

Google Analytics for CA BOE

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Workshop materials at
www.agitraining.com/boe



Key learning Objectives for Google Analytics training

In this workshop you will:

- Understand how Google Analytics (G.A.) works.
- Discover what G.A. can tell you.
- Learn how to gather information from G.A.
- Get questions about Google Analytics answered.

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Things you will learn in our session:

- An overview of web analytics and Google Analytics
- Understanding the reporting interface
- Identifying valuable reports that answer your questions
- Interpreting data to create actionable information
- Go beyond counting visitors: how data relates to your site
- Filtering, sorting, and segmenting data
- Answers to your questions

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Session questions:

- How to use info from analytics to help optimize site and page design, effective links, etc.
- Information about the individual viewing the pages [Audience]
- What external source they used to get to the page [Acquisition]
- Page views on each page [Behavior]
- Anything that helps with usability / accessibility [Behavior + Browser]
- Using GA to find broken parts of the site [Behavior + WMT]
- Flow from page to page [Visitor Flow or Custom Click Path]

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Session questions (continued):

- Anything that aids making the numbers as accurate as possible
 - *Filters at the View level; Filtering reports; Segments*
- Is there a way to tell if people have likely found the information they wanted to find or did they give up? [Track search queries]
- Goals : Tracking to make sure that forms successfully go to the thank you / confirmation page [Goals and Conversion Tracking]
- Where on the page they clicked [Events]
 - Best methods to track events (like the use of specific buttons)
- What leads to users going to a social media page [Events]
- The page analytics plugin
- Analytics 360 vs. GA
- Optimizing how listings appear in Google search results

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About Web Analytics



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About Web Analytics

Web analytics is more than collecting data. It involves *analyzing* data, creating *information*, and generating *insight*. It may include information about:

- Who is visiting pages
- How they arrived (traffic sources)
- Pages being visited (content)
- How long visitors are spending on pages
- What pages or links led visitors to convert into prospects or buyers

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How web analytics can be used

- Determine what works or doesn't work on a site
- Monitor the effectiveness of advertising and marketing campaigns to determine:
 - Which campaigns and mediums generate the most actions
 - What is the lowest cost per action
 - What campaigns have the most conversions
- Analyze trends: trends tend to be more important than individual snapshots of data

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How you should use web analytics

- Measure, collect and analyze data for the purpose of optimizing and understanding an online presence.
- The data isn't the end-goal; use the data to:
 - create information
 - make better decisions
- The data itself can provide information overload

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Types of Analytics

- **Off-site analytics:** Internet-wide, describing patterns across the entire Web, or a series of related websites. For example, all news websites, or all online shopping sites
- **On-site analytics:** Provides data about a specific site. Google Analytics is on-site analytics.

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How on-site analytics works

- Javascript code is inserted into website or app being monitored
- Javascript sends data to analytics provider
 - Google, Adobe (Omniture), Webtrends, IBM (Coremetrics)
- Provider collects, processes, organizes, then displays data from site visitors when you log-in

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Google Analytics: about the code

- Copy and place .js code on the site you wish to monitor
 - Only use the code on a single site
 - Each site should have its own unique tracking ID
 - Set-up multiple sites with unique code per site
- Code is placed between opening and closing <body> tags
- Types of .js you may see
 - **ga.js** is the legacy code
 - **analytics.js** is the new code
 - Can use either
 - analytics.js has ambitious, cross-device goals
 - **gtm.js** is code from Google Tag manager

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Google Analytics setup

- Must have google account
 - Suggest not using gmail.com, @yahoo.com account users or admins
 - Don't want users to maintain access if they leave
 - Google accounts can be via @companyname.com domain
- Each account may have access to different web properties
 - Multiple web sites (properties) can be managed via a single account
 - 50 web properties available per account
 - Each property can have 50 different reporting views

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Google Analytics demo account

- Log-in to your Google account
 - Can be gmail or business email attached to Google account
- <https://analytics.google.com/analytics/web/demoAccount>
then click **→ACCESS DEMO ACCOUNT←**
- If you already have a Google Analytics account, the demo site data is added to the sites you already monitor.
- If you have a Google account but not an Analytics account, one is created and the demo account is added to it.

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Google Analytics Account Hierarchy

- Accounts
- Properties
- Views

Also:

- Reports
- Users

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Account

- How you log-in to Google Analytics.
- An account may be attached to multiple web properties.
- Account may also be attached to different Google services, such as Webmaster tools

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Property

- Each specific website is a property
- A single Google Analytics account can monitor multiple properties

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View (reporting view; profile)

- Defined perspective of visitor data from a property
- Views **may be filtered** or unfiltered
- Views are not retroactive;
 - Display data going forward from the time they are created
- It is possible to filter all website data
- Best practices:
 - Create multiple views to focus on traffic you want to measure
 - Create an unfiltered view before creating any filtered views

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Views: create an unfiltered view

- As a best practice, create multiple views
- One view should be unfiltered
- Once your data is filtered, it can't be recovered unless an unfiltered view also exists

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Users

- Individuals who have permission to view data

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Reports

- Information gathered for or by specific users about a view of a property
- Reports contain metrics and dimensions

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Metrics

- Metrics are measurements that Google Analytics displays
- Displayed in blue when selecting those to display
- Metrics are displayed in columns

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Examples of Metrics

- Bounce rate
- Visits
- Time on site
- Conversions
- Time on Page
- Clicks
- Impressions
- Unique Page views

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Metrics can be viewed within

- Scorecards
- Columns on tables
- Graphs

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Ways you can review Metrics

- Click a scorecard to graph its data
- Compare metrics
- View related metrics, grouped within a tab

400. *Thymus* *sp.*

[illegible]

Dimensions

- Dimensions are attributes describing data.
- Dimensions are always text
- Displayed in rows
- Displayed in green when selecting those to display

200. (continued)

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Examples of Dimensions

- Browser
- Country
- Keyword
- City
- Campaign
- Landing page
- Language
- screen

Lichtenberg et al.

Dimensions: Primary & Secondary

- Most reports support primary & secondary dimensions
- Examples of Primary Dimensions:
 - Query: What user typed into Google
 - Source: Who sent the traffic
 - Medium: How (email, organic, paid, referral)
- Secondary Dimensions
 - Adds another way to organize data
 - Layered on-top of primary dimension
 - Examples:
 - medium (cpc, referral, etc.)
 - Country
 - View and remove secondary dimensions near the top of the left-most column

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Understanding the User Interface

- Across top is administrative menu
 - Select different site to view; add new users; configuration options
- Within reporting interface:
 - along the side is for selecting reports
 - eg: look at data; manipulate data

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Standard Reporting – key concepts

- Use standard reporting to understand site traffic, including:
- Audience: Who is visiting
- Acquisition: How visitors found the site
- Behavior: What visitors did on the site
- Conversions: Are goals for a site being achieved?

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Understanding the Audience Overview

- Displays information about:
 - Number of visitors
 - Number of unique visitors
 - Page views
 - Pages per visit
 - Bounce rate
 - Average visit duration

GA/10/10/2017 10:01

The Reporting UI

- Within reports you can :
 - Change what is displayed via different scorecards
 - Change date range displayed
 - Compare different:
 - date ranges
 - metrics
- Add notes (annotations):
 - Annotations can be public or private

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The Reporting UI (continued)

- View new vs. returning visitor information
- Drill-down on demographic information
 - Country > State > City
- Obtain detailed computer system information
 - Operating System
 - Browser
 - ISP

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Exporting Reports

- Reports can be exported and saved
- Reports can be emailed on a schedule
- Multiple format options exist
 - Use CSV, XLS, or Google Sheets for additional manipulation

GA/Reporting Tools

Date ranges and reporting

- Can customize time period
- Can compare range
 - By default to the previous day/week/
 - Can chose comparison to any other time period that you customize
- Traffic graph along bottom shows dates
- When comparing two periods: always try to compare same day of week to same day of week

GA/Reporting Tools

Default Display

- Default Metric is visits
- You'll can change the metric displayed
- You can select second a second metric
- Displays information for the view (profile) you are viewing; not all sites

GA/Reporting Tools

Real-Time Reporting

- Provides only a brief snippet in time
- Provides distorted perspective
- Like viewing the night sky with a telescope
the size of a drinking straw

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What were the percent of new visits for
the past three months for the site you
are measuring?
What is the bounce rate for this period?



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Audience Reporting:

Who came to the site



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Demographics & Interests

- Age, gender, interests, purchasing intent available
- Must be enabled
- Information taken from:
 - Social networking sites
 - Google properties
 - Sites where users have entered
 - Cookies
- Generally displays for two-thirds of audience on a site

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Geography

- Language
 - Language used identifies based upon browser language not user
 - Browser doesn't tell you too much:
user might be working with an English browser but native language may be Spanish
- Location
 - Can view by Country, State (region), and city
 - Can isolate or remove visitors by country, region or city
 - **Filtering unrelated traffic can be beneficial.**
 - Filtering options
 - Reports
 - Segments
 - Views

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Behavior

- New vs. Returning
- Frequency & Recency
- Engagement

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Technology

- Browser
- OS
- Network
 - Where are users coming from
 - Bulk coming from ISPs
 - Can search for college, university, corporation
- Plotting rows for visual representation
 - Clicking checkbox, then click "plot rows"

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Mobile

- Mobile devices used

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Visitor Flow

- How visitors locate then travel through your site
- From entry to exit
- Duration
- Network report
- Devices
 - Can get a better understanding UX concerns by looking at bounce rate and visit duration for specific device types

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When Time on Site isn't...

- Time on site calculated as entry time until the next click
- If visitor visits two pages on the site, but never clicks a link on the second page
 - The only page visited that counts is the first page
 - The time on the final page is not counted
- Visitors only hitting a single page will show as zero seconds, regardless of time spent on that page

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Splitting Content to More Accurately Collect Time on Site Data

- Split content amongst pages
- Split content for tracking time on site
- More pages with related content can also help SEO

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- What percent of traffic is from countries where you don't sell or deliver services?
- What percent of traffic is from mobile devices over the past three months?


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Acquisition: How the site was found



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Acquisition Overview & Channels

- High-level groupings of how traffic arrived on your site
- Search: Organic, Paid
- Direct: The page directly typed-in or bookmarked
- Referral: Link from another site
- Social: Facebook, Twitter, etc.
- Display advertising
- PPC advertising
- Email

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All traffic

- Direct traffic
 - Keying URL directly into the web address
 - An email from a colleague or untagged link
 - Outbound email marketing should be tagged so you know the source
 - Visitors using a bookmark to return to your site
- All referrals: Sites that link to yours

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Campaigns

- Tagged links that point to a site
- Tags are added to links outside the site being targeted
- G.A. sees tags and reports them
- *Google and most advertisers automatically add tracking codes to campaigns placed on their network*

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Most Popular Campaign Dimensions

- source: where did they come from
 - Website or social media site
 - none
- medium: what's the marketing channel
 - Organic or Paid search
 - Manual tags: email, social, tv, newspaper, magazine, radio
- campaign
 - What was this tied to (what do we want people to do, what is the campaign all about? What is the initiative? Similar to Mad Men style campaigns)
 - Awareness
 - New sales
 - Remarketing
 - Use campaigns liberally: there's no limit to the number of campaigns used

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Other Campaign Dimensions

- keyword: keywords searched for when using search engine
 - When SSL search is used, value is *(not provided)*
 - To determine "not provided" look at landing page as a secondary dimension to see what users were expecting when searching
- content: Identifies specific links in a custom campaign
 - Use if you have multiple call to action links in an email, you can use *content* to determine which of the calls to action is most effective
 - Can be call-to-action, or a more specific drill-down
 - time email was sent
 - different subject line in an email, etc.
 - specific ad size
 - specific ad creative

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Examples of campaigns

Source	Medium	Campaign
Google	CPC (paid)	Remarketing in NY
Twitter	social	free monthly trial

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Ways to use Campaigns

- Tag source, medium, and campaign to determine what marketing efforts are most successful
- For example, a nonprofit could use:
 - campaign = donations
 - medium = social
 - source = (each specific source used in the campaign).

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Campaign Example

- Determining success of an email campaign: Test email subject lines to measure effectiveness
 - Source: weekly email blast; or name of list (where names were acquired)
 - Medium: Email
 - Campaign Name: Date of email campaign
 - Content:
 - add subject line A for first email subject used
 - add subject line B for second email subject used

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Campaigns and Organic Search

- Source and Medium are defined for organic search
- campaigns are not set for organic campaign
- Example
 - source = bing
 - medium=organic
 - campaign=not set
 - keywords=american graphics institute
- Possible source and medium combinations
 - Google/Organic
 - Bing / Organic

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Create a list or table tracking the following for an email campaign your client plans to send

- Source
- Medium
- Campaign
- keyword
- content



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Applying custom tags

- Apply tags at the end of the url string
- Place a question mark (?) then follow with tag
- Placing an ampersand (&) between each tag used
- Tags to use are
 - utm_source=
 - utm_medium=
 - utm_campaign=
 - utm_term=
 - utm_content=
- Register for our spring conference: http://www.porio.org/spring-conference?utm_campaign=spring-conference&utm_medium=social&utm_source=facebook

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Additional considerations for custom campaign tags

- Without utm parameters, campaigns appear as "not set" in Google Analytics
- Don't add tags for Google ads as Google applies tags within its network
- Campaigns report show up in the Campaigns section of the Sources
 - Can use a secondary dimension of Medium to determine where campaign was generated from, or you can do this for source

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Additional considerations for custom campaign tags (continued)

- Don't tag internal links
 - Internal tags will override how users arrived on the site
 - Events can be set-up to tag internal links (covered in 301)
- Tagging offline ads: magazines; billboards
- Use redirects on the site, and the redirect inserts the parameters

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Acquisition Reports

- Keywords
- Cost Analysis
- Adwords
 - Matched Search Queries are key when looking at paid search terms
 - Can see what is being used for search terms
 - **Matched Search Query is what users actually searched for vs. Keyword, which is what was bid on**

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Acquisition Reports (continued)

- Social
 - Certain sites share data with Google Analytics to report activity
- SEO
 - Queries: What users typed into Google
 - Landing Pages: Where users were sent

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Report View types

- Data, percentage, performance
- Table view: big picture overview
- Pie charts (not always useful with more than a few dimensions)
- Performance
 - Can sort any column by clicking on it when in a performance view
 - Spend time covering various ways to sort in the performance view

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Behavior: What visitors did on site


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Additional behavior reports

- Site Search
- Events
- AdSense
- Experiments

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In-page analytics

- Use Chrome Plug-in instead: *Page Analytics from Google*
- Offers Heat Map & Percent of clicks overlay on site


GA/PROPERTY/100

"Not Provided"

- In organic search results, "Not provided" is any query Google knows but is declining to provide.
- Much of this data was previously available

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Data Sampling

- Google Analytics doesn't always display full data
- Data is sampled when:
 - More than 500K visitors
 - More than 50K of rows of data
- Data sampling icon displayed near date range, in upper right corner
- If sampling occurs, there are ways to get more accurate data:
 - Increase precision of sample set
 - Reduce date range to minimize sampling
 - Sampling tends to happen more on custom segments when G.A. needs to calculate data

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Understanding Goals and Conversions

- Google Analytics is at its most powerful when you have goals
 - Goals are essential because they provide the lens through which you see performance
- When you reached a goal you've achieved a *conversion*.
- Clearly defined goals are essential for the optimal use of G.A.
- Not just specific revenue goals – but also
 - What is the purpose of your organizations' digital footprint?
 - What are the goals of the website?

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Two types of goals

- Macro Conversions:
 - Measurable with a dollar impact
 - Ecommerce sales;
 - Lead Generation
- Micro Conversions:
 - Steps along customer journey
 - Downloading a brochure or whitepaper
 - Generally show that the site delivering customer value
 - Show interest in your site or service
 - Examples
 - Playing a video; playing it to the end
 - Downloading a PDF

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Goals and the conversion funnel

- The conversion process, or funnel is the lifecycle for a customer
 - From prospect to customer to repeat customer
 - **Attract > Engage > Convert > Retain > Advocate**
 - The value of conversions tends to increase as you move from attraction to advocate.
- Where does each goal fit in the funnel process
 - Segment goals into top or bottom
 - Think about micro goals and macro goals

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Conversions track interaction with site

- Activity
- Interaction
- Time spent on site

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Examples of goals

- Reaching a destination URL
- Spending a specific amount of time on the site
- Visiting a certain number of pages
- Events: watching a video; downloading a white paper

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Goals can require a funnel

- Optional
- Allows you to define a specific conversion path
- Allows you to define different conversion goals that might have the same result
 - eg: Facebook ads that lead to a sale vs. Adwords spending with same result

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More about goals

- Goals are set at the view (profile) level
 - Defined as part of the administrative area
- You can have up to 20 available goals
- Once goals are set, they can't be removed

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Advanced Goal Options

- Matching URL goals
 - Exact match: regular URL
 - Head match: Eliminates trailing characters
 - RegEx match: Allows you to specify a pattern to match

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Other conversion options

- Ecommerce: Requires separate, custom configuration
- Multi-Channel Funnels
- Attribution

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Filters & Segments



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Filters: General Information

- Filters are applied on the view (profile) level
 - predefined filters
 - custom filters
- *Data cannot be reprocessed as raw after it has been filtered.*
 - **Always keep at least one unfiltered profile.**

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Predefined filters

- Exclude from domains: excludes traffic from specified domain names
- Exclude traffic from an IP address:
- Include traffic to subdirectories:
 - Use this to allow a profile to view traffic to only one part of a website (eg: blogs)

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Custom filters

- Include / exclude: use this to exclude certain visitors, such as those from an IP range
- Search / replace: Use this to replace codes with plain language. For example, id=100 could be "shoes"
- Uppercase / lowercase: Use to standardize URLs because Google Analytics sees uppercase and lowercase URLs differently, even if they display the same data.
- Advanced: Can combine data from multiple fields.
- Exclude referrers: Use to exclude traffic sent from a domain that you do not want to track. Available for domain or IP address.

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Custom filter example

- Using a filter to show only adwords traffic

	Type	Field	Pattern
Filter 1 Custom include	Campaign source	google	
Filter 2	Custom include	Campaign medium	cpc

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Understanding Segments

- Segments allow filtering of data
- You can redefine segments
- You can apply them retroactively
- You can create and save custom segments
 - Custom segments can use regular expressions
 - Can share or edit custom advanced segments

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Examples of custom segments

- morning visitors
- time on site
- branded keywords
- non-branded keyword (use "exclude" to remove the keywords)

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Advanced topics



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Intelligence Events

- Automatic Alerts
- Custom Alerts

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Examples of custom alerts

- bounce rate changes
- traffic decreases / increases

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Internal Site Search

- Discover what users are searching for on your site
- Requires search query parameters in the URL
 - eg: ?q=search-terms
- Use to compare goal completions for visitors who use search vs. visitors that don't
- Use to determine what content users are having difficulty locating
- Site search shows start page, destination page, search terms used

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Not everything is tracked (by default)

Some of what is missing:

- Video plays
- PDF downloads and clicks
- Ecommerce
- Some site searches

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Virtual Pageviews

- You can use virtual pageviews to track items that Google Analytics might otherwise ignore:
- PDF downloads
- Click of video link

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About Virtual Pageviews

- You can provide the filename to identify the name of the pageview
- Virtual pageviews appear as regular pages within Google Analytics reports
- You could create a profile to display only virtual pageviews to separate them for reporting

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Implementing Virtual Pageviews

- The code you use: `onClick="_gaq.push(['_trackPageview','/fake-page-name-here']);"`
- An example for a PDF file:
`<a href="http://www.agitraining.com/sample.pdf" onClick="_gaq.push(['_trackPageview','/sample-pdf']);">`
- Note that code is placed inside the `<a>` tag within the HTML
- An example for a Flash file

```
On (release) {
  //tracking – no action
  getURL="_gaq.push(['_trackPageview','/media/flash-file.swf']);"
}
```

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Event tracking

- Events are used to track non-page clicks, similar to a Virtual Pageview, but more granular.
- When using events, keep the following in mind:
- Events do not create a page view
- You can organize events into categories
- Events appear in the Events panel (a separate section – so they don't surface as easily when looking at overview reports)

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Arguments you can use when tracking an event

- Category: "bucket" (eg: videos)
- Action: What occurs with the event (eg: play)
- Label: name (eg: admissions)
- Value: numerical (eg: time of video)

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Implementing Event tracking

- The code you use for events: `_gaq.push(['_trackEvent','name','label','value']);`
- An example event:
`_gaq.push(['_trackEvent','videos','admissions','2:30']);`

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Evaluating Events

- Total events: The total number of times an event occurs.
 - Example: If the play button is being tracked, and it is pressed five times, the value would be five.
- Unique events: The number of times an event occurs per visit
 - Example: If one user presses the same play button five times, it only would report as one.

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Custom Dashboards

- Create from templates or scratch
- Access shared templates

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Questions?

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