Google Analytics

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March 13, 2018

Abstract

This is a short documentation about my reasearch about the Google
Analytics product from Google.

1 Introduction

Google Analytics is a [?] freemium web analytics service offered by Google [1]
that tracks and reports website traffic. Google launched the service in November
2005 after acquiring Urchin. Google Analytics is now the most widely used web
analytics service on the Internet.

1.1 The Technology

Google Analytics is implemented with "page tags", in this case, called the
Google Analytics Tracking Code, which is a snippet of JavaScript [2] code that
the website owner adds to every page of the website. The tracking code runs in
the client browser when the client browses the page (if JavaScript is enabled in
the browser) and collects visitor data and sends it to a Google data collection
server as part of a request for a web beacon.

The tracking code loads a larger JavaScript file from the Google web server
and then sets variables with the user's account number. The larger file (currently
known as ga.js) is typically 18 KB. The file does not usually have to be loaded,
however, due to browser caching. Assuming caching is enabled in the browser, it
downloads ga.js only once at the start of the visit. Furthermore, as all websites
that implement Google Analytics with the ga.js code use the same master file
from Google, a browser that has previously visited any other website running
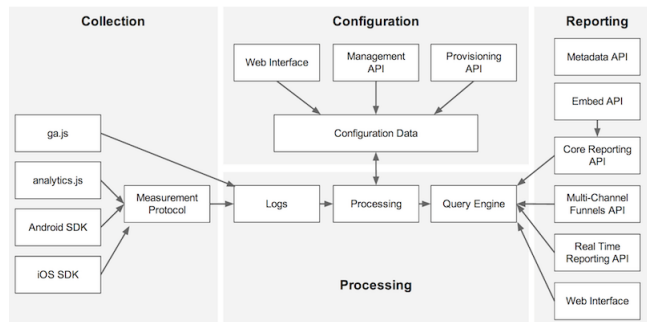Google Analytics will already have the file cached on their machine.

Figure 1: how it works.

1.2 Platform components

Developers interact and influence processing through a rich user interface, client libraries, and APIs that are organized into 4 main components: collection, configuration, processing, and reporting.

Collection collects user-interaction data.

Configuration allows you to manage how the data is processed.

Processing processes the user-interaction data, with the configuration data.

Reporting provides access to all the processed data.

2 User experiences

When I [3] worked for a search engine marketing company, we would advise our clients to get this tool and they would exclaim, Ive never heard of such a thing! They would say, what is Google Analytics? How does it work?

Information is from Wikipedia. [4]

References

[1] S. Ghemawat, H. Gobioff, and S.-T. Leung, *The Google file system*, vol. 37. ACM, 2003.

[2] D. Flanagan, *JavaScript: the definitive guide.* " O'Reilly Media, Inc.", 2006.

[3] B. Clifton, *Advanced web metrics with Google Analytics.* John Wiley & Sons, 2012.

[4] *https://en.wikipedia.org/wiki/Google$_A$nalytics.*