# Introducing Google Analytics for Libraries

### **Abstract**

Google Analytics continues to evolve into a more robust web analytics tool, and libraries must stay informed on these developments to get the most out of the tool. Chapter 1 of Library Technology Reports (vol. 49, no. 4) "Maximizing Google Analytics: Six High-Impact Practices" introduces the high impact practices essential to Google Analytics and provides a brief history of the tool to show how it has developed since first launched in 2005. The authors share the benefits and limitations of Google Analytics and conclude with additional resources to help libraries maximize usage.

oogle Analytics is a widely used, free web analytics tool that collects, analyzes, and reports website traffic data. Its price tag alone makes it a very desirable option for libraries to adopt, but Google Analytics is also a powerful tool that offers a wide range of reports and features not found in other web analytics tools on the market. More importantly, it is fairly easy to use—you don't have to be an expert in web programming or worry about installing the software on a web server in order to implement it on the website. The basic Google Analytics implementation involves creating a Google Analytics account, setting up a profile for a website to be tracked, and then embedding the automatically generated tracking code into the HTML code of every single web page on a website. If you are comfortable with copying and pasting and can add the script to your website, Google Analytics can be functional in a matter of minutes and your library can start reaping the benefits of knowing how visitors find and interact with its website. Why wouldn't a library implement it?

Google Analytics www.google.com/analytics

In fact, many libraries are already using it. A brief review of library literature shows that libraries are actively using web analytics and are using Google Analytics as their primary web analytics tool.¹ So why is this issue of *Library Technology Reports* dedicated to Google Analytics if libraries are already using it? Because Google Analytics is as wonderfully complex as it is useful. You can easily implement it, but with further customizations you and your library can use Google Analytics to its full capacity. This report covers common customizations and concepts libraries should implement to have a fully functional web analytics tool. We have distilled this information into six high-impact practices that are worth investing in:

- implementation of Google Analytics on various online library-specific web presences
- suggestions for managing multiple web presences in Google Analytics
- advanced filtering to remove staff computers from the data
- use of event tracking to collect data from the "untrackable"
- creation of high-impact goal reports
- advice for reviewing and sharing all that great data

This report is not designed to provide an introduction to web analytics or an overview of basic Google Analytics functions and reports—the end of this chapter includes several excellent resources for that information. Instead, we focus on introducing advanced Google Analytics features that require some out-of-the-box customization and best practices for making the most of your data collecting and reporting.

# **Google Analytics: A History**

Understanding the origin and evolution of Google Analytics will help you understand how far this tool has come and its potential future. Google Analytics is based on the Urchin web log analyzer software and its online equivalent, Urchin on Demand, which Google acquired when it bought the company called Urchin in 2005. Urchin was an expensive web analytics tool, priced beyond the reach of most library budgets. After some modifications to the Urchin tracker and web interface, Google Analytics was released later in 2005, available free but only to those who received an invitation to create a Google Analytics account. It was officially open to the public in late 2006.<sup>2</sup>

Google stopped supporting the Urchin software in 2012,<sup>3</sup> but Google Analytics has continued to evolve, adding new reports and features. The Google Analytics tracking code received a major overhaul in 2009, transitioning to the asynchronous tracking script that loaded more efficiently in a web browser so it could be placed in the <head> section of a web page to offer more accurate data tracking.<sup>4</sup> In 2011, Google Analytics upgraded to version 5, which overhauled its interface and report options.<sup>5</sup> The real-time reports, one of the new additions, display data as traffic happens on a website—allowing you to monitor how users are navigating through your site without waiting for the data to arrive the next day.

Later in 2011, Google launched Google Analytics Premium, a fee-based service designed for large businesses with heavily trafficked websites. This service comes with additional custom reporting features and dedicated technical support, but its \$150,000 annual fee is well outside the range of most library budgets.<sup>6</sup> Not to worry—the free version of Google Analytics many libraries have adopted is still available and being developed. You should be aware this option exists in case you stumble upon documentation for the premium service.

Google Analytics Premium www.google.com/analytics/premium/index.html

And Google Analytics promises major changes in the future. One of the largest upcoming improvements is Universal Analytics, a new tracking method that offers even more customizable options. How this will affect

# Keeping Current on Google Analytics Development

Clearly, Google Analytics is a perpetually evolving web analytics tool, and any libraries wishing to take full advantage of all it offers must stay informed of the tool's latest developments. Here are a few sites and blogs to monitor:

- Google Analytics blog, http://analytics.blogspot.com
- Google Analytics developer guide, https://developers.google.com/analytics
- Google Analytics YouTube channel, www.youtube .com/googleanalytics?hl=en

libraries is not clear yet, as the option is currently in beta and is available only to a select few who request and are granted access to the tool.<sup>7</sup>

# What Can Google Analytics Do?

Google Analytics offers a lot of functionality for a free web analytics tool. It contains the standard web analytics reports, such as Top Viewed Web Pages and Traffic Sources (how visitors find the site), but it also offers custom reports that allow libraries to determine which metrics they will analyze. Other key reports include Goal reports (the focus of chapter 6) and Site Search reports that can collect data gathered from your website's search. You can even use Google Analytics for A/B testing using the Experiments report. Google Analytics can also track custom variables<sup>8</sup> and mobile applications.<sup>9</sup> The list of features is far too long to cover, which makes it essential for libraries to invest time in reviewing the Google Analytics documentation to discover all the available options.

# What Can't Google Analytics Do?

Even a powerful web analytics tool like Google Analytics has some limitations. Libraries should be aware of these limitations before agreeing to the tool's terms of service. First, Google Analytics is designed to be a hosted service, which means the use data gathered from your website visitors will be captured and retained on a Google server, not your own. This generates legitimate concerns about who controls that data. For example, once Google Analytics starts tracking data, you have no authority to remove that data other than by deleting the entire profile. Additionally, Google Analytics is not designed to be an infinite repository for a website's data. According to web analytics expert Brian Clifton, Google Analytics policy for its free version is to retain data for 25 months. 10 While both authors of this report

have Google Analytics accounts with data going back further than 25 months, it is not a good idea to assume that your data will always be there. Libraries need to have a data-archiving plan to export the necessary data and store it internally to prevent tragic data loss.

Google Analytics Terms of Service www.google.com/analytics/terms/us.html

Google Analytics also does not provide data to track individual users—it intentionally aggregates all website users as visitors and makes you either segment or filter the data into defined user groups. This is part of the Google Analytics privacy policy.<sup>11</sup> What does this really mean? Google Analytics will not provide individual session logs (how one visitor accessed and navigated through your site) or give you access to the IP addresses of website users that could be used to identify specific computers or devices accessing your site. Essentially, it is difficult or impossible to use Google Analytics to track and identify individuals using your website. While this is good news because libraries often do not want to store or share personally identifying information with outside commercial entities, it also implies you cannot have the level of data analysis you can get from other web analytics tools.

Lastly, Google Analytics's out-of-the-box configuration does not seamlessly track all the data you may want to track. The most common example of "untrackable" data is outbound links—those links that navigate users to a different website. A link to the library catalog (catalog.libraryexample.org) from library's website (www.libraryexample.org) would be considered an outbound link and would require additional configurations on your library's website to track clicks on that link. We will cover these customizations in chapters 3 and 5.

### **Conclusion**

Despite its imperfections, Google Analytics is still an excellent web analytics tool that provides libraries with a detailed level of data that can be used to improve a site. However, libraries need to be prepared to invest in this free tool to make it worthwhile. This investment involves customizing Google Analytics to fit the library's needs and taking the time to review the data it provides. The best piece of advice we can offer those responsible for managing their library's Google Analytics accounts is to prioritize your library's needs and take small steps to implement the necessary configurations to get the data your library wants from the tool.

### **Additional Resources**

### **Google Analytics Help**

- Google Analytics help center, http://support.google .com/analytics/?hl = en.
- Google Analytics user forum, http://groups.google .com/a/googleproductforums.com/forum/#! forum/analytics.
- Clifton, Brian. Advanced Web Metrics with Google Analytics, 3rd ed. Indianapolis, IN: John Wiley & Sons, 2012.

## **Web Analytics Blogs**

- Kaushik, Avinash. Occam's Razor. www.kaushik .net/avinash.
- Cutroni, Justin. Analytics Talk. http://cutroni.com/ blog.
- Web Analytics Demystified blogs. www.webanalyt icsdemystified.com/wad-weblogs.asp.

### Web Analytics Books

- Marek, Kate. "Web Analytics in Libraries." Library Technology Reports, 47, no. 5 (July 2011).
- Farney, Tabatha, and Nina McHale. Web Analytics Strategies for Information Professionals: A LITA Guide. Chicago: ALA TechSource, 2013.
- Kaushik, Avinash. *Web Analytics 2.0*. Indianapolis, IN: John Wiley & Sons, 2010.

### **Notes**

- 1. To name just a few: Paul Betty, "Assessing Homegrown Library Collections: Using Google Analytics to Track Use of Screencasts and Flash-Based Learning Objects," Journal of Electronic Resources Librarianship 21, no. 1 (2009): 75-92, doi:10.1080/19411260902858631; Julie Arendt and Cassie Wagner, "Beyond Description: Converting Web Site Usage Statistics into Concrete Site Improvement Ideas," Journal of Web Librarianship 4, no. 1 (2010): 37-54, doi:10.1080/19322900903547414; Tabatha A. Farney, "Click Analytics: Visualizing Website Use Data," Information Technology & Libraries 30, no. 3 (Sept. 2011): 141-148; Sara Memmott and Susann deVries, "Tracking the Elusive Student: Opportunities for Connection and Assessment," Journal of Library Administration 50, no. 7-8 (2010): 798-807, doi:10.1 080/01930826.2010.488974.
- 2. Brett Crosby, "We're Open! Instant Access Now Available," Google Analytics (blog), Aug. 15, 2006, http://analytics.blogspot.com/2006/08/were-open-instant-access-now-available 15.html.
- 3. Paul Muret, "The End of an Era for Urchin Software," Google Analytics (blog), Jan. 20, 2012, http://analytics.blogspot.com/2012/01/end-of-era-for-urchinsoftware.html.
- Brian Kuhn, "Google Analytics Launches Asynchronous Tracking," Google Code (blog), Dec. 1, 2009, http://googlecode.blogspot.com/2009/12/googleanalytics-launches-asynchronous.html.

- 5. Trevor Claiborne, "The New Google Analytics Available to Everyone," Google Analytics (blog), April 20, 2011, http://analytics.blogspot.com/2011/04/new-google-analytics-available-to.html.
- "Get the Power of Google Analytics," Google Analytics website, accessed March 1, 2013, www.google .com/analytics/premium/features.html.
- 7. "About Universal Analytics," Google Analytics website, accessed March 1, 2013, http://support.google.com/analytics/bin/answer.py?hl=en&answer=2790010.
- 8. "Custom Variables Web Tracking (ga.js)," Google

- Developers website, last updated Jan. 2, 2013, https://developers.google.com/analytics/devguides/collection/gajs/gaTrackingCustomVariables.
- "Mobile App Analytics," Google Analytics website, accessed March 1, 2013, www.google.com/analytics/ features/mobile-app-analytics.html.
- Brian Clifton, Advanced Web Metrics with Google Analytics, 3rd ed. (Indianapolis, IN: John Wiley & Sons, 2012), PDF e-book, chap. 3.
- 11. "Safeguarding Your Data," Google Analytics website, accessed March 1, 2013, www.google.com/analytics/learn/privacy.html.