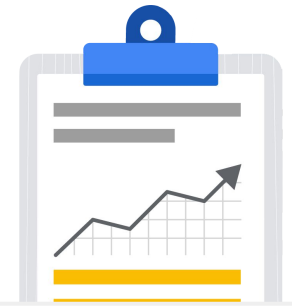


# Getting the most value out of Reporting in Google Analytics 4



# GA4 offers four core reporting experiences that give access to insights, making data more powerful than ever.



Google Analytics 4 helps users break down internal silos and increase access to insights from data. Users can access unsampled data and insights within the new UI, create custom reports within the flexible interface, leverage Google AI to find answers and AI-powered insights, and understand sales and conversions with cross-channel, data-driven attribution (DDA).



56% of decision makers in analytics, media & marketing business insight report that **analytics tools do not surface insights easily.**

We offer **4 key reporting experiences** for users to maximize value from their data within GA4:

	STANDARD + CUSTOMIZED REPORTS	EXPLORE	API	BIG QUERY
WHEN TO USE	Use to answer key questions and to export + share reports across an organization.	Use as a "scratch-pad" to gain deeper insights about users and their journeys.	Use to programmatically access GA4 reporting data to automate and integrate with other business applications.	Use to run advanced analysis on raw, unsampled, GA4 event data with SQL-like syntax.
USE CASES	View Overview Reports with summarize information about a topic and Detailed Reports which allow users to investigate data. Based on permissioning, Standard Reports can be customized.	Utilize more advanced techniques that go beyond standard reports to help uncover deeper insights about data.	Build custom dashboards to display GA data, automate complex reporting to save time, or integrate GA data with other business applications.	Query raw event data for analysis, join GA4 data with additional 1P data sources, and export data for visualization in BI tools
CONSIDERATIONS	Upon setup of GA4, all users with access will see a Homepage, Reports Snapshot, Realtime Report & a number of predefined reports.  Each property can have up to 150 custom reports.	To explore data in more detail, use Explore to: <ul style="list-style-type: none"> <li>• Perform ad hoc &amp; one time queries</li> <li>• Easily configure and switch between techniques</li> <li>• Sort, refactor &amp; drill down into the data</li> <li>• Use filters and segments</li> <li>• Create segments &amp; audiences</li> <li>• Share Explore with other users of the same GA4 property</li> <li>• Export the exploration data for use in other tools</li> </ul>	The Google Analytics Data API: <ul style="list-style-type: none"> <li>• Gives users access to most of the report data in Google Analytics.</li> <li>• Allows data to be exported to tools such as Looker Studio</li> <li>• <a href="#">Data Limits</a>: 360 provides higher limits for Google Analytics 4 data API quotas.</li> </ul>	BQ Data availability: <ul style="list-style-type: none"> <li>• Available to both Standard and Enterprise customers in GA4</li> <li>• The daily export supports a full export of the previous day's raw event data</li> <li>• The streaming export supports a realtime export of current-day event data</li> <li>• Standard properties have a daily BigQuery limit of 1M events</li> </ul>

# Why does **data look different** between Standard Reports, Explore, API & BQ?

This table outlines key differences between Reporting platforms that contribute to differences in data.

	REPORT		EXPORT	
	STANDARD REPORTS	EXPLORE	DATA API	BIG QUERY
<b>Data Scope</b>	Aggregated	Raw & user-level data	Aggregated	Raw & user-level data
<b>Thresholding</b> <i>Applied to prevent anyone viewing a report or exploration from inferring the identity of individual users based on demographics, interests, or other signals present in the data.</i>	Possible	Possible	Possible	Not Applied
<b>High Cardinality</b>	Can occur + show as the ("other row") after filtering or applying a secondary dimension	No	Can occur + show as the (other row) after filtering or applying a secondary dimension	No
<b>Sampling</b> <i>Used when the number of events returned by an exploration exceeds the limit for your property type.</i>	No	Yes	Data API methods for Standard Reports will never show sampled data	No
<b>Cross-Platform Reporting with Google Signals</b> <i>Google signals are session data from sites and apps that Google associates with users who have signed in to their Google accounts, and who have turned on Ads Personalization.</i>	Can be applied	Can be applied	Can be applied	No
<b>Conversion Modeling</b> <i>Allows for accurate conversion attribution without identifying users.</i>	Included	Included	Included	Not Included
<b>Behavioral Modeling</b> <i>Behavioral modeling for consent mode uses machine learning to model the behavior of users who decline analytics cookies based on the behavior of similar users who accept analytics cookies.</i>	Included in Reporting Module + Realtime Not in Audiences, Segments with a sequence, Retention reports, Predictive Metrics	Partially-included, only in free-form tables	Can be applied if set up with a client-side tag either gtag.js or client-side GTM	Not included
<b>Data Limits</b>	Each property can have up to 150 custom reports	200 individual analyses per user per property  Up to 500 shared analyses per property  Import up to 10 segments per exploration  Data will be sampled if more than 10M events are part of the exploration	GA4 APIs are subject to <a href="#">API quotas</a>  GA4 360 provides higher limits for GA4 data collection, reporting, retention and quotas. Upgrading properties to 360 can help you increase the amount of data accessed through the API	Standard customers have a daily export limit of 1M events/day

# How do metrics differ between UA and GA4?

Why does my GA4 data look different than my UA data?

**DATA DIFFERENCES**



**Different data collection models**

UA used a collection model based on pageviews, where GA4 uses a model based on event and [event-parameter paradigm](#).

Behavioral modeling and Conversion modeling with Consent Mode is only available in GA4.



**Data attribution models**

UA defaults to a last-click cross-channel attribution model while GA4 defaults to data-driven attribution.



**Key metrics are defined differently**

UA utilizes hits while GA4 utilizes events. UA measures screenviews in separate mobile-specific properties and GA4 combines web and app data in a single GA4 property.

GA4 tracking provides more meaningful data by providing up to 25 parameters to describe data across a single taxonomy for web, Android & iOS data streams.

How are metrics calculated differently between UA and GA4?

	UA	GA4
<b>Users</b>	<b>Users</b> The primary metric in UA shows the <i>total number</i> of users.	<b>Users</b> The primary metric in GA4 shows the number of <i>active users</i> .
<b>New Users</b>	<b>New Users</b> The number of users who interacted with your site for the first time.	<b>New Users</b> The number of users who interacted with your site or launched your app for the first time.
<b>Views</b>	<b>Pageviews</b> This total number of pages viewed.	<b>Views</b> The total number of app screens and/or web pages viewed.
<b>Purchases</b>	<b>Purchase</b> Fired within the Enhanced Ecommerce model. Pulled from a products array via GA provided JavaScript and collected in a purchase event.	<b>Purchase</b> Filled within the Enhanced Ecommerce model. Does not provide any additional JavaScript for array collection and expects you to provide items array when collecting a purchase event.
<b>Sessions</b>	<b>Sessions</b> Period of time when a user is actively engaged with your website. Ends after 30 mins of inactivity.	<b>Session Start</b> Triggered by the Session_Start event. Ends after 30 mins of inactivity. Sessions are not restarted at midnight.
<b>Conversions</b>	<b>Goal</b> Indicates that a particular user action is to be considered a conversion. UA counts <i>only one</i> conversion per session for each goal.	<b>Conversion Event</b> GA4 counts <i>every instance</i> of the conversion event, even if the conversion event is recorded multiple times during the same session. <u><a href="#">Edit with conversion counting method</a></u> .
<b>Bounce Rate</b>	<b>Bounce Rate</b> Percentage of single page sessions in which there was no interaction with the page. Has a duration of 0 seconds.	<b>Bounce Rate</b> Percentage of sessions that were not engaged sessions (a session that lasts 10 seconds or longer, has 1 or more conversion events or has 2 or more page or screen views)
<b>Event Count</b>	<b>Hits</b> Has a category/action/labels and is its own hit type.	<b>Events</b> All hits are events in GA4 and they have no notion of category/action/label.

# GA4 Standard Reports

- > Use Standard Reports to monitor key metrics and answer key questions. Use Standard Reports to export + share reports across an organization.
- > Customize Standard Reports to make them most relevant for your business.

# Common Reporting Use Cases in GA4

## Standard Reports vs UA

### Understand User Behavior

**UA**

**Audience Reports**  
A group of reports that provide insight into characteristics of your users

**Active User Report**  
Shows the number of active users for your site

**Lifetime Value Report**  
Shows how valuable difference users are to your business based on lifetime performance

**User Explorer Reports**  
Isolates and examine individual rather than aggregate user behavior

**GA4**

**Engagement Overview**  
Dashboard overview of user engagement with your business from the perspective of engagement time (session duration), and screens and events

**Pages and Screens Report**  
Shows the pages on your website and screens on your app that people visit and engage with

**Landing Page Report**  
Shows you the first page a visitor lands on when they visit your website and how many visitors land on each page

**Tech Details Report**  
Identifies the technology people use to access your website or app, including their browser, screen resolution, app version, and operating system

### Analyze Conversion Performance

**Conversions Reports**  
A group of reports that provide into into conversions: a completion of an activity that is important

**Conversions Report**  
Highlights which conversion actions are most important, how many people performed each action & how much revenue is associated with each action

### View Traffic Acquisition Performance

**Acquisition Reports**  
Provide a window on how you acquire users, their behavior on the site after acquisition, and their conversion patterns

**Acquisition Reports**  
Reports that help users analyze, understand and improve online advertising

**Acquisition Overview**  
Dashboard overview of user count and the sources, mediums and campaigns by which you acquired users

**Traffic Acquisition Report**  
User count by source/medium, along with engagement, event-level conversion + revenue metrics

**User Acquisition Report**  
User count by medium, along with engagement, event-level conversion + revenue metrics

### Analyze eCommerce Performance

**Goals Report**  
Measurement of conversions on your website

**ECommerce Report**  
Shows purchase activity on your site or app including product and transaction information, average order value, ecommerce conversion rate, time to purchase

**Enhanced ECommerce Report**  
Shows product page views, shopping cart performance and transactions

**Multi-Channel Funnel Report**  
Shows the sequences of interactions that led to each conversion and transaction

**Monetization Overview Report**  
Dashboard of eCommerce activity from the perspective of revenue, purchases, items + coupons

**eCommerce Purchases Report**  
Item purchases by views, cart activity + revenue

**In-app Purchases Report**  
Shows how many users drop off between each step in your purchase funnel, from starting a new session to completing a purchase

**User Purchase Journey Report**  
Checkout funnel analysis

**Order Coupons Report**  
Shows the revenue associated with each coupon on your website or app

# Getting Started with GA4

## Standard Reports



After following best practices for Account Setup, the core set of Standard Reports below will appear in the UI. To find all reports, open Reports in the left-hand side Navigation. Below are the elements of the Reports section:

### **HOMEPAGE** *Uses Google AI to surface information relevant to your business*

- Use the Homepage to monitor traffic, navigate around Analytics and get insights about your websites and apps

### **REPORTS SNAPSHOT** *Surfaces key data points for your business*

- This report can be customized based on permissions by adding a new summary card. Details on how to customize are on the following page

### **REALTIME REPORTS** *Monitors activity on website or app as it happens*

- The arrangement of the cards lets you see how users enter the conversion funnel + how they behave once they're in the funnel
- Comparisons can be applied to evaluate subsets of data side by side
- Click "View user snapshot" at the top of the report to see a snapshot of data for a single user

*Note: App data is batched to conserve battery life so you may notice delays*

### **PREDEFINED REPORTS** *A set of predefined reports will appear as Report Collections, which are filtered based on the information provided during setup*

**App Developer Collection** - summarizes key metrics about the apps you connect to Firebase

- Automatically appears when Google Analytics for Firebase SDK is added to connected mobile app

**Games Reporting** - game specific information to measure customer behavior across user funnel

- Automatically appears when you have at least one app data stream associated with games app in the Google Play Store or the Apple App Store

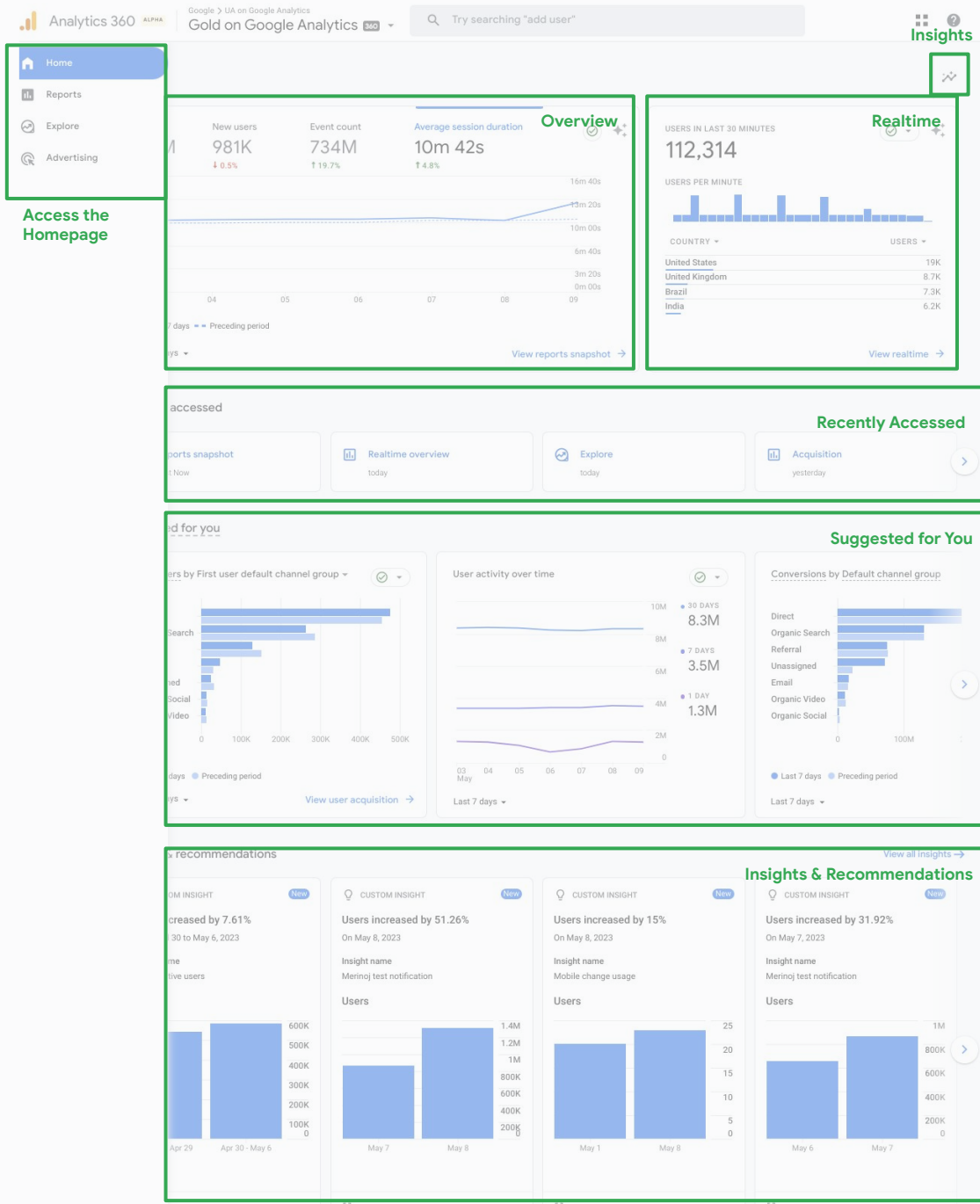
**Life Cycle** - helps you understand each stage in the customer journey from acquisition to retention

- All GA properties start with this collection by default

# Getting Started with the Standard Reports Homepage



The first page you will land on is the **Homepage** which surfaces information that's relevant to your business. The page can be used to monitor traffic, navigate around Analytics & get insights about your website and apps.



To access the Homepage, **click Home** in the left navigation.

The **Overview section** shows relevant metrics with a trendline for each metric. To change a metric, hover over the metric's drop down menu and click a new metric.

The **Realtime section** shows activity as it happens using data from the Realtime Report. The card shows the number of users in the last 30 minutes.

**Recently accessed** provides links to parts of your Analytics account that were accessed most recently.

The **Suggested for You** section highlights cards that you view often, even if they haven't been viewed recently.

The **Insights & Recommendations** section highlights Google AI powered Insights, unusual changes or emerging trends and Recommendations, tailored suggestions to help you get the most useful and accurate data & take advantage of new features as they become available.



# Customize **Standard Reports** for curated views of data

If standard reports in GA4 don't give you all of the data you want and need to see, you can create a curated view of data in your Analytics property through customization. The left navigation can be customized to your business needs for quick access.



## CUSTOMIZATIONS OFFER FLEXIBILITY

Users with editor or admin rights to a property can customize detail reports to create curated views of the data in a property. The reports can be added to the navigation to share across different internal stakeholders.

The below are customizations currently available:

- Change the dimensions
- Change the metrics
- Change the charts
- Save a filter to the report
- Create a summary card
- Link or unlink the report
- Change the date range

What are the steps to **customize reports** to make them most valuable for my business?



### EDIT AN EXISTING REPORT

To edit an existing report, click into the Reports > Library left menu item. Hover over a detail report in the table and click More. To create a new detail report, click into the Reports > Library menu.



### CUSTOMIZE THE REPORT

Each property can have up to 150 custom reports. To change the dimensions in a report, click the pencil button in the top right report to change the dimensions/metrics that are available in the report. Up to 12 metrics can be added to the table in the report.



### SHARE + EXPORT REPORTS




The Viewer role at the property level is required to share and export. To share or export, click the share/export button in the top right of a report.

# How to customize the Reports Snapshot




The Reports Snapshot is the overview report displayed when a user clicks Reports in the left navigation. An overview report can be set as the Reports Snapshot. Below, we highlight how to customize the cards within the Reports Snapshot page using the Report Builder.

What are the steps to **customize cards** on the Reports Snapshot page?

- STEP 1: Access the Report Builder** by clicking the Click Customize Report  in the upper-right corner
- STEP 2: Drag cards**  to change the order in which the cards will appear in the report
- STEP 3: Click**  **to remove a card** from the report
- STEP 4: Click “+ Add Cards”** to **add a card** to the report

The screenshot shows the Google Analytics Reports Snapshot interface. The main dashboard displays various metrics and charts, including a line chart for users over time, a bar chart for users in the last 30 minutes, and a horizontal bar chart for new users by channel. The 'Customize report' sidebar is open on the right, showing a list of report cards that can be added to or removed from the snapshot. The sidebar is highlighted with a green border.

**Analytics 360 ALPHA** Google > UA on Google Analytics Gold on Google Analytics  Try searching "add user"

← Back Reports snapshot Current Reports snapshot Last 28 days Apr 12 - May 9, 2023 Save...

**Users** 7.9M **New users** 4.1M **Average engagement time** 12m 32s **Total revenue** \$40.00

**USERS IN LAST 30 MINUTES** 116,233

**USERS PER MINUTE**

**TOP COUNTRIES**

Country	Users
United States	24K
United Kingdom	9.7K
India	6.3K
Brazil	5.7K
Spain	4.7K

**Insights 10+**

- CUSTOM INSIGHT** New  
Users increased by 7.61%  
From April 30 to May 6, 2023
- CUSTOM INSIGHT** New  
Users increased by 51.26%  
On May 8, 2023
- CUSTOM INSIGHT** New  
Users increased by 15%

**WHERE DO YOUR NEW USERS COME FROM?**

New users by First user default channel group

Channel Group	Users
Direct	~8.5M
Organic Search	~4.5M
Referral	~2.5M
Email	~1.5M
Unassigned	~1.0M
Organic Social	~0.5M
Organic Video	~0.5M














**HOW ARE ACTIVE USERS TRENDING?**

User activity over time

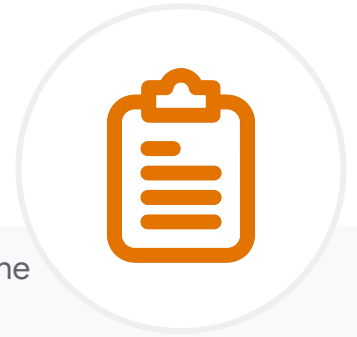
Time Period	Users
30 DAYS	8.4M
7 DAYS	3.5M
1 DAY	1.4M

**Customize report**

CARDS (UP TO 16)

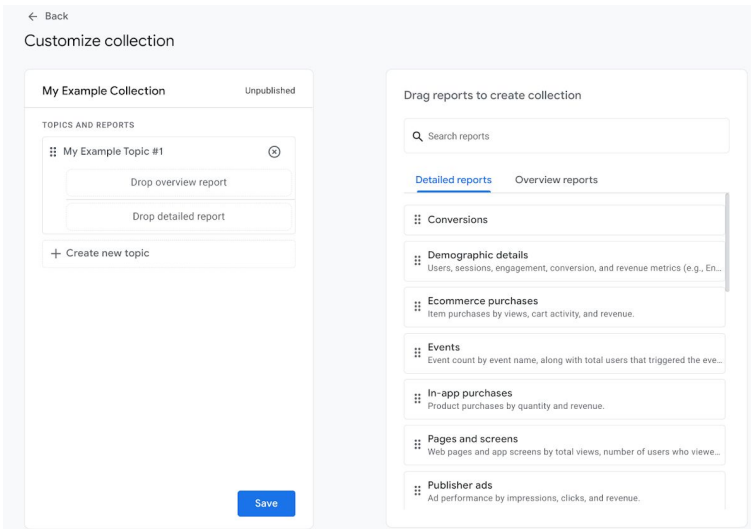
- Overview 
- Realtime 
- Insights 
- New users by First user default chan... 
- User activity over time 
- User activity by cohort 
- Views by Page title and screen c... 
- Event count by Event name 
- Conversions by Event name 
- Items purchased by Item name 
- Conversions by Platform 
- Users by Page path and screen ... 
- Views by Page path and screen ... 
- + Add Cards

# How to customize the Reports Navigation



Property administrators can organize reports into collections and topics in the report navigation. By customizing collections and topics within collections, reports will be customized for all those with access to the account.

## What are **collections** and how do I create them?

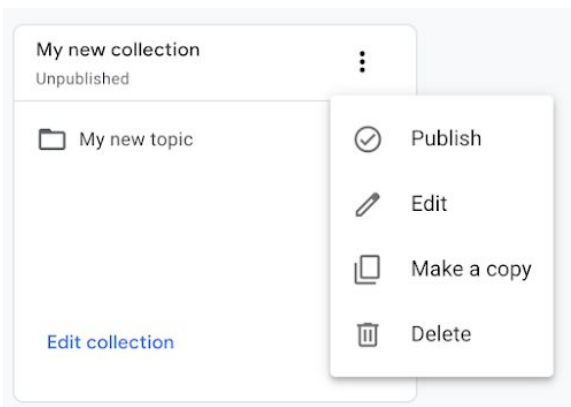


A collection is a set of reports and GA4 users can create their own collections. Life cycle and User are predefined collections that appear in the report navigation by default.

### To create a collection:

1. In the left navigation, click “Library” in the bottom left corner and “Create New Collection”
2. Click Blank to start with an empty collection that has no topics and reports
3. Enter a name in the Collection name field
4. Click “+Create new topic” and enter a topic name
5. Click apply and drag a Detail report from the card on the right and drop it under the new topic
6. Drag and an Overview report from the card on the right and drop it under the new topic
7. Click save
8. Reports will now appear in the left navigation

## How do I **make collections available** for all users within the Property?



Collections must be Published to make it available to everyone with access to the Analytics property.

### To publish a collection:

1. In the left navigation, click Library and locate your collection card
2. Click “More” and click “publish”

# Align GA4 Reporting to your **Business Objectives**

The flow within GA setup asks users about their specific business objectives and ensures setup for reports, conversions + audiences is most relevant. Customization of standard reports will continue to be available, regardless of setup.

**EXAMPLE BUSINESS OBJECTIVES + REPORTS DISPLAYED:**

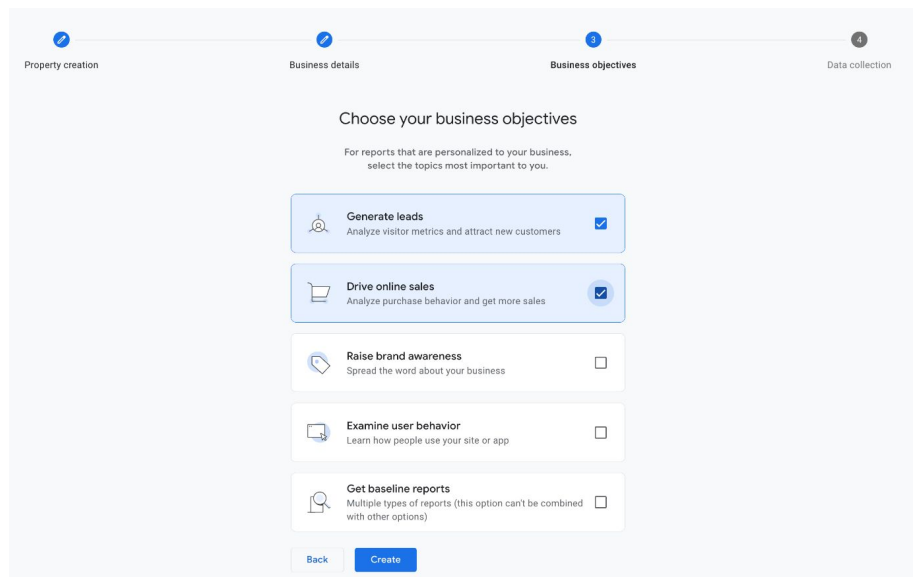
<div style="background-color: #f9a825; color: white; padding: 5px; margin-bottom: 10px;"><b>GENERATE LEADS</b></div> <div style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;"> <table border="0"> <tr> <td>User Acquisition</td> <td>Traffic Acquisition</td> </tr> <tr> <td></td> <td>Landing Page</td> </tr> </table> </div> <div style="background-color: #f9a825; color: white; padding: 5px; margin-bottom: 10px;"><b>DRIVE ONLINE SALES</b></div> <div style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;"> <table border="0"> <tr> <td>User Purchase Journey</td> <td>eCommerce Purchases</td> </tr> <tr> <td></td> <td>Promotions</td> </tr> </table> </div> <div style="background-color: #f9a825; color: white; padding: 5px; margin-bottom: 10px;"><b>EXAMINE USER BEHAVIOR</b></div> <div style="border: 1px solid #ccc; padding: 10px;"> <table border="0"> <tr> <td>Events</td> <td>Conversions</td> </tr> <tr> <td></td> <td>Pages &amp; Screens</td> </tr> </table> </div>	User Acquisition	Traffic Acquisition		Landing Page	User Purchase Journey	eCommerce Purchases		Promotions	Events	Conversions		Pages & Screens	<div style="background-color: #f9a825; color: white; padding: 5px; margin-bottom: 10px;"><b>GET BASELINE REPORTS</b></div> <div style="border: 1px solid #ccc; padding: 10px; margin-bottom: 10px;"> <table border="0"> <tr> <td>Acquisition</td> <td>Monetization</td> </tr> <tr> <td>Engagement</td> <td>Retention</td> </tr> </table> </div> <div style="background-color: #f9a825; color: white; padding: 5px; margin-bottom: 10px;"><b>RAISE BRAND AWARENESS</b></div> <div style="border: 1px solid #ccc; padding: 10px;"> <table border="0"> <tr> <td>Google Ads Campaigns</td> <td>Pages &amp; Screens</td> </tr> </table> </div>	Acquisition	Monetization	Engagement	Retention	Google Ads Campaigns	Pages & Screens
User Acquisition	Traffic Acquisition																		
	Landing Page																		
User Purchase Journey	eCommerce Purchases																		
	Promotions																		
Events	Conversions																		
	Pages & Screens																		
Acquisition	Monetization																		
Engagement	Retention																		
Google Ads Campaigns	Pages & Screens																		

## How do I **setup GA4 to reflect my business objectives** and show the most relevant reports?

When setting up a new property, the setup flow will prompt a user to select their relevant business objectives.

A user can select 1 or more relevant business objectives.

For Partners, select “all” to view all reports for Customers.



# GA4 Explore

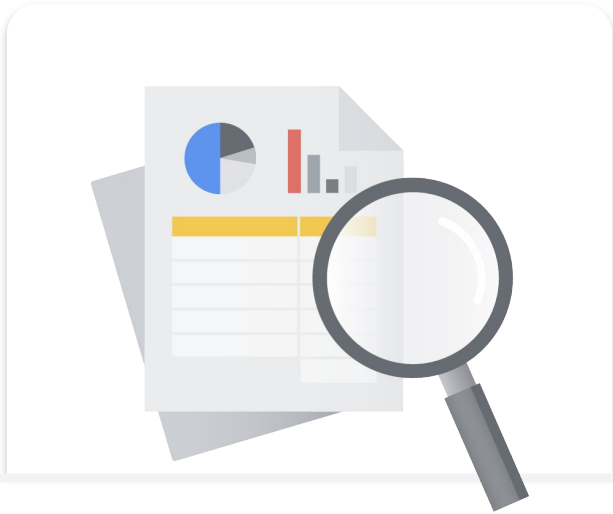
> Use Explore to gain deeper insights about your user and their journeys on your website or app.

# Getting Started with Explore

## in GA4



Explore are a collection of advanced techniques that go beyond standard reports to help users uncover deeper insights and customer behavior.



### WHY USE EXPLORE

Explore allows users to get answers to their most specific, ad hoc and advanced questions, leveraging techniques such as pathing, cohorts and others. Explore is available to both Standard and 360 properties. 360 properties can adjust sampling sizes to give faster results.

- In Explore, users can drill down into their GA4 data, leveraging powerful data models and advanced segmentation to uncover powerful insights on their businesses with just a few clicks. Results and insights can then be shared with others on the property and/or used to create audiences directly from the results.

### INTRODUCTION TO EXPLORATION TECHNIQUES

Explore provide access to data and analytical techniques that aren't available in reports. Use Explore to explore your data in depth and answer complex questions about it.



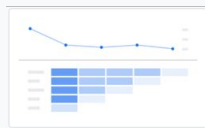
#### FREE FORM

A crosstab layout where many visualization styles can be applied including bar charts, pie charts, line charts, scatter plots & geo maps.



#### FUNNEL

Visualize the steps user take to complete tasks on your site or app and see how you can optimize user experience and identify over or under performing audiences.



#### COHORT

Gain insights from the behavior + performance of users related by common attributes.



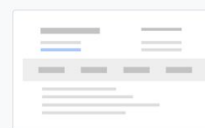
#### PATH

Visualize the paths your users take as they interact with your website and app.



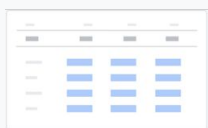
#### SEGMENT OVERLAP

See how different user segments relate to each other. Use this technique to identify new segments or users who meet complex criteria.



#### USER

Examine the users that make up the segments you create or import. You can also drill down into individual user activities.



#### USER LIFETIME

Explore user behavior and value over their lifetime as a customer.

# Understand **how to set up Explore** in GA4



Customize each Exploration to dig deeper into your dataset. The variable panel, shown below, is common for all techniques. The Tab Settings below will change slightly based on the technique selected.

The screenshot shows the Google Analytics 360 Explore interface. On the left, there are four panels: Variables, SEGMENTS, DIMENSIONS, and METRICS. On the right, there are Tab Settings and a data table. Annotations in green and blue boxes highlight specific features and actions.

**Variables Panel:**

- Exploration Name: Free form (Annotation: Enter Name)
- Custom: Apr 3 - May 2, 2020 (Annotation: Edit Date Range)
- SEGMENTS: US, Direct traffic, Paid traffic, Mobile traffic, Table (Annotation: Create and Add Segments)
- DIMENSIONS: Event name, Gender, Country, Device category, First user medium, City (Annotation: Create Dimensions and Apply Segments)
- METRICS: Active users, Event count, Transaction (Annotation: Add Metrics)

**Tab Settings Panel:**

- TECHNIQUE: Free form (Annotation: Adjust Technique Type)
- VISUALIZATION: Bar chart, Pie chart, Line chart, Scatter plot, Table, Map (Annotation: Double click or drop in segments)
- SEGMENT COMPARISONS: (Annotation: Double click or drop in segments)
- ROWS: Country, Drop or select dimension, Start row: 1, Show rows: 10 (Annotation: Specify row details)
- COLUMNS: Drop or select dimension, Start column group: 1, Show column: 5 (Annotation: Specify column details)
- VALUES: Event count, Drop or select metric (Annotation: Add in Metrics)
- FILTERS: Drop or select dimension or (Annotation: Apply Filters)

**Data Table:**

Country	Event count
Totals	2,381,553,986 100.0% of total
1 United States	352,404,834
2 Japan	241,325,723
3 India	198,760,428
4 United Kingdom	124,287,765
5 Brazil	107,018,212
6 Spain	72,407,541
7 France	71,120,804
8 Germany	70,196,409
9 Netherlands	65,211,359
10 Canada	59,555,640

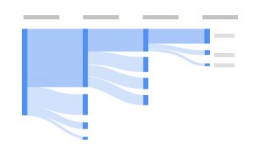



**Annotations:**

- Blue boxes highlight the Variables panel and its sections.
- Green boxes highlight the Tab Settings panel and its sections.
- Red circles highlight the 'Export Exploration' button in the top right.

# Use Cases for Explore in GA4



Each Exploration Technique allows you to answer specific questions for your business and dig deeper into your data.

Question	Technique Name	Analyzing the Data
<p>What steps do users take to complete a task on my website or app?</p>	<p><b>Path Exploration</b> Tree Graphs</p> 	<p>Click &lt;start over&gt; and select the desired ending point for the task you are looking into.</p> <p>The path will change from the default forward path to a backward one, looking at what steps users took to get to your selected ending point rather than the steps they did after the selected starting point.</p>
<p>How well are users progressing on the key journeys on my website and/or app?</p>	<p><b>Funnel Exploration</b> Funnels</p> 	<p>Define the steps of the journey you want to explore.</p> <p>Adjust the relevant settings, such as selecting an open funnel if you want to consider users starting the funnel at any step (vs. a closed funnel where only users starting at the first step of the funnel are considered), and see which steps your users are struggling with the most.</p> <p>Once you see a step you want to understand better, choose Trended funnels to see how each step has performed over time.</p>
<p>How do users behave during their lifetime as a Customer?</p>	<p><b>User Lifetime</b> Data Table</p> 	<p>This technique analyzes users based on their:</p> <ol style="list-style-type: none"> <li>1 <i>Initial Interactions</i> data from a customer's first time engaging with your property</li> <li>2 <i>Most recent interactions</i> show data from the last time the user was measured for a property</li> <li>3 <i>Lifetime interactions</i> shows data aggregated over the user's lifetime</li> <li>4 <i>Predictive metrics</i> show data to predict user behavior</li> </ol>
<p>How do my users relate to one another?</p>	<p><b>Segment Overlap</b> Venn Diagram</p> 	<p>This technique lets you compare up to 3 user segments to see how users overlap and relate to each other.</p> <p>Users can create new segments based on the findings.</p>
<p>How is the user behavior on my website and/or app improving over time?</p>	<p><b>Cohort Exploration</b></p> 	<p>Define the inclusion criteria that characterizes the cohort of users you want to analyze (e.g. users who have viewed your promotional landing page). Then define a desired (or undesired) behavior for this group of users (e.g. a purchase) and see how many users went from the first event to the second, how long it took them, and how this is changing over time to see if any changes you have made to your campaign or purchase funnel are improving your conversions.</p>



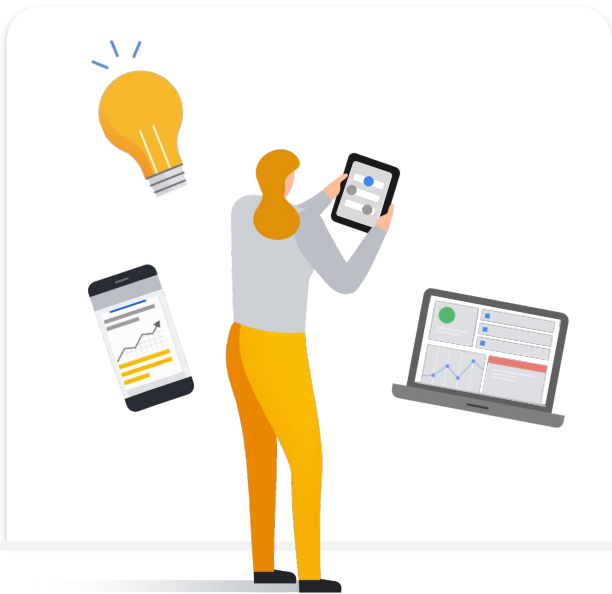
# GA4 APIs

> APIs provide programmatic access to GA4 report data for automation and integrations.

# Build on top of Google Analytics with **Google Analytics APIs**



APIs can be used to automate complex reporting and configuration tasks, such as creating custom dashboards to display GA data, saving time by automating complex tasks and integrating your GA data with other business applications.



## WHY USE THE GA APIs

The Google Analytics APIs has four key benefits:

- 1 Increased flexibility and control over your GA account(s)
- 2 Improved efficiency and time saving
- 3 Detailed and insightful reporting
- 4 Easier integration with other systems and applications

There are two ways to help pull GA data without accessing the GA UI: The Query Explorer and the Google Analytics spreadsheet Add-on, which both make use of the Data API to pull data from your GA account.

### Definition + Use Case

## What are the APIs compatible with GA4?

For official Google Analytics API announcements, please subscribe to [Google Analytics API Notify Group](#).

[GA4 Dimensions & Metrics Explorer](#) to see query dimensions and metrics for a given property.

Universal Analytics to Google Analytics 4 [dimensions and metrics equivalence](#).

<b>Data API</b>	<b>Gives programmatic access to read GA4 Report Data</b> Use this to build custom dashboards to display GA data, automate complex reporting tasks to save time, integrate your GA data with other business applications, realtime reporting and funnel reporting
<b>Admin API</b>	<b>Allows for programmatic access to read and update the GA4 Configuration Data</b> Use this for search change history, manage properties, manage data retention setting for a property, manage Google Signals setting for a property, manage conversion events, Manage custom dimensions and metrics, manage links between GA4 properties and Google Ads accounts, View access logs (GA360 only feature)
<b>User Deletion API</b>	<b>Allows customers to process deletions of data associated with a given user identifier</b> Use this to delete data for a given user identifier from a project or web property
<b>Measurement Protocol</b>	<b>Allows developers to make HTTP requests to send raw data directly to GA servers. It's an API geared toward developers that can accept data in realtime.</b> Use this to measure user activity in new environments, tie online to offline behavior, send data from both the client and the server, incorporate events that happen outside the website and app, incorporate events that cannot be tracked via gtag or the SDK

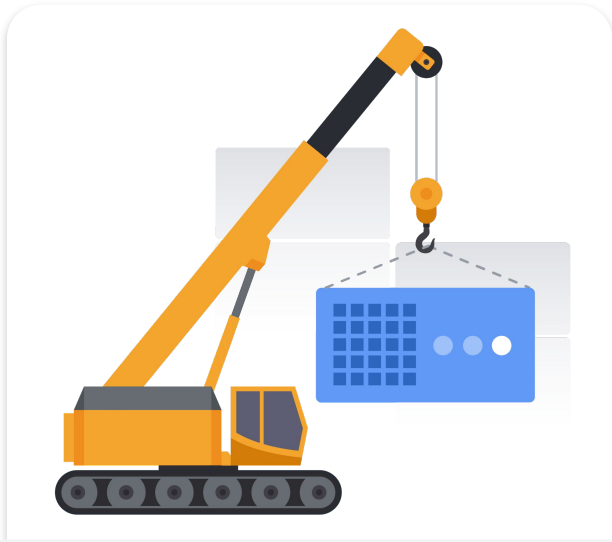
# GA4 Big Query

> BQ provides exports of all raw events from GA4 properties for use in SQL-like syntax to build customer models.

# Run advanced analysis on your GA4 data with **Big Query Export**



BigQuery is a cloud data warehouse that runs highly performant queries of large datasets. Use the BigQuery integration with Google Analytics 4 to export your raw, unsampled data for advanced analysis in BigQuery. Get started today by setting up a GCP account and enabling the BigQuery APIs to configure the export.



## WHY USE BIGQUERY

The GA4 BigQuery export is an extremely powerful tool that offers increased flexibility when analyzing data - all your GA4 data without the limitations of the UI.

- 1 Integrate raw GA4 data with additional 1P data sources (ex. CRM data)
- 2 Run advanced analyses (ex. propensity modeling) and build custom attribution models
- 3 Export data for visualization in popular BI tools (ex. Looker, Data Studio, etc)
- 4 No sampling, no cardinality, no data retention limits

In GA4, there are multiple different export options. See below for a breakdown of each option. These export types can all be enabled the same time.

### GA4 EXPORT TYPES

<b>Daily Export</b>	A one daily completed export of raw, unsampled GA4 event data from the previous day. <b>Note:</b> For Standard customers there is 1M event/day export limit
<b>Streaming Export</b>	A realtime export of current-day GA4 event data with no export limit. New User traffic source data is not included in this export. For this data the Daily export is recommended.
<b>User Data Export (Coming soon!)</b>	A daily export of all user data enabling the export of audience data, predictive data, and more.
<b>Enterprise Export (Coming soon!)</b>	<b>Enterprise only.</b> The enterprise export will support an SLA that will guarantee a complete set of data by the same time each day. The exported data will be similar to the daily export.

### CONSIDERATIONS

- Standard customers have a daily event export limit of 1M events/day. Data streams and events can be filtered out of the export to maintain this limit, otherwise we recommend upgrading to enterprise for a nearly limitless export.
- The BigQuery export is intended to give customers back the data they collect with GA4. It does not export Google's proprietary data including Google Signals, modeled, or attributed data.
- Beyond the exclusion of Google data noted above, there are a number of expected reasons why data in the export may not match what's in the UI. ([See here to learn more](#))
- While the BigQuery integration is a free GA4 feature, there is cost on the BigQuery side associated with storage and query processing