

GOOGLE TAG MANAGER AND DRUPAL

Brian Perry

April 15, 2020



bounteous

Hand-washing technique with soap and water



WE COOL?



Create your own
<https://washyourlyrics.com>

Old Town Road
Lil Nas X

BRIAN PERRY

- Lead Front End Dev at Bounteous
- Rocking the Chicago 'burbs
- Lover of all things components...
...and Nintendo



d.o: brianperry

twitter: bricomeddy

github: backlineint

nintendo: wabrian

brianperryinteractive.com

bounteous



WE'VE ALL BEEN THERE...

Client: “Add Analytics to my Website”



You:

drush en google_analytics



TWO DISTINCT OPTIONS

- The Google Analytics Module is:
 - Great in a pinch
 - Better than no analytics at all

But...

- Using Google Tag Manager is a better option if:
 - You expect to customize beyond the defaults
 - You want to be able to adjust data collection without always requiring developer intervention.

Back to site

Manage

Shortcuts

admin

Content

Structure

Appearance

Extend

Configuration

People

Reports

Help

Google Analytics

Home » Administration » Configuration » System

Google Analytics is a free (registration required) website traffic and marketing effectiveness service.

GENERAL SETTINGS

Web Property ID *

UA-136159624-1

This ID is unique to each site you want to track separately, and is in the form of UA-xxxxxxx-yy. To get a Web Property ID, [register your site with Google Analytics](#), or if you already have registered your site, go to your Google Analytics Settings page to see the ID next to every site profile. [Find more information in the documentation](#).

Premium account

If you are a Google Analytics Premium customer, you can use up to 200 instead of 20 custom dimensions and metrics.

Tracking scope

Domains

A single domain

Pages

All pages with exceptions

Roles

Not restricted

Users

Not customizable

Links and downloads

Outbound links, Mailto links, Downloads, Colorbox enabled

What are you tracking?

A single domain (default)

Domain: ga-sandbox.lndo.site

One domain with multiple subdomains

Examples: www.example.com, app.example.com, shop.example.com

Multiple top-level domains

Examples: ga-sandbox.lndo.com, ga-sandbox.lndo.net, ga-sandbox.lndo.org

List of top-level domains

If you selected "Multiple top-level domains" above, enter all related top-level domains. Add one domain per line. By default, the data in your reports only includes the path and name of the page, and not the domain name. For more information see section *Show separate domain names* in [Tracking Multiple Domains](#).

bounteous Proprietary & Confidential

7

SETTINGS TO CONSIDER

- Web Property ID
 - Won't get anywhere without this
- Tracking Scope
 - Domains – single, one domain with subdomains, multiple top-level domains.
 - Pages – excludes admin and user pages by default
 - Roles – could be used to exclude internal roles for example
- Advanced Tracking
 - Users – Opt in or out, Track User ID
 - Links and Downloads – Enabled by default
 - Internal Search – requires config within GA

CUSTOM METRICS AND DIMENSIONS

Home

Manage

Shortcuts

admin

Content

Structure

Appearance

Extend

Configuration

People

Reports

Help

Index number

The custom dimension name.

The custom dimension value.

13

Index number

The custom dimension name.

The custom dimension value.

14

Index number

The custom dimension name.

The custom dimension value.

15

Index number

The custom dimension name.

The custom dimension value.

16

Index number

The custom dimension name.

The custom dimension value.

17

Index number

The custom dimension name.

The custom dimension value.

18

Index number

The custom dimension name.

The custom dimension value.

19

Index number

The custom dimension name.

The custom dimension value.

20

Index number

The custom dimension name.

The custom dimension value.

You can supplement Google Analytics' basic IP address tracking of visitors by segmenting users based on custom dimensions. However, you must not allow any third party to use the Service to track, collect or upload any data that personally identifies an individual (or information reasonably linked to such information by Google). You will have and abide by an appropriate Privacy Policy and will communicate that to your Visitors. You must post a Privacy Policy and that Privacy Policy must provide notice of Your use of cookies that are used for advertising purposes that are part of the Service.

[Browse available tokens.](#)

Available tokens

Click a token to insert it into the field you've last clicked.

NAME	TOKEN	DESCRIPTION
▶ Current date	current-date	Tokens related to the current date and time.
▶ Current page	current-page	Tokens related to the current page request.
▶ Current user	current-user	Tokens related to the currently logged in user.
▼ Nodes	node	Tokens related to individual content items, or "nodes".
▶ Author	[node:author]	
Body	[node:body]	The main body text of the node.
Comment count	[node:comment-count]	The number of comments posted on an entity.
▶ Comments	[node:comment]	Comments field.
Content ID	[node:nid]	The unique ID of the content item, or "node".
▶ Content type	[node:content-type]	The content type of the node.
▶ Date changed	[node:changed]	The date the node was most recently

[Home](#) [Manage](#) [Shortcuts](#) [admin](#)

[Content](#) [Structure](#) [Appearance](#) [Extend](#) [Configuration](#) [People](#) [Reports](#) [Help](#)

▼ ADVANCED SETTINGS

☐ **Locally cache tracking code file**
If checked, the tracking code file is retrieved from Google Analytics and cached locally. It is updated daily from Google's servers to ensure updates to tracking code are reflected in the local copy. Do not activate this until after Google Analytics has confirmed that site tracking is working!

▼ CUSTOM JAVASCRIPT CODE

You can add custom Google Analytics [code snippets](#) here. These will be added every time tracking is in effect. Before you add your custom code, you should read the [Google Analytics Tracking Code – Functional Overview](#) and the [Google Analytics Tracking API](#) documentation. **Do not include the `<script>` tags**, and always end your code with a semicolon (;).

Parameters

Enter one value per line, in the format `name|value`. Settings in this textarea will be added to `gtag("config", "UA-XXXX-Y", {"name": "value"});`. For more information, read [documentation](#) in the `gtag.js` reference.

Code snippet (before)

Code in this textarea will be added **before** `gtag("config", "UA-XXXX-Y");`.

Code snippet (after)

Code in this textarea will be added **after** `gtag("config", "UA-XXXX-Y");`. This is useful if you'd like to track a site in two accounts.

☐ **Enable debugging**
If checked, the Google Universal Analytics debugging script will be loaded. You should not enable your production site to use this version of the JavaScript. The `analytics_debug.js` script is larger than the

WHY GOOGLE TAG MANAGER?

What can people do on our site?

- Learn About Us
- Download Information (Specs, Product Sheets)
- Watch Informational/Product Videos
- Fill Out A Form (Request for Information/Contact Us)
- Use an Online Tool (Calculator/Scheduler)
- Submit an Application
- Get Directions
- Make a Purchase

Google Analytics Default

- Learn About Us
 - Basic tracking data like:
 - Page views
 - Referrals
 - Unique visitors
 - Browser usage
 - and so on...

WHAT CAN PEOPLE DO?

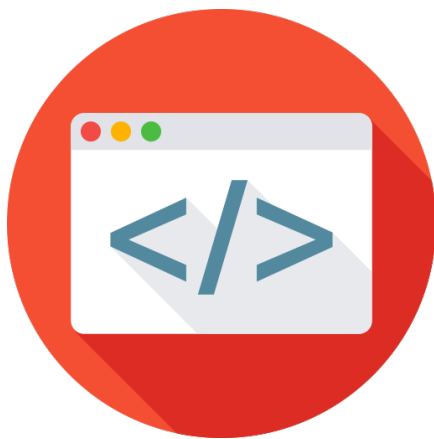
Extra Effort Needed

- Download Information
- Watch Informational/Product Videos
- Fill Out A Form
- Use an Online Tool
- Submit an Application
- Get Directions
- Make a Purchase

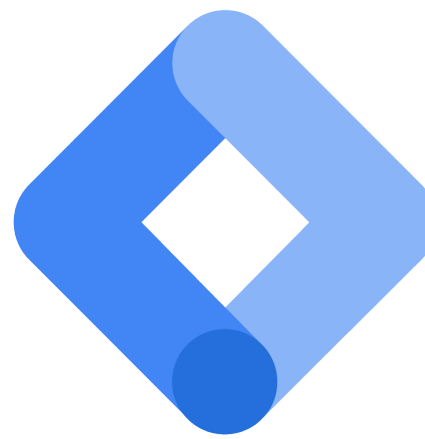
HOW DO WE COLLECT MORE?

In order to add Google Analytics to our site, we need to be able to make changes to the site.

Generally, we have two options:



Add Code



Use Tag Manager

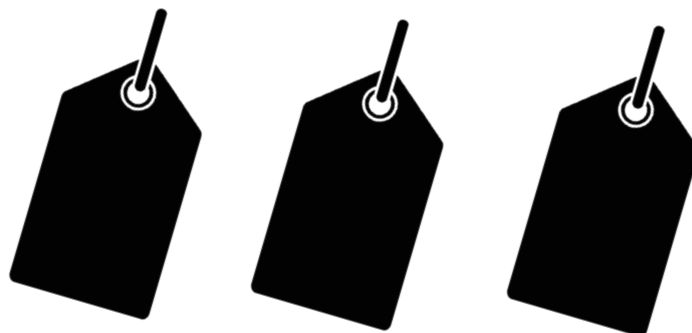
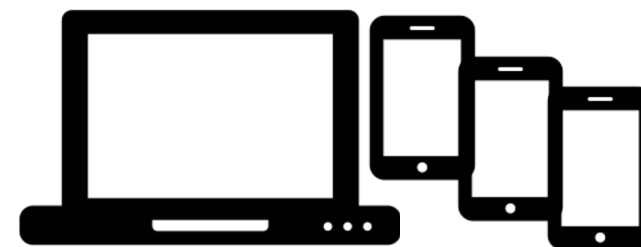
THE SPACE BETWEEN

Google Tag Manager lives between your website and your users.

Web Server



Users Accessing



Google Tag Manager is a **free** tool that allows users to add tags – including conversion tracking, analytics, and remarketing – with just **a few clicks**.

GOOGLE TAG MANAGER



- Little coding required
- Integrated tags with select third-party tools
- Multiple users and permissions supported
- Import solutions from others

Reduce technical burden

Separate site functionality
from marketing & tagging

Flexible, continuous
improvement & tracking.

~~Set It & Forget It~~

WHY DOES THIS MATTER?



CURRENT WORKSPACE

Default Workspace >

Search

Overview

Tags

Triggers

Variables

Folders

New Tag

Choose from over 50 tag types.



Add a new tag >

Now Editing

Default Workspace



Workspace Changes

0

Modified

0

Added

0

Deleted

Manage workspaces >

Live Version

Version 92

Published 3 years ago
by jon.meck@gmail.com

Latest Version

Version 92
Modified 3 years ago
by jon.meck@gmail.com

Latest version >

Description

Edit description >

Workspace Changes



This workspace has no changes.

[Learn More](#)

The screenshot displays the Google Tag Manager interface with the 'Tags' tab selected. The top navigation bar includes 'Google Tag Manager', 'Tags', 'Variables', and 'Data Layer'. The container ID 'GTM-MLKTZ4' and a 'QUICK_PREVIEW' button are visible in the top right. On the left, a 'Summary' sidebar lists five events: 'gtm.click', 'Page Load', 'gtm.click', 'DOM Ready', and 'Pageview'. The main content area, titled 'Summary', shows 'Tags Fired On This Page:' with three cards: 'AdRoll Smart Pixel' (fired 1 time), 'AdWords Remarketing' (fired 1 time), and 'Universal Analytics' (fired 1 time). Below this, 'Tags Not Fired On This Page:' shows three cards: 'AdWords Conversion Tracking', 'Bing Conversion Tracking', and 'Facebook Conversion Tracking', all marked as 'Custom HTML'.

Google Tag Manager Tags Variables Data Layer GTM-MLKTZ4 QUICK_PREVIEW

Summary

5 gtm.click
4 Page Load
3 gtm.click
2 DOM Ready
1 Pageview

Summary

Tags Fired On This Page:

- AdRoll Smart Pixel
AdRoll Smart Pixel - Fired 1 time(s)
- AdWords Remarketing
AdWords Smart Pixel - Fired 1 time(s)
- Universal Analytics
Universal Analytics - Fired 1 time(s)

Tags Not Fired On This Page:

- AdWords Conversion Tracking
AdWords Conversion Tracking
- Bing Conversion Tracking
Custom HTML
- Facebook Conversion Tracking
Custom HTML

Recommend a combination of:

- Google Tag Manager Module
- Data Layer Module

GoogleTagManager

[View](#) [Version control](#) [View history](#) [Automated testing](#)

Posted by [solotandem](#) on 18 February 2014, updated 26 February 2018

This Google Tag Manager project allows non-technical stakeholders to manage the analytics for their website by triggering the insertion of tags and tracking systems onto their page(s) via Google's [Tag Manager](#) (GTM) hosted application.



To use the module, sign up for GTM and obtain a "container ID" for your website. Enter the "container ID" on the settings form for this module. You may also configure the conditions on which the tags are inserted on a page response. Conditions exist for: page paths, user roles, and response statuses.

For development purposes, create a GTM environment for your website and enter the "environment ID" on the settings form for this module.

Additional features for Drupal 7

The module implements the Variable API, so that settings may be separately configured by realm, thus enabling support for multiple languages and domains.

Related projects for Drupal 7

Other projects that rely on or can be used with this project include:

★ Star 26 [Followed](#)

Maintainers for GoogleTagManager

[solotandem](#) – 167 commits
last: 1 week ago, first: 5 years ago

[View all committers](#)
[View commits](#)

Issues for GoogleTagManager

To avoid duplicates, please search before submitting a new issue.

[Search](#)
[Advanced search](#)
All issues
34 open, 167 total

dataLayer

[View](#) [Version control](#) [View history](#) [Automated testing](#)

Posted by [doublejosh](#) on 2 July 2014, updated 14 September 2017

Get content/entity/user data from inside Drupal to the client-side/front-end.

Outputs various CMS page meta data (like content type, author uid, taxonomy terms), which can be used for all kinds of front-end features. This works for all entity types and is easy to extend with hooks.

D7: Use the 7.x-1.x-dev version.

Documentation on GitHub

Often used for [Google Tag Manager](#).

The "dataLayer" is just a front-end standard for passing info around, for example allowing your server-side to inform javascript behaviors. It enables plenty of 3rd party services (like [Google Tag Manager](#)) to access web application data. Regardless, you should use this juicy data to implement super-awesome-great client-side features, like... [anonymous user tracking](#), etc.

NOTE: The dataLayer object is used as a warehouse for Google Analytics and GTM, and is therefor



★ Star 15 [Followed](#)

Maintainers for dataLayer

[blake.thompson](#) – 30 commits
last: 11 months ago, first: 2 years ago

[bighappyface](#) – 6 commits
last: 1 year ago, first: 3 years ago

[doublejosh](#) – 39 commits
last: 2 years ago, first: 4 years ago

[View all committers](#)
[View commits](#)

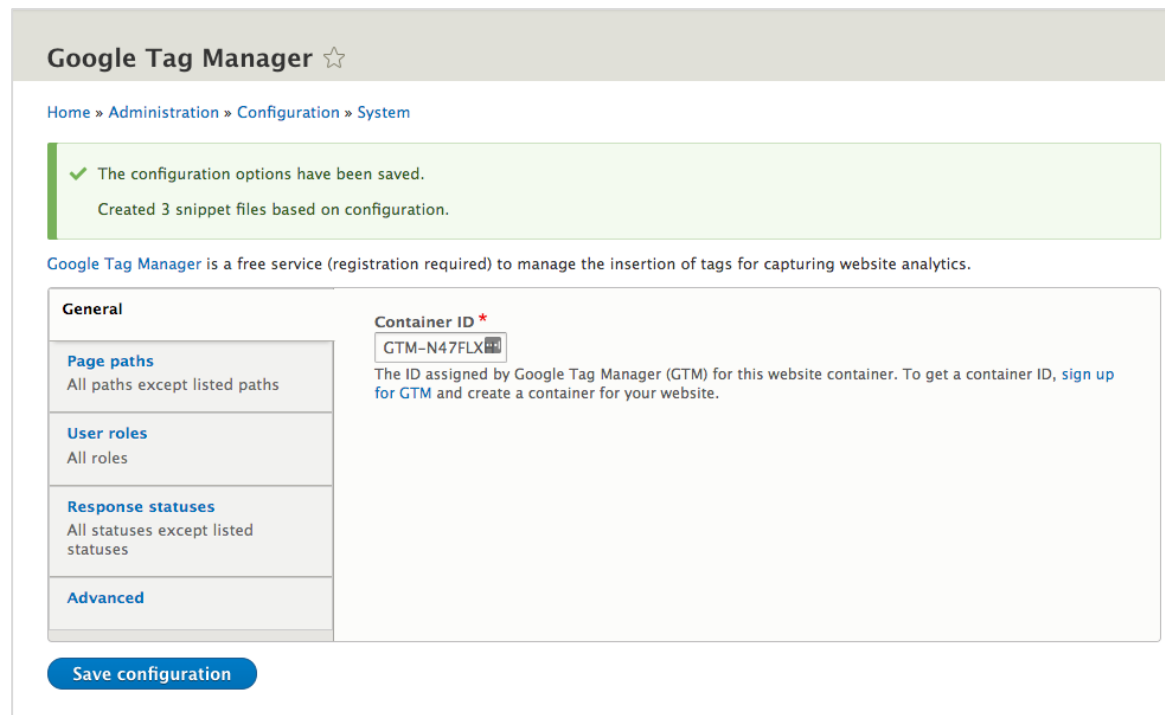
Issues for dataLayer

To avoid duplicates, please search before submitting a new issue.

[Search](#)
[Advanced search](#)

Google Tag Manager Module

- Limited configuration required
 - Add Container ID
 - Review excluded paths/statuses



The screenshot shows the Google Tag Manager configuration page in a Drupal administration interface. At the top, the breadcrumb trail is 'Home » Administration » Configuration » System'. A green success message states: 'The configuration options have been saved. Created 3 snippet files based on configuration.' Below this, a note explains that Google Tag Manager is a free service requiring registration to manage tag insertion for website analytics. The configuration is organized into a sidebar with sections: 'General' (selected), 'Page paths' (All paths except listed paths), 'User roles' (All roles), 'Response statuses' (All statuses except listed statuses), and 'Advanced'. The 'General' section contains a 'Container ID' field with the value 'GTM-N47FLX' and a red asterisk indicating it is required. A descriptive text below the field explains that this is the ID assigned by Google Tag Manager for the website container and provides a link to sign up for GTM. A blue 'Save configuration' button is located at the bottom of the configuration area.

THE DATA LAYER

The data layer has two main functions

- It allows us to send server information directly to Google Tag Manager
- GTM uses it to keep track of events that happen on the page

The information we send is usually done programmatically and inserted into the page, anywhere ABOVE the Tag Manager snippet. (Drupal modules handle this for you)

This could be done in PHP, .NET, etc...

WHAT DOES IT LOOK LIKE?

```
{
  drupalLanguage: 'en',
  drupalCountry: '',
  siteName: 'Bounteous',
  entityCreated: '1372134476',
  entityLangcode: 'und',
  entityStatus: '1',
  entityUid: '1',
  entityUuid: '443e42a3-221a-4a29-8048-xxxxxxxxxxxx',
  entityVid: '####',
  entityName: 'example',
  entityType: 'node',
  entityBundle: 'insights',
  entityId: '61112',
  entityTitle: 'TOOL: The Regexinator, A Google Analytics RegEx Inc
entityTaxonomy: {
  insights_taxonomy: {
    1061: 'Analytics',
    1068: 'Google',
    1091: 'Google Analytics'
  },
  insights_miscellaneous_taxonomy: {1122: 'JavaScript'}
},
  userId: '1',
  gtm: {start: 1543512968634, uniqueEventId: 0},
  event: 'gtm.js'
}
```


Data Layer Module

- Many configuration options
- Default is a solid starting point
 - Passes useful entity metadata to pages

The screenshot shows the 'Data Layer' configuration page in Drupal. The page has a breadcrumb trail: 'Home » Administration » Configuration » Search and metadata'. The main content area is titled 'Data Layer' with a star icon. It contains a 'GLOBAL' section with four checkboxes: 'Add entity meta data to pages' (checked), 'Include taxonomy terms' (checked), 'Include enabled field values' (unchecked), and 'Include "data layer helper" library' (unchecked). Below these are five expandable sections: 'ENTITY META DATA', 'PATH ARCHITECTURE', 'TAXONOMY', 'USER DETAILS', and 'DATA LAYER OUTPUT KEYS'. At the bottom is a 'Save configuration' button.

Data Layer ☆

Home » Administration » Configuration » Search and metadata

GLOBAL

- ☒ Add entity meta data to pages
- ☒ Include taxonomy terms
- ☐ Include enabled field values
Exposes a checkbox on field settings forms to expose data.
- ☐ Include "data layer helper" library
Provides the ability to process messages passed to the dataLayer. See: [data-layer-helper](#) on GitHub.

▶ ENTITY META DATA

▶ PATH ARCHITECTURE

▶ TAXONOMY

▶ USER DETAILS

▶ DATA LAYER OUTPUT KEYS

Save configuration

Via Data Layer Module Configuration

Data Layer ☆

[Home](#) » [Administration](#) » [Configuration](#) » [Search and metadata](#)

GLOBAL

- ☒ Add entity meta data to pages
- ☒ Include taxonomy terms
- ☒ Include enabled field values
Exposes a checkbox on field settings forms to expose data.
- ☐ Include "data layer helper" library
Provides the ability to process messages passed to the dataLayer. See: [data-layer-helper](#) on

☒ Expose in dataLayer
Checking this box will result in this field being included in the dataLayer object.
DataLayer label

Enter the label you would like in the datalayer output.

Save settings

[Delete](#)

Via Data Layer Module Hooks

```
/**
 * Implements hook_data_layer_alter()
 */
function hsnew_data_layer_data_layer_alter(&$data_layer) {
  // Modify data layer for Insights
  if (isset($data_layer["entityTaxonomy"]["insights_taxonomy"])) {
    $data_layer['blogCategories'] = implode("|", $data_layer["entityTaxonomy"]["insights_taxonomy"]);
  }
}
```

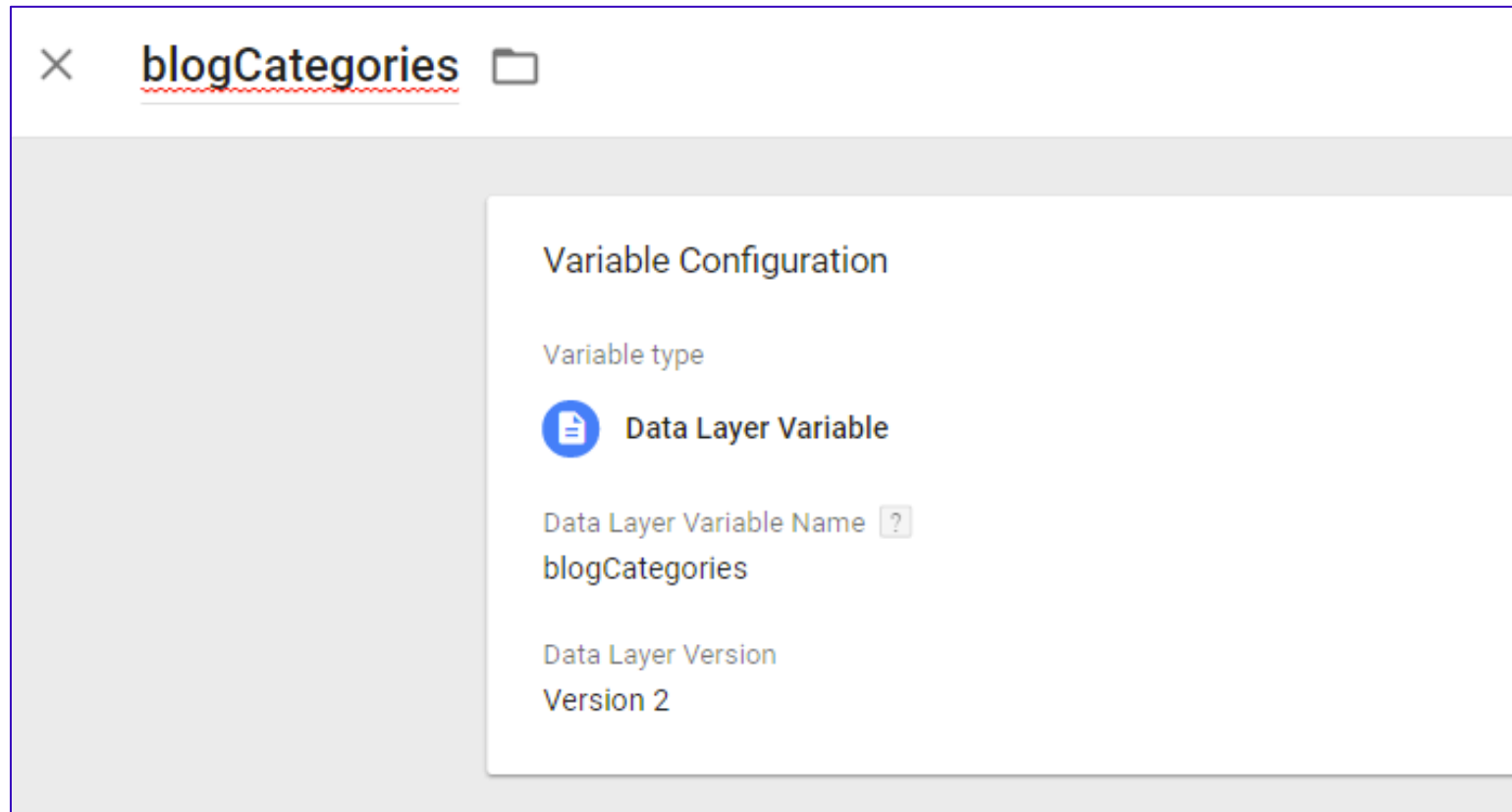
ADD DATA TO DATA LAYER

Data from your server is added to the data layer on the page. Here we can see the output:



```
131 <script type="text/javascript">
132 var dataLayer = window.dataLayer = window.dataLayer || [];
133 dataLayer.push({
134   'author': 'Dan Wilkerson',
135   'postedDate' : '2017/06/22 12:00:00 PM UTC',
136   'blogCategories' : 'Google Optimize|Google Tag Manager',
137   'version' : 3
138 });
139 </script>
140 <script>
141   (function(i,s,o,g,r,a,m){i['GoogleAnalyticsObject']=r;i[r]=i[r]||function(){
142     (i[r].q=i[r].q||[]).push(arguments)},i[r].l=1*new Date();a=s.createElement(o),
143     m=s.getElementsByTagName(o)[0];a.async=1;a.src=g;m.parentNode.insertBefore(a,m)
144   })(window,document,'script','https://www.google-analytics.com/analytics.js','ga');
145   ga('create', 'UA-123456-1', 'auto');
146   ga('require', 'GTM-F00');
147 </script>
```

Data is accessible within GTM; create Data Layer variables to store the values.



Outcome:

Data from your server is shared with Google Analytics and can be used for analysis/action.

Which blog categories had the most engagement?

Blog Categories ✓	
Primary Dimension: Blog Categories	
Plot Rows	Secondary dimension ▼ Sort Type: Default ▼
<input type="checkbox"/>	Blog Categories ?
<input type="checkbox"/>	
<input type="checkbox"/>	1. Analytics Google Analytics
<input type="checkbox"/>	2. Analytics Google Analytics Google Tag Manager
<input type="checkbox"/>	3. Google Analytics
<input type="checkbox"/>	4. Google Analytics Google Tag Manager
<input type="checkbox"/>	5. Google Tag Manager
<input type="checkbox"/>	6. LunaLabs Search Engine Optimization

[How to Report Custom Dimensions in Google Analytics](#)

ADD INFO AFTER PAGE LOAD

We can send information directly to the dataLayer after the page loads (when an action occurs), to be retrieved by GTM.

```
dataLayer.push( { 'event' :  
'event_name' } );
```


Call the push() API by modifying a button link to set an event when the button is clicked:

```
<a href="#" name="button1"
onclick="dataLayer.push({ 'event' :
'button1-click' });" >Button 1</a>
```

[Adding Data Layer Variables to a Page](#)

Call the push() API within a function:

```
function nextSlide() {  
  if(currentslide < totalslides -1) {  
    currentslide = currentslide + 1;  
    $('.jcarousel').jcarousel('scroll', currentslide, true);  
  } else {  
    currentslide=0;  
    $('.jcarousel').jcarousel('scroll', currentslide, true);  
  }  
  dataLayer.push({'event':'carousel-next','carousel-slide':(currentslide+1)});  
}
```

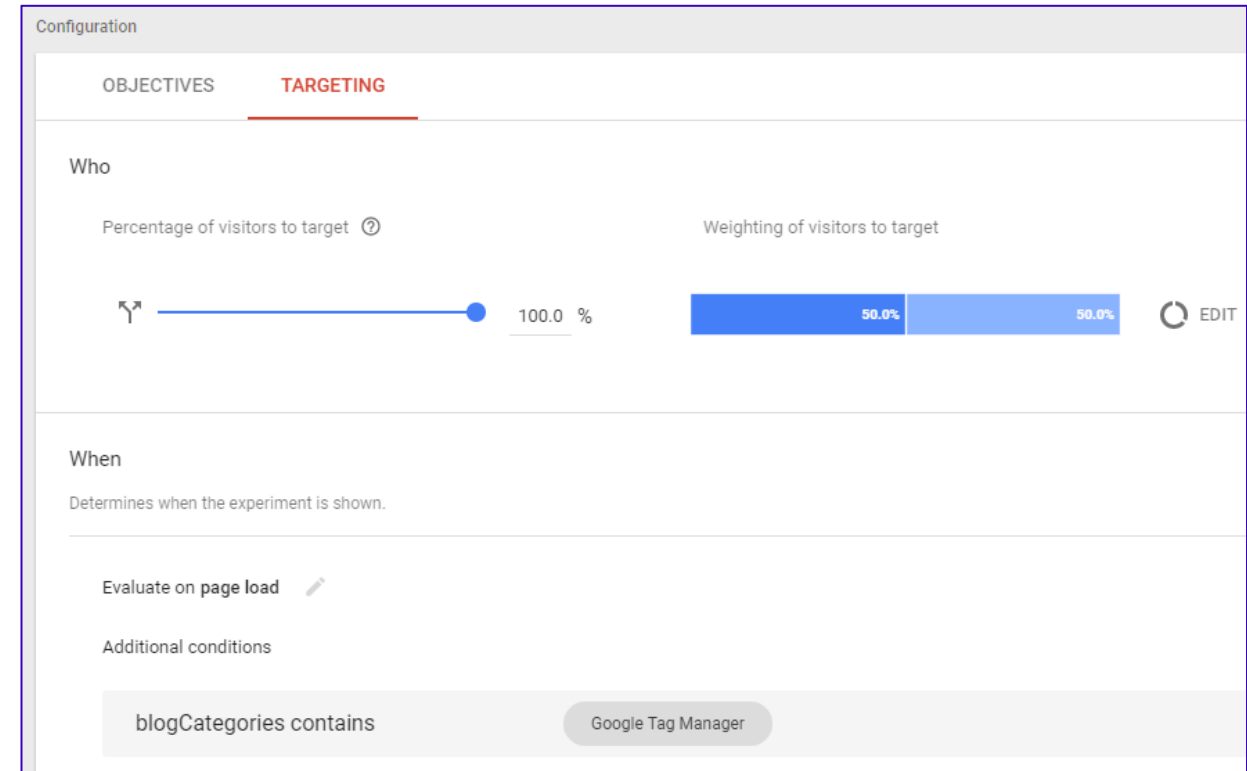
[Adding Data Layer Variables to a Page](#)

USE YOUR DATA WITH OTHER TOOLS

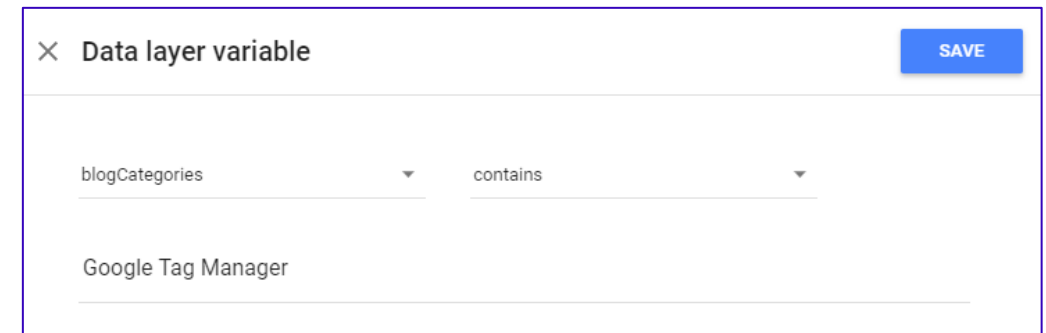
Outcome:

Data from your server is shared with Google Optimize and can be used to target experiments.

Show experiment variations to people who viewed blog posts within a specific category.



The screenshot shows the 'Configuration' page in Google Optimize, specifically the 'TARGETING' tab. Under the 'Who' section, there are two sliders: 'Percentage of visitors to target' set to 100.0% and 'Weighting of visitors to target' set to 50.0%. Below the 'When' section, there is a checkbox for 'Evaluate on page load' and a text input for 'Additional conditions' containing 'blogCategories contains Google Tag Manager'.



The screenshot shows the 'Data layer variable' configuration in Google Tag Manager. It features a dropdown menu for 'blogCategories', a dropdown for 'contains', and a text input for 'Google Tag Manager'. A 'SAVE' button is located in the top right corner.

[Data Layer Variable Targeting - Optimize](#)

WHO CAN MAKE CHANGES?

I have the technical skills and the correct access to make changes to the server-side code on my website:

[A Developer's Guide To
Implementing The Data Layer](#)

I do not have either the necessary skills or access to complete this process alone:

[Unlock the Data Layer: A Non-Developer's
Guide to Google Tag Manager](#)

WHO CAN MAKE CHANGES?

With Drupal modules, answer is somewhere in the middle.

- A surprising amount of customization can be handled in admin UI.
- Developer intervention may still be required for specific cases.

[Drupal-Friendly Google Tag Manager Configuration with the dataLayer Module](#)

DOES GTM MAKE SENSE FOR YOU?

Probably!

- Requires less custom code if you go beyond defaults
- Takes you out of the critical path for updates
- Lets you use pre-packaged templates
- Lets you use data beyond Google Analytics

DOES GTM MAKE SENSE FOR YOU?











... but maybe not!

- Does require some additional initial setup
- “My client needs more oversight”
 - GTM still might make sense.
 - Client still consumes GA and you hold the keys to GTM

COMMUNITY TEMPLATES


Community Template Gallery


Import Tag Template


	Acquia Lift Capture by acquia	>
	Acquire by acquireio	>
	Adform Tracking Point by gtm-templates-simo-ahava 	>
	AdGlare Ad Tag by adglare	>
	AdMaxim Retargeting Pixel by harshmohta	>
	AdMaxim Smart Pixel by harshmohta	>
	Admitad Journey by AdmitadSDK	>
	Admitad Tracking by AdmitadSDK	>
	Adot Campaign Pixel by adotmob	>

Tag Configuration

Tag Type

 **Acquia Lift Capture**
acquia

GALLERY 


 Tag permissions

1 permission >

Capture Type

Event


Event ID

e.g. file_download 


> Event Custom Parameters

> Advanced Settings

My accountLog out

 GA Sandbox

Search




Tools


[Add content](#)

Welcome to GA Sandbox

No front page content has been created yet.
Follow the [User Guide](#) to start building your site.
[Add content](#)



Powered by [Drupal](#)





Pull requests


Issues

Marketplace

Explore







backlineint / ga-sandbox

Unwatch

1

Star

0

Fork

0

<> Code

Issues 0

Pull requests 0

Actions

Projects 0

Wiki

Insights

Settings

Sandbox profile to demonstrate GA and GTM configuration for Drupal

Edit

Manage topics

5 commits

1 branch

0 releases

1 contributor

GPL-2.0

Branch: master


New pull request

Create new file

Upload files

Find File

Clone or download

 backlineint

Updates to streamline deployments from config

Latest commit fa70320 19 hours ago

config/sync	Updates to streamline deployments from config	19 hours ago
drush	Initial composer Drupal Project	21 hours ago
scripts/composer	Initial composer Drupal Project	21 hours ago
web	Updates to streamline deployments from config	19 hours ago
.editorconfig	Initial composer Drupal Project	21 hours ago
.env.example	Initial composer Drupal Project	21 hours ago
.gitattributes	Initial composer Drupal Project	21 hours ago
.gitignore	Updates to streamline deployments from config	19 hours ago
.lando.yml	Lando Drupal install	20 hours ago
.travis.yml	Initial composer Drupal Project	21 hours ago
LICENSE	Initial composer Drupal Project	21 hours ago

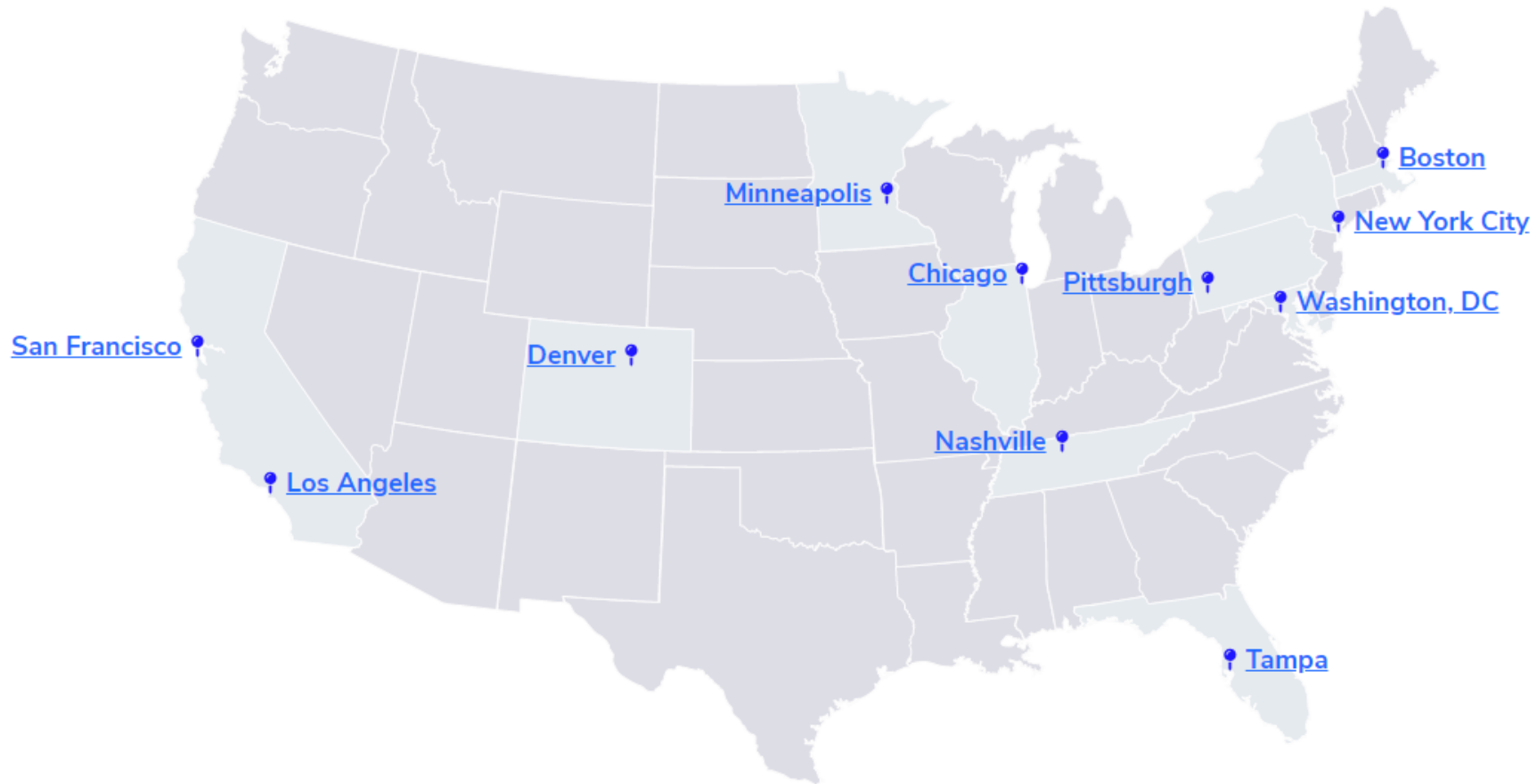
<http://bit.ly/drupal-ga-sandbox>

Thank You

BOUNTEOUS (VIRTUAL) TRAINING

Google Marketing Training

Our passion for insights makes our training top of the line.



Q&A

Brian Perry
Lead Front End Developer

Email: brian.perry@bounteous.com

