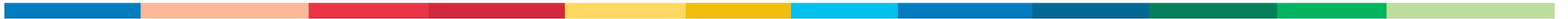


Google™



Google Analytics: End To End

Nick Mihailovski
May 20, 2010



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this session on Google Wave**

<http://bit.ly/c8zpAV>



Interpret

Extend

Integrate



Google Analytics Web Interface

Analytics: New Account Signup

General Information > Contact Information > Accept User Agreement > Add Tracking

Please enter the URL of the site you wish to track, and assign a name as it should appear in your Google Analytics reports. If you'd like to track more than one website, you can add more sites once your account has been set up. [Learn more.](#)

Website's URL: (e.g. www.mywebsite.com)

Account Name:

Time zone country or territory:

Time zone:

Google Analytics Web Interface

Instructions for adding tracking

Standard

Advanced

Custom

New! Try the asynchronous tracking code

1 What are you tracking?

A single domain (default)

Domain:

One domain with multiple subdomains

Multiple top-level domains

Your account is already receiving data from AdWords

2 Paste this code on your site

Copy the following code, then paste it onto every page you want to track immediately before the </body> tag. [Learn more](#)

```
<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' typ
</script>
<script type="text/javascript">
try {
var pageTracker = _gat._getTracker("UA-30481-1");
pageTracker._trackPageview();
} catch(err) {}</script>
```

► Optional: Email these instructions

Google Analytics Web Interface

Google Analytics

Settings | My Account | Help | Sign Out

Analytics Settings | View Reports: | My Analytics Accounts:

- Dashboard
- Intelligence Beta
- Visitors
- Traffic Sources
- Content
- Goals
- Ecommerce

Custom Reporting

- My Customizations
- Custom Reports
- Advanced Segments
- Intelligence Beta
- Email

- Help Resources
- About this Report
- Conversion University
- Common Questions

Export | Email | Advanced Segments:

Dashboard |



Site Usage

 370,995 Visits	 69.24% Bounce Rate
 988,344 Pageviews	 00:01:13 Avg. Time on Site
 2.66 Pages/Visit	 84.10% % New Visits

Visitors Overview

Map Overlay

Four Components

Management

All Starred Day Week Month Year

Website Profiles + Add new profile

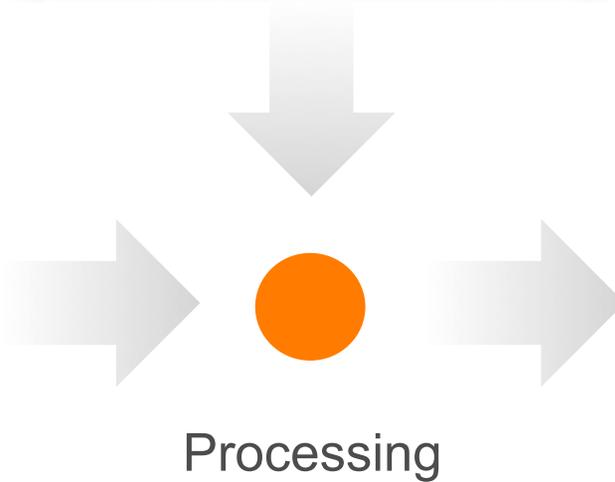
Name↑	Reports	Status	Visits	Avg. Time on Site	Bounce Rate	Completed Goals	Visits % Change	Actions
www.googlestore.com UA-30461-1 + Add new profile								
Content Test	View report	✓	7,278	00:00:59	60.17%	0	↑ 181,850.00%	Edit Delete
Cost Data Test - 2/20/2009	View report	✓	388,076	00:01:07	69.92%	0	↓ -5.94%	Edit Delete
Dal's Googlestore 1/3/2010	View report	✓	383,951	00:01:05	70.34%	0	↓ -5.91%	Edit Delete

Collection

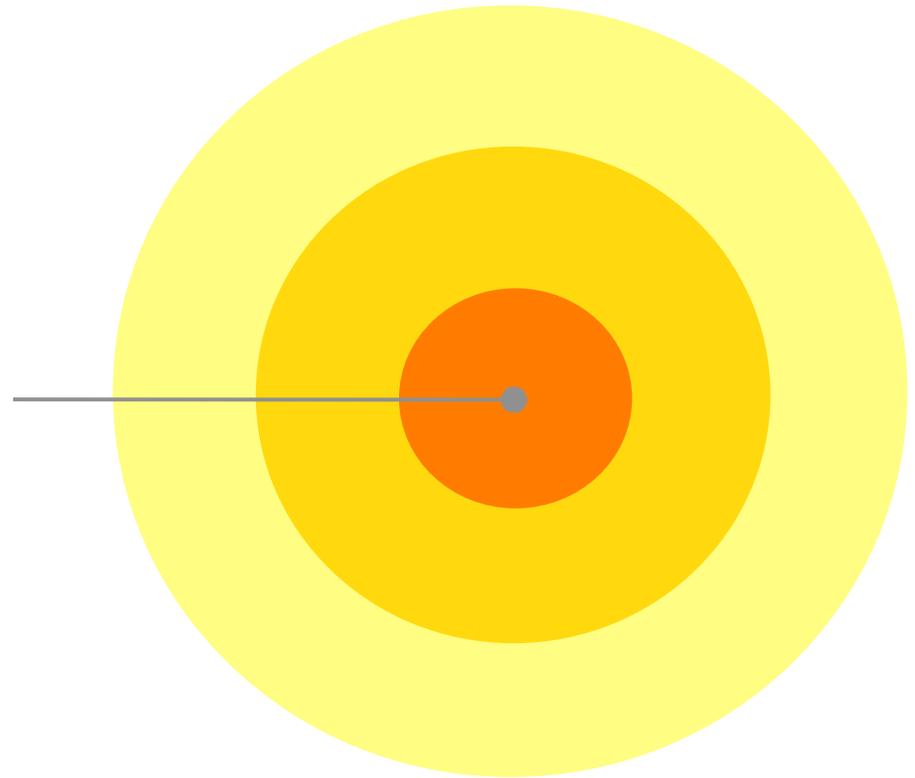
```
<script type="text/javascript">

var _gaq = _gaq || [];
_gaq.push(['_setAccount', 'UA-XXXX-X']);
_gaq.push(['_trackPageview']);

(function() {
  var ga = document.createElement('script'); ga.t
  ga.src = ('https:' == document.location.protocol
  var s = document.getElementsByTagName('script')
})();
</script>
```



1. Core Processing



Dimensions and Metrics

Dimensions

Metrics

	Page None ▾	Pageviews ↓	Unique Pageviews	Avg. Time on Page	Bounce Rate	% Exit	\$ Index
1.	/default.aspx	173,672	149,166	00:01:05	73.07%	72.34%	\$0.17
2.	/shop.axd/Search	109,595	97,492	00:01:04	75.76%	75.09%	\$0.02
3.	/shop.axd/Home	84,430	45,358	00:00:23	34.21%	16.16%	\$0.64
4.	/You+Tube/default.aspx	66,399	46,891	00:00:39	67.15%	58.02%	\$0.06
5.	/googlesearch.aspx?filter=[gscategory: youtube]	24,696	20,852	00:00:49	48.48%	43.70%	\$0.13
6.	/googlesearch.aspx?filter=[gscategory: +doodles]&	24,465	21,589	00:00:55	64.74%	63.37%	\$0.06
7.	/googlesearch.aspx?filter=[gscategory: apps]	21,630	16,999	00:00:29	46.92%	14.06%	\$0.65
8.	/googlesearch.aspx?filter=[gscategory: accessorie	21,536	16,360	00:00:31	53.68%	11.13%	\$0.99
9.	/googlesearch.aspx?filter=[gscategory: vogue/cfde	19,513	15,715	00:00:30	49.64%	12.23%	\$0.83
10.	/googlesearch.aspx?filter=[gscategory: wearables]	18,695	13,318	00:00:31	34.33%	8.93%	\$1.40

Filter Page: containing ▾ Go Advanced Filter Go to: 1 Show rows: 10 ▾ 1 - 10 of 19,183 ◀ ▶

Lots of Data – How Is It Calculated?

80 Dimensions

ga:pagePath

ga:keyword

ga:referralPath

ga:browser

ga:city

ga:continent

...

95 Metrics

ga:visits

ga:pageviews

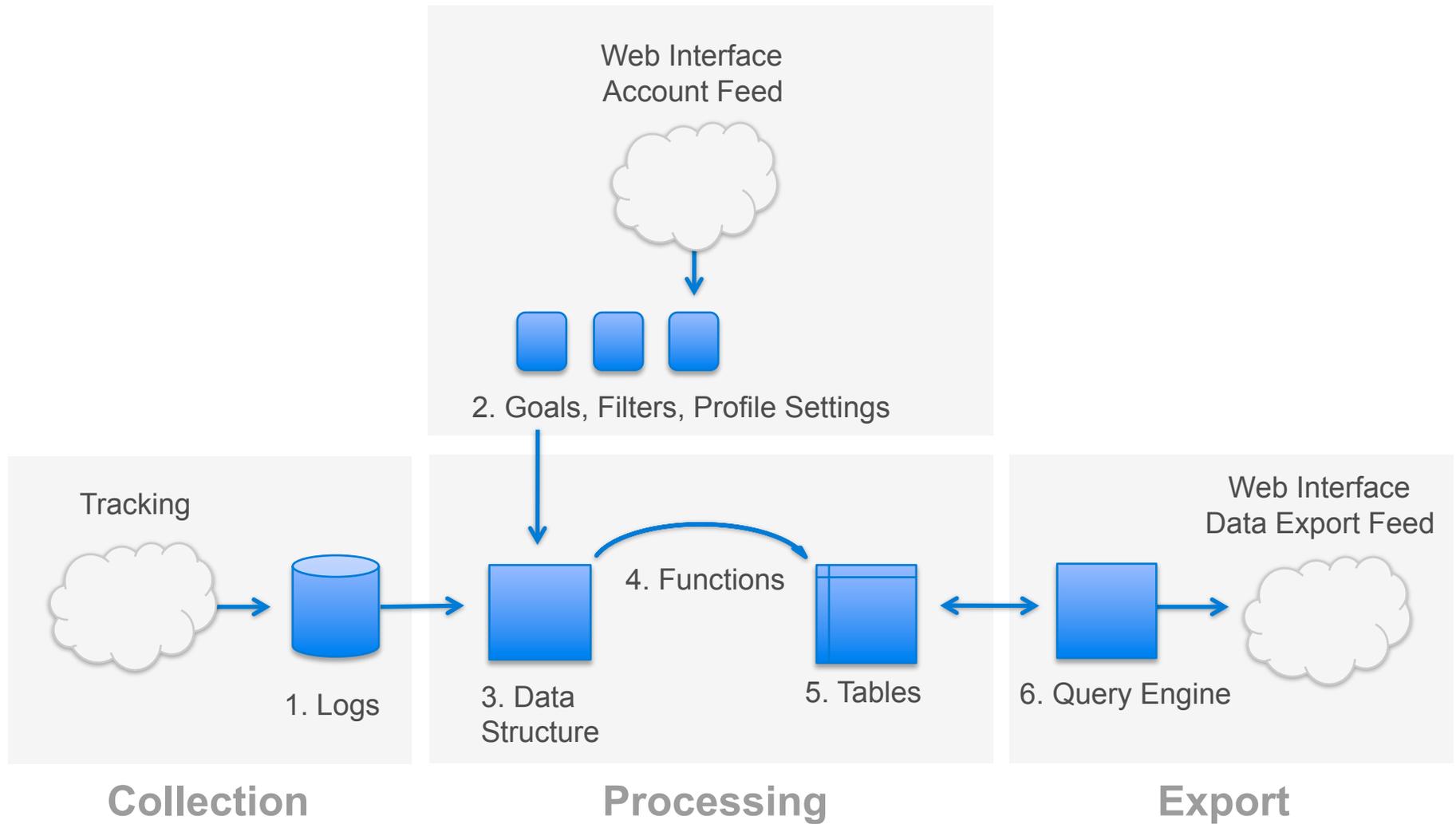
ga:uniquePageviews

ga:timeOnPage

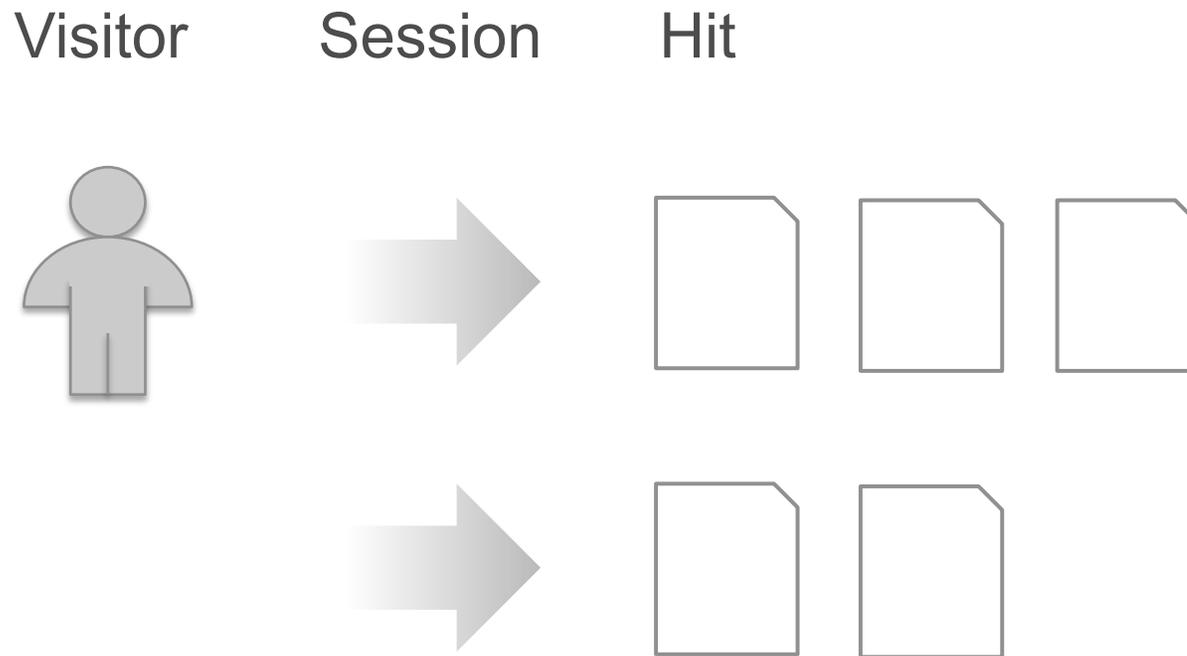
ga:timeOnSite

...

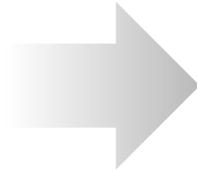
Management



Core Visitor Interaction Model



Data Collection From Client



`<ga.js>`



1x1 pixel image request

`__utm.gif?...`



Visitor Model Persists Across Requests

Visitor Session Hit

__utm.gif?utm=UA-1-5&vid=1020&cmp=google&type=page&path=/foo

__utm.gif?utm=UA-1-5&vid=1020&cmp=google&type=page&path=/bar

__utm.gif?utm=UA-1-5&vid=1020&cmp=google&type=trans&rev=100

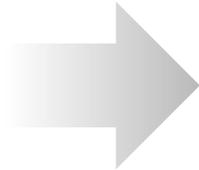
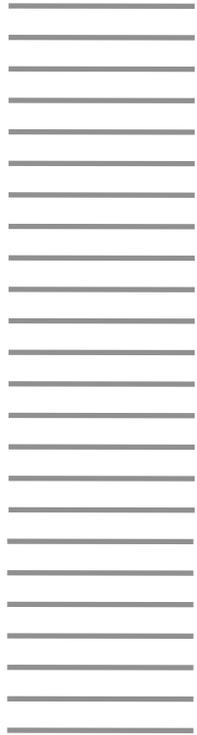
__utm.gif?utm=UA-1-5&vid=1020&cmp=google&type=path&path=/foo

__utm.gif?utm=UA-1-5&vid=1020&cmp=referral&type=page&path=/bar

__utm.gif?utm=UA-1-5&vid=1020&cmp=referral&type=page&path=/baz

Functions Process Sessions And Hits

Logs

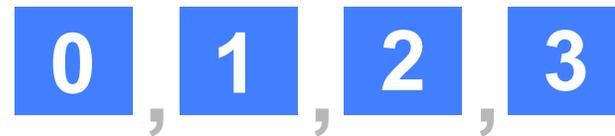


Session



:

Hits



```
String dimension(Session session, int index) {  
    ...  
}  
int metric(Session session, int index) {  
    ...  
}
```

Calculating Metrics – `ga:visits`

```
int visits(Session session, int index) {  
    if (index == 0) {  
        return 1;  
    }  
    return 0;  
}
```



Calculating Dimensions – `ga:pagePath`

```
String pagePath(Session session, int index) {  
    if (session.hit[index].type == "page") {  
        return session.hit[index].pagePath;  
    }  
    return "";  
}
```

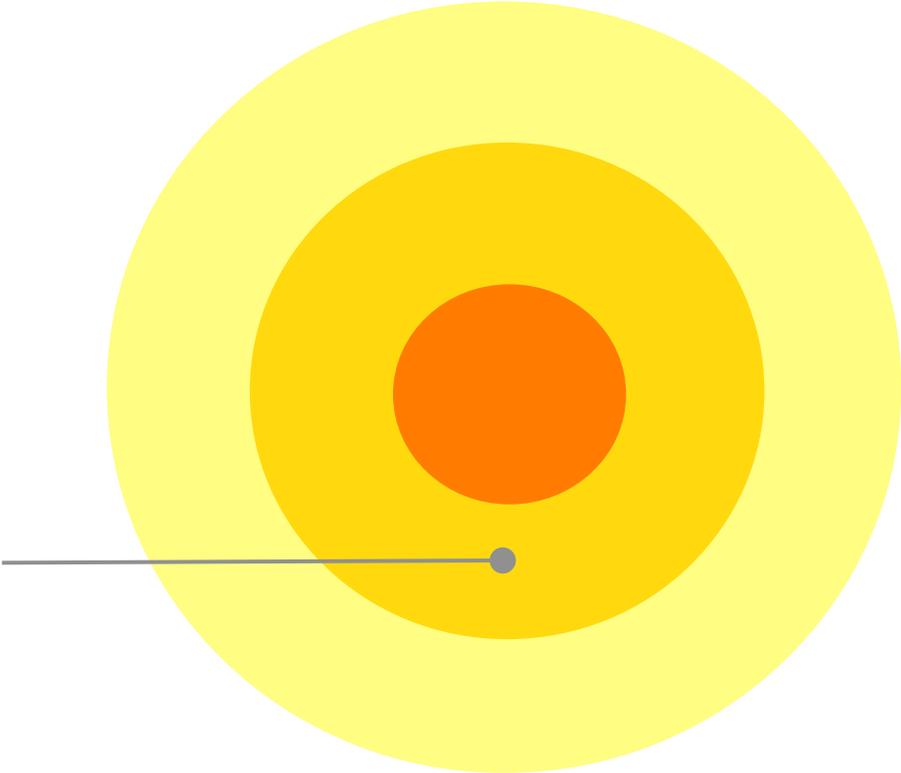


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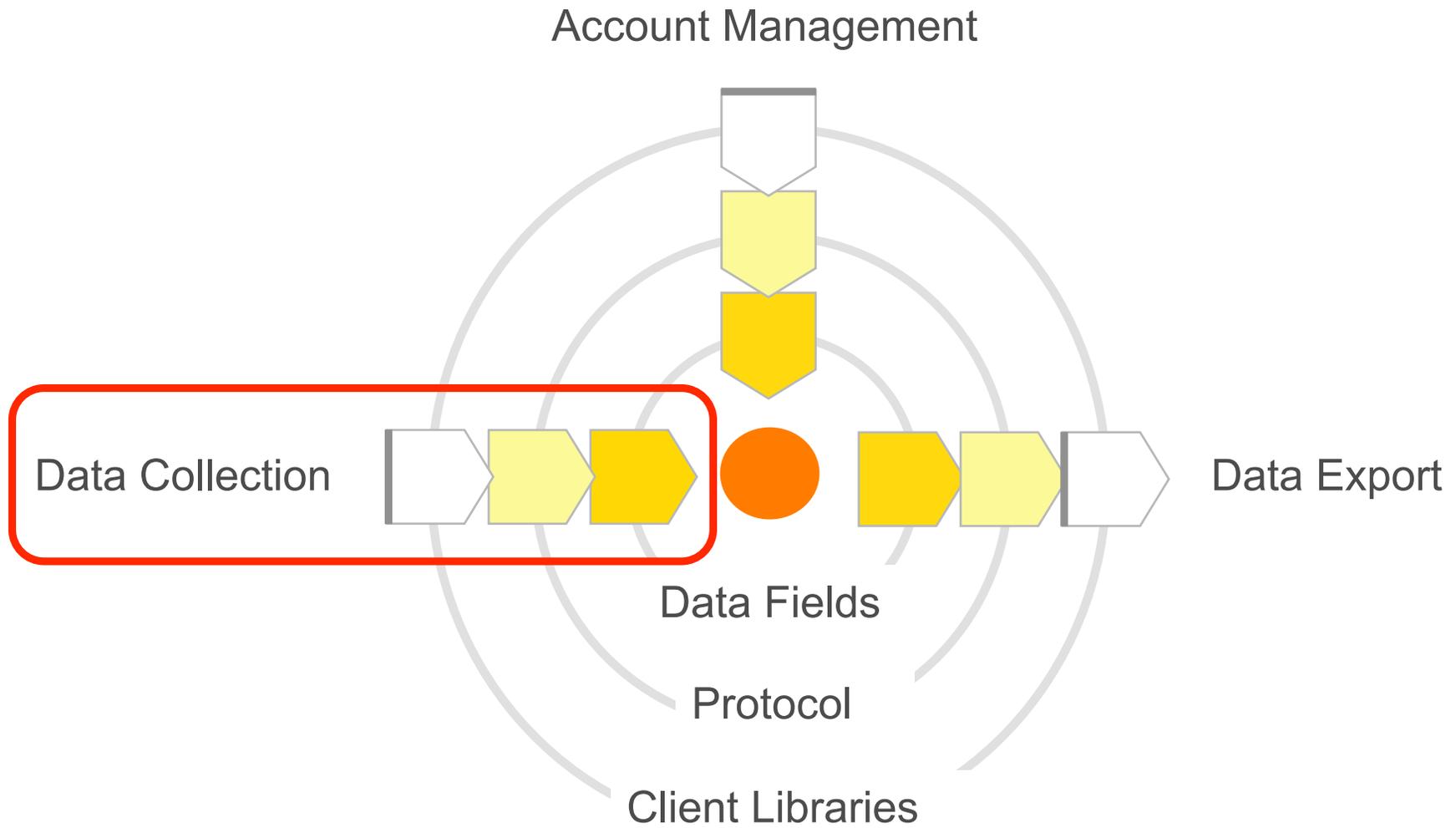
<http://bit.ly/c8zpAV>



2. Developer Platform



Developer Platform



Data Collection Overview

Data Types

Page Tracking

Event Tracking

Custom Variables

E-Commerce

IP-Geo/Network

System Parameters

Protocol

__utm.gif

Client Libraries

JavaScript (ga.js)

Android SDK

iPhone SDK

Mobile Websites

- PHP/JSP/ASP/Perl

ActionScript 3

- Flash/Flex/Air

Silverlight

Account Management Overview

Data Types

Accounts

Web Properties

Profiles

Goals

Advanced Segments

Protocol

Google Data

Client Libraries

Java

JavaScript

Python

.Net (C#)

Ruby

Perl

PHP

Data Export API Overview

Data Types

Dimensions

Metrics

Protocol

Google Data

Queries:

- Dimensions
- Metrics
- Date Range
- Advanced Segments
- Filters
- Sorting
- Max Rows

Client Libraries

Java

JavaScript

Python

.Net (C#)

Ruby

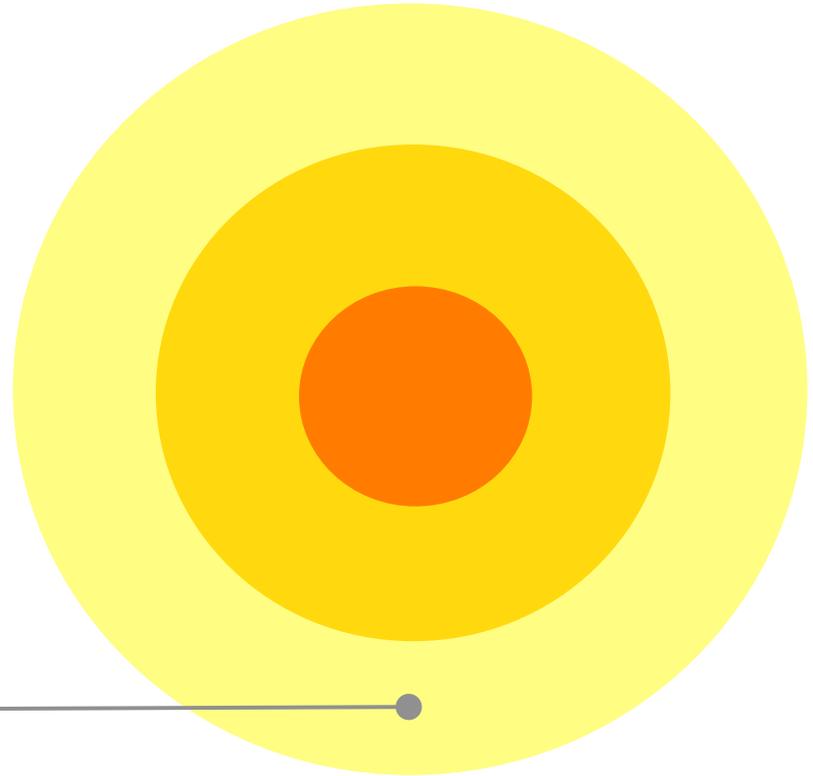
Perl

PHP

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this session on Google Wave**

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3. Example Integration



Using Visitor Behavior To Optimize User Experience

Ranking a List Of Links By Number Of Clicks



List of Unordered Links

Site Map

If you have other tips on how I can organize this better please send a email to blog at kaushik dot net.

The What: Web Analytics Point of View :

Traditional Web Analytics is Dead
The Awesome Power of Data Visualization
Stop Obsessing About Conversion Rate
Five "Ecosystem"? Challenges for Web Analytics **Vendors**
Five "Ecosystem"? Challenges for Web Analytics **Practitioners**
Web Analysis: In-house or Out-sourced or Something Else?

The Why: Customer Satisfaction / Usability / Qualitative :

Overview & Importance of Qualitative Metrics
Got Surveys? Recommendations from the Trenches
Lab Usability Testing: What, Why, How Much.

The How:

The 10 / 90 Rule for Magnificent Web Analytics Success
Top Ten: Signs You Are A Great Analyst
Thirty Days In Numbers (how to measure blog success)
Are You Into Internal Site Search Analysis? You Should Be
Tips for Web Analytics Success for Small Businesses

Order Links Using Data

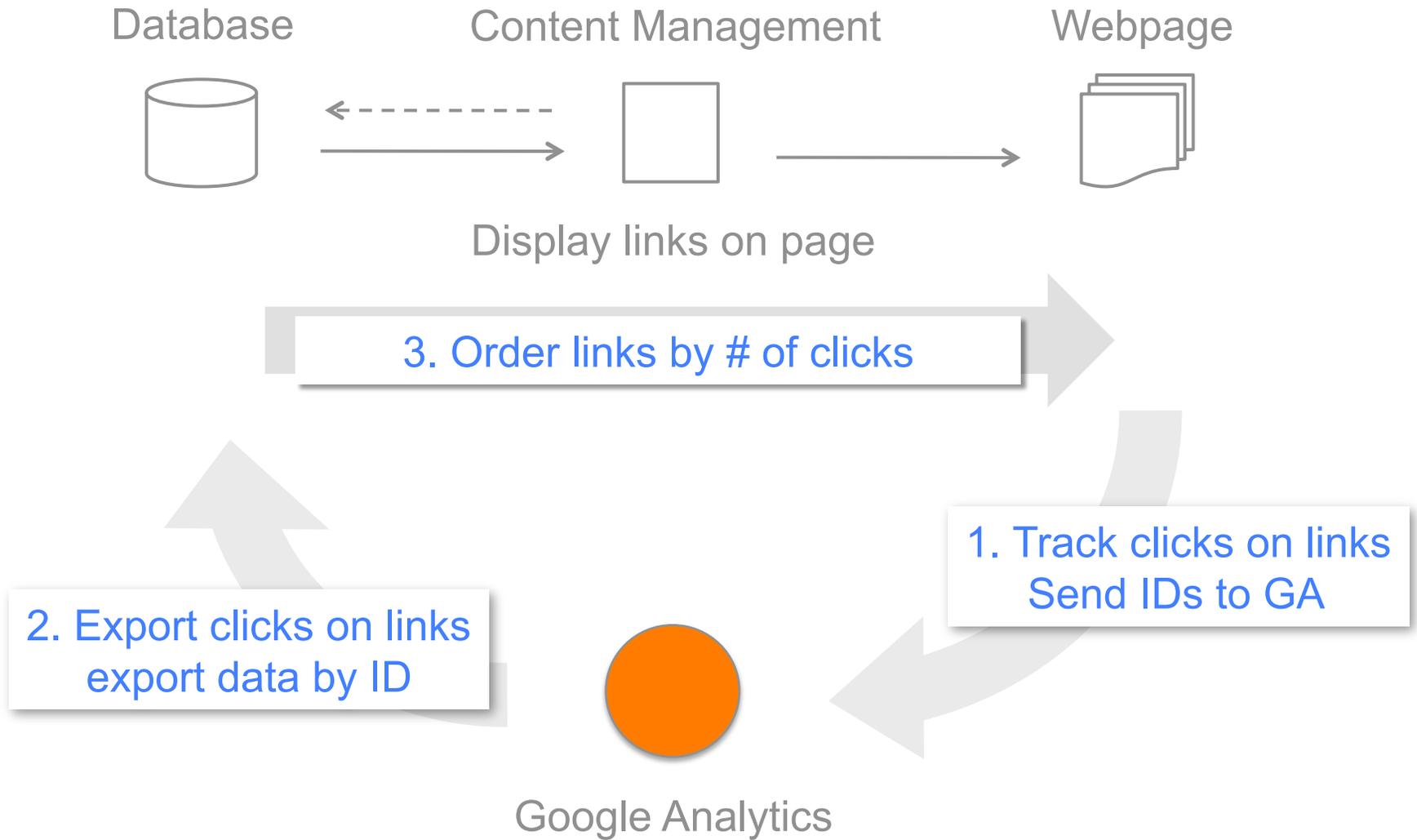
Site Map

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The Most Popular Links:

Traditional Web Analytics is Dead
Top Ten: Signs You Are A Great Analyst
Five "Ecosystem"? Challenges for Web Analytics **Practitioners**
The Awesome Power of Data Visualization
Tips for Web Analytics Success for Small Businesses
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Lab Usability Testing: What, Why, How Much.
Five "Ecosystem"? Challenges for Web Analytics **Vendors**
Are You Into Internal Site Search Analysis? You Should Be

Design Overview



Design Overview



CMS Displays Links On Page

Database

html_links
linkId
linkUrl
linkText

Content Management

SQL

```
SELECT A.linkId,  
       A.linkUrl,  
       A.linkText  
FROM html_links AS A
```

Website

HTML

```
<ul>  
  <li>  
    <a name="linkId"  
      href="linkUrl">  
      linkText</a>  
  </li>  
  ...  
</ul>
```

Analytics Links

[Traditional Web Analytics is Dead](#)

[Path Analysis: A Good Use of Time?](#)

[Data Quality Sucks, Let's Just Get Over It](#)

[The Awesome Power of Data Visualization](#)

[Stop Obsessing About Conversion Rate](#)

[Competitive Intelligence Analysis: Why, What & How to Choose](#)

[Five Ecosystem? Challenges for Web Analytics **Vendors**](#)

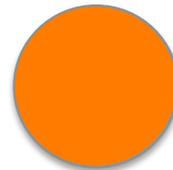
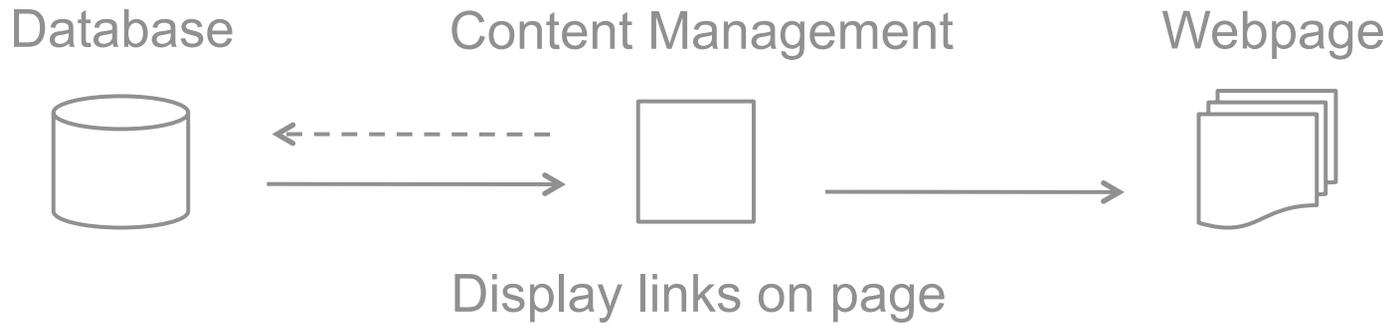
[Standard Metrics Revisited: #1: Visitors](#)

[All Web Analytics Applications Should Be Free! Not](#)

[Five Ecosystem? Challenges for Web Analytics **Practitioners**](#)

[Web Analysis: In-house or Out-sourced or Something Else?](#)

Design Overview



Google Analytics

1. Track clicks on links
Send IDs to GA

Track Clicks On Links With Google Analytics

HTML

```
<ul>
  <li>
    <a name="linkId"
      href="linkUrl">
      linkText</a>
  </li>
  ...
</ul>
```

JavaScript

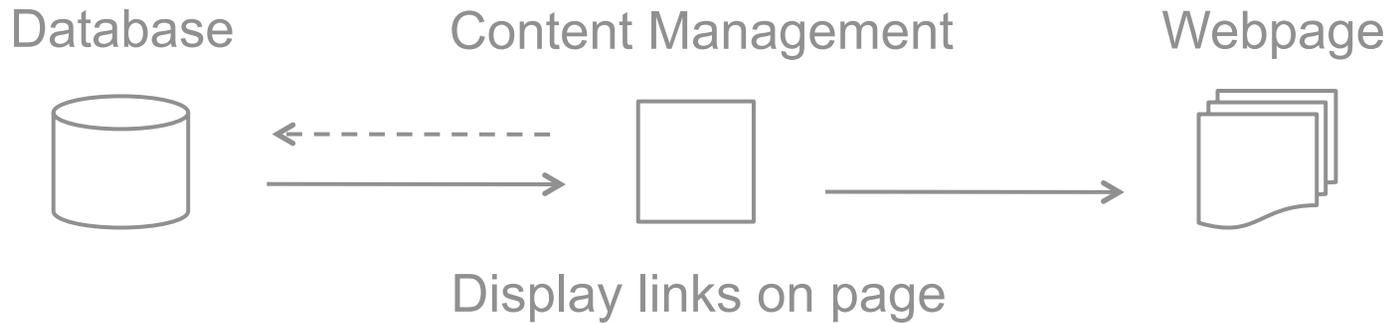
1. Implement Tracking Code
2. Set `linkId` in Custom Variable
3. Send Data with Event Tracking

Code Example

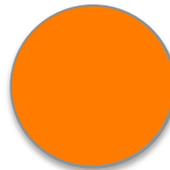
Implement Tracking Code



Design Overview



2. Export clicks on links
export data by ID

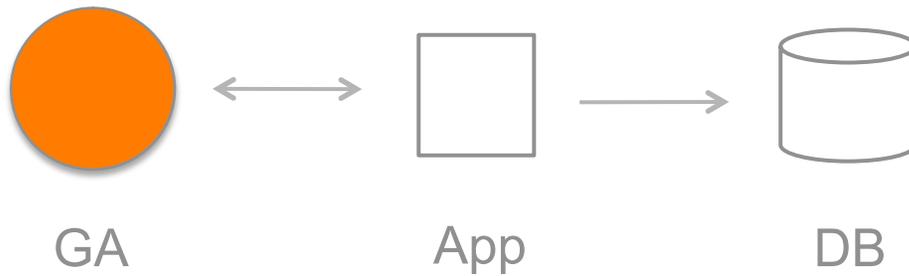


Google Analytics

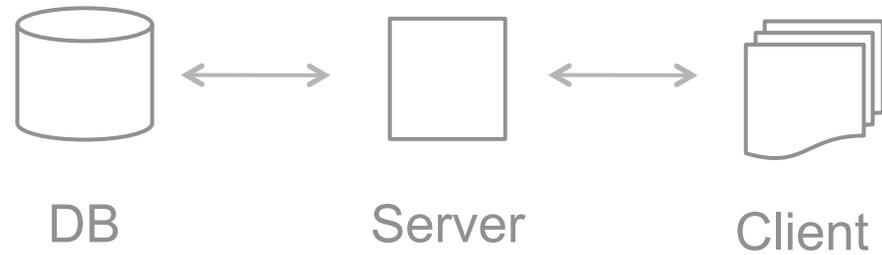


2-Step Scheduled Data Export

1. Scheduled Process



2. Served On Demand



Query The Right Data

Tracking Code

```
_gaq.push(['_setCustomVar', 1, 'top-links', linkId, 3]);  
_gaq.push(['_trackEvent', enclosingId, linkText]);
```

Data Export API Query

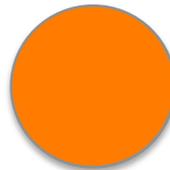
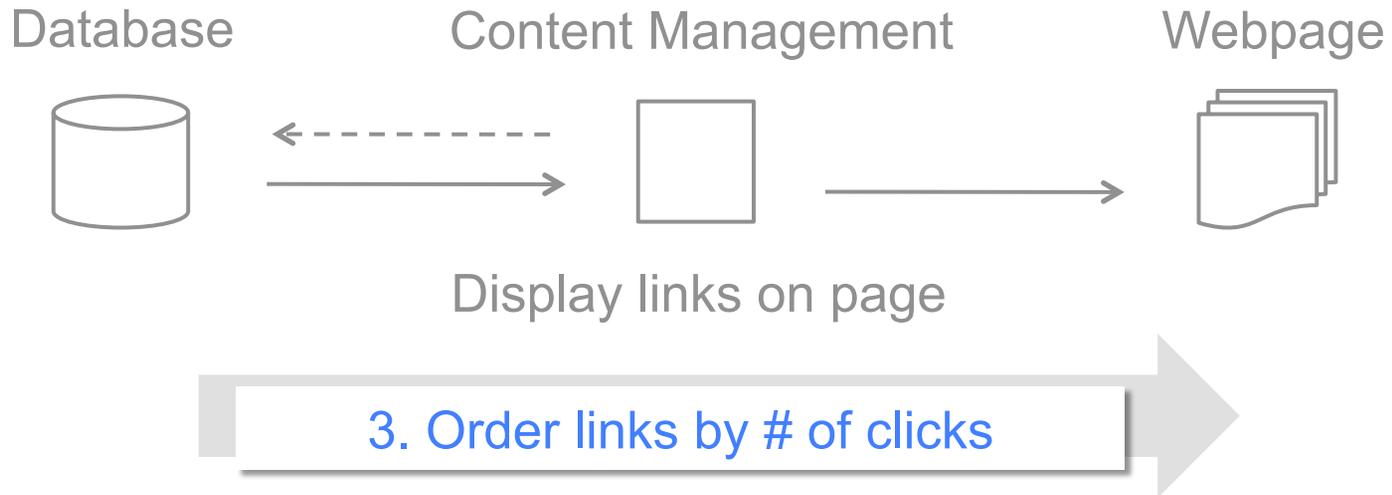
```
query.setFilters("ga:customVarName1==top-links");  
query.setDimensions("ga:customVarValue1");  
query.setMetrics("ga:totalEvents");
```

Code Example

Sending data into Google Analytics



Design Overview



Google Analytics



Order Links By Number Of Clicks

Data Base

html_links
linkId
linkUrl
linkText

link_order
linkId
totalEvents

Content Management

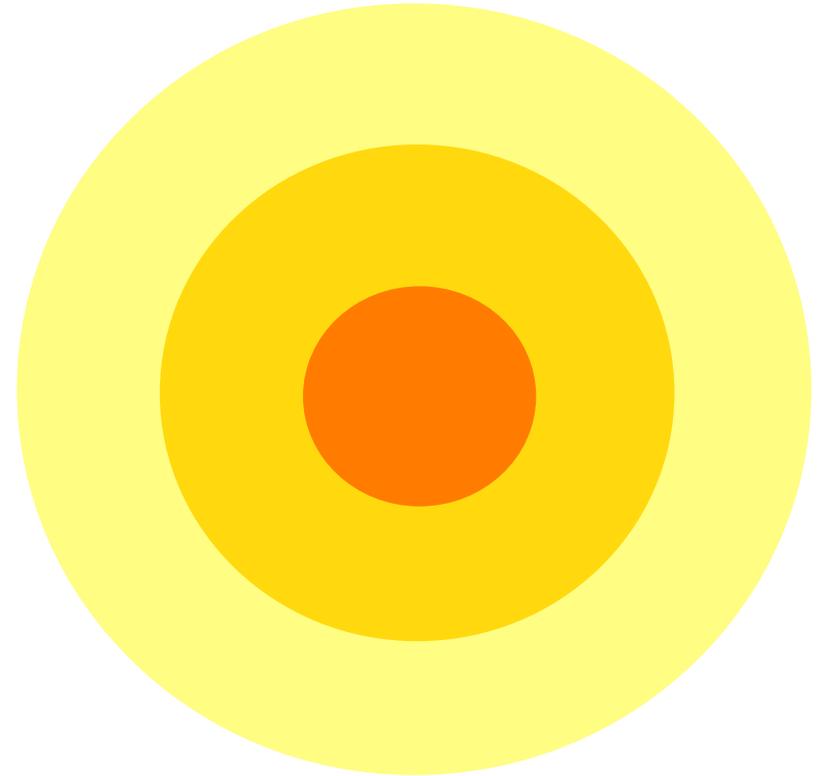
```
SELECT A.linkName,  
       A.linkUrl,  
       A.linkText  
FROM html_links AS A,  
     link_order AS B  
WHERE A.linkId=B.linkId  
ORDER BY B.totalEvents
```

Analytics Links

[Traditional Web Analytics is Dead](#)
[Path Analysis: A Good Use of Time?](#)
[Data Quality Sucks, Let's Just Get Over It](#)
[The Awesome Power of Data Visualization](#)
[Stop Obsessing About Conversion Rate](#)
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Ordered Links by Clicks

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[The Awesome Power of Data Visualization](#)



Developer Eco System



App Gallery Home

BY CATEGORY

[Business Intelligence](#) (5)

[Campaign Management](#) (1)

[Content Management](#) (3)

[Data Collection](#) (3)

[E-Commerce](#) (1)

[Email Marketing](#) (1)

[Mobile Solutions](#) (6)

[Phone Call Tracking](#) (3)

[Reporting Tools](#) (7)

[Search Optimization](#) (2)

[Site Audit](#) (3)

[Widgets & Gadgets](#) (3)

Editor's Picks

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Go

[Add Your Application](#)

Google Analytics Application Gallery

[Add Your Application](#)

This gallery contains applications that extend Google Analytics in new and exciting ways. They are solutions that help analysts, marketers, IT teams, and executives get more out of Google Analytics. Start by viewing our featured applications below or by browsing our categories to the left.

Featured Application

BTBuckets

Phillip Klien - Apr 01, 2010 - ☆☆☆☆☆ (0)



BTBUCKETS Your site just got smarter. Engage your users with five segments.

what? why? how?

BTBuckets is a free tool that allows sites to create user segments and take actions upon them in real time. Think of segments as buckets, where you keep your users. For each bucket, you might take a different set of actions, as well integrating with AdSense, CMS, Web analytics or any other tool. [Instant benefits.](#)

CASESTUDY
Learn how T&E improved their conversion by 328% using BTBuckets to analyze and target customized messages and products directly to their clients.

BROWSERPLUGIN
Create banner and target users straight from the Google Analytics and Google Website Customizer. Integrate with our JavaScript plugin.

About BTBuckets

BTBuckets is a free segmentation and optimization webapp that allows sites to create user segments and take actions upon them in real time. Create and target user clusters based on their behavior and IP intelligence automatically from within the Google Analytics interface (with browser plugin).

[Learn More](#)

Tags: [segmentation](#) [targeting](#) [buckets](#) [behavioral targeting](#) [clusters](#) [geosegmentation](#) [segments](#)

Editor's Picks



Analytics Visualizations
Designed to feed your brain

Analytics Visualizations

Sal Uryasev, Chris Gemignani - Mar 31, 2010 - ★★★★★ (2)

Visualizations powered by the Google Analytics API and JuiceKit. The Referrer Flow visualization answers what sites are linking to you and what content is benefiting the most. The Keyword visualization displays the most frequently used search keywords and how they are used together.

[learn more](#)

Evolve!



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this session on Google Wave**

<http://bit.ly/c8zpAV>



Learn More

Google Analytics Code Site:

<http://www.code.google.com/apis/analytics>

Google™

