

# GA4

How to start using GA4

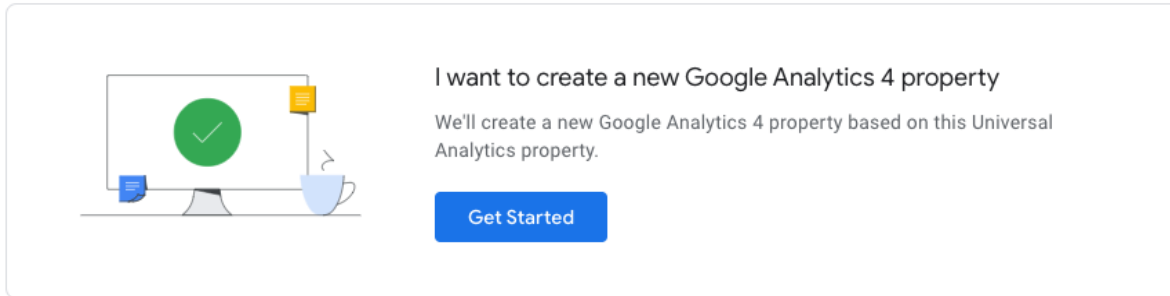


# GA4 set up



# Getting started

If you already have a Google Analytics account, setting up GA4 is a quick and simple process.



1. Log in to Google Analytics and select the correct account. You will need to have Editor access to the account to set up GA4.

2. Go to **Admin > Property > GA4 Setup Assistant**

3. Click **Get Started**

4. On the setup assistant popup – click **Create property** (you do not need to 'Enable data collection using your existing tags' and in the majority of cases this option will not be available)

5. You can now **Go to your GA4 property**. Your original Universal Analytics (GA3) property will remain intact.

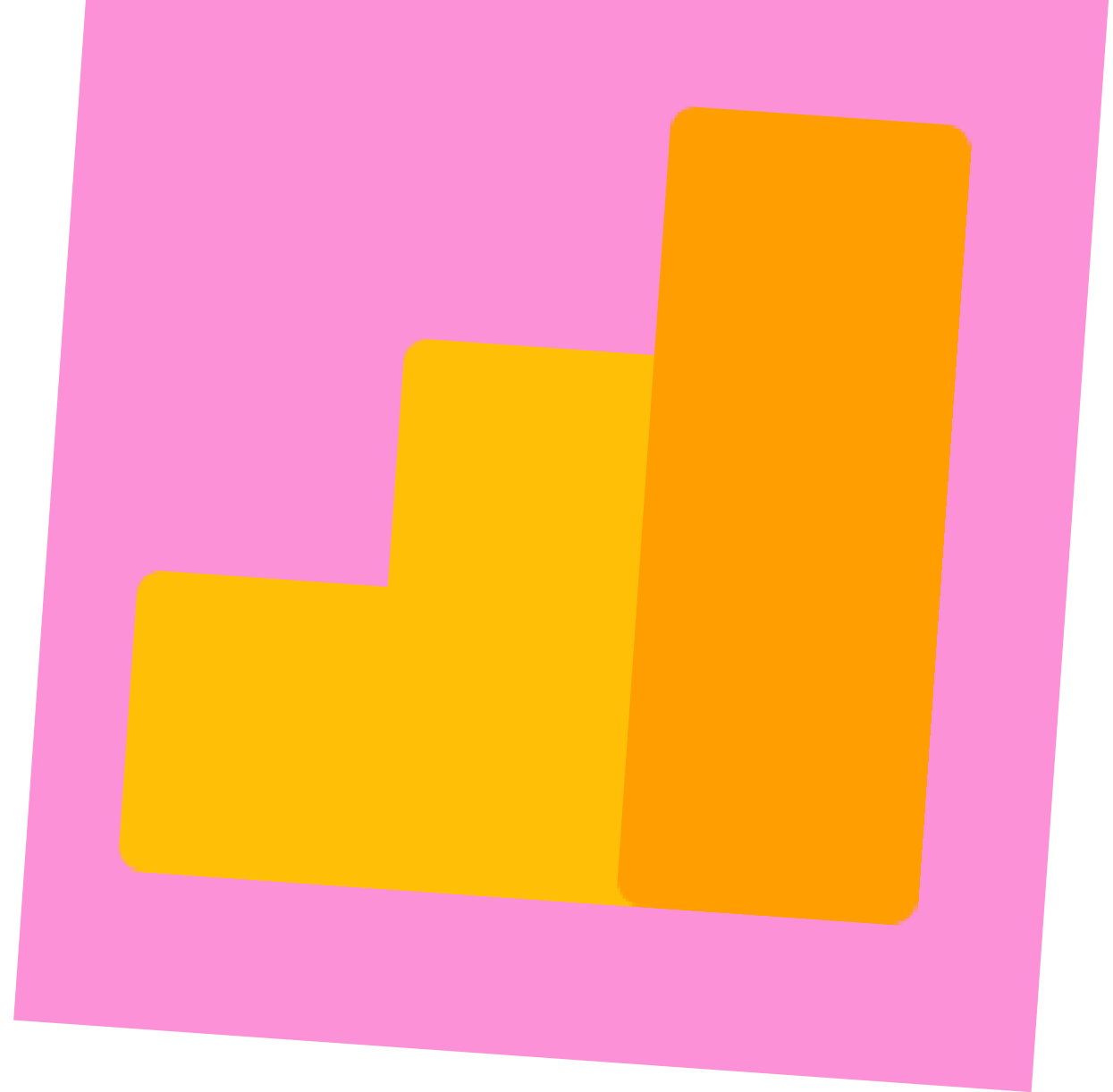
6. To begin collecting data you will need to either: add a GA4 Configuration tag to your Google Tag Manager account; manually add the GA4 tag script to the <head> section of your website code; OR install your tag



# Viewing GA4

If you have already created your GA4 account, you can find your GA4 property by logging into Google Analytics and clicking your account name at the top.

GA4 currently sits under 'Properties & Apps' as a separate property.



# General set up using GTM

The GA4 Configuration tag  
is added in GTM



The GTM tag fires an event  
on every page view and  
every custom GA4 Event



The events are sent to the  
GA4 property in Google  
Analytics



# Data retention

## An important detail...

User and event data retention in GA4 is set to **2 months** by default.

This affects all data associated with cookies user IDs and advertising IDs (but not standard reporting).

Change this setting to 14 months in your GA4 property by going to:

**Admin > Property > Data Settings > Data Retention**

### User and event data retention

You can change the retention period for data you send that is associated with cookies, user identifiers, or advertising identifiers. These controls don't affect most standard reporting, which is based on aggregated data. Changes to these settings take effect after 24 hours. [Learn more](#)

Event data retention ⓘ 

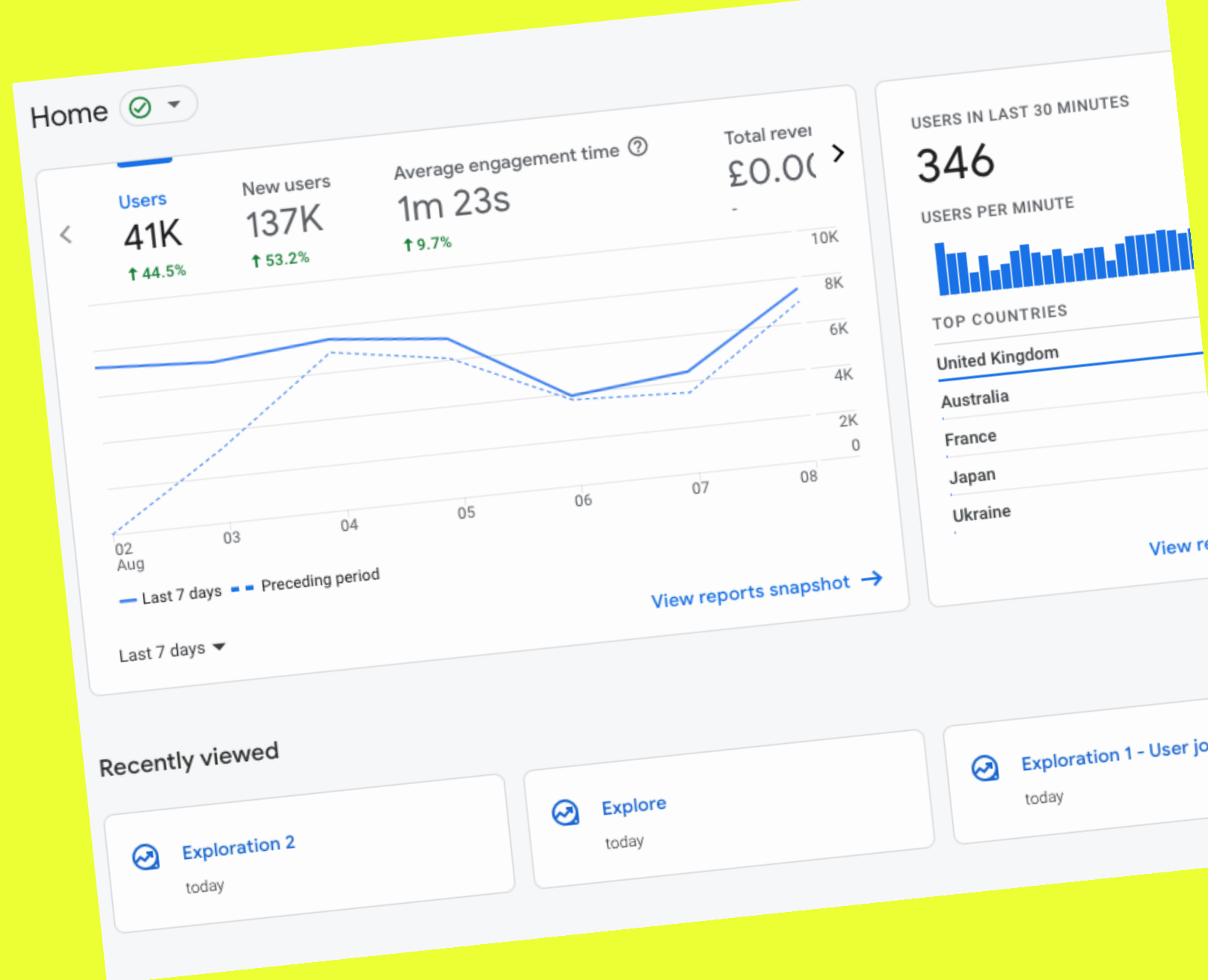
2 months ▼

Reset user data on new activity ⓘ ☒

Save

Cancel

Some big  
changes

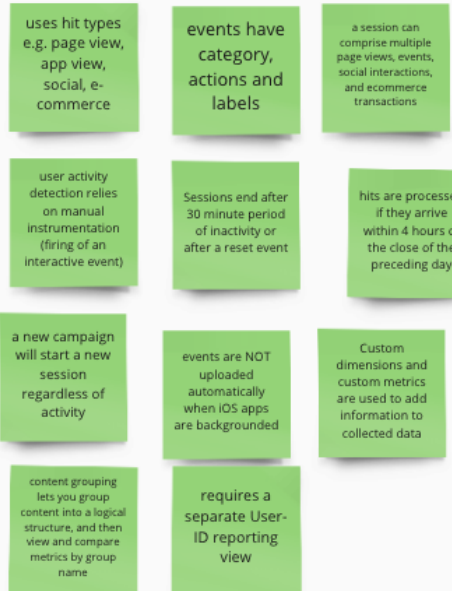




# Key differences between Universal Analytics and GA4

- In GA4 everything is event-based. Event parameters are used to get more information about events. This replaces using hit types and custom dimensions in UA.
- You can't have different 'Views' in GA4. GA4 'Subproperties' can only be created at an additional cost. Instead you will use 'Explorations' to replicate views.
- GA4 does not track bounce rate. Instead it provides data on 'Engagement rate'.
- There are not as many pre-built reports in GA4, so it's likely you will need to build your own reporting views in 'Explore'.
- Goals no longer exist in GA4 – you will use 'Conversions' instead.
- GA4 allows you to track across platforms and across devices per user – this is a huge advantage to GA4.

## Universal Analytics

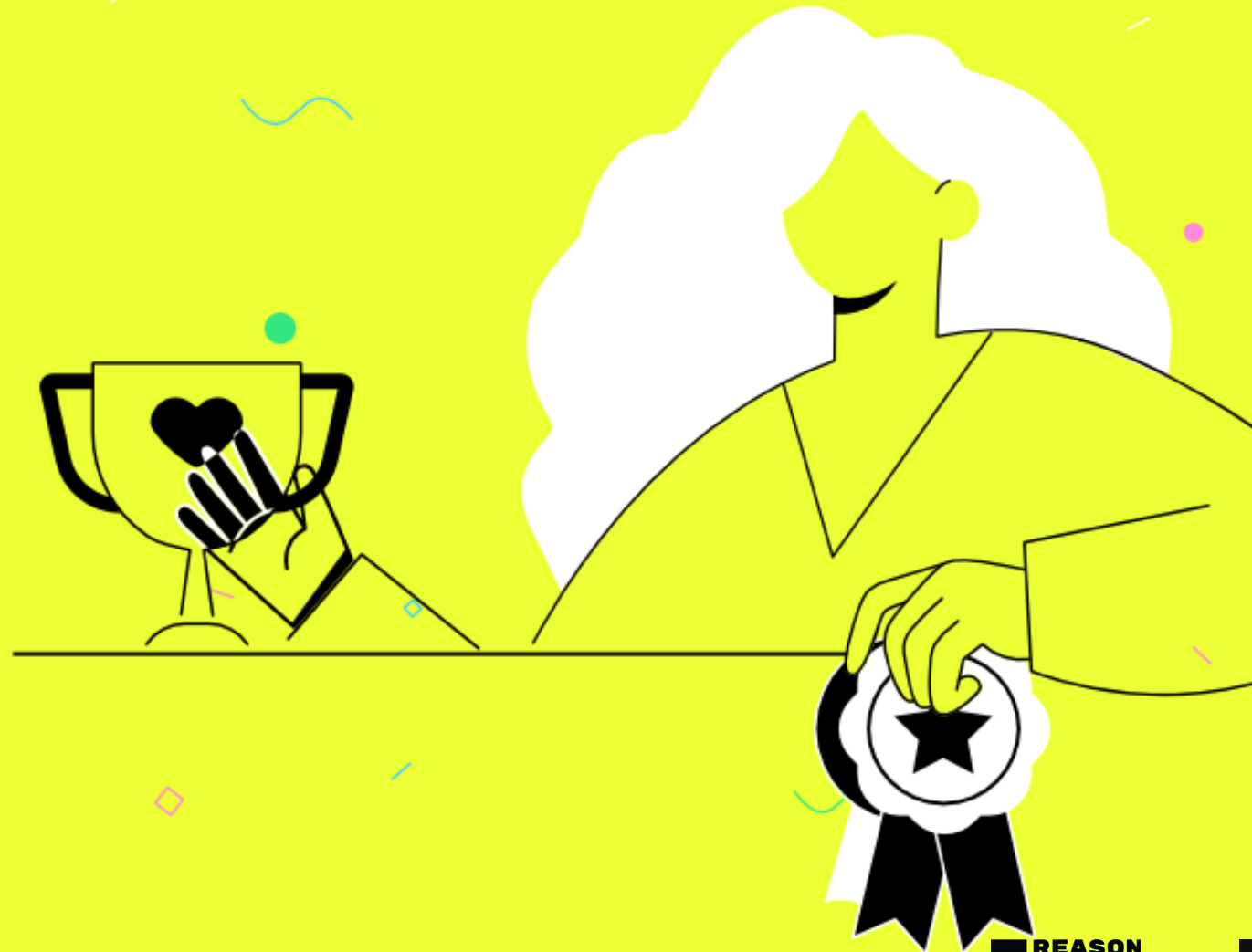


## GA4





# Conversions



# A fresh start for your goals

Switching to GA4 is an opportunity to re-evaluate your organisational goals and get your tracking in order.



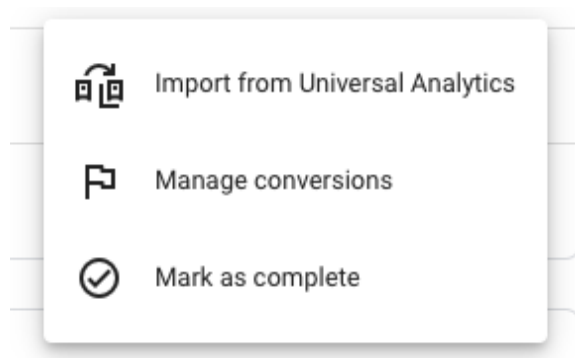
# Conversions

## In GA4 you will track 'Conversions', rather than goals.

Although you can import your Goals from Universal Analytics, consider starting afresh in GA4. Most of our Universal Analytics accounts contain legacy goals or goals that miss the mark when we need a snapshot of how we are performing against our KPIs.

The introduction of GA4 is a great opportunity to reassess your organisation's digital goals and properly track these as conversions.

Putting in the leg work now will provide you with better data down the line!



## Some things to consider...

- In GA4 you can now track 30 conversions per property! (up from 20)
- However, if you have configured goals across different Views in UA, you will need to come up with a new measurement strategy as Views are no longer available in GA4.
- Smart goals do not exist in GA4.
- In GA4 there is no difference between goals and ecommerce – all conversions are GA4 events and the purchase event covers ecommerce.
- GA4 automatically marks the purchase event as a conversion along with certain mobile app events.

## To get started...

List your UA goals and pull together key stakeholders to decide if they should be recreated as conversions within your GA4 property.

# Navigating GA4



# Home

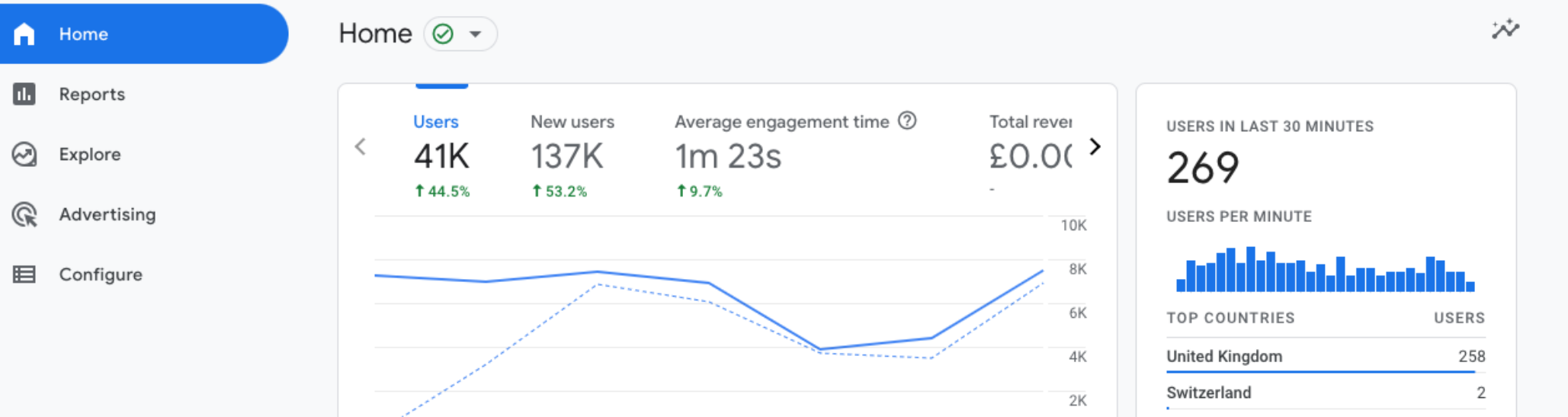
## An overview of your property's high-level data.

### Users in last 30 minutes

This section links to Realtime. This is different to the UA Realtime overview which displayed users in the last 5 minutes. Numbers will therefore be very different too.

### Insights

GA4 is trying to depend more on machine learning than Universal Analytics did. The Insights section uses machine learning to try to alert you to opportunities, anomalies and important pieces of data. Click on these insights to see more detail.



# Reports

## Realtime

**View user snapshot** – This allows you to see what an individual user is doing. You can switch between individual users by using the left/right arrows at the top. This will show you the device and location if known.

## Acquisition

Here you can analyse traffic by source, medium and campaign.

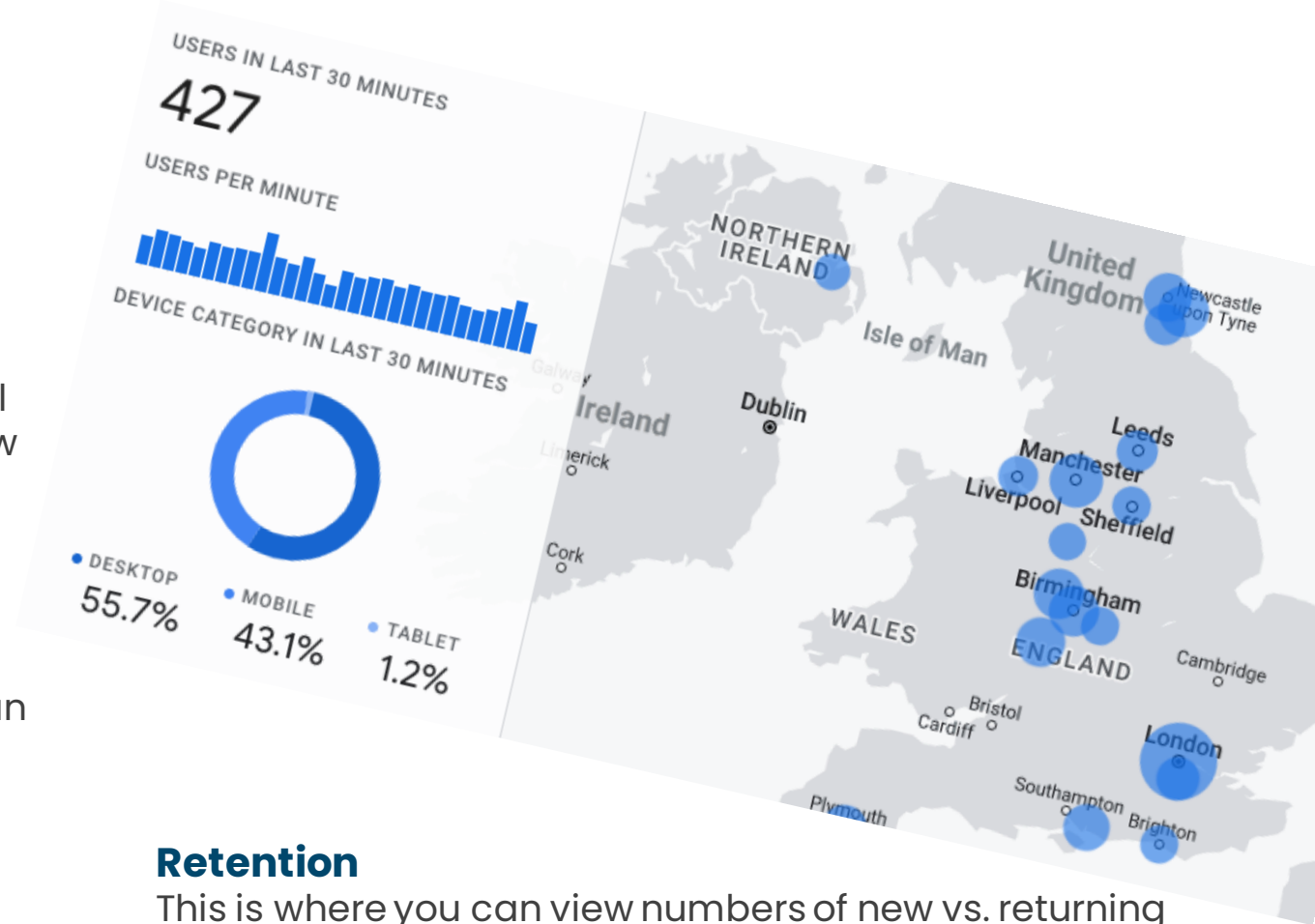
By default, GA4 data is set to show the last 28 days. This can be changed at the top right.

## Engagement

**Pages and screens** – You can switch to view by 'Page path' rather than 'Page title'. You can also add secondary dimension by clicking on the + icon in the table header.

## Monetization

You will only see data in this section if you have set up ecommerce tracking using a specific GA4 purchase event script on your website. A developer should provide the code for this.



## Retention

This is where you can view numbers of new vs. returning users.

## Tech

View users by platform, operating system, device. To get more granular data, click on 'Tech details'

# Explore

## A powerful new GA4 feature

On the face of it GA4 has fewer reports than Universal Analytics did, but that's not the whole story.

The 'Explore' section of GA4 is a far more **powerful and flexible** way to analyse and visualise your data than was previously possible.

### Use Explorations to:

- Quickly see data flow reports using pre-built templates, such as funnels, paths and charts
- Switch between visualisation styles to find the best view, or even apply multiple styles to your analysis
- Analyse in more detail by using filters, segments and audiences
- Export and share explorations with other tools and other users of the same property





# Explore

## Techniques



### Blank

Create a new exploration

Bar charts, pie charts, line charts, scatter plots and geo maps



### Free form

What insights can you uncover with custom charts and tables?

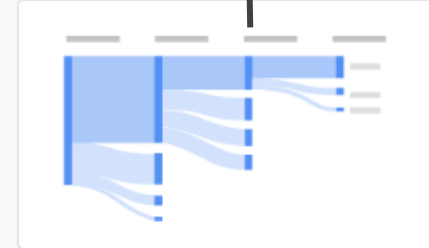
Visual representation of the steps users take to complete tasks e.g. sign up or purchase



### Funnel exploration

What user journeys can you analyze, segment, and breakdown with multi-step funnels?

Useful for tracking how users explore your website



### Path exploration

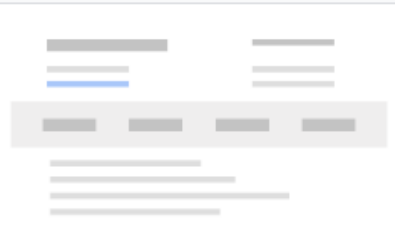
What user journeys can you uncover with tree graphs?

Compare up to 3 segments and see how they relate to each other



### Segment overlap

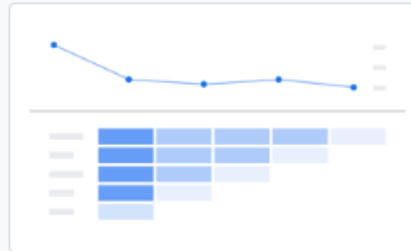
What do intersections of your segments of users tell you about their behavior?



### User explorer

What individual behaviors can you uncover by drilling into individual user activities?

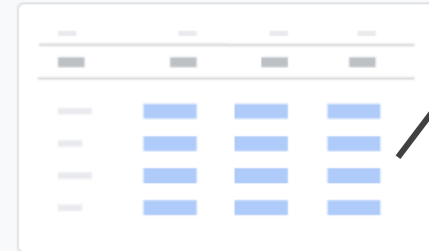
Examine the users that make up the segments you create or import



### Cohort exploration

What insights can you get from your user cohorts behavior over time?

Analyse the behaviour of groups of users related by common attributes



### User lifetime

What can you learn by analyzing the entire lifetime of your users?

Explore user behavior and value over their lifetime as a customer

# Advertising

**Here you can learn which channels and campaigns drive your conversions.** If you pay for advertising online, this section can also help you understand and evaluate your Return on Investment (ROI).

## 1. Advertising snapshot

Get a quick overview of metrics. **Tip: Use the filter at the top to set which conversion event you want to view.**

## 2. Model comparison

Compare how different channels and attribution models contribute to your conversion events.

## 3. Conversion paths

See your users' paths to conversion by Source, Medium and Campaign – you can see the interactions users took before completing a conversion.

### Use these reports to answer questions like:

- What role did my Facebook campaign play in getting donations?
- What's the average time from a user seeing our advert to them signing up to our newsletter?

# Configure

**A new workspace where you can create and manage events, conversions and audiences.**

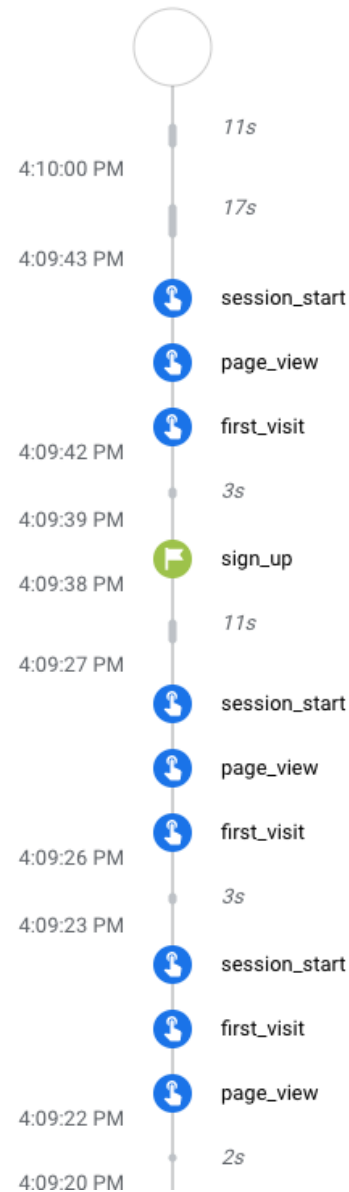
## Events

This is where GA4 really comes into its own. You can now create and modify events within the GA4 interface itself, where previously you could only do this through GTM or in the website code.

You can even set matching conditions to tell GA4 when to track your new event.

## Conversions

Conversions in GA4 replace what were 'Goals' in Universal Analytics. It's much easier to define conversions in GA4, by simply toggling to mark any existing event as a conversion. You can also add new conversion events from scratch.



## Audiences

Create audiences to analyse subsets of users according to what's important to your organisation.

## Custom definitions

GA4 automatically collects some information about users via custom dimensions and metrics. You can also create your own custom dimensions and metrics in the custom definitions section of GA4.

## Debug view

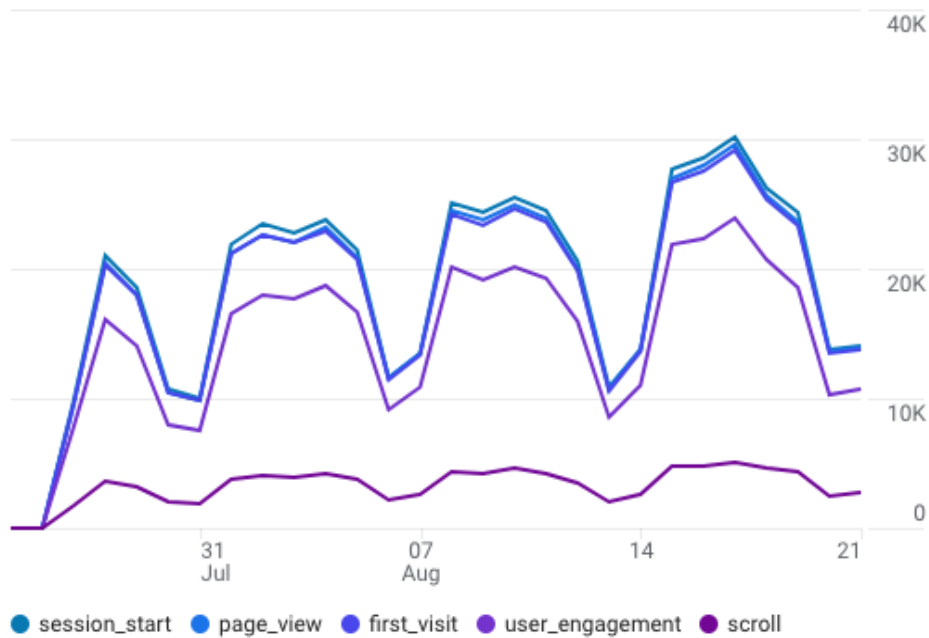
Another helpful new feature which improves on the old Realtime view – the debug view (left) allows you to monitor live events as they take place when you have debug mode enabled.

# A closer look at some new features in GA4



# Enhanced event tracking

Event count by Event name over time



## Automatically tracked events

GA4 will automatically track some events on your website:

1. first\_session
2. session\_start
3. user\_engagement

## Enhanced measurement events

GA4 offers built in enhanced event tracking which you can toggle on/off in your Settings. By default it will automatically track:

- Scrolls (if a visitor scrolls below 90% of the page height)
- Outbound clicks (Click event)
- Site search
- Video engagement (embedded YouTube videos)
- File downloads

## Recommended events

Some events are not tracked automatically because they are set up differently on different websites e.g. Purchase and Add to Cart. GA4 recommends you set up certain common events like these using GA4's naming structure. You will need to set up these events using GTM or javascript in the website code.

# Ecommerce

## GA4 doesn't differentiate between standard and enhanced ecommerce.

To be able to track ecommerce in GA4, a developer needs to add a `dataLayer.push` script to the conversion page(s) on your website e.g. on a Donation Thank You page.

This script must contain the GA4 'Purchase' event and set certain parameters, such as 'transaction\_id', 'currency', 'value' and 'items'.

You can then fire a tag in Google Tag Manager to track the purchase event and send the parameters to GA4.

To continue to track ecommerce through Universal Analytics as well as GA4, the GA4 purchase event must be set up as a separate `dataLayer.push` to the Universal Analytics `dataLayer.push` script, which should remain in place.

```
gtag('event', 'purchase', {
  transaction_id: "T_12345",
  affiliation: "Google Merchandise Store",
  value: 25.42,
  tax: 4.90,
  shipping: 5.99,
  currency: "USD",
  coupon: "SUMMER_SALE",
  items: [
    {
      item_id: "SKU_12345",
      item_name: "Stan and Friends Tee",
      affiliation: "Google Merchandise Store",
      coupon: "SUMMER_FUN",
      currency: "USD",
      discount: 2.22,
      index: 0,
      item_brand: "Google",
      item_category: "Apparel",
      item_category2: "Adult",
      item_category3: "Shirts",
      item_category4: "Crew",
      item_category5: "Short sleeve",
      item_list_id: "related_products",
      item_list_name: "Related Products",
      item_variant: "green",
      location_id: "ChIJIQBpAG2ahYAR_6128GcTUEo",
      price: 9.99,
      quantity: 1
    }
  ]
})
```

# Custom events

For any custom events you want to track which are not an automatically tracked event in GA4, there are now 2 options:

1. Fire a GA4 Event tag in **Google Tag Manager**

OR

2. Add an event within GA4 itself under **Configure > Events** (this is a new and exciting feature!)

Remember – if you add custom events in GTM, make sure you register your custom dimensions in GA4

## Create and modify events in GA4

You can now create brand new events based on other 'source' events within GA4. For example you could add a Thank You page view event.

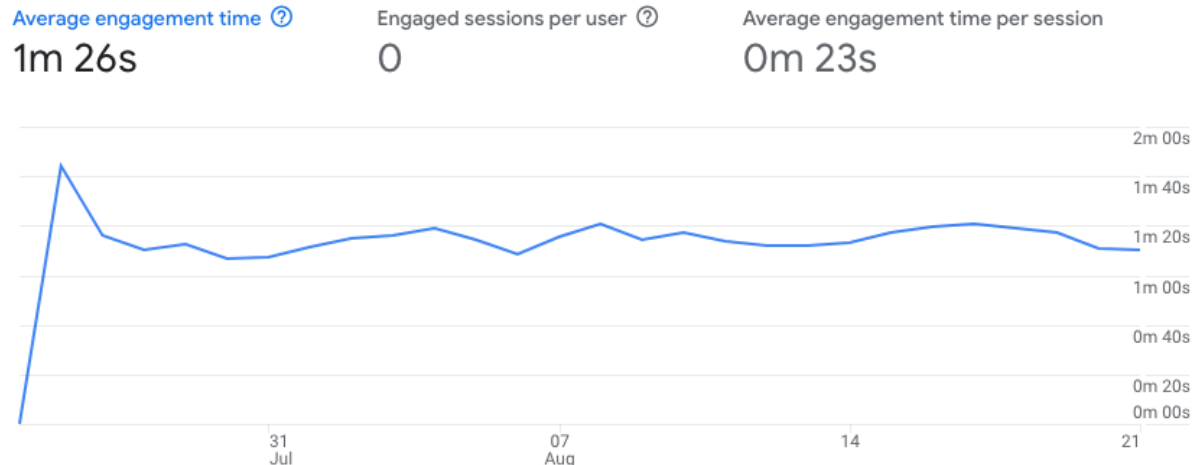
You can also modify events, for example if you need to rename an event or correct a spelling.



# Engagement vs. bounce rate

Unlike Universal Analytics, GA4 does not measure 'bounce rate'. In GA4 there are other metrics to measure engagement.

Go to **Reports > Acquisition > Engagement** to view engaged session metrics



## Engaged session

- has 2 or more page views
- OR has 1+ conversion events
- OR last 10+ seconds (this can be amended to up to 60 seconds in your Settings)

## Average engagement time per session

Average amount of time a user was looking at your site and engaging with it

## Engaged session per user

Engaged sessions divided by all users (the higher the number the better)

## Engagement rate

Percentage of engaged sessions (engaged sessions divided by sessions)

Unlike Universal Analytics, GA4 'Users' is a total number of 'Active users' (who have at least 1 engaged session). Therefore the number 'users' in GA4 will be lower than 'users' in UA.

# Audiences vs. Segments

**Spoiler: Audiences are not the same as Segments.**

## Audiences in GA4:

- Allow you to build lists of users to show ads to
- Mean you can compare data by audience in your reports
- Can be used to automatically create events in GA4 when people enter your audiences

## How to create an audience

Go to **Configure > Audiences > New audience**

Here you will see 'Suggested audiences' to use or you can create a custom audience.

## Things to consider

- Setting up an audience trigger will mean you can log an event when a user becomes a member of that audience.
- Audiences only collect data from the moment they are set up – they will not backdate.
- You can create up to 100 audiences per property.
- You can link GA4 audiences to Google Ads for remarketing.

## Segments in GA4:

- Allow you to slice your data
- Mean you can analyse a data subset

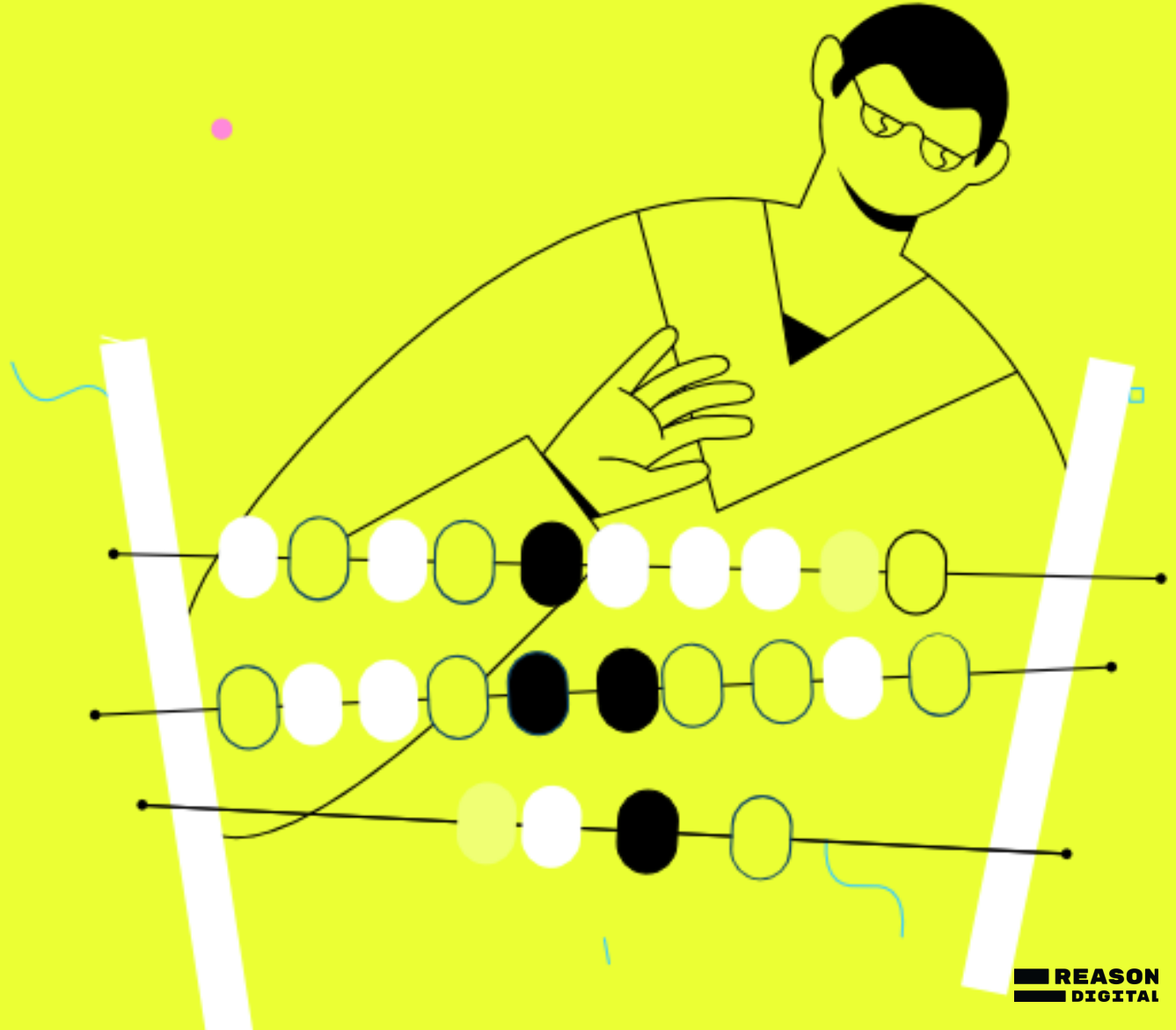
## How to create segments

Go to **Explore > Exploration report > Under Variables > Segments > +**

Here you will see 'Suggested segments' or you can create a custom segment.

There are 3 types of segment including a new type for GA4 – the 'Event segment'.


# Troubleshooting tips




# Some common problems solved

- You must have an [Editor](#) role to manage events and conversions in GA4.
- Before you create or modify an event in GA4, make sure the event doesn't already exist in your website code or Google Tag Manager container. If you create an event that already exists, GA4 will overcount the number of times the event was triggered.
- If you manually send `page_view` events via GTM, make sure Enhanced measurement in GA4 is configured correctly to avoid double counting pageviews. Usually, this means disabling 'Page changes based on browser history events' under the advanced settings of the Page views section.
- When you mark an event as a conversion, allow up to 24 hours for it to show up in standard reports. Conversions for that event will only be counted from that point forward.
- When you create a new audience, it can take 24–48 hours for the audience to accumulate users. GA4 will only assign users to your audience from that point forward.
- GA4 limits the number of event modifications to 50, and the number of new events you can create from existing events to 50.

× Enhanced measurement 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.



[Hide advanced settings](#)

☒

Page loads

☒

Page changes based on browser history events