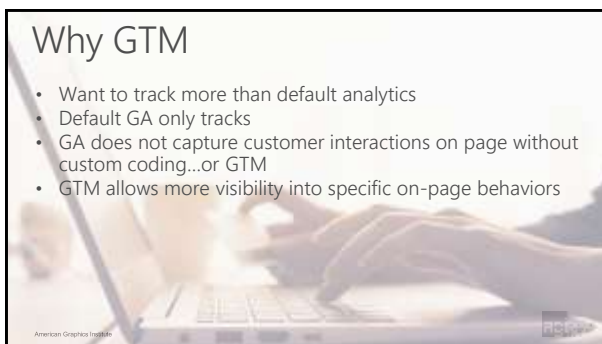
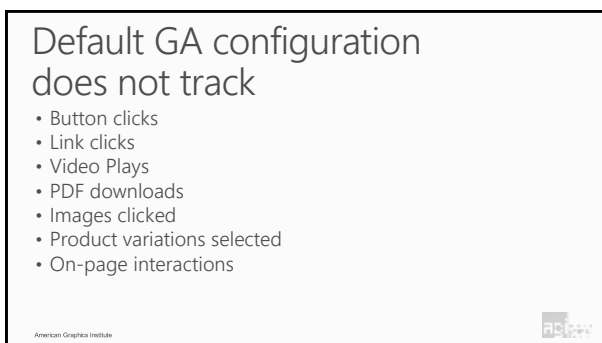




1



2



3

Why GTM

- Track on-page interactions without custom coding
- Want to manage and organize the many tags on sites
 - Remarketing
 - Ecommerce
 - Social Media
 - Advertising
- GTM allows tags to fire because of specific actions

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4

Why GTM

- Establish complex rules for sending data
 - eg: Customer watches video but does not buy, then send retargeting pixel to Facebook
- Place tags and tracking code on pages without developers
 - Allows placement of third-party tags, custom code in addition to Google tags

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Why GTM

- Want to involve broader team in data collection
- GTM is used across organizations
 - Marketing
 - UX
 - Web Development
 - Engineering

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Why GTM

- Too many tags can
 - Impact site performance and slow site
 - be disorganized or duplicated
 - become out of date

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7

Before tag management

- Tags added manually
- Required coding skills
- Required direct access to website for every change

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8

With GTM

- Tags can be added by non-developers
- Tags can be added by partners
- Tags are more easily organized
- Tags from Google platforms are more easily implemented such as Ads and Analytics
- Third-party tags added more easily such as Criteo, Bing, LinkedIn and Facebook
- Can more easily manage tag versions and updating

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With GTM

- Specify when tags send data
 - Sending data: the tag "fires"
- Streamlines loading process
- Allows management of tag firing sequence

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10

Tag management

- Acts as central dashboard for all tags
- Watches customers through journey
- Allows you to decide which tags to fire based upon what data you want to collect
- Allows specification of where tags send data

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11

GA vs. GTM

- GA default implementation
 - collects basic data
 - stores data
 - generates reports
- GTM replaces GA data collection function

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12

GA vs. GTM

- GA still stores the data and provides reporting
- GTM is separate from GA
 - GTM can send data to GA and other platforms
 - GTM does not store data nor does it provide reporting
- GTM collects information and passes it to both Google and third-party systems and platforms

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GTM Implementation Planning

- Are there existing tags to be migrated
- While GTM does not need to manage all tags, placing other tags manually defeats the purpose of GTM
- Determine systems to which you want to pass data

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GTM Implementation Planning

- Identify data you want to pass to an outside system.
 - Examples:
 - User information
 - Revenue information
 - Sales process
 - Events & actions on page (scroll, button clicks, add to cart, etc.)
- Data collected should align with business goals

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15

How GTM Works



16

How GTM Works

- JS Container Snippet place on every page of site; replacing manually added tags
- GTM Container snippet, on its own, doesn't do anything.

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How GTM Works

- To collect and send data GTM Container needs
 - Tags
 - Triggers
 - Variables
- Tags, triggers, and variables are placed within GTM Container
- GTM is used to add, delete and update tags, replacing manual tags that would otherwise be hard-coded on page

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18

Visits & user actions trigger tags

- Tags send specific information to specific services
 - GA event tag sends user actions to GA
 - Criteo pageview tag sends information to Criteo
 - Facebook tracking pixel send information to FB
- Tags fire based on instructions you define to GTM
- Firing instructions are defined using Triggers

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19

Account Setup



20

Log-in to GTM



21

GTM Sign-in

- Requires Google Account
- Separate from GA
- tagmanager.google.com

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22

GTM Account Set-up

- Create Account
- Create Container: generally one container per website
- Obtain & Install Container Script
- Add:
 - Tags
 - Triggers
 - Variables
- Test
- Publish

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23

GTM Account

- Account manages one or more site containers
- Similar to GA Accounts
- Typically one account per organization
- Each user can access multiple GTM accounts
- Each account can have multiple containers if managing multiple websites
- Typical setup involves one container per site

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24

One GTM account & Multiple users

- Multiple users can access the same GTM account
- Each user can be assigned different privileges
- If collaborating with an agency, the client should create and own the GTM account

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GTM Container – placed on pages

- Sometimes called Container Tag, but different from GTM tags
- Placed on all pages, intended to replace existing tags
- Separated into two pieces:
 - <head>
 - <body>
- Script for container is provided after setup is completed or
Click container ID (upper right of workspace)

26

GTM Container – placed on pages

- Any tag that needs to fire in <head> or <body> can be accomplished by GTM (exception: split testing scripts)
- Generally one single container per site, placed on all pages
- Container is where tags, triggers, and variables are placed
- Typical container name is URL name

27

Container includes

- Tags
- Triggers
- Variables

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28

GTM Container & WordPress

- GTM for WordPress Plug-in
- Only need to add Tag Manager ID
- Automatically places GTM code across all pages
- Does work, but places tags in footer
- Alternate: Appearance > Edit the theme and enter the code

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29

Verify GTM installation

- Check page source code, look for GTM
- Use Google Tag Assistant:
 - get.google.com/tagassistant
- View Real Time reports in GA to confirm data is received

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30

GTM Container Dashboard

- Add new tags to container
- View tags being edited
- See if container is published
- Add notes about container
- View change history

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32

Container Dashboard navigation

- Overview: Home screen
- Tags: Create new tags or edit existing tags
- Triggers: Define triggers for when tags should fire
- Variables: Use built-in or user-define variables; information GTM needs to send or do its job
- Folders: Organization for tags, triggers, and variables
- Versions: See past versions of what has been published
- Admin: Configure GTM account
- View users who have made changes & history of changes

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33

Data Layer



34

Why the Data Layer is needed

- There is a need for temporary, local storage of data.
- Temporary storage of data makes it easier to send data to systems. Examples:
 - Product variation currently on-screen
 - Video being watched
- Key : Value pairs can become variables and sent to GA or other systems.

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About the Data Layer

- Plain English: Temporary storage for GTM data
- Technical: The Data Layer is a JavaScript Object
- Provides temporary storage of tags or variables before acting on it or sending to a system such as GA
- Temporary storage, like the Clipboard
- The Data Layer does not persist across pages
- Temporary storage is per-page
- Local storage: data layer information remains local
 - Data is only sent to external systems when accessed via a tag.

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About the Data Layer

- Each page load creates new data layer for that page
- Only exists on pages with GTM or where Data Layer is created by JS
- Holds information sent to it from the site.
- Examples of information you may find in Data Layer:
 - Events
 - cart information
 - variables

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37

About the Data Layer

- Data layer exists on every page where GTM loads
- Data layer is unique to each view of a page
- GTM creates Data Layer this automatically
- Non-GTM implementations require JavaScript
- Data layer builds as user interacts with page

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38

Information in Data Layer is structured

- Data stored in Keys and Values
- Called Key Value Pairs
 - Key is descriptive
 - Value is the information
- Examples:
 - Page Path : /products
 - Time of Visit : 22:01
 - Video Action : Play

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39

How Data Layer receives Key Value Pairs

- Populated with page load.
 - Example: product category is set on page load
- Data is gathered by GTM
- After data is gathered it is pushed into data layer.
 - Example: When a product is added to the cart. Data layer might receive name and price of product and page from which product was added.

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40

Viewing the Data Layer



41

Seeing the Data Layer

- Tag Manager Preview shows data on data layer
- Can see data layer
 - At a specific point in time
 - As it changes through events via the summary

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42

Getting data into data layer & GA

- Most things on page or in DOM can be added to data layer and/or sent to GA
- Variables are often the easiest way to push information into Data Layer or sent to GA
- Variables can be sent directly to GA within Events
- Variables can be pushed to data layer

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43

Pushing content to data layer

- Use JavaScript within Custom HTML Tag in GTM
- Use `dataLayer.push` script:
 - `<script>`
 - `window.dataLayer.push({`
 - `'key':'value'`
 - `});`
 - `</script>`
- Identify key value pair being sent to data layer

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Extracting from data layer

- Create Data Layer Variable
- Pulls information from data layer
- Data Layer Variable name : use key from key, value pair
- Can send variable data as GA Event category, action, label

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45

Preview & Publishing



46

Previewing and Testing



47

Preview process

- Use to:
 - Test tags, triggers, and variables
 - Confirm changes made to container are working and acceptable before publishing
 - Determine what is working and when it works

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48

Preview process

- Local testing environment: not visible to public
- Displays tags, triggers, variables, data layer and events for testing purposes before they are published live
- Can share preview with others for collaboration
- May need to refresh container tag if recent changes were made that need to be previewed; also remember to refresh browser window to load updated GTM container

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Using Preview Mode

- Click Preview in container dashboard
- Open new browser tab
- Navigate to site containing GTM tag being previewed
- Use preview window (bottom half of browser) to test
- Can expand or collapse preview mode

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50

Using Preview Mode

- View Tag Manager Events along left side of display
 - Display a chronological list of events as they occurred
 - Select specific event
 - View corresponding tag, variable, data layer and error information relating to specific event
- Summary lists all actions up to the current point in time.
 - No summary information for variables
 - Click individual events to see variables at each stage
- Leaving preview mode: requires clicking to stop preview

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Using Preview Mode

- If more than one container exists on site, confirm correct container is being previewed
- Return to GTM to do any of the following:
 - Leave preview mode
 - Publish changes to live site
 - Abandon changes

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Refreshing Preview Mode

Refresh Preview mode if tags, triggers, or variables were modified

- Refresh within GTM
- Also refresh browser tab

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53

Publishing Options

- Create Version: Saves draft copy of work being done without publishing
- Publish and Create Version: Publishes updated GTM container to the web with any changes included.
- When publishing or saving version include name and description
 - Provide information about why container was updated
- Where to publish: Live is production; other options exist if same container has multiple environments (testing, development, staging).

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Container Versions

- All versions of container, including past versions can be
 - Previewed
 - Shared
 - Renamed
 - Rolled-back (by setting as latest version)

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GA Real-time reporting

- Use for additional debugging and testing of GA tags
- Can see data being sent to GA

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Version Control for each tag

- Roll-back to previous version
- Preview version
- Save versions without publishing

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57

Tags



58

Tags

- Tags define what you want GTM to do
- Tags provide the framework for sharing information about what is happening on your site.
- Tags share information about on-page (or in-app) activities
- Replace the need for individual scripts to be placed on site.
- Tags place scripts on appropriate pages and monitor actions by users.

59

Tags

- Tags send information to Google Analytics and Other Services about activity on your site
- Collect and pass information (values) to external systems
- Send information when instructed by Triggers
- Pre-built tags
 - Many Google systems have pre-built tags
 - There are many third-party pre-built tags
- Custom Tags
 - Custom tags can be created manually

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60

Tags

- May send data to multiple locations with multiple tags on same page
 - Visitor arrived on site
 - Visitor went to another page
 - Visitor clicked a button
- At least one trigger must fire for an event to send data
- Can include constant and variable information

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61

Examples of Tag Usage

- Tags on a single page could share information with
 - Google Analytics
 - Google Ads
 - Facebook
 - Criteo
- Some tags might fire when page is viewed
- Other tags may fire when a user completes a purchase
- Other tags may fire if a video is played or button is clicked

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62

Most Common GTM Tags

- Google Analytics Pageview : generally on every page
- Good Ads Conversion Tracking
- Google Ads Remarketing
- GA Event Tags
- Criteo OneTag

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63

Adding tags to container



64

Creating a Tag

- Tags > New Tags
- Google Tags are “featured” and ready to use
- More built-in tags for common services including Bing, LinkedIn, Criteo, Adroll, Twitter
- Custom tags can be used when no pre-built tags exist (eg: FaceBook)
- Tags require at least one trigger

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65

Creating GA Pageview Tag

- GTM code replaces GA code
 - GTM sends data
 - GA stores data
- If previous GA code exists on site, remove GA tag
 - Only want one tracking code sending data to GA
- Tag > New (or click New Tag)
- Select GA – Universal Analytics
- Select Pageview

66

Creating GA Pageview Tag

- GA Settings:
 - Can enter GA tracking ID or use a variable
 - Create New Variable
 - GA Settings: enter tracking ID
 - Cookie Domain: allows tracking across subdomains and main domain

67

Creating GA Pageview Tag

- Name using a convention that identifies the tag. eg: GA – Pageview
- Trigger: When to fire;
 - Default Trigger for Pageview is All Pages
- Preview to test
 - Evaluate first step: pageview & Tags that fired
- Publish to make tag operational

68

Test and QA new tag

- Preview to confirm trigger is functional
- Use GA real-time reporting to validate data is received by Analytics

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69

Scripts and Pixels: Custom HTML

- Example: Facebook pixel installation
- Tag > New Tag > Custom HTML
- Copy tag from Facebook
- Define Trigger: Default is all pages
- Save, Name
- Preview and test
- Can also use Facebook Pixel Helper Browser Extension

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70

Google Ads tag for Remarketing

- Tags > New > Choose Google Remarketing
- Enter Conversion ID from Pixel Script found in Google Ads interface

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71

Conversion Linker Tag

- If using Google Ads, this should be enabled
- Fire on all pages
- No configuration needed
- Helps to accurately track conversions across all pages

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72

Adding Criteo tags



73

Third-Party tags

- Added in similar way to Google tags
- Available for Criteo, Bing, LinkedIn, Hotjar, PayPal, and others

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74

Criteo One Tag

- Add tag
 - Enter client ID
 - Enter MD5 hashed email
- Define Trigger as DOM Ready

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Criteo Scripts

- Add HTML Tag
 - Enter Script
- Define Trigger as DOM Ready

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76

Triggers



77

Tags vs. Triggers

- Tags: What you want GTM to do
- Triggers: When you want GTM to take the action



78

Triggers

- Defines when you want GTM to take an action
 - when tags should fire (send information) from a tag
- Initiated by conditions or actions::
 - conditions you've specified
 - eg: Pageview
 - user actions
 - eg: Button clicked



79

More about Triggers

- Multiple triggers can exist on a page and in a GTM container
- Triggers operate independently of each other
- Require one or more triggers be true for tags to fire
 - When button clicks, fire X tag
 - When page loads, fire Y tag

80

More about Triggers

- Both pre-defined and custom triggers exist
- Can be simple (page load) or complex (item added to cart)
- Built-in actions or custom actions are available
- Comprised of Variables and Operators
- Enable When : when trigger should start listening
- Fire On: when to submit data

81

Creating triggers



82

Trigger Types

- Page View: When page loads
 - Various stages of page load are available
- Click: such as a hyperlink
 - Different types of clicks are available
- User Engagement:
 - Forms submitted
 - Elements loaded or visible on page
 - Scroll to certain depth of page
- Others: custom events

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Creating a Trigger

- Can Create within Tag at bottom of tag
- Can choose Trigger > New

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84

Planning for Triggers

- When will trigger fire
 - Page load
 - Scroll
 - Clicks
 - Element visibility
 - GTM Custom Event (event list seen in debug panel)
 - Other action...
- What tags will trigger fire

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Variables



86

Variables

- Pieces of data: information needed by GTM or other systems
- Placeholders for values
- Examples:
 - Title of page being viewed
 - Name of link being clicked

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87

Variables

- Used in both tags and triggers
- Built-in variables are defined by GTM (eg: page URL)
- Custom variables are user-defined (eg: purchase amount)
- Type of variable depends upon source of data
- On their own, variables do not perform any tasks

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88

Variables

- Allows unique, pages-specific information to be sent using the same tag on different pages
- Example: Same GA tag can exist on all pages but send unique page-specific information because of variables that collect unique, page-specific data such as the Page Title
- Variable name is constant
- Variable value changes

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89

Variable Examples



Tags: Pageview; Video Event
Variables: Page URL; Name of video



Tags: Pageview; Click Event
Variables: Page URL; Button name

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90

Variable Examples

- Page URL
- URL query parameter
- Video title
- Name of button
- Value of transaction

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91

Using variables



92

Using Variables in GTM

- Located on left side of navigation pane
- Built-in variables can be configured
- User define variables can be created
- Most commonly used for interactions are Click variables

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93

Click Variables

- Click Element: Accesses gtm.element key in the dataLayer. References the DOM element of click.
- Click Classes: Accesses gtm.elementClasses in dataLayer. References classes attribute on the DOM element clicked.
- Click ID: Accesses the gtm.elementId key in the dataLayer, The value of the id attribute on the DOM element clicked.

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94

Click Variables

- Click Target: Accesses the gtm.elementTarget key in the dataLayer. This is the click target.
- Click URL: Accesses the gtm.elementUrl key in the dataLayer. This is the HREF portion of the clicked element.
- Click Text: Accesses the gtm.elementText key in the dataLayer. This is the hyperlinked text or button text.

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95

Verifying Variables

- Create Click Trigger
- Verify variables using GTM preview
- Variables selected should appear within list
- Will be empty unless activated
- Variables can change at each stage

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96

Built-in Variable Examples

- GA Settings Variable
- Page hostname
- Page URL
- Referrer
- DOM Element
- Click Elements
- Information from Data Layer

97

User Defined Variable Examples

- Navigation eg: query parameter
- Page eg: cookies
- Page Elements eg: page element visibility
- Utilities eg: constant value
- Container Data

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98

Variable Operators

- Define relationship between variable and value
- Specify conditions when trigger should fire
- Examples: Equals, contains, does not contain

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Variable Values

- Information about visitor, browser, or site condition
- Examples of variables:
 - Page URL, Items in Cart, User ID
 - Variable: Page Path - Variable Value: /home
- Variable: Video Action - Variable Value: Play

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100

Examples of variables used by tags

- Page visited
- Product Purchased
- Product viewed

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Examples of variables used by Triggers

- Fire only on certain product click
- Fire only when video action occurs

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102

Adding Variables

- Select Variables on left side of interface
- Built-in variables: defined by Google
- User-defined: Custom variables, created by you

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Create GA Property Variable

- Saves Time
- Reduces risk of error
- Allows re-use of GA property across GTM

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Creating a New Variable for GA Property

- Click New
- Rename from Untitled to ga Property
- Set Type to Constant
- Configure Variable: add GA Property ID: eg: UA-123-4567890
- Click to Create Variable

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105

Replace GA Pageview Property ID with gaProperty Variable

- Tags > GA Pageview
- Configure Tag
- Tracking ID: Click Selector lego block, choose gaProperty variable
- Continue, then Save
- Preview to confirm variable is firing

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106

Creating GA Events



107

GA Events

- Track on-page activity
- Link clicks
- Button clicks
- Social share
- Product options
- Email subscriptions

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108

GA Events: Use UA Tag

- Set as Event (change from default of Pageview)
- Define data to send to GA
 - Category
 - Action
 - Label
 - Value (optional)
- Use Variables for Action and/or label to include session specific information.
- Define when to send data with trigger

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109

Use Variables to send Event data

- Multiple Variables can exist together to send more data
- Video name and video action
- Page name and website
- Dollar value and items purchased

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Easily Create GA Event

- Create event after defining variable and trigger
- Duplicate Pageview tag
- Change tag type from Pageview to Event
- Add Category, Action, and Label

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111

Tracking Engagement



112

Engagement Tracking

- Track behavior on pages such as buttons or hyperlinks
- The process: Variable passes data to trigger which fires a tag

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Engagement Tracking: Variables

- Must enable variables to listen for activity to be tracked
- Variables > Configure
- Example: enable various Click variables

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Engagement Tracking: Triggers

- Triggers > New
- Click > Just Links
- Trigger can fire GTM tag when hyperlinks are clicked
- Tracks clicks of links with <a> tag in HTML
- Can test trigger and variable on their own, but trigger needs to be connected to Tag to send data
- Preview shows data being collected

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Engagement Tracking: Finding Triggers

- Use Some Clicks for most triggers to limit trigger to a specific click
- Need to identify unique click?
 - Right-click to select element and Inspect
 - Create All Clicks trigger and click element, using Preview mode to see identifying information about what was clicked

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Engagement Tracking: Link Clicks

- Using a variable to identify clicked text and URL
- Tag > New
- GA
- Event
 - Category: Social
 - Action: Click
 - Label {{Click URL}} {{Click Text}}
- Trigger: All Links
- Preview to test

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117

Engagement: Time on page

- Look for specific on-page actions at a set time
 - Was form completed within 20 seconds
 - Was link clicked within 10 seconds
 - Did reader reach scroll depth within 30 seconds

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Engagement: Time on page

- Trigger: Timer
- Set name to name you wish to use
- Set Milliseconds: note 1,000 ms = 1 second
- Set limit:
 - Eg: set 1 to fire only 1 time at 1,000 ms
- Set conditions when timer should start to fire
- For all pages use RegEx .* (not advised: slow performance)
- Create events to fire at specific intervals of trigger

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119

Scroll Tracking

Track how far down page visitors scroll

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120

Create GA Tag for Scroll Depth:

- GA Event Tag
 - Category: Scroll Depth
 - Action: {{Page URL}}
 - Label: {{Scroll Depth Threshold}}
 - Use {{gaSettings}} or enter GA identifier

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121

Create Trigger for Scroll Depth

- Scroll Depth Trigger
 - Choose percent or pixels
 - Avoid 0 or 100; avoid % of screen likely visible when first displayed
 - Select pages to which this should apply
- Interaction or Noninteraction: Do you want scrolling to affect bounce rate
- Preview and test in GA Real Time Reports
 - Active Users displays Interaction Hits, last 30 minutes displays all hits

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122

Element Visibility Trigger

- Trigger can fire tag when page changes
- Can detect even when page (URL) does not change
- Example: Can detect when messages or items appear in browser such as "invalid password"
- New > Trigger > Element Visibility
- Copy Selector of Element to use for trigger with right-click
- Select Observe DOM Changes for visible items changing
- Limit to specific pages if all pages do not contain items being tracked

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123

Engagement Tracking: Tags

- Establish GA Event tag
- Tags > New > GA
- Track Type: Event
- Set Category, Action, and Label to reflect engagement type
- GA Settings: set GA account ID or GA variable

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124

Tracking Clicks



125

Tracking Button Clicks: Create Trigger

- Examine Class of button in browser
- Define trigger variable: Variable > Click Classes

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Tracking Button Clicks: Create Trigger

- Set-up Trigger: Click Triggers > New
 - Name Trigger
- Choose Event Type: Click
 - Link Click (or Click) for HTML links using <a> tag
 - All Clicks for any click on the page
- Enable When Page URL contains [enter page path]
- Fire on: defines when trigger should fire

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Tracking Button Clicks

- Create User-Define Variable
 - Variables > New > User Defined
 - Choose Type: URL
 - Choose Component Type: Fragment

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128

Video engagement



129

YouTube Videos

- Can track engagement with YouTube videos
- Pre-defined Variables and Triggers are available

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130

YouTube Videos

- Enable YouTube Variables
- Enable YouTube Trigger
 - Can trigger on Start, Complete, Pause, Seek,, or Buffering
 - Can also trigger at certain threshold percentages
 - One all-encompassing trigger and tag, then set variables or set different triggers for specific events
- Create GA Tag to send GA Event
 - Use YouTube Variables to identify video title

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131

Ecommerce



132

Ecommerce

- Must enable in both GA and GTM
 - GA: Settings > View > Ecommerce
 - GTM: GA Settings Variable > More > Ecommerce
 - Choose if data is found in Data Layer (more common) or into a variable
- Available in two options: Standard and Enhanced
- Standard is transaction information
- Enhanced adds product information and buyer-journey details
- Enhanced writes data in different format
- Ecommerce Reports available in GA

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Ecommerce Process

- Find the data to be sent: variable
- Push data to data layer: tag
- Send data to GA either on pageview or via another trigger
- Events are more common for advanced
- Within CMS this is often done with tags applied directly in CMS using GTM with custom script or events to do the data layer push.
- Items to send:
 - Transaction data: transactionID, transactionTotal
 - Product data: name, sku, price, quantity

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Ecommerce Funnels

- Establish Funnels in GA
- Requires step numbers be sent via Event or Pageview from GTM to GA
- When interpreting reports, note numbers may not be perfect: buyers may skip steps, some may re-load purchase confirmation; some may start mid-cycle and be counted as Goal but not within funnel

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135

Account administration & organization



136

Workspaces

- Provide organization if multiple users work on same container
- Eliminates others overwriting your work, or you overwriting others
- Can create up to three total workspaces
- Creates temporary, parallel version of container
- Not permanent
- Shows workspace and user who made changes when used
- Can view in Activity History
- Only needed if several people work concurrently

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137

Workspaces

- Workspace disappears after changes are published
- Default workspace shows "update workspace" if other changes have been published

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138

Admin area

- Account
 - Settings
 - Activity
 - User Management
- Containers
 - Settings
 - Activity
 - User Management
 - Import / Export Container

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139

Users

- Two levels of users
 - Admin: Add / remove users; "super user"
 - User: Vendors or users who will not add / remove users
- Privileges for Containers
 - Read
 - Edit
 - Approve
 - Publish

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140

Containers

- Each account can have multiple containers
- One container per website URL is most standard
- Each container is designed to organize content being measured.
- Use a single container to keep together related data.

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Folders

- Organize tags, triggers, variables using folders
- Examples: all GA tags and triggers into a GA folder
- Example: all Facebook tags into a FB folder
- Move items into folders from within Folders section
- View content from specific folders in the Folders section

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142

Tag naming

- Name tags, triggers, and variables with similar structure
- Tags are grouped alphabetically in GTM
 - Example:
 - Google Analytics tags start with GA-
 - Facebook tags start with FB-
 - Pageview triggers start with Pageview-
 - Scroll triggers start with Scroll-

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143

Trigger naming

- Suggest to name based on actions
- Examples:
 - Pageview-
 - Scroll-

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Variable naming

- Suggest naming to convey type
 - Constant-
 - URL-
 - Cookie-

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145

Advanced Topics



146

Tag Sequencing

- If multiple tags fire at the same time, you can select order in which tags fire
- Advanced Settings for tags
 - Establish tags to fire before and/or after specific tag
 - Setup tags are sent before a specific tag
 - Cleanup tags are sent after a specific tag

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147

Monitoring user-input Forms

- Virtual Pageview for each form field click
- Allows tracking for each form field started
- Default trigger does not exist in GTM
- Use onChange or onFocus event hard-coded on page to send data to data layer using dataLayer.push JS
- Monitor virtual pageviews vs. form completions to determine form abandonment

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148

Cross Domain Tracking

- Track visitors across multiple domains
- Combines user session data from across multiple domains or subdomains
- Client ID is passed between sites, unifying session data
 - Can examine client id in debugger on different sites to validate
- Tracks internal referrals across domains and subdomains
- If Cookie Domain is set to auto, then subdomain tracking functions properly

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149

Set Up Cross Domain Tracking

- Google Analytics Settings Variable
 - Tracking ID: keep as-is
 - Cookie Domain: auto
 - Cross domain Tracking: Auto Link Domains: Enter domains to Link together
- Fields to Set:
 - Field Name: allowLinker
 - Value: true
- ClientID gets passed in URL between sites

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Cross Domain tracking in GA

- In GA visit Admin > Property > Tracking info > Referral Exclusion list

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151

Deploy Google Ads Code

- Need Conversion ID and Label from Google Ads
- Google Ads: Tools > Conversions
- Select Conversions, click Edit option then obtain conversion_id and conversion_label

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152

Custom Dimensions and Metrics

- Create Custom Dimensions or Metrics in GA and get index number
- Add within GA via Admin > Property > Custom Definitions
- Enter index number into GAS variable within GTM to map data to custom dimension or metric

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153

Collecting dynamic variables

- Collecting changing values such as purchase price, item price
- Create User Defined Variable
- Variable > New
- Select Data Layer Variable and provide name
- Create Variable
- Add JS on page to extract value and push to data layer

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Formatting User Defined Variables

- Variable > Format Value
- Change Case
- Change Null to 0
- Change Undefined to Not Set
- Change True or False to yes or no (or 1 or 0)

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155

Importing & Exporting Containers

- Export all tags, triggers, and variables
- Allows for easier setup of multiple accounts with identical or similar settings
- Share specific version of container or workspace
- Shared as JSON file
- Can edit the JSON file using text editor
- Import and Export via Admin interface

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156

Troubleshooting

- Browser Developer tools are helpful
- Within Chrome can use Network tab to see information sent to GA.
 - Filter on Collect

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157

Resources

- Tag Manager Help: <https://support.google.com/tagmanager#topic=3002579>
- GA Debugger <https://chrome.google.com/webstore/detail/google-analytics-debugger/jnkmfdileelhoficijamephohjehhna>
- Implementing eCommerce Help Files : <https://support.google.com/tagmanager/answer/6107169>
- EEC Developer Guide <https://developers.google.com/tag-manager/enhanced-ecommerce>

158

Resources

- How to Measure
 - Product Impressions
 - Product Clicks
 - Product Detail Impressions
 - Add / Remove from Cart
 - Promotion Impressions
 - Promotion Clicks
 - Checkout

159

Resources

- Purchases
- Refunds
- List of EEC data types and actions: <https://developers.google.com/analytics/devguides/collection/analyticsjs/enhanced-ecommerce>
 - Impressions
 - Product
 - Promotions
 - Actions

160