contains at least one "page," the total number of exit pages equals the total number of completed visits for any given time frame.

The use of cookies to track visit sessions or another reliable visit session method is necessary to accurately track this measure.

Visit Duration

Type: Count

Calculation:

The length of time in a session. Calculation is typically the timestamp of the last activity in the session minus the timestamp of the first activity of the session.

Notes:

Also referred to as "Time Spent." When there is only one piece of activity in a session (a single-page visit or single-event visit), no visit duration is typically reported because there is no second timestamp to subtract from, and the amount of time spent is unknown. If the duration can not be calculated then zero is sometimes used as the value. Including "zero duration" visits can significantly reduce your overall calculated average visit duration.

Ask your vendor:

1. "Zero Duration" Visits - Ask your vendor if they include "zero duration" visits in visit duration measurements. Some vendors will include it in the calculation while others don't.
2. Visit Duration Delimiters - Are timestamps for page views the only ones used in the visit duration calculation, or are timestamps for other activities (errors, events, etc.) considered?



Visit characterization terms

Referrer

Type: Dimension

Calculation:

Referrer is a generic term that describes the source of traffic to a page or visit.

Notes:

When using the term "Referrer", one should specify the frame of reference, either a page referrer, session referrer or visitor referrer. The frame of reference is a hierarchy. Visitor referrer is a special kind of session referrer, and session referrer is a special kind of page referrer.

Regardless of type, referrers are often collected into meaningful groups to facilitate analysis. Groups often encountered are:

- Internal Referrer - The internal referrer is a page URL that is internal to the web site or a web-property within the web site as defined by the user. Not all tools report internal referrers as a group.
- External Referrer - The external referrer is a page URL where the traffic is external or outside of the web site or a web-property defined by the user.
- Search Referrer - The search referrer is an internal or external referrer for which the URL has been generated by a search function. Many tools segment and report on search referrers as a group; however the exact definitions vary from tool to tool. Most will include the "big" search engines, such as Yahoo, Google, and MSN/Live. However, they vary in whether or not they exclude mail servers from these sources, or whether they use wildcards to capture any URL containing the word "search."
- Direct Navigation (a/k/a "No Referrer") - The referrer value is empty or null. An empty referral string is often assumed to indicate that the user either directly entered the URL or selected from a list of bookmarks, but. this is not always the case. Some user agents such as email clients, news readers, ad servers, and others may not set the referrer value in the request header and thus the referrer is unknown.

The analyst is typically not limited to the above groupings. Many tools allow customization of referrer groups, and the analyst may choose to segment further, grouping affiliate referrers, blog referrers, known email referrers, advertising referrers, partner referrers, etc.

In some cases, the referrer of interest may not be the prior request to the page. This may be due to redirects, recording of clickthroughs via other requests or the iframing of content. The analyst may need to work with the vendor(s) and/or developers involved to understand how the referrer is recorded in these cases.

Ask your vendor:

How are search referrers defined by default? Is this definition customizable?

Are mail servers (e.g. mail.google.com) excluded from the default search engine definitions?

Are internal referrers, such as might be recorded when a visitor resumes activity after a time-out, exposed in the tool and included in aggregate measurements?



Page Referrer

Type: Dimension

Calculation:

Page referrer describes the source of traffic to a page.

Session Referrer

Type: Dimension

Calculation:

The first page referrer in a visit.

Notes:

Session referrer is frequently provided as a standard report in analytics tools. However, the report is often simply named "referrer," "referring sites," "referring domains," or "referring URLs" depending on how the referrer is displayed.

Visitor Referrer (Original Referrer or Initial Referrer)

Type: Count

Calculation:

The first page referrer in a visitor's first session.

Notes:

Archiving of data after a period of time may affect the recorded visitor referrer. The visitor's "first" session may be with respect to a specific date or reporting period, or it may be with respect to the life of the data.

Ask your vendor:

Does archiving of data affect the reported visitor referrer? How?

Visit characterization terms

Click-through

Type: Count

Calculation:

Number of times a link was clicked by a visitor.

Notes:

Click-throughs are typically associated with internal or external advertising activities, although they are also valuable for understanding navigation. Note that click-throughs measured on the sending side (as reported by your ad server, for example) and on the receiving side (as reported by your web analytics tool) often do not match. Minor discrepancies are normal, but large discrepancies may require investigation.

Click-through Rate/Ratio

Type: Ratio

Calculation:

The number of click-throughs for a specific link divided by the number of times that link was viewed.

Notes:

Both the click-throughs and the views of the link must be measured for the same designated reporting time period.

Visitor Characterization

The terms in this section describe various attributes that distinguish website visitors. These attributes enable segmentation of the visitor population to improve the accuracy and usefulness of analysis.

Visitor Characterization terms

New Visitor

Type: Count

Calculation:

The number of Unique Visitors with activity including a first-ever Visit to a site during a reporting period. Note that "first-ever" is with respect to when data began being properly collected on your site by your current tool.

Notes:

Each individual is counted as a new visitor only once in the reporting period, so New Visitors plus Return Visitors is always equal to Unique Visitors for a specific reporting period. It is not possible for a Visitor to be counted as both a New Visitor and a Return Visitor in the same reporting period.

Because the technology used to identify visitors is not perfect, there can be a discrepancy between identified visitors and actual visitors. New visitors are often over-counted due to cookie deletion, usage of multiple computers or browsers, and other reasons.

The new visitor metric, when compared with the return visitor metric, is helpful in determining the overall loyalty and affinity of visitors to the site being analyzed. Additionally, when segmented correctly, the new visitor behavior is especially helpful when compared to return visitor behavior in determining the difference, if any, between how new and presumably unfamiliar visitors utilize a web site versus the usage habits of visitors that have some level of experience interacting with the site.

Example:

If a visitor comes to your site for the very first time on Monday, then comes back on Wednesday of the same week, here is how s/he would appear in the different visitor counts:

Reporting Period	New Visitor	Return Visitor	Repeat Visitor	Unique Visitor
Monday only	Yes	No	No	One
Wednesday only	No	Yes	No	One
Entire week (or month)	Yes	No	Yes	One

Visitor Characterization terms

Return(ing) Visitor**Type:** Count**Calculation:**

The number of Unique Visitors with activity consisting of a Visit to a site during a reporting period and where the Unique Visitor also Visited the site prior to the reporting period.

Notes:

Each individual is counted only once in the reporting period. It is not possible for a Visitor be counted as both a New Visitor and Return Visitor in the same reporting period, since New Visitors + Return Visitors = Unique Visitors.

The return visitor metric, when compared with the new visitor metric, is helpful in determining the overall loyalty and affinity of visitors to the site being analyzed. Additionally, when segmented correctly, the return visitor behavior is especially helpful when compared to new visitor behavior in determining the difference, if any, between how new and presumably unfamiliar visitors utilize a web site versus the usage habits of visitors that have some level of experience interacting with the site.

Example:

If a visitor comes to your site for the very first time on Monday, then comes back on Wednesday of the same week, here is how s/he would appear in the different visitor counts:

Reporting Period	New Visitor	Return Visitor	Repeat Visitor	Unique Visitor
Monday only	Yes	No	No	One
Wednesday only	No	Yes	No	One
Entire week (or month)	Yes	No	Yes	One

Visitor Characterization terms

Repeat Visitor**Type:** Count**Calculation:**

The number of Unique Visitors with activity consisting of two or more Visits to a site during a reporting period.

Notes:

Repeat Visitor, as a metric, is the measure of the amount of Visit activity during a reporting period. In contrast, New Visitor and Return Visitor qualifies when the Visitor started visiting the site. It is possible for a visitor to be counted as both new and repeat or both return and repeat during a reporting period. It is not possible for a visitor be counted as both new and return in the same reporting period.

For example, during a reporting period of one day, if a Visitor has their first ever visit in the morning and then engages in a second visit in the afternoon the Visitor would be counted as New and Repeat but not Return.

Example:

If a visitor comes to your site for the very first time on Monday, then comes back on Wednesday of the same week, here is how s/he would appear in the different visitor counts:

Reporting Period	New Visitor	Return Visitor	Repeat Visitor	Unique Visitor
Monday only	Yes	No	No	One
Wednesday only	No	Yes	No	One
Entire week (or month)	Yes	No	Yes	One

Visitor Referrer (Original Referrer or Initial Referrer)

[\(Defined in the Visit Characterization area to keep the Referrer definitions together\)](#)



Visits per Visitor

Type: Ratio

Calculation:

The number of visits in a reporting period divided by the number of unique visitors for the same reporting period.

Recency

Type: Count

Calculation:

Time since a unique visitor performed a specific action of interest to the analyst.

Notes:

The action in the above definition can be anything of interest to the analyst - visit, purchase, download, use of a certain service, etc. Most often recency is associated with either a visit or a purchase. Further, the unit of measure for recency can be at any level of time -- hours, days, months, etc.

As an example, let us say the action of interest is the purchase of a certain product. Visitor A last purchased that product 30 days ago and Visitor B last purchased that product 90 days ago. The recency for Visitor A will be 30 (if measured in days) or 1 (if measured in months) and for Visitor B will be 90 (if measured in days) or 3 (if measured in months).

Frequency

Type: Count

Calculation:

The number of times an action was performed by a unique visitor over a period of time.

Notes:

The action in the above definition can be anything of interest to the analyst - visit, purchase, download, use of a certain service etc. Most often frequency is associated with either a visit or a purchase.

Engagement Terms

The terms in this section describe the behavior of visitors while on a website. However, they differ from the “visitor characterization” terms in that they are often used to infer a visitor’s level of interaction, or engagement, with the site.



Engagement terms

Page Exit Ratio

Type: Ratio

Calculation:

Number of exits from a page divided by total number of page views of that page.

Notes:

Page exit ratio should not be confused with bounce rate, which is an indicator of single-page-view visits on your site. Page exit ratio applies to all visits regardless of length.

Be aware that some tools may calculate page exit ratio using visits in the denominator instead of page views. Page view count is a more appropriate denominator because a visitor may travel through the same page multiple times in a visit.

Ask your vendor:

If Page Exit Ratio is exposed in the tool, what metric is used as the denominator?

Single Page Visits (Bounces)

Type: Dimension or Count

Calculation:

A visit that consists of one page view.

Notes:

For a bounced visit, the entry page and exit page are the same page. Bounces may appear in an analytics tool as a list of URLs and number of visits where they were the only URL viewed (Single Page Visits as a dimension), or the number of bounced visits may appear as a metric in other reports (Single Page Visits as a count).

Engagement terms

Bounce Rate

Type: Ratio

Calculation:

Single page visits divided by entry pages.

Notes:

If bounce rate is being calculated for a specific page, then it is the number of times that page was a single page visit divided by the number of times that page was an entry. If bounce rate is calculated for a group of pages, then it is the number of times pages in that group were a single page visit divided by the number of times pages in that group were entry pages. A site-wide bounce rate represents the percentage of total visits that were single page visits.

Page Views per Visit

Type: Ratio

Universe: Aggregate, Segmented, Individual

Calculation:

The number of page views in a reporting period divided by number of visits in the same reporting period.

Conversion Terms

Conversion terms record special activities on a site, such as purchases, that have particular business value for the analyst. They often represent the bottom-line “success” for a visit.

Conversion terms

Conversion

Type: Dimension or Count

Calculation:

The number of times a desired outcome was accomplished.

Notes:

Specific conversions are typically defined by the analyst based on their business goals and the specific type of site (commerce, lead generation, content, etc.).

Conversions usually represent important business outcomes, such as completing a purchase or requesting a quote. Sometimes they are chosen because they indicate potential for future behavior, such as clicking on an advertisement, registering for more information, or starting a checkout process. These examples are sometimes referred to as step, support, mini, or micro-conversions.

Because a Conversion can be both a metric and a count, a web analytics report may show “number of conversions,” “number of purchases,” “number of sign-ups,” etc. (conversion as a count), or it may show specific conversions and how many events, page views, visits, or unique visitors were associated with the conversion (conversion as a dimension).

These counts are always associated within designated reporting timeframes such as an hour, day, week or month.

Conversions are known by several different names: goals, outcomes, and success events are synonyms.

Ask your vendor:

Are any conversion metrics configured by default for particular site types? What activities do they measure?

Conversion terms

Conversion Rate

Type: Ratio

Calculation:

The ratio of conversions over a relevant denominator.

Notes:

Calculation of conversion rate requires consistency between numerator and denominator, both with units (visits or visitors) and with segments. For example, if a conversion is defined as "the number of visits where a purchase was completed," then the appropriate conversion rate would divide those conversions by the total number of visits where a purchase could have been made (typically, total visits is used). If you had counted conversions as visitors who purchased, then the denominator would be total visitors. Further, if you are considering the number of visits from affiliate links that completed a purchase, then the denominator would be total number of visits from affiliate links.

When a conversion rate is specified, it should always be made clear whether a visit conversion rate or a visitor conversion rate is being used. In general, visit conversion rate is used when the analyst is interested in conversion that happens within one visit, and visitor conversion rate is used when the concern is with conversions that happen over multiple visits.

Ask your vendor:

If any conversion rate metrics are configured by default, are they based on visits or on visitors?

Miscellaneous Terms

These terms did not fit under any of the above categories.

Hit (AKA Server Request or Server Call)

Type: Count

Calculation:

A request received by the server

Notes:

Any server request is considered a hit. For example: When a visitor calls up a web page with six images, that is seven hits; one for the page, six for the images.

Prior to sophisticated web analytics, this legacy term was used to measure the interaction of the user with the website. Currently, Hits may be a useful indicator of server load, but are not considered useful for understanding visitor behavior.

Impressions

Type: Count

Calculation:

Number of times a piece of content was delivered to a user's browser.

Notes:

Impressions are most often used to count the number of times an advertisement was delivered to a user, but an impression can be used for other content such as a promotion, news story, or search result.

Note that when impressions are used to track 3rd-party advertisements, the methodology for tracking is defined by standards from the Interactive Advertising Bureau (IAB) (www.iab.net). When comparing impressions from an ad vendor with impressions measured in a web analytics tool, be aware that different methodologies may be used, leading to different counts.

