

# How to enhance Google Analytics 4 data with Google Tag Manager

James Akers, Wednesday 12 July 2023



Digital Culture  
Network





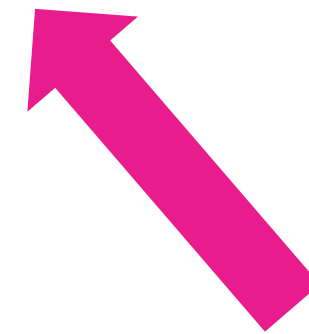
**#DigitalCultureNetwork**

**@ace\_dcn**



# Build your own Events to track your objectives

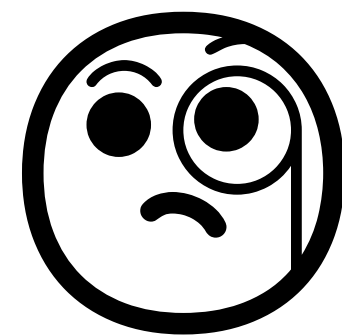
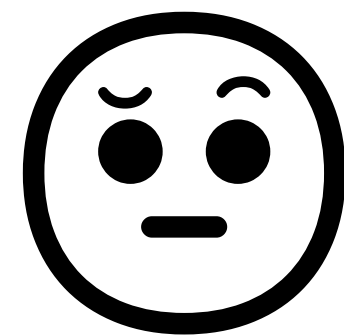
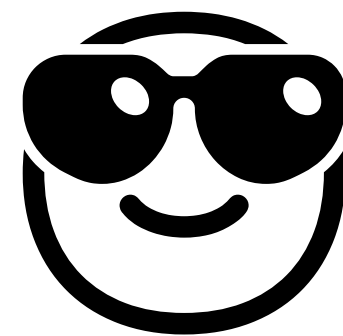
1. Use the GA4 admin interface
2. Ask a developer to add relevant tags
3. Use Google Tag Manager



# Session outline

Today we will cover:

1. What is Google Tag Manager (GTM)?
2. How to create and install a GTM account
3. Setting up Event tracking for Google Analytics 4
4. Advanced configuration and common pitfalls



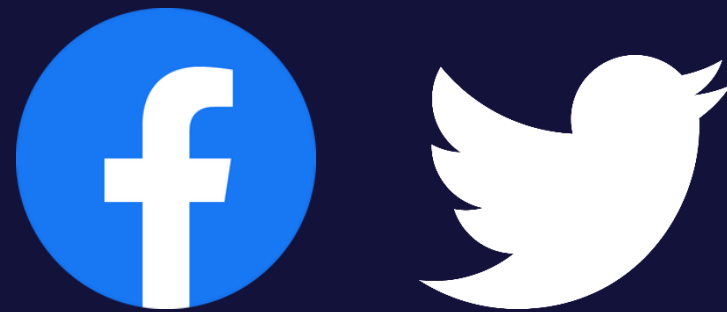
**Part 1:**  
**What is**  
**Google Tag Manager?**



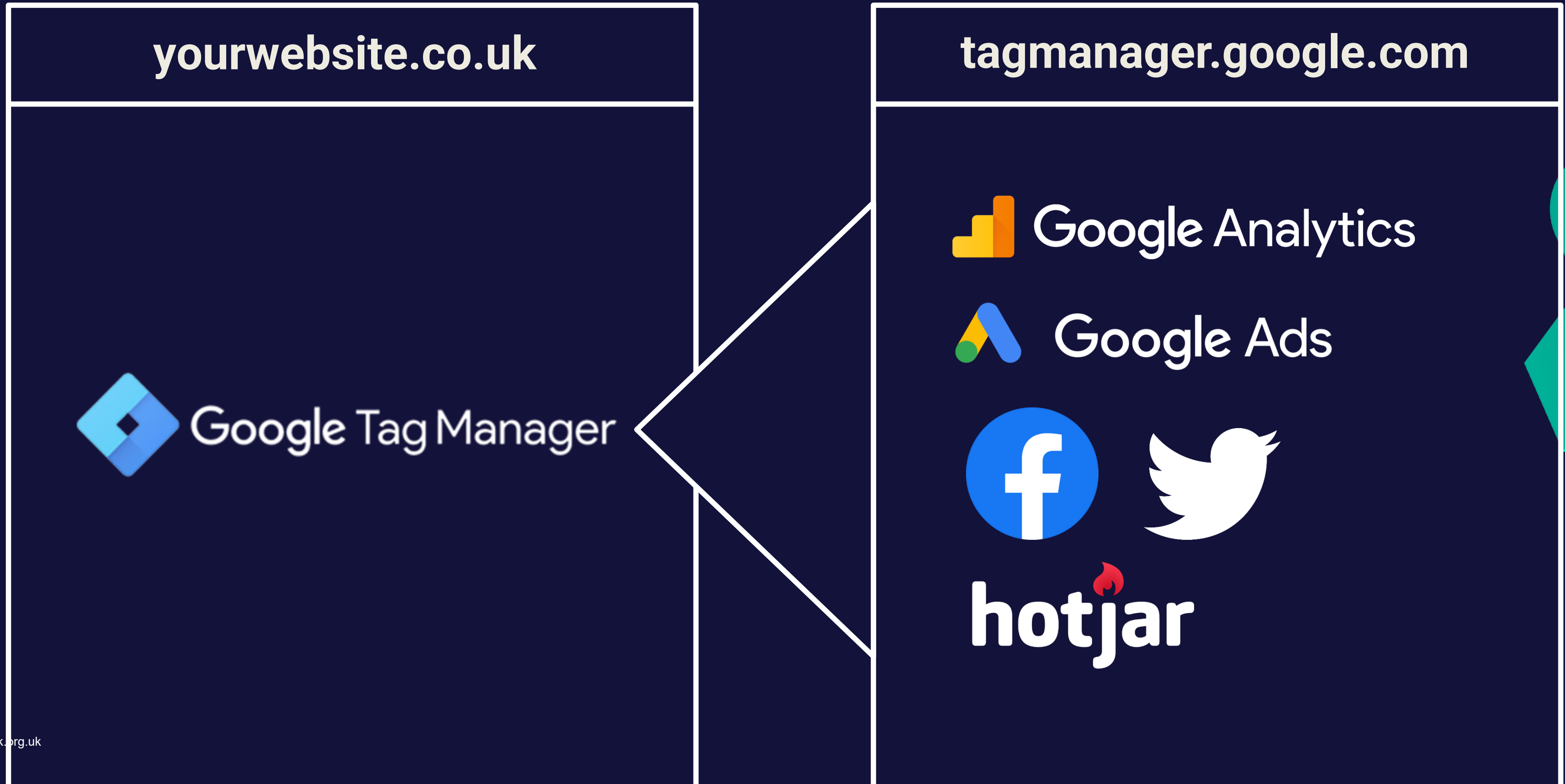
**yourwebsite.co.uk**

 **Google Analytics**

 **Google Ads**



**hotjar**



# Tag

What do you want to happen?



# Trigger

When do you want to do it?

# Variable

How, specifically should things happen?

**What?**

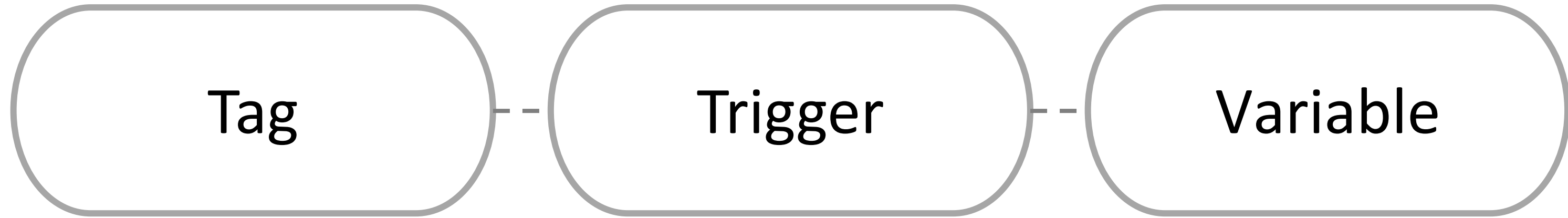
**When?**

**How?**

Tag

Trigger

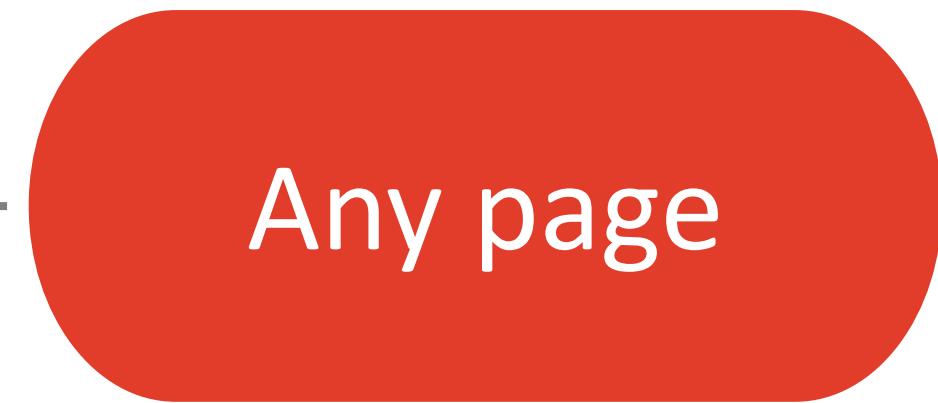
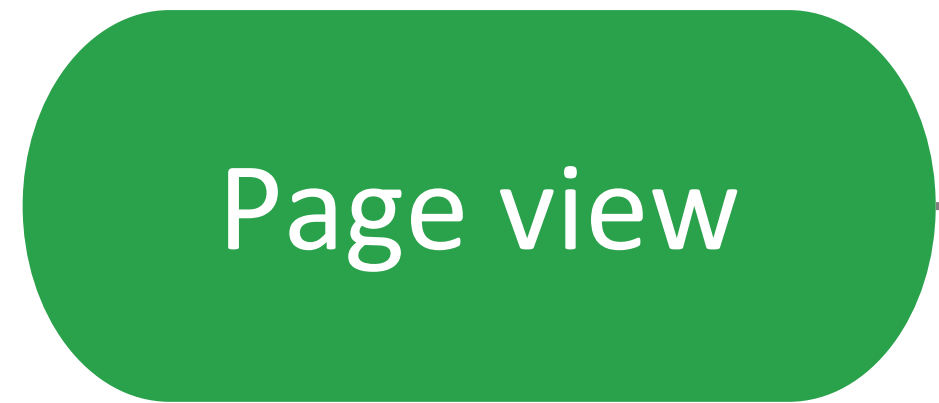
Variable



**What?**

**When?**

**How?**



**What?**

**When?**

**How?**

File download

Link click

URL match

**URL match** – does the link end with any of the following:

pdf|xlsx?|docx?|txt|rtf|csv|exe|key|pp(s|t|tx)|7z|pkg|rar|gz|zip|avi|mov|mp4|  
mpe?g|wmv|midi?|mp3|wav|wma

## Part 2:


# How to create and install a GTM account

**Part 3:**  
**Setting up Event tracking  
for Google Analytics 4**


✔ Data collection is active in the past 48 hours.

Stream details




STREAM NAME **digitalculturenetwork.org.uk** STREAM URL **https://digitalculturenet**


MEASUREMENT ID **G-RZF2R7PBE4** 


Events

 **Enhanced measurement**


Automatically measure interactions and content on your sites in addition to standard page Data from on-page elements such as links and embedded videos may be collected with rele personally-identifiable information will be sent to Google. [Learn more](#)

Measuring:  Page views  Scrolls  Outbound clicks [+ 3 more](#)


 **Modify events**  
Modify incoming events and parameters. [Learn more](#)


 **Create custom events**  
Create new events from existing events. [Learn more](#)


Save

**Page views**  Capture a page view event each time a page loads or the website changes the browser history state. Optionally turn off browser history-based events under advanced settings.


[Show advanced settings](#)


**Scrolls**  Capture scroll events each time a visitor gets to the bottom of a page.


**Outbound clicks**  Capture an outbound click event each time a visitor clicks a link that leads them away from your domain(s). By default, outbound click events will occur for all links leading away from the current domain. Links to domains configured for cross-domain measurement (in Tagging Settings) will not trigger outbound click events.

**Site search**  Capture a view search results event each time a visitor performs a search on your site (based on a query parameter). By default, search results events will be fired any time a page loads with a common search query parameter in the URL. Adjust which parameters to look for under advanced settings.

[Show advanced settings](#)

**Form interactions**  Capture a form interaction event each time a visitor interacts with a form on your website.

**Video engagement**  Capture video play, progress, and complete events as visitors view embedded videos on your site. By default, video events will be automatically fired for YouTube videos embedded on your site with [JS API support](#) enabled.

**File downloads**  Capture a file download event each time a link is clicked with a common document, compressed file, application, video, or audio extension.



# Configure directly in GA4

if the trigger is one of:

1. page view
2. external link click
3. file download

**AND**

4. you don't need **additional** Parameters

# Custom Events

## Questions to ask:

1. What do you need to know?
2. Where can you get this data from?
3. How can you structure the data?

# Custom Events

When building Events consider:

1. Can I get this data from existing GA4 Events?
2. What recommended Parameters could I use?
3. Do I need to define a **Custom Dimension**?

**What?**

**When?**

**How?**



**What?**

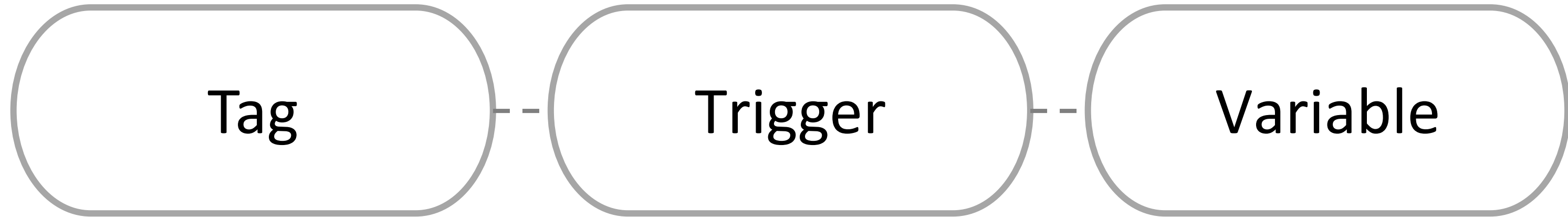
**When?**

**How?**

Tag

Trigger

Variable



**Example 1:**  
**Contact by email  
and telephone**



HAVE FURTHER QUESTIONS?

# CONTACT US

You can commission the team, suggest new events, and have a general chin wag.

Email: [hello@peasantparty.com](mailto:hello@peasantparty.com)

Phone: [07594 000 123](tel:07594000123)

**mailto:hello@peasantparty.com**

**tel:07594000123**

Name

Email

**What?**

**How?**

**When?**

Contact

Email

Phone number

Form

Link click

Link click

Submit

mailto:

tel:





contact

Parameter


Name:	method
Value:	Email / Phone / Form

Parameter

Name:	content_name
Value:	e.g. info@myorganisation.org

### Tag Configuration

Tag Type

 **Google Analytics: GA4 Event**  
Google Marketing Platform

Configuration Tag 

GA4 Configuration

Event Name 

contact

### Event Parameters

Parameter Name

method

contact\_name

Value


{{Contact method}}

{{Contact name}}




### Triggering

Firing Triggers

 **Email clicks**  
Just Links



OR

 **Telephone clicks**  
Just Links



### Variable Configuration

Variable Type



 RegEx Table 

Input Variable 





{{Click URL}}  

RegEx Table 


Pattern

mailto:	
tel:	


Output

Email		
Phone		

[+ Add Row](#)

Set Default Value 

Default Value 

Form 

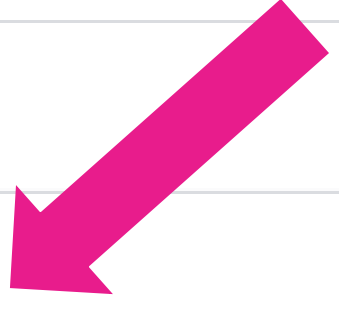
Variable

### Trigger Configuration

Trigger Type



Click - Just Links



Trigger

Wait for Tags ?

Check Validation ?

This trigger fires on

All Link Clicks

Some Link Clicks

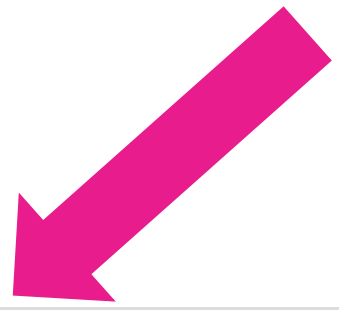
Variable

Fire this trigger when an Event occurs and all of these conditions are true

Click URL

starts with

mailto:



-

+

### References to this Trigger



GA4 Event - Contact  
Tag

# Custom Definitions

Define any non-standard parameters:

- `method` → • Method
- `contact_name` → • Contact name

If you don't, they cannot be used in reports



# Google Analytics 4 (GA4) - Dimensions and Metrics Cheatsheet v1.2

All Data Dimensions Metrics Expand

## Attribution

Campaign ID	DIMENSION	
Is manual campaign	DIMENSION	
Campaign	DIMENSION	
CM360 account ID	DIMENSION	
CM360 account name	DIMENSION	
CM360 advertiser ID	DIMENSION	
CM360 advertiser name	DIMENSION	
CM360 campaign ID	DIMENSION	
CM360 campaign name	DIMENSION	
CM360 creative format	DIMENSION	
CM360 creative name	DIMENSION	
CM360 creative type	DIMENSION	
CM360 creative version	DIMENSION	
CM360 default channel group	DIMENSION	

## Ecommerce

Currency	DIMENSION	
Item affiliation	DIMENSION	
Item brand	DIMENSION	
Item category	DIMENSION	
Item category 2	DIMENSION	
Item category 3	DIMENSION	
Item category 4	DIMENSION	
Item category 5	DIMENSION	
Item coupon	DIMENSION	
Item ID	DIMENSION	
Item location ID	DIMENSION	
Item name	DIMENSION	
Item variant	DIMENSION	
Item list ID	DIMENSION	

## Cohort

Cohort	DIMENSION	
Daily cohort	DIMENSION	
Monthly cohort	DIMENSION	
Weekly cohort	DIMENSION	
Cohort active users	METRIC	
Cohort total users	METRIC	

## General

A/B testing experiment event	DIMENSION	
Experiment - variant name	DIMENSION	
Experiment - variant ID	DIMENSION	
Experience - variant ID	DIMENSION	
Experiment impression ID	DIMENSION	
File extension	DIMENSION	

## Demographics

Age	DIMENSION	
Interests	DIMENSION	
Interest IDs	DIMENSION	
Gender	DIMENSION	
In-market interest ID	DIMENSION	

## Geography

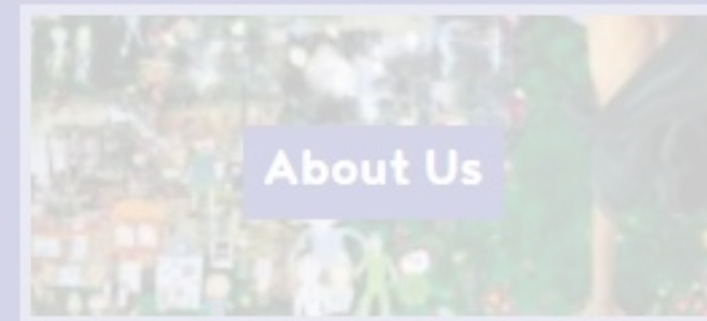
City	DIMENSION	
City ID	DIMENSION	
Continent ID	DIMENSION	
Continent	DIMENSION	
Country	DIMENSION	
Country ID	DIMENSION	
Latitude	DIMENSION	

# Example 2: Audio interactions



# Welcome to Chapel FM

This is the website for Chapel FM—the first-ever arts centre in East Leeds. You will be able to find everything you need to know about what is going on in the Centre; about how you can get involved and be part of it; and how you can listen and watch all the programming from our community radio station, East Leeds FM.



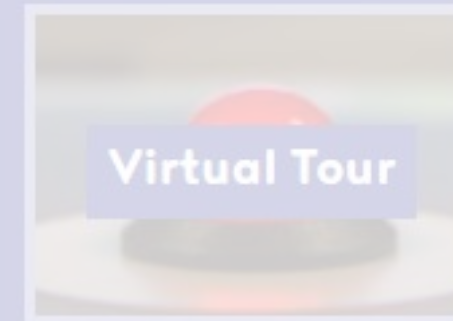
About Us



ELFM Player



What's On



Virtual Tour



Get involved in ELFM

## Explore Chapel FM...



Event



Course



Programme



Chapel FM Volunteering  
16th Mar '22 - 31st Dec '23

SAVE OUR STORIES – a community radio play

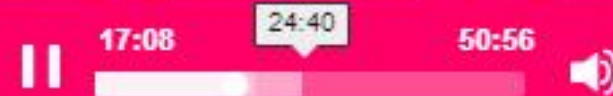


### SAVE OUR STORIES – a community radio play

SEA.CORP have arrived in East Leeds. When a group of local young people discover the plans, they decide to spread the word and share the stories of our home from home spaces.... [More details](#)

Comments

Share this programme...





audio\_start

Parameter



Name:	audio_title
Value:	From The Bandroom #53

Parameter

Name:	audio_mode
Value:	listen_again

### Tag Configuration

Tag Type

 **Google Analytics: GA4 Event**  
Google Marketing Platform 


Configuration Tag 

GA4 - Data Stream




snake\_case


Event Name 

audio\_start 

Event Parameters

Parameter Name

audio\_title 

audio\_mode 

Add Row

Value

{{Get nearest H3 text}}  

{{DLV - Player Mode}}  

User Properties

# Custom Definitions

- audio\_title → • Audio Title
- audio\_mode → • Audio Mode

## Custom definitions

[Quota information](#)[Custom dimensions](#)[Custom metrics](#)[Create custom dimension](#)

Dimension name ↑	Description	Scope	User Property/Parameter	Last changed	
Audio Mode		Event	audio_mode	May 20, 2022	⋮
Audio Title		Event	audio_title	May 20, 2022	⋮

Items per page: 25

1 - 2 of 2



## Tab Settings

Drop or select segment

### ROWS

Audio Title

Drop or select dimension

Start row 1

Show rows 10

Nested rows No

### COLUMNS

Drop or select dimension

Start column group 1

Show column groups 5

### VALUES

Event count

Drop or select metric

Audio Plays



Audio Title

↓ Event count

Totals

1,025

100% of total

1 Listen Now

244

2 From The Bandroom #53

166

3 From The Bandroom #52

49

4 Think Global Act Local #19

38

5 From The Bandroom #51

31

6 From The Bandroom #49

22

7 From The Bandroom #50

19

8 From The Bandroom #48

18

9 Home From Home: The Welcome In Community Centre and Cafe

18

10 Musicathon 2023: The Best of the Broadcasts Part 2

18

# Example 3: Resource downloads



- ✔ Get suggested content
- ✔ Create personalised work boards

Free learning resources from arts, cultural and heritage organisations.

From story  
Proud: The First Gay Pride in London

Download Image

View story

<https://www.mylearning.org/resources/first-gay-pride-1972-1/download>



resource\_download

Parameter

Name:	link_text
Value:	Download image

Parameter



Name:	link_url
Value:	.../first-gay-pride-1972-1/download

Parameter

Name:	file_name
Value:	First Gay Pride, 1972

### Tag Configuration


Tag Type

 **Google Analytics: GA4 Event**  
Google Marketing Platform 

Configuration Tag 

GA4 Configuration 


Event Name 


resource\_download 


Event Parameters


Parameter Name


Value

link\_text 

{{Click Text}} 

link\_url 

{{Click URL}} 

file\_name 

{{JS - File Name from Page Title}} 

Add Row



### Trigger Configuration

Trigger Type



Click - All Elements



This trigger fires on



All Clicks



Some Clicks

Fire this trigger when an Event occurs and all of these conditions are true

Click Classes



contains



resource-page\_link



### References to this Trigger



Event - Download Resource

Tag



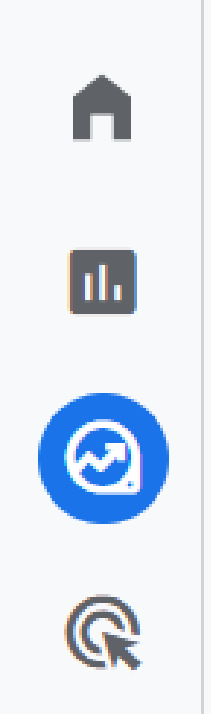
GA4 - Resource Download

Tag

# Standard Parameters

No need for Custom Definitions

- link\_text → • Link text
- link\_url → • Link URL
- file\_name → • File name



Resource dow... +

File Name	↓ Event count
Totals	554 100% of total
1 Guidelines for Drawing a Human Face	42
2 Mining Vocabulary (PDF)	29
3 Illustration of a Victorian Hurrier	17
4 Testimony: Lola's Journey	10
5 Flame Safety Lamp (PDF)	9
6 Poetry from the Decendants of the Windrush Generation	9
7 Sample Exhibition Planning Timeline	9
8 Draw your own medal - blank template (PDF)	8
9 Introducing Printmaking	8
10 A day in the life of a young Sheffield steel worker in Victorian times	6

# Example 4: Content grouping





Ask a Tech Champion

Events

Awards ▾

External Support ▾

News

About ▾

Knowledge Hub



Sign up to the Digital Culture Network Newsletter!

Newsletter sign up

# Digital skills for the arts


page\_view

Parameter

Name:	content_group
Value:	Knowledge Hub

### Tag Configuration

Tag Type

 **Google Analytics: GA4 Configuration**  
Google Marketing Platform

Measurement ID [?](#)

{{GA4 Measurement ID - G-RZF2F}}

Send a page view event when this configuration loads

Send to server container [?](#)

Fields to Set

Field Name

content\_group



Value

{{Content Group}}

Add Row

### Variable Configuration

Variable Type








 **RegEx Table** 

Input Variable 















{{Page Path}} 

RegEx Table 

Pattern

/news/	
events	
knowledge	
awards	
external-support	
about	
ask-a-tech-champion	

Output

News		
Events		
Knowledge Hub		
Awards		
External Support		
About		
Ask a Tech Champion		

[+ Add Row](#)



Reports snapshot

Realtime

Life cycle

- Acquisition
- Engagement
  - Overview
  - Events
  - Conversions
  - Pages and screens**
  - Landing page
  - Retention
- Marketing
  - How did users find us?

Library

Pages and screens: Content group

Last 28 days Jun 13 - Jul 10, 2023

Search...

Rows per page: 10

Search items

- Page title and screen class
- Page path and screen class
- Page title and screen name
- Content group**

						Event count
						All events
						36,914
						100% of total
1						10,834
2						6,808
3						5,717
4						2,045
5						1,443
6						919
7						464
8	External Support	36	29	1.24	0m 55s	130
9	(not set)	0	3,108	0.00	0m 00s	8,554

Reports snapshot

Realtime

Life cycle

- Acquisition
- Engagement
  - Overview
  - Events
  - Conversions
  - Pages and screens**
  - Landing page
  - Retention
- Marketing
  - How did users find us?

Library

Pages and screens: Content group

Last 28 days Jun 13 - Jul 10, 2023

Search... Rows per page: 10

	Content group	Views	Users	Views per user	Average engagement time	Event count
		10,053 100% of total	3,108 100% of total	3.23 Avg 0%	1m 18s Avg 0%	36,914 100% of total
1	Knowledge Hub	3,897	1,435	2.72	1m 18s	10,834
2	Events	2,478	1,412	1.75	0m 36s	6,808
3	Other	1,992	838	2.38	0m 32s	5,717
4	About	684	279	2.45	0m 56s	2,045
5	Ask a Tech Champion	459	260	1.77	1m 27s	1,443
6	News	342	190	1.80	0m 52s	919
7	Awards	165	89	1.85	0m 36s	464
8	External Support	36	29	1.24	0m 55s	130
9	(not set)	0	3,108	0.00	0m 00s	8,554

# Tab Settings

## COLUMNS

Drop or select dimension

Start column group 1

Show column groups

5

## VALUES

Views

Drop or select metric

Cell type

Bar ch...

## FILTERS

Content group

Filter

exactly matches

Knowledge Hub

CANCEL

APPLY

## Variables



Knowledge Hub



Page title

↓ Views

Totals

3,361

100.0% of total

1

Webinar recording - Getting started with Google Analytics 4 - Digital Culture Network

461

2

Segmentation Audience Personas - Digital Culture Network

201

3

Step-by-step: How to live stream a Zoom meeting to YouTube - Digital Culture Network

157

4

Getting started with Google Looker Studio - Digital Culture Network

155

5

What's a social media 'pixel' and what do they do? - Digital Culture Network

128

6

Webinar recording - Advanced configuration and custom reporting in Google Analytics 4 - Digital Culture Network

126

7

Digital Culture Award Winner Case Study: We The Curious - Digital Culture Network

73

8

Introduction to Digital Accessibility - Digital Culture Network

72

9

Introduction to Google Analytics 4

72

10

10 ways to make your website more sustainable

69

**Part 4:**  
**Advanced configuration  
and common pitfalls**



# Advanced configuration to get the most out of GTM

- Cookie consent
- Ticketing and shop system integrations
- Pixel management

# Frequent questions

## when first using Tag Manager

1. I can't access Tag Manager
2. The Tags are not firing
3. I'm seeing weird Event names in GA4

Modify event

Create event

Existing events



Event name ↑		Count	% change	Users	% change	Mark as conversion (?)
Completed Order	✘	32	-	16	-	<input type="checkbox"/>
event_listing	☑	111	-	89	-	<input type="checkbox"/>
event_register	☑	66	-	30	-	<input type="checkbox"/>



snake\_case

## Recap

# How to enhance Google Analytics 4 data with Google Tag Manager





**You are not alone,  
we are here to help**



James Akers

## Google Analytics 4

🕒 45 min

In this session we can review your current Google Analytics 4 set up, outline important actions you wish to track, and explore relevant reports and analysis.

These **free 1-2-1 sessions** are only for people who work in the creative and cultural sector in **England**.

[Cookie settings](#)

### Select a Date & Time



MON	TUE	WED	THU	FRI	SAT	SUN
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

#### Time zone

🌐 UK, Ireland, Lisbon Time (10:56am) ▼

[Troubleshoot](#)



Google Analytics

# Q&A



**Digital Culture  
Network**



# Further resources

## Available on our website

James Akers Beginner Read · Typical Reading Time 3 mins

### Webinar recording: why are you measuring that?

Attachments:

↓ DCN - why are you measuring that - Sept 2022 (PDF)

Why are you measuring that? | Digital Culture Network

### Why are you measuring that?

James Akers Intermediate Read · Typical Reading Time 3 mins

### How to use UTM Parameters to track marketing activity

In this article we explain what UTM Parameters are and why they're useful for cultural organisations and individuals to consider using.

#### What are UTM Parameters?

UTM Parameters are tags you can add to the end of the links you share on different platforms, email campaigns and QR codes. When added to the end of your URL, when a user clicks one of the links can then be tracked in your analytics software (such as [Google Analytics](#)). It is a great way for marketers to see the impact of their own activity: did the users come from a specific source? What did they go on to do on your website? This is

James Akers Beginner Read · Typical Reading Time 9 mins

### Getting started with Google Looker Studio






# Help us help you



**[digitalnetwork@artscouncil.org.uk](mailto:digitalnetwork@artscouncil.org.uk)**



# digitalculturenetwork.org.uk

  [Ask a Tech Champion](#) [Events](#) [External Support](#) [News](#) [About](#) [Knowledge Hub](#) 

We've created resources and advice for you to use during the COVID-19 lockdown. [Read More](#)

## Digital skills for the arts

### Welcome to your Digital Culture Network

We are here to develop your organisation's digital skills. Working across the arts and culture sector, the Network is led by nine specialist Tech Champions. We want you to be a part of it.

[Browse our Knowledge Hub](#)




Knowledge Hub



Beginner Read  
Video and Digital Content

#### Podcasting and how to get started

This resource provides information and advice on making podcasts. As well as considerations for generating content, it contains guidance on hardware, software, and distribution methods.

 Marc Burns · 2 months ago



Beginner Read  
Social Media

#### Engaging Audiences with Social Media

Whilst your audiences, participants or stakeholders may not be able to engage with you physically at the moment, you can still reach people through social media.

 Haydn Corrodus · 2 months ago



Beginner Read  
Social Media

#### Introduction to Social Media

Social media is a unique and powerful way to help your organisation thrive and engage with your audience. Read on to find out more.

 Haydn Corrodus · 4 months ago





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