

Google Analytics 4 vs. Universal Analytics:

How Do They Compare?

While they use similar terminology, GA4 and UA metrics have different definitions and collection methods. Below, we've provided an overview of some of these differences to help you understand how GA4 can (and cannot) compare against your historical UA data.

Users

GA4 has three User metrics:

Total Users, Active Users, and New Users.

GA4

- **Total users** is the total number of unique users who have logged an event.
- **New users** is the number of users who interacted with your site for the first time.
- **Active users** is the number of users who have an engaged session.

UA has two User metrics:

Total Users and New Users.

UA

- **Total users** is the total number of users.
- **New users** is the number of users who interacted with your site for the first time.

Because GA4 is better at understanding that viewers use multiple devices (and, thus, can de-duplicate users), **GA4 users will typically, but not always, be lower than UA users.**

We expect these numbers to be within 10%.



Sessions

GA4 and UA Sessions are similar in that they are both a period of time in which someone is engaged on your site.

However, there are differences:

GA4

- A **session will end** when there has been more than a 30-minute period of inactivity (unless this time has been increased).
- Sessions are **not restarted** at midnight or when new campaign parameters (such as UTM parameters) are encountered.

UA

- A **session will end when:**
 - There has been more than a 30-minute period of inactivity (depending on the session timeout settings);
 - Midnight passes;
 - Or new campaign parameters are encountered.

We expect GA4 and UA sessions to be within a **10% difference**, but they may be further apart for many reasons.

In addition, this difference may not be consistent across all dates.

Bounce Rate

In short, the bounce rate metric cannot be compared between GA4 and UA.

GA4

- Percentage of sessions that were not engaged sessions, i.e. a session that does **not**:
 - Last 10 seconds or longer;
 - Have one or more conversion events;
 - Or have two or more page or screen views.
- The GA4 bounce rate is the inverse of the engagement rate.

UA

- Percentage of single page sessions in which there was no interaction with the page.

Purchases

GA4 and UA Purchases are similar, as long as they are set up properly within the platforms.

GA4

- GA4 does **not** provide the additional JavaScript for array collection and expects you to provide the items array when collecting a purchase event on your own.

UA

- UA provides **more** support, as purchase events are fired within the Enhanced Ecommerce model and the data is pulled from a products array via Google Analytics-provided JavaScript.

How much purchases (and, therefore, revenue) vary will depend on your site and your setup. GA4 and UA have different ways of collecting this data, which can account for some differences.

However, assuming that both platforms are set up well, we expect these numbers to be relatively similar.

Note: GA4 will likely report a lower number of purchases and a lower revenue number than your eCommerce platform.



Conversions

Because conversions are configured and tracked differently in GA4 and UA, this metric won't compare one-to-one across platforms.

GA4

- Mark specific **events** as **conversions** within GA4.
- Fires every time the event happens (unless this setting is changed).

UA

- Set up a **goal** to tell UA that a particular user action is a **conversion**.
- Counts only one conversion per session for each goal.

The discrepancy in conversion counting can lead to large differences between each platform, even when your UA goals are properly configured as GA4 conversions.

An example: Say you have a GA4 conversion event and a UA goal for submitting a contact form. If someone else fills out a form on your site twice in the same session, GA4 will count two conversions, while UA will only count one.



Read more about the differences between Google Analytics 4 and Universal Analytics [in this guide](#).