



The Complete
Google Analytics
Power User Guide



Introduction:

Google Analytics (GA) can be a powerful tool. It can also be incredibly intimidating for new users. This guide is a compilation of VKI's Google Analytics: Power User series, presenting an overview of several key features and uses of Google analytics—some basic, some advanced—and how you can use these features to analyze, interpret, and optimize your websites traffic.

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Google Analytics Setup Checklist

First things first. Before you can become a GA power user you need to have created a GA account and set it up properly on your website. This blog post will outline a step by step process to implement GA on your site. This is not an exhaustive checklist, but one that will get you up and running so that you can become a power user. If you are a marketer reading this post you may want to quickly read this post and then schedule some time with your IT person to go over the list and see if anything was missed.

If you don't have Google Analytics setup on your site, and you feel you need some help, contact us about our GA Setup service. If you already have GA on your site, but you feel that it isn't setup properly contact us to learn more about our GA Audit service.



Step 1: Understand your Website

Ask yourself such questions as:

- Why does my website exist?
- What do I want my visitors to do?

Answers to questions like these will help you to determine what your sites goals are and define your key metrics (KPI's)

Step 2: Analyze The Website

Does your website have any of the following:

- **Large amount of traffic** - If your site gets 200k+ visits or 500k+ pageViews in a week then consider sampling your data collection instead of collecting data on every visit
- **Crosses Multiple Domains and Sub-Domains** - If your site crosses multiple domains or sub-domains you will need to update your code as per Google's documentation.

[How do I install the tracking code if my site spans multiple domains?](#)
[How do I track all of the subdomains for my site in one profile?](#)

- **Has Non-HTML Pages** - If your site has .pdf, .wmv, or other non-html based files that you would like to track, you'll need to tag these items so that they can be tracked.
- **Is Dynamically Created** - If your site is dynamically created, you may need to exclude query string variables that hold no relevance to the reporting. If the site uses session IDs in the URL or other customer identifying information, these need to be identified so they can later be removed via the Exclude URL Query Parameters section of the profile.
- **Uses Frames** - The Google Analytics tracking code will need to be placed in the section of the parent HTML file and also any child HTML pages. Without careful implementation you could see inflated visitor numbers and lose referring source information.
- **Uses Flash** - There is a brand new flash component that installs right into the Flash IDE and this should be used for tracking Flash content for the best results: [Google Analytics Tracking for Adobe Flash](#)



Step 3: Create a Google Analytics Account

If you don't already have a GA account, it is really quick and easy to set one up. Just visit the following link and enter your email address and create a password: <http://twurl.nl/6qg7ad>

Step 4: Create and Configure Profile(s)

1. You can create up to 50 profiles per account.

Profiles you want to setup:

- o Master Profile. A master profile should be created for each website. This will contain live data with only pre-tested filters.
 - o Live Test Profile. Same URL as Master Profile. This contains live data like the master account, but is the profile where all new filters are first tested for a period of time before being added to the master profile.
 - o No Filter Profile. Same URL as Master Profile with no filters applied. This will act as a fall back for information to validate filters, etc.
 - o Dev Profile. This profile is only run on the development site to test site updates and ensure that the analytics data is getting sent to Google properly before putting site updates live. Use a hostname filter to include only dev site traffic.
2. Ensure that you have specified a default page for each profile (ex. [index.html](#)) so that the domain ([www.mysite.com](#)) and home page ([www.mysite.com/index.html](#)) do not get tracked separately.
 3. Set the Time Zone. If the user has an Adwords Account, use the Adwords account timezone. Otherwise, use the client's location as the time zone.
 4. Add any URL variables that you don't want showing in your reports to the Exclude URL Query Parameters field (session id's, etc)
 5. If the site will track e-commerce transactions, then enable e-commerce tracking in each profile.
 6. If the site has an internal search engine, then enable site search tracking in each profile.
 7. If AdWords is being used, be sure to link the AdWords account to the appropriate profiles and activate the "Apply Cost Data" setting via the AdWords interface. AdWords accounts are linked to profiles not to GA accounts.



Step 5: Setup Internal Traffic Filter

You will likely want to filter out traffic to your website that is generated by your agency and your employees. You may even want to add this data to its own profile.

Step 6: Add Tracking Code to Website

Insert tracking script on all the pages you wish to track by doing the following:

- For standard installations, the tracking script should be included right before the closing body tag.

Step 7: Link Google Analytics Account to AdWords Account (if applicable)

If you setup your analytics account from AdWords, this should already be done. If not, login to the AdWords account, click the Analytics tab, and click "Link It To Your AdWords Account" near the bottom of the page.

More information on this can be found here:

[How do I link my Google Analytics account to my AdWords account 1](#)
[How do I link my Google Analytics account to my AdWords account 2](#)

*leave auto-tagging enabled

It's also important to login to your analytics profiles and be sure that "Apply Cost Data" is ticked.

- You must link each and every profile you wish to track Adwords data on
- Adwords account must have administrator access to profiles
- To link an Adwords account, under Analytics tab, click "Edit" for the profile you want to link. Set "Apply Cost Data" to "yes"



Step 8: Setup Goals and Funnels

- Define the actions you want users to complete on the site.
- Identify 'Goal Pages' for those actions.
- Identify the Funnel pages, if applicable
- Be sure you have identified the correct 'Match Type' If you are unsure which match type to use, please review the documentation on this subject.
- Enter a 'Goal Value' for the goal, if applicable. This will not be used for eCommerce goals but should be used in pages such as lead generation forms to give a dollar value to a lead.

Step 9: Configure E-Commerce Tracking

- Ensure the site includes a receipt/thank-you page as this is required by Google to track e-commerce transactions effectively
- On the receipt/thank-you page include the appropriate Javascript code and form specified by Google in the instructions found here: [How do I track e-commerce transactions?](#)
- For carts that are on a different domain than the website domain, you will need to use the `_link()` or `_linkByPost()` functions to transfer the cookies to the other domain. Each page of the cart should be tagged with the Google Analytics Tracking Code

Step 10: Configure Site Search

You can activate Site Search in the "Analytics Settings>Profile Settings>Edit Profile Information" section for a specific profile. When on the edit profile information page you will then click the "Do Track Site Search" radio button. Next enter the URL Query Parameters. These parameters typically take the form of "?q=mykeyword" or "&search=mykeyword", so you would enter 'q' or 'search' in this box. If when performing a search on your site you don't see any search parameters included in the URL you will need to do some programming on your site to append this information to the URL of the search result pages.



Step 11: Tag Advertising Links

Tag all campaigns links that point at your site. Variables included are:

- campaign : e.g. holiday promo
- medium : e.g. cpc, banner or email
- source : e.g. Google, New York Times, newsletter
- content : e.g. 10% off, 5% off
- term : this is for identifying paid keywords

The first three variables must be included in every tracking URL.

Step 12: Create/Update Privacy Policy

All sites that implement Google Analytics are required to have a privacy policy somewhere on the website (as per Google's Terms of Service). This policy must indicate that the site uses a cookie to collect anonymous traffic data.

[VKI-blog: Google Analytics - Do You Have A Privacy Policy? Google Analytics Terms Of Service](#)

Step 13: Test on Development Server

(whenever possible)

- Test your updates on a development server whenever possible
- After applying the updates, visit the development site to ensure that it continues to function normally
- Log in to Google Analytics and check that the development profile is receiving data (may take up to 24 hours to appear)
- Validate the development site with tools such as WASP (SiteScanGA is another good tool, but the site needs to be indexed in Google for scanning so it's usually only possible to use this tool on the live site)

Two great tools for helping you with your testing are:

- [WASP](#)
- [SiteScanGA](#)



Step 14: Setup Filters

Filters can be a very powerful way of segmenting data. Now that GA has included Advanced Segmentation within the reporting area you can segment data much more easily without having to create as many filters. Some advanced filters that you may still want to use will allow you to match specific transactions with the referring source, medium and keyword that lead to the sale or changing the referrer given credit for the transaction.

Step 15: Implement on live site

- Upload all updated pages to live site
- Visit the live site to ensure that it continues to function normally
- Log in to the Google Analytics and check that the live profile is receiving data (may take up to 24 hours to appear)
- Validate the site with tools such as WASP and SiteScanGA to ensure all pages are tagged properly

Step 16: Review and Update

- Let some traffic start populating the reports for a few days.
- Review filters and goals and update as per your requirements. Be sure to test each filter and goal individually on the test profile before applying to the master profile.

Step 17: Grant Access to Other Users

- Access the user manager and give access to other users that can benefit from seeing your Google Analytics reports. It's recommended that you give most people per report access. Administrator access should only be granted to people that need to make changes to your Google Analytics configuration.



Step 18: Setup Scheduled Reports

- To help make analytics part of your decision making process, we recommend setting up some scheduled reports that outline some of your Key Performance Indicators (KPI). This will help ensure that you are reviewing this data on a regular basis.

If you don't have Google Analytics setup on your site, and you feel you need some help, contact us about our GA setup service. If you already have GA on your site, but you feel that it isn't setup properly contact us to learn more about our GA Audit service.

As was mentioned at the top, this is not intended to be an exhaustive list. Any comments are appreciated.



Site Overlay Report

When asking people what their favorite Google Analytics report is you will likely get a lot of different responses. One of the more common responses will likely be the Site Overlay report.

Before jumping into who should use this report and what type of analysis should be done there are a couple of things that should be understood about this report:

1. The Site Overlay report will not work properly on all sites or pages. This is a known issue to Google and they are working to make it more robust. For it to work all links on a page must exist as an HREF element on the page.
2. If you have multiple links on a given page that all link to the same page, the Site Overlay report will not differentiate between the links. That is it will credit all links on the page with the click, not just the one that was clicked. To fix this issue so that you can determine which link was the actual source of the click you will need to add an additional query parameter to each of the identical links. As is often the case in life, when you fix one problem you create another. The new problem that we have created by adding unique query parameters to each link is that we now have to be careful when viewing other reports such as Top Content. Now when we look at our Top Content report we have to sum the page view data created by the query parameters to get the true page view count.



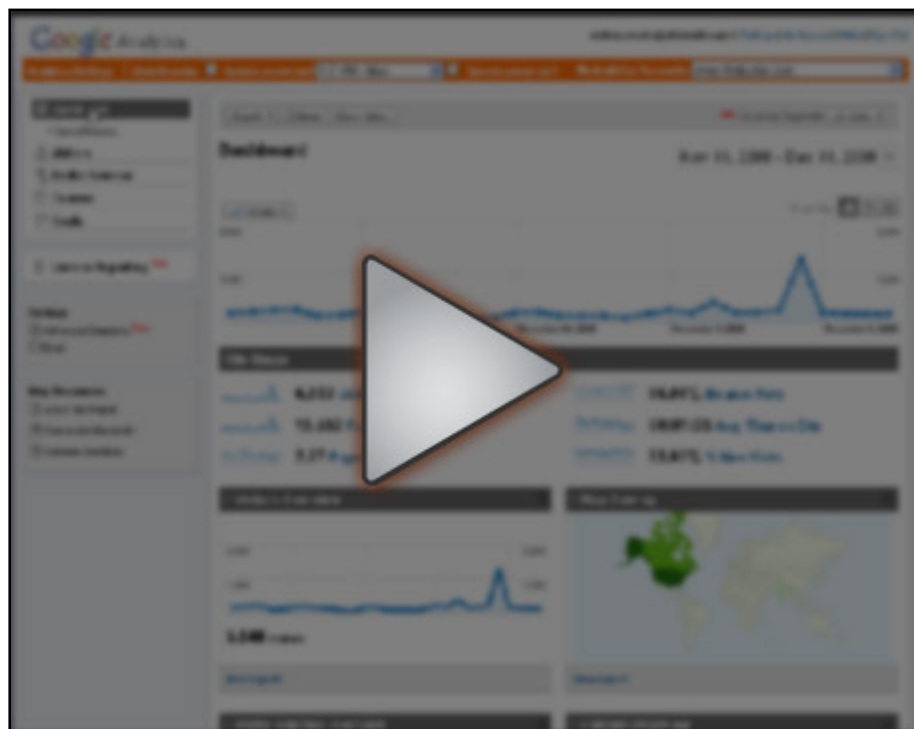
Who should be using the Site Overlay report?

The Site Overlay report is a great way for designers, marketers, and analysts to visually see how people are interacting with your web pages. You can quickly and easily see how visitors are interacting with your page elements and layout.

How should the report be used? What should I be looking for?

- Look for what links are being clicked.
- Look to see if text links are being clicked more than graphics or buttons.
- Look to see if anyone clicks on links in a drop down menu. Are you hiding content?
- Look to see not only which links get the most clicks, but which have the highest \$Index (value), conversion, transactions, revenue...
- Look to see how people interact with your content that is below the fold.

Insights such as those listed above will give you ideas on how to test changes to your layout and different elements and their position on the page.





Another tool that I really like that gives you a similar visualization to Google Analytics Site Overlay is [Crazy Egg](#). Crazy Egg has a number of advantages and benefits that make it more valuable to me than GA's Site Overlay, but it is a paid tool, so you get what you pay for.

We'd love to hear your thoughts. Let us know what you find most usefully about a Site Overlay tool. Which ones you like/use and any tips that you might have to share.



Visitors: Map Overlay

Next up in the series of most useful Google Analytics reports is the Map Overlay report.

The Map Overlay report is found under the Visitors tab. Simply put, this report allows you to see (visually on a map) where your visitors are located and how visitors from different locations behave.

Note: Google Analytics captures the visitors IP address, which is a piece of Personally Identifiable information (PII), just long enough to use to for a geo-IP look up. After GA has thrown out the IP address it still knows where each IP was located, and can plot a visitors location on the map.



The Map Overlay report defaults to a world view displaying Visits as the metric. The darker the color the greater the value of the metric being mapped. You can change the metric being displayed on the map to from Visits to Pages/Visit, avg. Time on Site, % New Visits, Bounce Rate, Goal Conversion Rate, Revenue... You can also drill down to see more detailed information within specific regions, either by clicking on the map or selecting a different Detail Level. By looking at information presented in this manner you can identify new areas in which to test/launch campaigns, measure how geo-targeted campaigns are performing, and see how different products are selling in different regions.

As with most reports, one of the best things you can do is to analyze is to segment them. Google Analytics' new Advanced Segments feature makes this a really easy task to accomplish. You can quickly choose from default segments such as New Visitors, Returning Visitors, Paid Traffic, Non-paid Traffic, or create your own custom segments. Some custom segments that I have found helpful with the Map Overlay are Campaigns such as email or display ads and segments that represent individual products (only the top sellers).

Name	Reports	Status	Visits	Avg Time on Site	Bounce Rate	Completed Goals	% Change	Actions
http://www.vkistudios.com UA-4026481-1								
1.1 VKI - Blog	View report		6,226	00:01:18	79.81%	0	-2.54%	Edit Delete
1.2 VKI - Main	View report		1,017	00:01:58	80.46%	0	-26.91%	Edit Delete
1.3 VKI - Mobile	View report		1	00:01:38	70.00%	0	-18.00%	Edit Delete
1.4 VKI - Test Blog	View report		1		70.00%	100	3.00%	Edit Delete
1.5 VKI - Test Main	View report		1		50.00%	0	-23.00%	Edit Delete
1.6 VKI - Test Mobile	View report		1	00:02:04	60.00%	0	-11.00%	Edit Delete
1.7 VKI - No Filter	View report		1	00:02:00	60.00%	0	-14.00%	Edit Delete
88.1 Dev - VKI Blog	View report		61	00:00:45	38.29%	16	128.87%	Edit Delete
88.2 Dev - VKI Main	View report		2	00:00:00	0.00%	0	NA	Edit Delete

If you haven't used this report before then try this plan out for starters: create a geo-targeted Adwords campaign with a unique and geo-targeted landing page. Run the campaign and then compare the results of this campaign to other areas, and then to segment of visitors from the area who didn't view the target campaign/landing page. If you see a higher conversion rate and increased revenues then you can probable make the argument to roll out more geo-targeted campaigns.



Content: Top Content

Next up in the series of most useful Google Analytics reports is the Top Content report.

The Top Content report is likely one of the first reports you will be looking at when assessing your website's performance.

This report gives you the following common per-page metrics:

- Page Views - This is the number of times a page or set of pages has been viewed. Repeat views of a given page or set of pages are counted.
- Unique Page Views - Number of visits during which a given page or set of pages was viewed.
- Time on Page - Average amount of time visitors spent viewing a page or set of pages. This time span can only be calculated if the visitor visits another page on your site.
- Bounce Rate - The percentage of single page visits for a set of pages or a given page.
- % Exit - Percentage of site exits from a page. This can be compared to the average page % Exit.
- \$ Index - The average value of a page or set of pages. $\$ \text{ Index} = (\text{Ecommerce Revenue} + \text{Total Goal Revenue}) / \text{page views for the page(s)}$. This metric helps you prioritize the importance or impact of pages on your website. The higher the \$ Index value, the more valuable a page is in generating conversions.



This report can be sorted by the different metrics by clicking on the metric headings at the top of each column. By default it is sorted by page views in descending order.

Note: Interesting article on [how Google Analytics calculates some of its metrics and how this affects accuracy.](#)

Name*	Reports	Status	Visits	Avg. Time on Site	Bounce Rate	Completed Visits	% Change	Actions
http://www.vkistudios.com UA-80264811-1								
1.1 VKI - Blog	View report		8,228	00:01:18	78.81%	70	-2.54%	Edit Delete
1.2 VKI - Main	View report		15	00:01:58	80.65%	0	-36.21%	Edit Delete
1.3 VKI - Social	View report		0	00:01:38	70.50%	0	-15.53%	Edit Delete
1.4 VKI - Test Blog	View report		0		76.18%	100	8.07%	Edit Delete
1.5 VKI - Test Main	View report		0		55.89%	0	-23.80%	Edit Delete
1.6 VKI - Test Social	View report		0	00:01:04	88.28%	0	-11.12%	Edit Delete
1.7 VKI - No Filter	View report		0	00:02:00	89.00%	0	-14.22%	Edit Delete
88.1 Dec - VKI Blog	View report		81	00:00:49	26.26%	18	628.57%	Edit Delete
88.2 Dec - VKI Main	View report		2	00:00:00	0.00%	0	N/A	Edit Delete

The report should be used to do much more than take the pulse of your website, or act as a counter. It should be used to gain insights into visitor behavior. You can segment and/or filter your data so that we can figure out how different groups of people consume and interact with your website content.

To do this you must first have some basic knowledge about your visitors, and how visitor segments may behave differently. For example, first time visitors vs. repeat visitors, or organic search traffic vs. paid search traffic.

When looking at the data in a segmented way you will likely find that a given group of people makes up a greater portion of traffic than the other. These different groups of people will also have different motivations or intents for their visits and as a result be of different value to your company. So this information can help us figure out how to adapt your content to best satisfy the different segments of people who are viewing certain pages.

On the top content report you can also drill down to get more detailed information by clicking on a page.



Once on the content detail report for a given page you are able to analyze a page in four additional ways:

- Navigational Summary - Discover how visitors arrived at a given page and where they went next.
- Entrance Paths - For a given entrance page discover the next pages viewed and where they ended up.
- Entrance Sources - Top entrance sources per page. i.e. Google, Digg...
- Entrance Keywords - Top entrance keywords per page.

As with the Top Content report you will want to segment these results to see how different user groups are finding/entering your site so that you can prioritize your marketing efforts to drive more of your most valuable visitors to your best pages.

As time goes on Google makes updates and changes to GA. One of these changes was to remove the ecommerce tab from the Content Detail report (this is the report that you drill down to from the Top Content report). This is too bad, as this report would allow you to analyze and compare the ecommerce conversion rates of different product pages. You could also segment the page by referral source to compare how different traffic sources converted for a given page. We hope that at some point they bring it back.



Ecommerce: Overview

Next up in the series of most useful Google Analytics reports is the Ecommerce: Overview Report.

If you have an Ecommerce website, then the Ecommerce: Overview Report will likely be one of the reports that you regularly review to assess where your revenue is coming from and how your campaigns are performing.

Note: Even if you don't have an Ecommerce enabled website you can still monetize your success events by adding goal values. If you are a lead generation site and you have more than four lead generation forms as success events and you want to monetize them all you could set up your forms submissions as Ecommerce events. This would then keep all of the success event data in one profile/report. In this case the forms would be products and the data will be reported in the Ecommerce section not the goals section. By doing this though you lose some of the reporting that is available in the goals section, such as the funnel visualization. So as with everything in life there are pros and cons (you could also set your forms using the four goals and ecommerce).



When looking at the Ecommerce Overview report you will see the Ecommerce conversion rate charted, a summary of the number of different products that generated \$X in revenue, the average Ecommerce conversion rate for the period, total number of transactions for the period, average order value, and total products purchased. At the bottom of the report you will find two tables which report on the Top Revenue Sources, by Products and by Source/Medium.

Name*	Reports	Status	Visits	Avg Time on Site	Bounce Rate	Completed Deals	% Change	Actions
http://www.vkistudios.com UA-8026481-1								
1.1 VKI - Blog	View report		5,225	00:01:18	79.81%	70	+2.54%	Edit Delete
1.2 VKI - Main	View report		1,000	00:01:58	88.46%	0	-35.91%	Edit Delete
1.3 VKI - Social	View report		30,000	00:01:38	70.50%	0	-15.50%	Edit Delete
1.4 VKI - Text Blog	View report		100	00:01:30	76.18%	100	+8.07%	Edit Delete
1.5 VKI - Paid Main	View report		0	00:00:00	88.89%	0	-23.60%	Edit Delete
1.6 VKI - Text Social	View report		0	00:02:04	88.38%	0	-11.12%	Edit Delete
1.7 VKI - No Filter	View report		0	00:02:00	88.00%	0	-14.22%	Edit Delete
88.1 Dev - VKI Blog	View report		81	00:02:48	38.28%	18	+828.87%	Edit Delete
88.2 Dev - VKI Main	View report		2	00:00:00	0.00%	0	N/A	Edit Delete

Once you've done your quick review and compared these top line metrics with the previous month, and the same month a year ago... it is time to dive in and learn more about where your traffic is coming from and how your campaigns are performing.

To do this you will click on one of your top performing products and then select a dimension (this is a drop down menu in the heading of the first column). There are a number of dimension to choose from; Product SKU, None, Source (this is the referring site), Medium (is the type of referral i.e. cpc, organic, email, referral...), campaign, keyword, ad content, visitor type (new or returning), landing page, language, continent, sub continent, country/territory, region, city...). This is where it starts to get fun. You are now looking at one of your top performing products and comparing what keywords contribute to your revenue. Take this even one step further by using Google Analytics Advanced segmentation feature to see how paid vs. non-paid visitors contribute to a products revenue. This is crucial information for your marketing team who are responsible for product search marketing both paid and organic.

From the Ecommerce Overview report the other Top Revenue Sources report is based on Sources/Medium instead of products. This data tells us what referring sites contribute the most revenue. As with top revenue



sources by products, top revenue sources by sources/medium can and should be segmented by a dimension. The default dimension for this report is keyword. You will notice that this report provides us with an ecommerce conversion rate (the top products report didn't provide this). This report will also be a very valuable report for those people managing both organic and paid search campaigns as you can determine which keywords are converting well on a per source basis and even segment further by first vs. returning visitor...



Content: Site Search

Next up in the series of most useful Google Analytics reports is Content: Site Search Report.

If your site allows visitors to search your content to find what they are looking for, then the Content: Site Search Report should be enabled and configured. This report will likely be one of the reports that you regularly review to discover what people are searching for, uncover new terms for you paid search campaigns, refine the results your search tool is providing and learn about content that your visitors are looking for that you might not currently have (this can be treated as a form of market research).



Note: The Site Search report will not work for you by default; it must be enabled and configured. To do this you must select a profile from the analytics settings dashboard and then click 'edit' in the 'Main Website Profile Information' section. From here you will need to select 'Do Track Site Search'. Once you have completed this you need to enter your 'Query Parameter'. It is usually quick and easy to discover what your query parameter string is. Simply go to your site and perform a search. The resulting URL of the results page that you arrive at should contain the query parameter that you are looking for. The query parameter will often look like ?q=keyword or &search=keyword, but it could be something else such as search_text=keyword. If you aren't sure do a couple of search and look for a pattern. Next you will need to choose between stripping the query parameter out of the URL or not. In many cases you will want to strip of the query string parameters as they will be of no use to you. In some cases though these parameters will be used in other places and they should not be stripped out. They could be needed for goal definitions if a specific search is desired to be a goal, or a step in a funnel or used in a filter. Finally you must select whether or not you want to use categories for site

search. This option is only selected as 'yes' if your search functionality allows searchers to restrict their searches to a specific category within your site. For example, when you are visiting Amazon you can restrict your search to 'Books' and not search their entire site.

You will find the Site Search report in the Content section in the left hand navigation. When looking at the Site Search report you will see the number of visits with search charted, a list of summary metrics of: % of visits that used search, visits with search, total unique searches, results pageviews/search, search exits (you want to reduce this number by providing better results), search refinements (again you want to reduce this number by providing better results), time after search and search depth. Each of these metrics can graphed at the top (up to two metrics at a time).



To the right of the summary metrics you will find a very handy navigation tool that ask you what type of data you want to look at. These questions are broken down into three sections, Visits, Search and Content. Make sure to look at these as they will help you quickly and easily find the report that will answer your questions.

At the bottom of the report you will find two tables which report on the Site Search Details, by Top Site Searches and by Top Searched Content.

Once you've done your quick review and compared these top line metrics with the previous month, and the same month a year ago... it is time to dive in and learn more about what people are searching for. Are the results what they were looking for? And are there any opportunities to optimize the search results and/or content that exists within the site?

Let's start by clicking on the 'Which search terms did visitors use?' link in the Search: 'What did visitors search for?'. Here we find a list of terms that visitors used during their visit to you site. These search terms are ordered by total unique searches in descending order. You will notice that there are three tabs that you can select from, 'Site Search Usage', 'Goal Conversion', and 'Ecommerce'. If you select the 'Ecommerce' tab you will see how much revenue visits with searches contributed as well as the conversion rate of visits that contained a search. Further down the page you will see how much revenue each search term contributed to and the conversion rate of visits that searched for a given term. This is where it starts to get fun. Take this even one step further by using Google Analytics Advanced segmentation feature to see how paid vs. non-paid visitors used your site's search feature, or how new vs. return visitors interacted with you site search. This is crucial information to help you optimize the results that your site search returns, discover content that is desired by visitors but doesn't currently exist (this could be giving you hints as to want new products to add to your ecommerce store), or keywords to add to your paid search campaign.



Identifying and Setting up Goals

Next up in the Google Analytics Power User series is not a report, but instructions on how to identify and setup goals in Google Analytics.

Step one, identify your site's goals. Whether you are an ecommerce site, lead generation site, or a publishing site (even a blog), identifying your goals is one of the most important steps in the process of setting up your Google Analytics profile. You have invested time and money into the creation and maintenance of your site for a reason. What is that reason? The answers to this question should be reflected in your analytics as goals.



Some examples of different goal types are:

- A completed transaction
- Adding something to a cart or starting to complete a form (these could also be part of a funnel)
- Form submission (lead generated)
- File downloads (PDFs...)
- Links clicked (follow RSS, submit a comment, follow the affiliate ad...) this must be done by creating a virtual page view.
- Visiting a particular page

Name*	Reports	Status	Visits	Avg. Time on Site	Bounce Rate	Completed Goals	% Change	Actions
http://www.vkistudios.com UA-50264811-1								
1.1 VKI - Blog	View report		5,225	00:01:18	79.61%	70	+2.54%	Edit Delete
1.2 VKI - Main	View report			00:01:58	80.46%	0	-35.91%	Edit Delete
1.3 VKI - Usual	View report			00:01:38	70.50%	0	-15.53%	Edit Delete
1.4 VKI - Test Blog	View report				76.14%	100	+3.07%	Edit Delete
1.5 VKI - Test Main	View report				84.99%	0	-23.60%	Edit Delete
1.6 VKI - Test Usual	View report			00:02:04	69.38%	0	-11.12%	Edit Delete
1.7 VKI - No Filter	View report			00:02:08	84.00%	0	-14.22%	Edit Delete
88.1 Dev - VKI Blog	View report		81	00:00:45	36.26%	16	+628.87%	Edit Delete
88.2 Dev - VKI Main	View report		0	00:00:00	0.00%	0	NA	Edit Delete

Goal set up

When you first login to Google Analytics account you arrive at the Overview page. From this page identify the Profile that you would like to configure your goals for (up to four per profile) and click "edit" on the far right in the "Actions" column. If you don't see an edit option then you login doesn't have administration privileges and you can only view reports, configure the profiles or account. So for those who have administrative right, you will now be on the "Profile Settings" page. In the second box down you will see a section titled "Conversion Goals and Funnel". In this section are four goals (G1, G2, G3, and G4). On the far right in the "Setting" column you will see the option to "edit" your goals. If there is no information in the "URL" column and you click "edit" you will be creating a new goal. The page you are now taken to contains two different sections, "Goal Information", and



"Define Funnel". In the first section "Goal Information" you are asked for six pieces of information.

The first is "Active Goal". If you are setting up your goal, the "On" radio button must be selected. You can use this to toggle a goal "On" and "Off" in the future.

Next you are asked for a "Match Type". From this drop down menu you must choose from "Head Match", "Exact Match", or "Regular Expression Match". An Exact Match is exactly that, an exact URL match. A Head Match would be used if the URL string has a session ID or parameter that is included in the URL so that each time the URL is generated it is different. Finally a Regular Expression Match can be used to match your URLs with wild card characters or meta data. Head and Exact Match will satisfy the vast majority of situations that you will run into when setting up your goals.

Next up is the goal URL. The goal URL is the page that a visitor is taken to once they have successfully completed your goal. For the goal page "<http://www.mysite.com/thankyou.html>" enter "/thankyou.html" Next is the "Goal Name". This information will be used to identify your goal in your reports, as well as when editing information in your GA profile. Next is "Case Sensitive". This is a check box, that if selected will only goal a goal if the URLs entered above match exactly the capitalization of the visited URLs.

Finally we have goal value. This is a very important field and one that is often over looked. Every goal on your site should have a monetized value. Even if it isn't a transactional goal you should have some value that represented the contribution that someone who completes that goal is providing. This monetized value can be calculated by looking at the average closing rate of a lead is X and the average value of lead is Y so a lead is worth $X \text{ times } Y \text{ times} = \text{the expected value of the lead}$. Or if your goal can't be measured in that way insert goal values that are relative to each other. i.e. when someone down loads whitepaper A vs whitepaper B it is twice as likely that they will become a lead. So Goal A's value would be 10 and goal B's value would be 5.

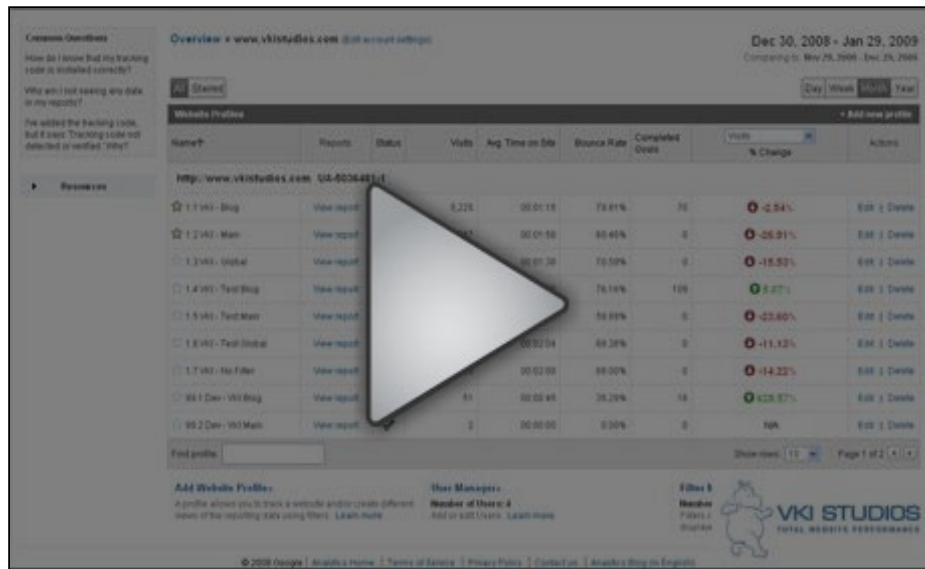
The second section, "Define Funnel" is optional. If you choose to complete this section you will be able to use the funnel visualization report within Google Analytics. A funnel is a series of pages leading up to the Goal URL. For example, the funnel may include steps in your checkout process that lead to the thank you page (goal), or a multi page form. To set up a funnel you simply enter the URLs of the page that preceded your goal in the order that they will be visited.

That is it, you now know how to set up your goal in Google Analytics, and to assign a value to them.



Goals and Funnel Visualization Report

Next up in the Google Analytics Power User series we will review path analysis using Google Analytics' Funnel Visualization Report. When you went through the process of configuring the goals for your website you had the option of setting up or defining a funnel for your goals. Funnels are most applicable to goals that have a well defined path that a visitor will follow prior to completing the goal. Examples of this would be the shopping cart of an ecommerce site, or the steps in a web form prior to submitting it, or an online reservation system... Not all goals can or should have a funnel.



On our blog one of our goals is to have people follow our RSS feed by clicking on the RSS icon. This icon is on every page in the blog and it doesn't have any clearly defined path that a visitor would take to complete the goal. So as a result it doesn't have a funnel set up for it.

Another one of our goals for our blog does have a defined funnel path and has been configured with a funnel. This goal is our "comment added" goal. To add a comment to our blog you must first click the "add comment" link. Once you have clicked this link you are taken to a new page where you then enter your comment and click "post".

The funnel visualization report empowers with the knowledge how your funnel is performing. i.e. where is it leaking. When you know where it is leaking you can dive into to the pages that are performing poorly so as to try and determine the problem and to fix it. These problems could be as result of technical issues, or be usability based... Your goal is to have as many people as possible who enter your funnel exit it by successfully completing your goal, and the Funnel Visualization Report will be key in the process.

In the case of our "comment added" goal our funnel illustrates how many people clicked "add comment" and then how many actually clicked "post". This report has helped us identify a technical issue that our blog was having that was preventing people from submitting comments. Our expectation is



that with this issue fixed we will see a higher funnel conversion rate and have happier commenter's.

In most reports I highly recommend that you dive in to the data further by using Google Analytics Advanced Segmentation capabilities, but in our case this feature is not available. In addition to not being able to use the Advanced segmentation feature, the Funnel Visualization Report has a few other limitations as well, such as, you can't use the compare date feature with the funnel.

Even with the few limitations that exist for this report it is still one of the top reports you should be looking at on a regular basis, as you spend a lot of time and money to get people excited enough to enter your funnel, and now is not the time to lose them.



Traffic Sources: All Traffic Sources - to optimize campaigns

When you are deciding how to allocate your online dollars you will want to have a solid understand of how your campaigns have performed in the past. A great way to get a quick high level handle on this is with the All Traffic Sources Report.



So let's start with a couple of definitions. What do Source and Medium mean?

Source is the referring site, that is, the domain of the site that a visitor has clicked on; a link that has taken them over to your site. Some common referral sources are search engines (both paid and organic), a link from an affiliate's site, a blog or article, an email, a partner or any other site that has a link to you. It could even be a document with an embedded link to your site.

On the other hand Medium refers to the type of online channel that the Source belongs to. Some examples of the different types of Mediums that you will likely see are, organic, referral, cpc, email and none (none is the medium for those visitors who arrive to your site directly either by typing your URL in, or clicking on your link in their bookmarks).

When you are in the All Traffic Sources report there are two or three tabs available:

- A Site Usage tab that tells you the visits, pages/visit, average time on site, % of new visits and the bounce rate for each of the Source/Medium pairing.
- A Goal Conversion tab that tells you how each Source/Medium pair contributed to successful completions of your goals (in addition to visits).
- An Ecommerce tab that tells you the revenue, the number of transactions, the average value, the Ecommerce Conversion rate, and the per visit value of each Source/Medium pair.

This information will give you insight into which of your campaigns are contributing the most to your bottom line. Within this report you should also be looking for ways to segment and dive more deeply into the numbers, look for opportunities. One way to do this would be to create Advanced Segments that allow you to geo-segment your Source/Medium reports so that you can identify how your campaigns are performing in different regions. Another way would be to see how repeat vs. returning visitors behave inside your different campaigns.

Inside this report, you may also change the "Show" filter to show you only "Source" information, or only "Medium" information.

This report is fantastic for figuring out where to cut and where to increase your spend, but we're sure there are loads of other uses for it. Let us know how you guys use it, and how it has helped you.



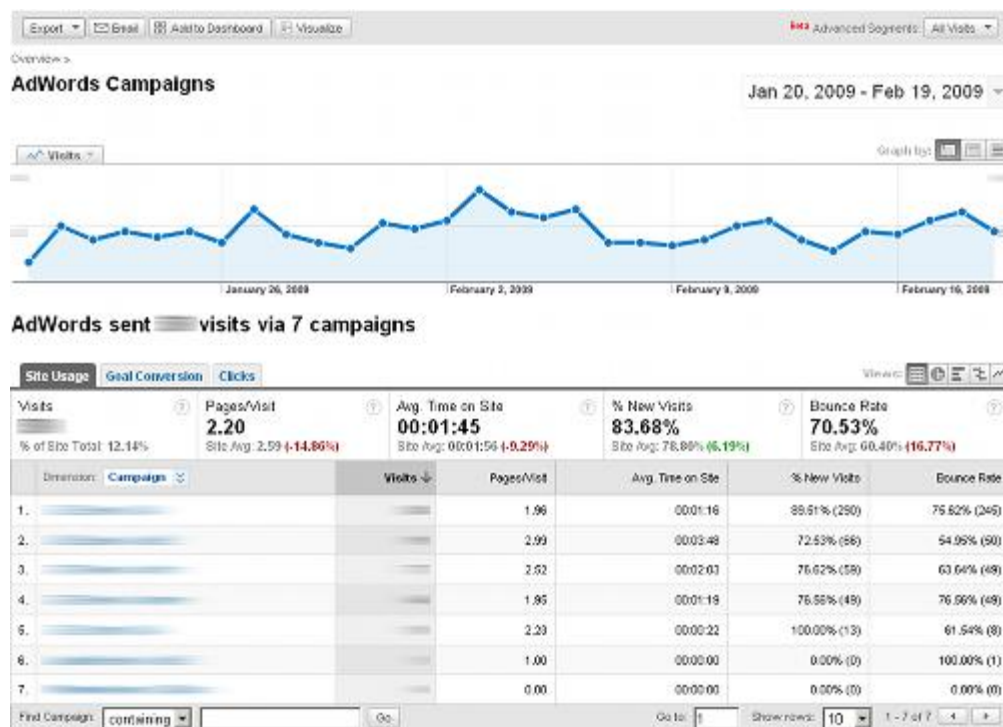
Traffic Sources: AdWords – optimize ROI

Next up in the Google Analytics Power User series is one of my favorite reports, the Traffic Sources: AdWords report. This report enables you to dive into and optimize the performance of your AdWords Campaigns like not other (No surprise that there is such a tight integration between Google's AdWords and Google Analytics. One of the primary drivers for Google to give away there analytics products is to empower people to improve their websites so that they can more effectively and efficiently spend their ad dollars with Google. Smart move.)

Within the AdWords reporting section of Google Analytics there are two different reports, the AdWords Campaigns report and the Keyword Positions report. To get the most out of these two reports you need to have your AdWords account linked (configured) with your Google Analytics account (For more information see Step 7 in [Part 2: Account setup](#))



In this post I will focus on the AdWords Campaigns report. When you first arrive at the AdWords Campaigns report you will be greeted by a report that looks like many others. At the top is a graph of visits that have been generated by your AdWords campaigns (the metric of the graph can be changed to plot any of the metrics that are available in this report, and you can choose to plot and compare two metrics at the same time, or even compare an AdWords Campaign metric to the site average). Below that is a table of data sorted into four tabs; Site Usage, Goal Conversion, Ecommerce, and Clicks. Within the table you will notice a drop down selection box titled Dimension. The Dimension defaults to Campaign, but you can choose to change it to a number of different dimensions including, keyword and ad content.



The Site Usage tab contains a lot of familiar metrics such as, Visits, Pages/Visit, Average Time on Site, % of New Visits and Bounce Rate. The data in this first tab will give you a high level picture of how your different campaigns are contributing and performing. One place to start is to look for campaigns that have a higher than site average or campaigns average bounce rate, and dive in to try and figure out why? Is there a misalignment between the keyword, ad copy and landing page that misleads or confuse the visitor?



Site Usage		Goal Conversion	Clicks	Views: [Grid] [List] [Table] [Chart]		
Visits 0.07% % of Site Total:	Pages/Visit 3.33 Site Avg: 1.51 (120.08%)	Avg. Time on Site 00:04:33 Site Avg: 00:01:20 (241.29%)	% New Visits 100.00% Site Avg: 83.84% (19.27%)	Bounce Rate 50.00% Site Avg: 77.81% (-35.74%)		
Dimension: Campaign	Visits ↓	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate	
1.		1.33	00:00:55	100.00% (3)	66.67% (2)	
2.		1.00	00:00:00	100.00% (1)	100.00% (1)	
3.		12.00	00:17:30	100.00% (1)	0.00% (0)	
4.		3.00	00:07:04	100.00% (1)	0.00% (0)	
5.		0.00	00:00:00	0.00% (0)	0.00% (0)	
6.		0.00	00:00:00	0.00% (0)	0.00% (0)	

Find Campaign: containing [] Go []
Go to: 1 Show rows: 10 1 - 6 of 6

The next tab over is the Goal Conversion tab. This tab's output looks similar to the previous tab expect the metrics reported now are visits, goal conversion rate and per visit goal value (this column will only display data if you have enter a value for your goals in the goal configuration display process). This report allows you to get quick insights into which campaigns or keywords have the best and worst goal conversion rates. This tab will be of particular interest for sites that have non transactional goal such as forms completed/pages visited for the paid traffic.

Site Usage		Goal Conversion	Ecommerce	Views: [Grid] [List] [Table] [Chart]		
Visits 17,055 % of Site Total: 22.75%	Revenue % of Site Total: 26.59%	Transactions % of Site Total: 25.15%	Average Value Site Avg: \$98.97 (5.74%)	Conversion Rate Site Avg: 14.35% (10.51%)	Per Visit Value \$16.59 Site Avg: \$14.20 (16.86%)	
Keyword	Visits	Revenue ↓	Transactions	Average Value	Conversion Rate	Per Visit Value
	4,653				18.40%	\$10.00
	937				23.48%	\$24.18
	918				21.82%	\$23.36
	1,019				17.88%	\$17.94
	1,094				13.89%	\$14.92
	978				15.98%	\$16.49
	801				15.11%	\$16.42
	470				21.48%	\$20.11
	214				40.85%	\$30.58
	192				31.25%	\$34.12

Find Keyword: containing [] Go [] Show rows: 10 1 - 10 of 1,442



Next up is the Ecommerce tab. If you have an Ecommerce site and you have configured your Google Analytics for Ecommerce (see Step 9 in [account setup](#)) this will be a very valuable report for you. This report displays Visits, Revenue, Transactions, Average Value (that is order value), Ecommerce Conversion Rate, and Per Visit Value. For me things are now starting to get more interesting, as I'm now starting to dive into how much value (\$) different campaigns and keywords are creating. We not just looking at a cost per conversion, but how much revenue those conversion generate, the average order size different campaigns and keyword generate... You can start looking at how the average order value or your Ecommerce conversion rate changes as you change your ad text.

The screenshot shows the 'Clicks' report in Google Analytics. The summary section displays the following metrics:

- Visits: 362 (93.06% of Site Total)
- Impressions: (not explicitly stated)
- Clicks: 362 (92.50% of Site Total)
- Cost: (not explicitly stated)
- CTR: 0.26% (Site Avg: 0.27%, -5.83%)
- CPC: (not explicitly stated)
- RPC: \$0.00 (Site Avg: \$0.27, -100.00%)
- ROI: (not explicitly stated)

The table below shows the performance of six campaigns:

Dimension: Campaign	Visits	Impressions	Clicks	Cost	CTR	CPC	RPC	ROI	Margin
1.			35		0.78% (0)		\$0.00		0.00% (0)
2.			15		0.06% (0)		\$0.00		0.00% (0)
3.			45		0.39% (0)		\$0.00		0.00% (0)
4.			226		0.25% (0)		\$0.00		0.00% (0)
5.			40		0.40% (0)		\$0.00		0.00% (0)
6.	0		1		0.98% (0)		\$0.00		0.00% (0)

At the bottom, there is a search bar for 'Find Campaign:' with a dropdown set to 'containing', a 'Go' button, and pagination controls showing 'Go to: 1' and 'Show rows: 10'.

The final tab is my favorite. The Clicks tab. This is my favorite report because it imports data from your AdWords account and allows you to start managing your campaigns based on advertising Margin or ROI. If you are just managing/optimizing your AdWords campaigns from within AdWords you only know how you are influencing your cost per conversion. For each product you will likely have a different price point, so as a result not all conversions are of equal value. Well this report is great for helping you determine how campaigns and keywords are contributing. For more



information on how to really extract value from this tab see [The Secret to Optimizing your PPC Campaigns](#)

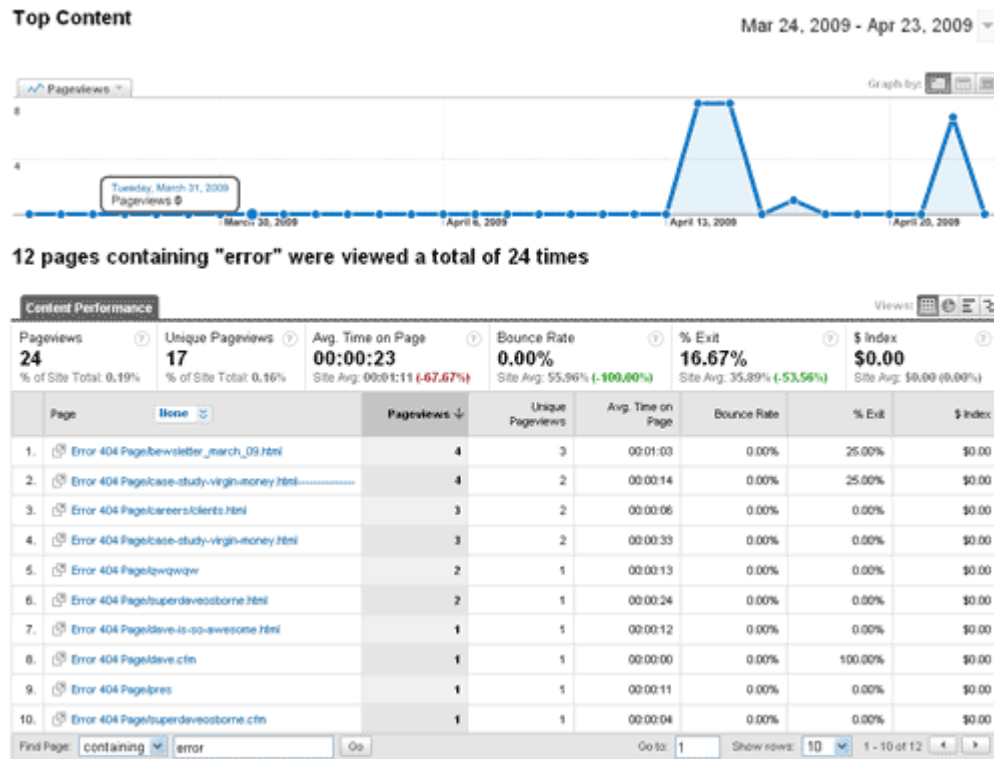
The AdWords Campaigns report is a great candidate for modification using Google Analytics' Custom Reporting. By creating a custom report you can pull all of your most important metrics into one tab. By doing this you won't have to click from tab to tab to compare all of your most commonly examined/analyzed data. So if you haven't played around with custom reports yet this is a great time to start.



Tracking Error 404 Pages and Broken Links in Google Analytics

Next up in the Google Analytics Power User series is something slightly different. Instead of your standard "out of the box" reporting, we're using Google analytics to look at errors on your site. The most common of which will be the classic "Error 404".

Whether you are an ecommerce site, lead generation site, or publishing site (even a blog)... you will likely have the occasional technical problem with your site. Sometime your site may throw a 4XX (client error) or 5XX (Server Error). These errors are often created as a result of broken links within your site, so you will want to find them and fix them ASAP.



Setup: Placing the GATC in your Error 404's, 500's, etc.

To track error pages you will need to have the Google Analytics Tracking Code (GATC) added to your error page template(s) (contact your webmaster to complete this task). Without the tracking code on the error pages you will not be able report on these pages or find their associated broken links.

As a reference, here is the code:

```
<script type="text/javascript">
Var gaJsHost = (("https:" == document.location.protocol) ? "https://ssl." : "http://www.");
document.write(unescape("%3Cscript src=" + gaJsHost + "google-analytics.com/ga.js"
type='text/javascript'%3E%3C/script%3E"));
</script>
<script tupe="text/javascript">
Var pageTracker = _gat.getTracker("UA-xxxx-x");
pageTracker._trackPageview();
</script>
```

Note: Be sure to use your own number under gat.getTracker()

With the GATC on your error pages they will now be tracked as page views. Since these error pages will be considered page views you will want to create a filter that will allow you to view them in isolation from each other.



One important aspect to setting up your error report properly is the naming convention that you use for your error pages' in the HTML "title" tag. All of the title tags need to be created in a consistent manner so that a single filter will be able to identify them. An example title tag would be: Error 404 Page.

For other errors you would just replace the '404' with the appropriate error number. An example of a custom filter that will track the above format would be:

```
Filter Type: Advanced
Field A -> Extract A | Page Title | (Error [0-9][0-9][0-9].+)
Field B -> Extract B | Request URI | (.*)
Output To -> Constructor | Request URI | $A1$B1
Field A Required: Yes
Field B Required: Yes
Override Output Field: Yes
Case Sensitive: No
```

An alternative version of the Field A regular expression is: (Error [0-9]{3}.+) Once you have the GATC on your error pages and set up your filter to help differentiate the different type of error pages from each other it is time to figure out where your error pages are and which links (broken links) sent your visitors to these non-existent pages.

Creating the Report in Top Content

To create your error pages report you will go to the top content report and then filter by the term "error" (assuming you had this word in your error page title tags as we did above). This will bring up all of your error pages and let you see the associated Content Performance metrics associated with them (pageviews, unique pageviews, bounce rate...)

Now that you have identified the error pages we need to track down the broken links that created the error. To do this you will click on an error page in the report to view the content details of that page. From the content details page you will then click on the "Navigation Summary" link on the right side. Once on the Navigation Summary page you will be able to see the page your visitor was on prior to visiting your error page. A quick visit to these pages and you should be able to figure out where your broken links are. Sometimes the pages with the broken links will not be within your site and you will need to contact someone else and ask them to correct the link, or set up a 301 redirect on your site to redirect the inbound visitor to the correct URL.

This is a great report for your webmaster or IT team to review regularly so that you can fix broken links as quickly as possible and reduce the number of error pages that your visitors will see.



Slow web page loading times? Track them with GA

Slow loading web pages frustrate users and provide a poor user experience. There are a bunch of different tools to help you measure the size of your web pages in kb but what you really want to know is on average how long it takes you user to load each of your pages (measured in milliseconds). Beyond that you want to know how the visitor's connection speed is influencing page load times.

To get Google Analytics to track page load times you will need to set up 'Event Tracking'. Currently, to enable this feature you need to submit a request to Google from the [event tracking documentation page](#).

We've included the newest scripts here:

[timeTracker.js](#)

[pageLoadTracker.js](#)



The following code is based on the TimeTracker object written by Google. The original source code can be found [here](#). We've updated the original source code to use the most current API calls (the original uses deprecated functions).

There are two objects used: TimeTracker which is the generic time tracking class (it can be used to time anything) and is also responsible for sending out the event tracking request to Google; and PageLoadTracker which is a wrapper for the TimeTracker class, and is specifically used to track page load times.

There are two snippets of code that need to be added to the page. The initialization code which should go as close to the opening tag as possible, and the window load event listener code which should go as close to the closing tag as possible.

Initialization Code

```
<head> <script type="text/javascript"> var startTime = (new Date()).getTime(); </script>  
<script src="/external/js/timeTracker.js" type="text/javascript" language="javascript"  
charset="utf-8"></script> <script src="/external/js/pageLoadTracker.js"  
type="text/javascript" language="javascript" charset="utf-8"></script> <script  
type="text/javascript"> var pageLoadTracker = new PageLoadTracker('pageTracker',  
'index.cfm', startTime); </script> ... </head>
```

The PageLoadTracker constructor takes one required argument, and two optional arguments.

The first argument is the variable name of the Google Analytics page tracker object.

The second argument is the name of the index page. If you pass in 'index.html' as the second argument, visiting 'www.example.com' and 'www.example.com/index.html' will both show up as 'index.html' in the GA reports. This also works for subdirectories. So visiting 'www.example.com/dir/' and 'www.example.com/dir/index.html' will both show up as '/dir/index.html' in the GA reports.

The third argument is used to specify a start time. Without the third argument, timing is started when the PageLoadTracker object is created. If you want to track the load time including the time required to load the TimeTracker and PageLoadTracker Javascript files as well, you need to record the timestamp before including the scripts, and pass that timestamp in as the third argument to the constructor.

Event Listener Code

```
<body> ... <script type="text/javascript"> addListener(window, 'load', function ()  
{pageLoadTracker.track();}); </script> </body> </html>
```



This code adds an event listener that fires after the page and external files (images, javascript, css, etc) have been downloaded and displayed by the browser. Once the event is fired, the pageLoadTracker sends the event tracking request to the Google servers.

CAUTION! Because you are using events in this way you will corrupt your bounce rate metric. Because the TimeTracker event is being fired on every page Google Analytics thinks that the user has taken an action on every page and therefore hasn't bounced (you will still have some people bouncing as they actually are real bounces who bounced prior to the entire page loading, but this number will likely be much smaller than your actual bounce rate). The way around this is to populate 2 separate Google Analytics accounts by double page tagging. This way you will have one account in which the TimeTracking event is fired and one in which the time tracking event isn't. The account that is collecting the TimeTracking information will not have an accurate bounce rate while the other account will maintain an accurate bounce rate metric.

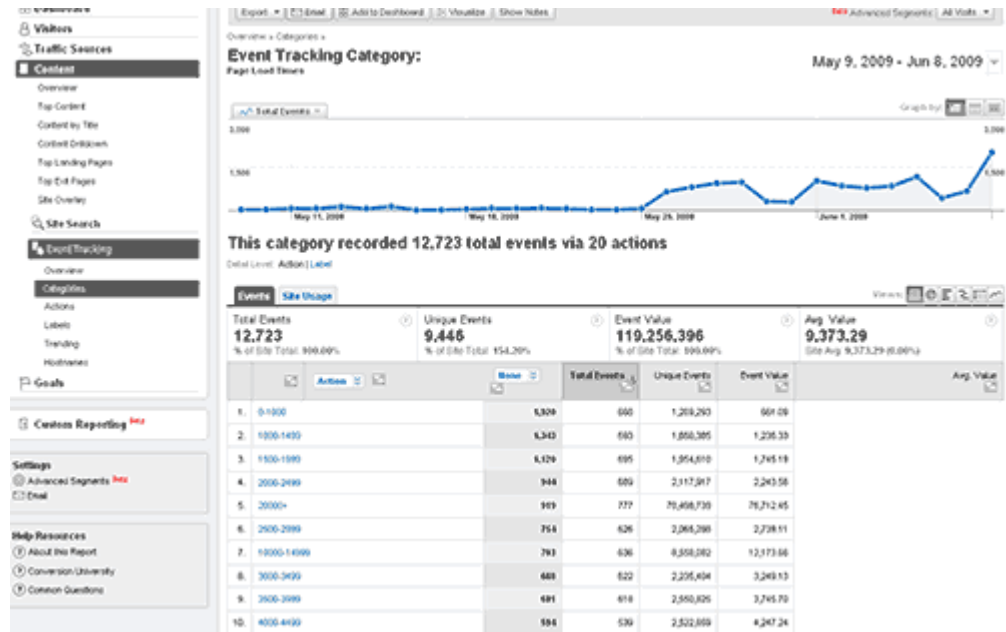
Another consideration when setting up the TimeTracking is how you will breakdown or categorize the different time intervals. In most cases we feel that the following millisecond break down is appropriate

0-999	5500-5999
1000-1499	6000-6499
1500-1999	6500-6999
2000-2499	7000-7499
2500-2999	7500-7999
3000-3499	8000-8999
3500-3999	9000-9999
4000-4499	10,000-14999
4500-4999	15000-19999
5000-5499	20000+

Something else you will likely want to do is create a few advanced segments based on visitor connection speed (cable, DSL, T1, Dialup, ISDN, Unknown). I usually create one segment titled broadband and include Cable, DSL, T1 and a second which is Dialup and a third which is ISDN. By creating these advanced segments you will be better able to understand if slow loading times are as a result of the visitors connection speed, or if they are a result of heavy pages, server issues...



As requested in the comments here is the page load time tracking within the Event Tracking reporting:





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