



**Privacy Impact Assessment Update  
for the**

**Department of Homeland Security  
Use of Google Analytics**

**DHS/ALL/PIA-033(a)**

**September 17, 2019**

**Contact Point**

**Matthew Harmon**

**Director of Web Communications**

**Office of Public Affairs**

**Department of Homeland Security**

**(202) 447-4617**

**Reviewing Official**

**Jonathan R. Cantor**

**Acting Chief Privacy Officer**

**Department of Homeland Security**

**(202) 343-1717**



## Abstract

The Department of Homeland Security (DHS) uses Google Analytics for viewing and analyzing traffic to the Department's public-facing websites. Google Analytics is a free, third-party hosted, website analytics solution that generates robust information about the interactions of public-facing website visitors with the Department. DHS does not collect, maintain, or retrieve personally identifiable information (PII), including a visitor's Internet Protocol (IP) address, during this analytics process operated by Google. Google Analytics does not provide to DHS, share with Google or any Google product for additional analysis, or use the full or masked IP address or information to draw any conclusions in the analytics product. The Department has expressly chosen to opt-out of sharing information with Google or any Google product for additional analysis. This Privacy Impact Assessment (PIA) update is being conducted to analyze the privacy risks of the Department's use of Google Analytics on internal-facing, anonymous access websites.

## Overview

### Purpose of Google Analytics

The Department will use aggregated information provided by Google Analytics for the purpose of improving Departmental services online through measurement and analysis of website traffic. Specifically, the Department will use non-identifiable aggregated information provided by Google to:

- Track visits to the Department's website(s);
- Monitor the size of the Department's audience; and
- Better understand the interactions of visitors in order to improve the functionality of the Department's website(s) and the user experience.

For Google Analytics to be effective, the product must collect the full IP address for analytics purposes. The Department has implemented the IP address masking feature<sup>1</sup> within Google Analytics to avoid the use and storage itself of the full IP address. Google collects then masks the IP address prior to use and storage; it then proceeds with providing the Department non-identifiable aggregated information in the form of custom reports.

DHS does not collect, maintain, or retrieve PII including a visitor's IP address during this analytics process operated by Google. Google Analytics does not provide to DHS, share with Google or any Google product for additional analysis, or use the full or masked IP address or

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<sup>1</sup> IP address masking is a customization to Google Analytics tracking that changes how Google Analytics uses and stores the IP address of visitors to the Department's website. By default, Google Analytics collects the entire IP address of website visitors to provide general geographic reporting. When IP masking is enabled, which the Department has implemented, Google Analytics removes the last octet of the visitor's IP address at the time of collection prior to use and storage. For example, when the last octet is truncated from the IP address, 192.168.0.1 becomes 192.168.0.



information to draw any conclusions in the analytics product. Google receives the data to process and provide aggregate statistics back to DHS. The only information that is available is the non-identifying aggregated information in the Google Analytics interface in the form of custom reports. Under no circumstances does the Department use Google Analytics to:

- Collect or track PII;
- Collect or track a visitor's full or masked IP address;
- Track individual user-level activity on the Internet outside of the Department's website(s); or
- Cross-reference any data gathered from Google Analytics against PII to determine individual user-level online activity.

### Tracking Methods

The Department's public affairs officials will tag pages on the Department's websites with a Google Analytics Tracking Code (the Google Code). The Department's privacy policy provides information on how to opt-out of having cookies dropped in the visitor's browser.<sup>2</sup> Visitors using a cookie blocker application will be able to visit the Department's websites and no information about their website experience will be processed by Google Analytics.

When an individual visits the Department's websites, the Google Code places a cookie on the visitor's computer. This service will allow DHS to analyze its traffic. While these cookies belong to Google and not the Department, DHS manages how long cookies will remain active on the Department's websites. The DHS Office of Public Affairs (OPA) and component public affairs officials will set the life of the cookie for no longer than six months, at which point it will automatically delete. OPA and component public affairs officials may choose a shorter cookie life.

The Google Code on the Department's websites will send information to Google. The Google Analytics tool will process aggregated information and send back reports on: 1) visitors; 2) traffic sources; 3) content; and 4) goals.<sup>3</sup>

This Google Code is a snippet<sup>4</sup> of JavaScript<sup>5</sup> that acts as a beacon, collecting visitor data. This data is collected through a combination of JavaScript and cookies that the Google Analytics tool uses to collect the data, send it back to Google data collection servers for processing, and present the website statistics to Google Analytics account holders on its website interface. The Department's public affairs officials assess this information so they can better understand the

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<sup>2</sup> The Office of Management and Budget Memorandum M-10-22, *Guidance for Online Use of Web Measurement and Customization Technologies*, allows federal agencies to use cookies. When a person visits any website, the website's server may generate a piece of text known as a "cookie" to place on the visitor's computer. Placing cookie text allows websites to "remember" visitors' preferences, browsing patterns, and behavior while they are connected. For more information, please see <https://www.dhs.gov/privacy-policy>.

<sup>3</sup> See Appendix A of DHS/ALL/PIA-033 Google Analytics for a description of the summary metrics that are available, available at <https://www.dhs.gov/privacy>.

<sup>4</sup> Small, stand-alone section of java code.

<sup>5</sup> A scripting programming language most commonly used to add interactive features to websites.



behavior of visitors on the websites and make changes to improve visitors' experience on the websites.

### **IP Address Masking**

To use Google Analytics, the product must collect the full IP address, which Google masks prior to use and storage. It only provides the Department non-identifiable aggregated information in the form of custom reports. Using masked IP addresses still allows Google Analytics to determine some geographic and network information to provide in aggregate to the Department. Google Analytics does this by using publicly available information made available by Internet regulatory authorities and matches part of the IP address to what is essentially a public phonebook of IP addresses. It is public information to know who owns what IP address block, the same as with a mailbox or phone system. Google Analytics completes the matching and then provides the non-identifiable information in aggregate to the Department showing information like "32% of users are from Washington, D.C." or "50% of users are from outside of the United States," for example.

### **Reporting**

Custom Reports: Custom reports can be created by website administrators in the Department to display Google Analytics data. Some examples of custom reports the Department could construct are "how are the keywords performing in different countries" or "should we target the website to Spanish-speaking users." More information on how the Department may create custom reports can be found at Google.<sup>6</sup> Information gleaned from custom reports is used by the Department's public affairs officials to improve the user experience on the Department's websites.

Analysis Intelligence: Google Analytics monitors report data and automatically sends alerts to the Department's public affairs officials when there are significant changes in data patterns as defined by DHS. The Department's public affairs officials will review the change in data pattern and determine if the Department needs to add or modify content to help meet users' need.

Dashboard: Appendix A of the initial Google Analytics PIA<sup>7</sup> is an illustration of the summary metrics that are available in the Google Analytics website interface in the context of historical or average website data.

### **Reason for the PIA Update**

DHS is updating this PIA to broaden the scope of the use of Google Analytics at the Department. DHS will now use Google Analytics on its internal-facing, anonymous access websites; previously, Google Analytics was only used on the Department's public-facing websites. This broadening of scope will provide the necessary information to the Department's public affairs

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<sup>6</sup> Available at <https://support.google.com/analytics/answer/1008015?hl=en>.

<sup>7</sup> See DHS/ALL/PIA-033 Google Analytics, available at <https://www.dhs.gov/privacy>.



officials to improve the accuracy and veracity of Departmental online services for both public and internal audiences.

## Privacy Impact Analysis

### Authorities and Other Requirements

In addition to the authorities listed in initial Google Analytics PIA, additional requirements mandate the collection of this type of analytics information on U.S. Government websites. Per the Office of Management and Budget (OMB) Memorandum M-17-06,<sup>8</sup> which cites OMB Memorandum M-11-24, *Streamlining Service Delivery and Improving Customer Service*,<sup>9</sup> and OMB Memorandum M-10-06, *Open Government Directive*,<sup>10</sup> all agencies must participate in the General Service Administration's (GSA) Digital Analytics Program (DAP) and deploy the DAP tracking code on all public-facing agency websites. The DAP provides agencies with free quantitative analytics to inform website management. Participation in the DAP does not preclude agencies from using other analytics programs. As such, DHS uses Google Analytics to further its ability to analyze traffic to the Department's websites.<sup>11</sup>

Agency use of web measurement and customization technologies must also comply with OMB Memorandum M-10-22, *Guidance for Online Use of Web Measurement and Customization Technologies*.<sup>12</sup>

### Characterization of the Information

The Department will continue to collect aggregated information on user interactions on the Department's website(s) such as number of visits, visitors, and browsers. However, with this PIA Update, DHS will now collect Google Analytics on its internal-facing websites, and thus the activity of its workforce. No PII is collected by DHS.

### Uses of the Information

The aggregated information collected by Google Analytics will continue to be used for the purpose of improving usability, evaluating visitors' usage of the Department's internal websites, and compiling reports on internal website activity for website operators. Google Analytics will also be used to determine the "top tasks" on the website (e.g., the most visited pages/items). This information will be used to track visits to the Department's internal websites, monitor the size of

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<sup>8</sup> See <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2017/m-17-06.pdf>.

<sup>9</sup> See <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2011/m11-24.pdf>.

<sup>10</sup> See <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2010/m10-06.pdf>.

<sup>11</sup> The difference between DAP and Google Analytics is how the data is displayed and aggregated, and who can see the data. DAP lumps all DHS websites into the same bucket (profile), which enables a view of how the entire Department is doing and how domains are performing comparatively. Since DHS has over 80 active domains that are eligible for DAP, viewing data for an individual site can be difficult. Thus, the use of Google Analytics provides site-level analytics.

<sup>12</sup> See <https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/memoranda/2010/m10-22.pdf>.



the Department's audience to its internal websites, and understand the interactions of the Department's internal website visitors.

Google Analytics reporting capabilities are only available to pre-approved, registered users, who include the Department's public affairs officials.

### **Notice**

Notice regarding the Department's use of website measurement technology on its internal-facing websites is provided through this PIA. Additionally, the OMB Memoranda listed above provide further notice of these types of required activities and tracking by U.S. Government websites.

DHS personnel also have the ability to opt-out of this information being collected by disabling the cookie function in their browser, pursuant to their individual component agency's security posture.<sup>13</sup>

**Privacy Risk:** There is a risk that DHS personnel may not know their web traffic activities on internal DHS websites are being tracked.

**Mitigation:** This risk is partially mitigated. Although this PIA provides notice of this change to how Google Analytics is being used at the Department, there may not be specific notice to individuals of this change. However, because no PII is collected or used by DHS, the collection of information through Google analytics will not have a direct impact on an individual.

Additionally, DHS Network users are also provided a security warning banner that states that all activities are monitored while engaging with government-issued equipment.

### **Data Retention by the project**

Google Analytics information is maintained according to National Archives and Records Administration (NARA) General Records Schedule 31, Item 20, *Information Technology Operations and Maintenance Records*. This retention schedule states that records should be destroyed 3 years after agreement, control measures, procedures, project, activity, or transaction is obsolete, completed, terminated or superseded, but longer retention is authorized if required for business use.

### **Information Sharing**

There are no changes to the internal and external sharing and disclosure of information with this PIA Update. The Department may share Google Analytics custom reports internally and

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<sup>13</sup> Individuals who do not wish to have session or persistent cookies stored on their computer can opt-out or disable them. Individuals will still have access to all information and resources at Department websites. However, turning off cookies may affect the functioning of some Department websites. More information can be found here: <https://www.usa.gov/optout-instructions>.



with external organizations, but no PII is shared. However, the Department does rely on Google to collect this information initially on the Department's behalf.

### **Redress**

There are no changes with regards to redress with this PIA Update. Google Analytics only provides non-identifying aggregated information in the form of custom reports; there is no individual data to access.

### **Auditing and Accountability**

The Department's Google Analytics accounts are administered by the Department's public affairs officials. Only approved, registered users who have taken DHS Privacy and IT Security Training may access the aggregated Google Analytics data. Procedures for administering the account are documented internally and accessible only to administrators. Account access will follow Department policies as outlined in DHS Policy Directive 4300A, Section 5.1.1, for secure passwords. Each component/agency with a separate domain name will have its own Google Analytics account subject to the same security requirements.

## **Responsible Official**

Matt Harmon  
Director of Web Communications  
Office of Public Affairs  
Department of Homeland Security

## **Approval Signature**

Original, signed version on file at the DHS Privacy Office.

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Jonathan R. Cantor  
Acting Chief Privacy Officer  
Department of Homeland Security