

Google Analytics Segments

(Written in October 2013)

Google Analytics Segments are a powerful tool for looking at subsets of visitors within the wider analytics interface. Segments help you focus on analytics that relate directly to your core mission. You can use predefined segments or make your own segments. Use segments to view and compare different types of visits based on factors that are important to your organisation, such as their location, the sections of your site they've visited, referrals from a partner site or from a marketing campaign. Once created and applied, segments (or 'Advanced Segments' in Google's jargon) are available in standard Google Analytics reports, allowing you to drill down and compare important metrics like visits, pages per visit, average visit duration, responses to marketing campaigns, ecommerce goals, referring sites and social media.

Key learning outcomes

This document will provide an overview of Google Analytics Segments, why they are important and how to create and apply key segments for cultural organisations.

You will learn:

- how to apply existing segments
- how to create your own segments
- how to design segments around your core goals and mission

Why is this important?

Google Analytics provides a lot of information, but much of it is too generic to help guide decisions. Segments help you focus on analytics that relate directly to your core mission by building analytics reports based on the factors that are important to you. The process of designing segments means defining the metrics that really matter. It will help you move from thinking about raw numbers to understanding how your online audiences find your site and how they behave once they're there.

Who is this resource for?

This assumes some basic familiarity with Google Analytics reports. It is aimed at people who have an understanding of the structure and content of their website, and the core goals and mission of their organisation. Knowledge of any marketing or paid search campaigns, target audiences and sites that link to yours is also useful.

What you will need

Access to an active Google Analytics account, a modern browser and internet access. If Google Analytics and segments are new to you, read the [Google Analytics Health Check](#) guide first.

To know before you start

Each Google Analytics account can be linked to multiple 'properties' - websites, mobile apps, etc - which in turn can have multiple 'views' depending on which 'filters' have been applied (for example, many people set up an unfiltered view and a filtered view that excludes visits from their own organisation to run in parallel). Google provides many standard reports which are accessible by clicking through to a particular view:

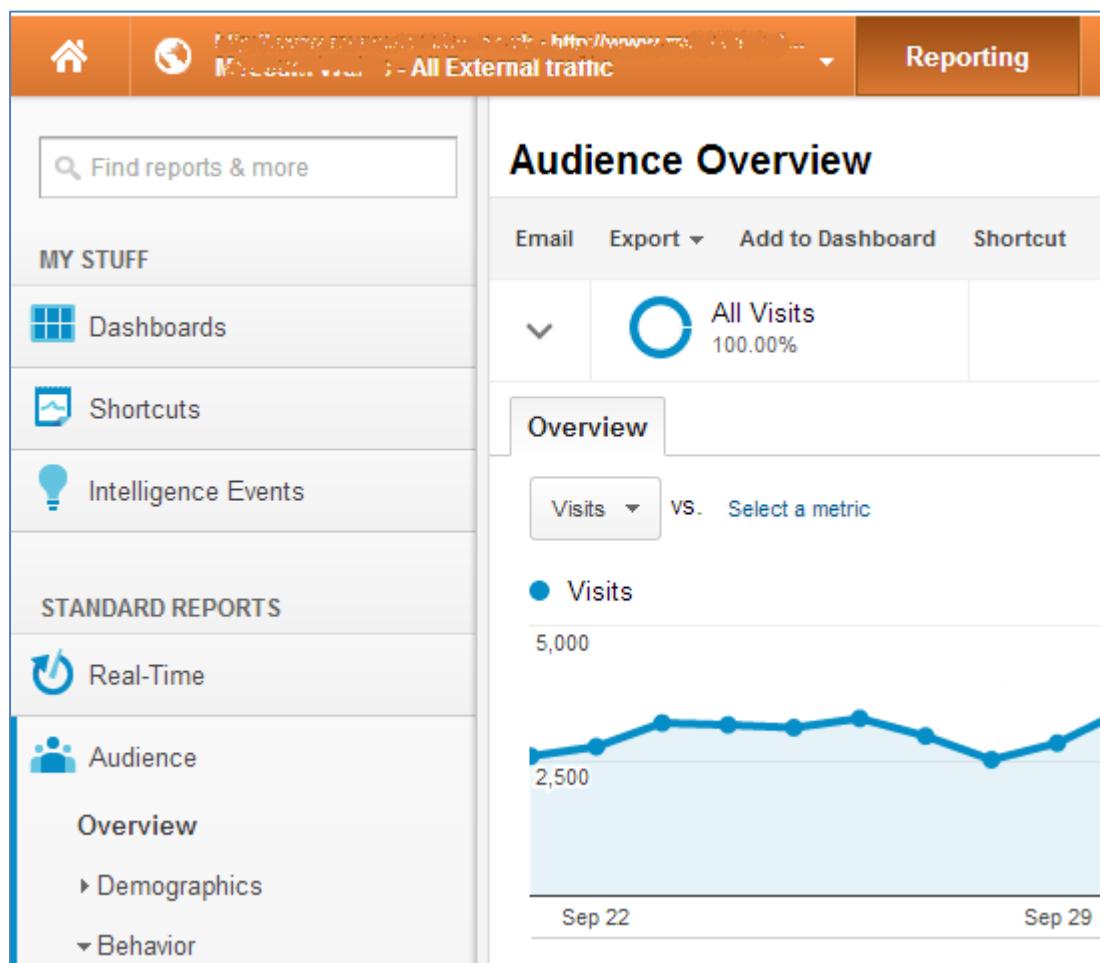
'Real-Time' shows live visits on your site; the others show historic data about how audiences found the site, where they are, what they did there and which technologies they used to access it.

How to apply existing segments

Google Analytics provides some useful predefined segments. Before creating your own segments, it's useful to explore existing segments on various reports to get a sense of how they work. This section will show you how to apply existing segments. In this example, we're interested in how visitors on mobile phones or tablets behave compared to other visitors.

1. Log into your Google Analytics account at <http://www.google.com/analytics/>
2. Click through to the 'view' (website) you're interested in
3. Click through to the 'Audience Overview' report.

Tip: when you open a report, an 'All Visits' segment will be on by default, as shown below.



4. To access the Segments screen, click on the small arrowhead symbol near the top left-hand corner of the report screen. When you click the arrowhead symbol, the 'Segment Builder' screen opens. This screen shows the Segments pre-defined by Google and any bespoke Segments added to your account.

5. Click on the segments you're interested in viewing, or drag them up to the outlined boxes at the top. For example, try 'All Visits', 'Mobile Traffic' and 'Tablet Traffic'. Click 'Apply' or the arrowhead to return to the report screen. The segments you have selected

Tip: you can apply up to four segments at one time.

6. The screen will refresh to show data for each segment you have applied.

The screenshot shows the Google Analytics interface for the 'Museum Wales - All External traffic' property. The top navigation bar includes links for Reporting, Customization, Admin, and Help. The main title is 'Audience Overview' with a date range of 'Sep 16, 2013 - Oct 16, 2013'. On the left, there's a sidebar with 'MY STUFF' containing links for Dashboards, Shortcuts, Intelligence Events, and Standard Reports (Real-Time, Audience, Overview, Demographics, Language, Location, Behavior, Technology, Mobile, Custom, Visitors Flow, Acquisition). The main content area displays 'All Visits' at 100.00%, 'Mobile Traffic' at 17.81%, and 'Tablet Traffic' at 15.37%. Below this is an 'Overview' section with a line chart comparing 'Visits (All Visits)' (blue), 'Visits (Mobile Traffic)' (orange), and 'Visits (Tablet Traffic)' (green) from September 22 to October 13. A summary box states '77,632 people visited this site'. At the bottom, there are three cards: 'Visits' (All Visits: 100,686, Mobile Traffic: 17,936), 'Unique Visitors' (All Visits: 77,632, Mobile Traffic: 13,555), and 'Pageviews' (All Visits: 380,055, Mobile Traffic: 41,710). Two pie charts on the right show the distribution of 'All Visits' (32.8% Returning Visitor, 67.2% New Visitor) and 'Mobile Traffic' (34.5% Returning Visitor, 65.5% New Visitor).

Tips: busy sites with a lot of data may take some time to refresh. Segments with lots of visits/visitors may make variations in smaller segments seem comparatively flat.

Congratulations! You've applied your first segments. Try moving to different reports and drilling down into detail screens - the segments will stay selected.

How to reset the segments viewed

Click the grey 'x' next to the segment names you don't want applied.

How to create a new custom segment

Any segment that you create yourself is called a 'custom segment'.

The basics of creating a new segment

1. Click the Segments arrowhead symbol ▾ to open the Segment Builder then '+ Create New Segment'.
2. The Segment Builder screen will open in a 'simple filters' view. These are pre-set forms for some of the most common segment types.

The labelled parts below are: #1 shows which segments are currently active, #2 is where you put the new segment name, #3 shows the 'simple filter' tabs, #4 shows the 'advanced filter' tabs, #5 marks the area where you configure the parameters for your segments - what's included and what's not - and #6 shows the summary area where the options and conditions for your segment are listed.

3. Give your segment a name (in #2 above) - one that will still be meaningful in a year's time is good.
4. Use the options on the left-hand side of the Segment builder (in #3 or #4 above) to select the visit or user attributes you want to isolate.
5. As you add filters, they'll appear on the right-hand side of the screen #6, providing an overview of each segment.
6. When you're happy with the values, hit 'Test'. This will give you an estimate of how many visits match the conditions you've set. If they look higher or lower than what you expected, you might need to tweak the segment conditions.



7. You can also hit 'Preview'. This applies the segment to the report you are currently viewing so you can preview the results by scrolling down the page.
8. When you're happy with your segment, click 'Save'. Your new segment will now be available on the Segment screen.

Tip: you can edit it at any time or share it with other accounts by clicking the grey cog next to the segment name.

Using simple filters

GA now offers a simple interface for creating segments with simple filters based on common configuration options:

- demographics (language and location)
- technology (operating system, device, browser, screen resolution)
- behaviour (' how often they visit and conduct transactions')
- date of first visit
- traffic sources (campaign, medium, source, and keyword).

For example, you could create a simple Segment to analyse how visitors referred from Wikipedia behave on your site by creating a segment that only visits where the Traffic Source contains 'wikipedia', as shown below. If you click into any of the form boxes, possible values will appear, and as you type, they will be filtered to values that match what you're typing.

The screenshot shows the 'Test segment' configuration screen. At the top, there are two segments: 'Test segment: ...' (0.66%) and 'BBC referrals' (0.27%). The main area is titled 'Test segment: traffic source is Wikipedia'. On the left, a sidebar lists filter categories: Demographics, Technology, Behavior, Date of First Visit, Traffic Sources (selected), Advanced, Conditions, and Sequences. The 'Traffic Sources' section contains four filter fields: Campaign (contains dropdown), Medium (contains dropdown), Source (contains dropdown set to 'wikipedia'), and Keyword (contains dropdown). Below the filters, a summary table shows 'Segment Visibility' (visible in any view) and 'Traffic Sources' (Source: contains "wikipedia"). At the bottom, there are 'Save' and 'Cancel' buttons, and a status message: '0.79% of users with 0.66% of sessions selected.'

Using advanced filters

Sometimes you may want more flexibility than simple filters provide. You can build Advanced Segments by combining blocks of filters. You may wish to exclude some visits, or combine multiple conditions into a highly specific segment. For example, one block might be set to include variations of common referring URLs, while another might be set to exclude visits on a particular date or users who have previously visited via a marketing campaign.

Important concepts for advanced filters

The labelled parts are of the advanced filters screen below are: #A shows the Advanced filter tabs where you can choose between 'Dimension & Metric Filters' on the 'Conditions' tab, or 'Sequence' filters on the 'Sequences' tab. The screen below shows the Conditions options for building up segments based on dimensions and metrics. Metrics are things you can put numbers on - e.g. the number of pageviews or goal completions in a visit. Dimensions are attributes that GA reports on - things like traffic sources, pages

visited, browser or visitor location. They generally match the names of relevant columns in Reporting pages.

The first line of the Conditions filter box sets whether the filter will operate on visits or users (#B below). You can now create segments based on behaviour within a single visit (called 'visit data'), or based on all visits within a date range (called 'user data'). You can also set the filter to include or exclude data with the relevant values (#C below). The same options are available on the Sequences tab (but they are in a different order). #D shows the button for adding a new filter block.

Each Conditions filter has three parts. From left to right or #E, #F, #G:

- #E: the 'dimension' or 'metric' you're interested in.
- Tip: click into the box and start typing the name of the dimension or metric. If you're not sure what it might be called, click into the box and start scrolling, or find it in an existing Report.
- #F: an operator that sets how precisely the value should match - exactly, anywhere in the value, at the beginning or end. This can be useful for narrowing visits with particular phrases in e.g. a search term or URL.
- #G: the value you're interested in, whether text or a number

The screenshot shows the Culture24 Segment builder. At the top, there are two segments: 'Test segment: ... 0.66%' and 'BBC referrals 0.27%'. Below this is a search bar containing 'BBC referrals' and a 'Summary' button. The main area is titled 'Conditions' with the sub-instruction 'Segment your users and/or their visits according to single or multi-visit conditions.' A sidebar on the left lists 'Demographics', 'Technology', 'Behavior', 'Date of First Visit', and 'Traffic Sources'. The 'Advanced' section is highlighted with a red box and contains 'Conditions' (with a count of 1) and 'Sequences'. The 'Conditions' section itself has a 'Filter' dropdown set to 'Visits' and an 'Include' dropdown set to 'contains'. It contains two OR statements. The first OR statement has a 'Source' dropdown set to 'contains' and a value input field containing 'bbc.co.uk'. The second OR statement has a 'Source' dropdown set to 'contains' and a value input field containing 'bbc.com'. Below these is another OR statement with a 'Source' dropdown set to 'contains' and a value input field containing 'bbcamerica'. At the bottom of the conditions section are 'Save', 'Cancel', 'Preview', 'Test', and a status message: '0.30% of users with 0.27% of sessions selected.'

Sequence filters let you create segments based on the actions visitors took on your site up to 30 days before the current visit, but describing them in more detail is beyond the scope of this guide.

Tip: if you're getting too many records with an include, add another condition that excludes records you're not interested in - for example, you could include visits that search for 'museum shop' but exclude any visits that also used 'dinosaurs' in their search term.

Tip: each filter block can have many statements within it, building logical conditions linked with 'and' and 'or' statements. For example, to restrict a segment to the city of Lincoln in the UK (and ignore other cities with the same name in other countries), create one statement to match when the City is exactly 'Lincoln' then add an 'AND' statement' and set the Country/Territory to 'United Kingdom'.

Putting it together: creating an advanced segment

In this example, we'll use advanced filters to create a segment for visits referred from a BBC website. You may wish to try it with referrers that are important to your site, whether other cultural organisations, media, schools, etc.

A bit of planning helps you know what you want to do for each of those parts. In this case, I knew that I wanted the subset of visits/visitors whose 'source' was a BBC site.

- I want to Include (not Exclude) records that meet the filter conditions
- I want to look at Visits rather than Users
- I'm interested in the visit Source (that is, which site did my visitors come from?)
- I used 'contains' as my operator as this allows for URLs that do or do not start with 'www'
- I also knew that the site might occasionally have hits from BBC America, so I added another condition for their URL:

The screenshot shows the Google Analytics Segment builder. At the top, there are two segments: 'Test segment: ...' (0.66%) and 'BBC referrals' (0.27%). The 'BBC referrals' segment is selected. On the left, a sidebar lists categories: Demographics, Technology, Behavior, Date of First Visit, Traffic Sources, Advanced (Conditions), Sequences, and a summary of 0.30% of users with 0.27% of sessions selected. The main area is titled 'BBC referrals' and contains a 'Conditions' section. It says 'Segment your users and/or their visits according to single or multi-visit conditions.' Below this is a 'Filter' section with 'Visits' selected under 'Include'. There are three stacked OR conditions, each with 'Source' selected under 'contains' and a URL ('bbc.co.uk', 'bbc.com', or 'bbcamerica') in the input field. To the right of the conditions is a 'Segment Visibility' panel stating 'Segment is visible in any view.' and a 'Conditions' panel listing the three URLs. At the bottom are 'Save', 'Cancel', 'Preview', and 'Test' buttons.

How to design your own custom segments

Once you've got the hang of segments you can create your own to answer questions that matter to your organisation, whether those questions are based on who your visitors are, how they got to your site, what they did there, or specific outcomes like ticket sales or newsletter subscriptions.

For example, you can design segments to analyse visits with characteristics as varied as:

- visits from academic addresses (e.g. ac.uk)
- located in local geographic catchment areas
- referred by email or social media marketing campaigns
- visits that included your ticketing or sales pages
- visitors who viewed information for teachers
- referrers from searches for specific objects or events

- specific landing pages or sections, whether collections, education, venue information, performances, etc
- how many pages they viewed
- how long they spent on the site
- whether they bought from your online shop or ticketing site
- referrers from searches for your brand name (or variations on it)

Once you know what you want to measure, create your custom segment:

- Write a sentence describing a key metric that relates to your mission and how you want to measure it on your website.

Find out which form of reporting within Google Analytics will give you the most actionable information. Explore GA reports to work out where that information is and how it's labelled. Choose the forms of reporting that will give you the most actionable information and re-write your sentence to include GA's labels.

Create a new segment as above.

Use 'or' and 'and' carefully to build up logical statements. Test and preview as you go to make sure you're matching the right records. Don't forget to save!

Tips:

- to preview your segment results with real data, create the segment from a Report page that contains the relevant information - e.g. Audience /Geo /Location if you're interested in visitors from particular areas or cities
- Google uses very general categories for geographic locations so it can help to look through the data it's already reporting when creating segments to understand where information may be stored. For example, England is a 'region' and the United Kingdom is a Country/Territory. Locations may also relate to the visitor's internet provider rather than their exact location. As you explore the options, you may find similar issues for other types of reports.

Key issues

This guide was updated in October 2013 after the Segments interfaces were redesigned but as Google Analytics is constantly changing, live screens may look different to the screenshots. New reports and segments can be introduced over time, and the nature of the data reported also varies as social media, devices, referring sites and analytic priorities change. It's a good idea to audit your account once a year to ensure important configuration settings are up-to-date.

More generally, analytics can only ever tell you what is happening, not why - if you can, supplement them with other methods for understanding your audiences.

Glossary of terms

See '[Google Analytics Health Check](#)' for an introduction to basic Google Analytics jargon and concepts.