



Point of View

Google Analytics 4 Migration

BharathyKannan Udhayasuriyan



Table of Contents

01.	What is Google Analytics 4 (GA4)?	04
02.	Why talk about Google Analytics 4 (GA4) now?	05
03.	Why 'fast track' Google Analytics 4 (GA4) migration?	06
04.	What is the 'Crawl Walk Run' model by LTIMindtree for Google Analytics 4 (GA4) Migration?	07
05.	How to handle historical data from Universal Analytics (UA)?	10
06.	What happens to 'UA Views' in Google Analytics 4 (GA4)?	12
07.	How Google Analytics 4 (GA4) is an event-based platform and differs from Universal Analytics 3 (UA3)?	13
08.	What happens to the existing Universal Analytics (UA) reports in Google Analytics 4 (GA4)?	14
09.	What happens to the current Universal Analytics (UA) Ecommerce transactions?	14
10.	Is there any replacement for Universal Analytics (UA) goals in Google Analytics 4 (GA4)?	15
11.	What are the changes in Google Analytics 4 (GA4) for the custom dimensions and metrics setup?	16
12.	Is it possible to use remarketing audiences in Universal Analytics (UA) as it is in Google Analytics 4 (GA4)?	18
13.	Is it required to re-tag the entire website for Google Analytics 4 (GA4)?	18
14.	Does this migration affect the Google Ads campaigns?	19
15.	Is there a tool / accelerator for GA4 Migration?	20
16.	If the app is hosted on a CMS is Google Analytics 4 (GA4) migration applicable?	21
17.	Can the existing Data Studios Report (using Data studio) be linked to GA4?	21
18.	Is there any technical reference link for migration?	22



Abstract

Web analytics are used by thousands of big and small businesses to understand their customers better and give them a better experience. Any organization must make the best use of marketing data as more businesses go digital. In terms of providing complete customer analytics on both web and mobile platforms, Google Analytics is a pioneer. Since its inception in 2005, Google Analytics has advanced significantly, starting with Urchin and moving on to ga.js, Firebase, and now the most recent version, Google Analytics 4(GA4). It is a

strong platform that addresses current marketing requirements in online and mobile application analytics by utilizing several Google ecosystem components. The migration from Universal Analytics (UA) to GA4 is outlined in this document as well as a migration roadmap. It discusses the key distinctions between Universal Analytics (UA) and Google Analytics 4 (GA4) in terms of user experience. The key migration considerations are laid out in this document.





What is GA4?

The most recent Google Analytics version is GA4. It is a novel method of gathering and processing site visits and sessions. Events in GA4 are considered to be any action on the page.

GA4 provides "customer-centric measurement," which consistently gathers data from websites and mobile apps to provide a better understanding of the customer experience across channels. Smarter insights on the campaigns, marketing spending, etc. are provided by GA4, which is supported by Google Advanced Machine Learning ML. The extensive new

set of properties (out of the box feature) in GA4 produces more pertinent target markets for advertising campaigns. Using data-driven attribution, GA4 enables analysis of the full marketing impact across the sales funnels. GA4 is designed with privacy in mind, for example, cookieless tracking. Since GA4 does not collect IP addresses, IPs are automatically anonymized. For example, GA4 provides many suggested events that automatically collect without requiring changes to the current site code.





Why talk about GA4 now?

The current version of Universal Analytics, GA3, will be replaced by GA4.

As of July 1, 2023, it will no longer process data using the default Universal Analytics properties.

Google Analytics 4 will be used to route the data instead. It indicates that the website will switch to GA4 and that users will only have access to the previously processed data for a period of six months in the Universal Analytics property. Customers of Google Analytics 360 will get a one-time processing extension that will end on October 1, 2023.





Why 'fast track' GA4 migration?

The site will not collect any analytics information if the migration is not completed by July 1, 2023, making it impossible to track site traffic and usage. All of the histories will be lost because it is not possible to port the data to GA4. There are some suggested methods for handling history. Contrary to GA3, GA4 is an event-based model; technically speaking, there have been many changes, making it

difficult to simply upgrade; instead, it must take into account all of the business requirements. The learning curve will take a lot of time because GA4 is a new platform that is still developing. For the migration, a developer who is familiar with GA4 would be required. Although Google suggests a few accelerators, including the user migration tool, no one tool can be used for this migration.





What is the 'Crawl Walk Run' model by LTIMindtree for GA4 Migration?

Crawl Phase: (GA Consultant, Analyst, Business Manager)

- Understand the site What GA account is being used? Who is maintaining it? What type of media tags are involved?
- Find where and how GA is installed. For instance, if CMS like WordPress is being used, plugins may be used in place of code. The migration roadmap must be defined in light of this knowledge.
- Audit the properties setup with a GA consultant's assistance. Ensure current universal properties are working as expected. A broken site / broken analytics code can impact the migration.
- It's a good opportunity to review previous campaigns, and site integrations; viz Google Ads, and the measurement plan.

Review the current tracking setup and tag management system.

- Understand the site usage history requirements.

 Below are some of the queries that can lead to this conclusion:
 - What level of data is required? Would high-level KPIs alone suffice for the business?
 - What historical data is consumed by stakeholders? How far back is the data needed?
 - Is historical data required? Is the summary reports already captured?
 - What are the 'nice to have', 'good to have', and 'needs a backup' datasets?



Walk Phase: (GA Consultant, Developer)

Enable dual tagging. Add Google Analytics 4
 (GA4) tracking on the website with the existing
 Universal Analytics tagging.

Benefits of Dual tagging:

Build up the History

GA4 does not work retrospectively. The sooner the tagging, the more historical data can be collected.

Time to familiarize

GA4 is a new platform with many new changes in reporting interfaces so sooner to start gives more room to get acquainted with the platform.

- Identify the site needs, based on the audit outcomes. Sites do not need all GA4 features.
 It may need one to many of the below data points: Translate GA3 views to GA4.
- Translate events to GA4.
- Need for goals and conversions.
- Need for custom dimensions and metrics.
- Ecommerce considerations.



Handle the history implementation through a manual or automated way.



Educate the team on GA4 features and the way it works.



Run Phase: (GA Consultant, Developer)

Execute the feature setup in GA4. Implement GA4 features. For instance, if using custom dimensions in UA then as per the migration steps, move it to GA4.

紛 Integration Setup

 If the digital marketing team utilizes any other platforms from the Google Marketing Platform stack, for instance, D&V 360, Google Ads, Optimize 360work with stakeholders to establish integrations and activate the recreated audiences.

Continuous optimization by revisiting and comparing with baseline data.

Data validation and testing. Since UA is also active as per the dual tagging, compare and validate UA and GA3 outcomes. GA4 can be tested with the new DebugView feature available in GA4.

Make GA4 the primary source for analytic data.

- GA4 delivers all the metrics needed for the reporting and analysis.
- Data is clean, accurate, and reliable.
- Baseline data is to be used as a benchmark for future performance.



How to handle historical data from Universal Analytics?

Explore the below mentioned ways to save the Universal Analytics data before it gets deleted.

Export Universal Analytics Data to Google Sheets or Excel

- Manual export is a known and easy way to export data as a standalone report. For instance,
 - Open the GA standard report that needs to be kept. Acquisition > All Traffic > Source/Medium.
 - Set any customizations, such as a segment for a particular country, a filter for a particular page grouping, or a secondary dimension for landing pages, and Click EXPORT in the top right corner.

 Select the file format from the drop-down menu, such as PDF, Google Sheets, Excel (.xlsv), or CSV.

Google Analytics Add-On for Google Sheets:

A free utility from Google that provides access, visualization, sharing, and manipulating Google Analytics data in Google Sheets.It is an accelerated way to export data manually.



Export Universal Analytics Data to The Cloud (Need developer Skills)

The **Google Analytics Reporting API** can be used to export data to any medium.

Any cloud-based storage which is less expensive can be considered, and ETL (Extract, Transform, Load) tool can be built as DIY (Do It Yourself mode) or use any third-party tools. Google BigQuery is the recommended option. For GA360 customers, it might already have a BigQuery account, and a standard (free) client can plan for the export.

Export Universal Analytics Data to a Custom Database (Need Developer Skills)

For enterprises that have Data Lakes or Data Warehouses, the data can be exported to a custom database. (However, this is an expensive solution)

Please note: For standard users, it is highly recommended to download the data as individual reports as ROIs.



What happens to 'UA Views' in GA4?

GA4 does not have a 'view' section, but data filters can exclude Internal traffic (by defining IP address), Developer traffic, or any Customer segmentation.

For instance, In UA3 customers might use views to segregate different data types. A view can be created which divides the global traffic into regional traffic. In GA4 data filter can be applied based on the user properties, which have a region by default.



How is GA4 an event-based platform and differs from UA3?

Most of the UA elements like **hits/page views/events/sessions/social** are treated as events in GA. A careful assessment of current elements is required to redefine GA4. All events are not necessarily to be recreated. It is one of the complex steps in migration, in identifying the events wherein implementation is simple.

GA4 has the following types of events:

Automatically collected events

No code change required. For example, ad click. No need to set up a separate parameter as in UA

Enhanced measurement events

No code change required. Enhanced measurement events are a special set of events e.g.: video engagement

Recommended events

Code change or adding events via GTM required.
For example, for online sales, add payment_info
is one recommended event

Custom events

If events are not available in the above section, custom events are created. This needs a code change or adding events via GTM



What happens to the existing UA reports in GA4?

Not all reports in UA are directly migrated to GA4. Few reports are available by default, and the rest must be recreated. Example: The behavior report section in UA has 20+ predefined reports, but in GA4, it is under the engagement folder with only 4 predefined reports.

The rest of the reports can be created in the 'Exploration' segment in GA4. Exploration is a collection of advanced techniques which go beyond standard reports to help get deeper insights into the customers' behavior.

09

What happens to the current UA Ecommerce Transactions?

This must be recreated in GA4. The Transaction event in UA needs to be recreated as a purchase

event in GA4. It is a complex migration based on business requirements.



Is there any replacement for UA Goals in GA4?

Yes, GA4 has conversions in place of UA Goals. Conversions are easier to set up in GA4. However, some manual effort is required.

Conversion is set by selecting the events most important to the business or adding conditions for existing events.

Conversions can be turned off at the event level, unlike UA where Goals cannot be removed.

Name events in a way, so that it expreses the action taken by the event.

Example: Downloading a PDF is an event that can be called Download_PDF_PageA. It could be a conversion if it's downloadable on form submission, giving the customer a lead. If it is a mere download link, it is not qualified as a conversion. Though it is easy to create a conversion, we need to assess carefully before setting up the Conversions.



What are the changes in GA4 for the Custom Dimensions and Metrics Setup?

- UA custom dimensions cannot be directly ported or mapped in GA4.
- GA4 handles custom dimensions set up differently.

UA Dimension Type	Description	Example	GA4 Type
Hit Event	Current Hit Only	Pageview	Replaced as Event
Session	Entire Session	Landing Page	No Session Type
User	Multiple Sessions from a single user	Account Type	User properties
Product	Current product	Size	No Product Type

- GA4 has only event and user properties, so the session and product scope of UA must be redefined in GA4.
- Most product scope events are part of automatically collected Events in GA4. i.e., No extra configuration is required.



• Many session scope dimensions can become an event or user-scoped dimensions.

For example, in UA, the logged-in user is session scope. This can be converted into a log in event in GA4.

If there is any custom page, click captured as custom dimensions in UA, as it needs to be recreated in GA4.

• GA4 metrics also set up similarly custom dimensions. UA metrics must be recreated in GA4 as it does not have product scope.





Is it possible to use Remarketing audiences in UA as it is in GA4?

No, Audiences must be manually recreated in GA4.It is very straightforward to create audiences manually

Migrating Universal Analytics audiences used in Google Ads allows for remarketing to existing or previous users based on their website activities. In UA, audience is mainly used for Google Ads Integration. While in GA4 it is more of a combination of segments and audiences. Audiences in GA4 can be used as a replacement for UA views in some places.

13

Is it required to re-tag the entire website for GA4?

Since GA4 uses a distinct data model, the collection process differs slightly. While Google Tag Manager offers native tags for GA4 config and GA4 events,

this needs to be rolled out across the entire site, so yes, this migration will require some re-tagging work cut-out though.



Does this migration affect the **Google Ads campaigns?**

Unless the Universal Analytics property is linked to the Google Ads account, the Google Ads account will be unaffected. However, if Universal Analytics property and Google Ads accounts are linked, Universal Analytics data will stop flowing to Google Ads after July 1, 2023. (October 1, 2023, for Analytics 360 properties.)

This could affect Google Ads campaigns if:

Bidding on imported Universal Analytics goals or Ecommerce transactions.

Using Universal Analytics audience in the campaigns.

Importing Universal Analytics site metrics.



Is there a tool or accelerator for GA4 Migration?

There is no 'one size fits all' tool available for migration. Below are some of the support documents for accelerators:

Google Ads links Migration Tool - Google Ads links migration tool - Analytics Help

GA4 Migrator Plugin for User migration -

https://workspace.google.com/marketplace/app/ga4_migrator_for_google_analytics/472716783070

Goals Migration -

https://support.google.com/analytics/answer/10762548?hl=en#zippy=%2Cin-this-article



If the App is hosted on CMS, Is GA4 migration applicable?

Yes, It is applicable. Check with the CMS provider / Website platform builder whether they have native support for GA4. If there is no native support, then

the data collection snippet (which is available in gtag.js) can be added to the custom field. The CMS will direct this.

17

Can the existing Data Studios Report (using Data Studio) be linked to GA4?

The data source for the new GA4 property in the existing dashboard can be changed easily but it needs to update every dashboard element due to

the different data structures. Few metrics are different hence need to re-create them.



Is there any technical reference link for migration?

Yes, Google has excellent documentation for this GA4 migration.

https://support.google.com/analytics/answer/10759417?hl=en

Talk to our experts now!

Please select Industry services – "Cloud" in the form drop down menu, and we will get in touch with you shortly.

References

https://support.google.com/analytics/answer/10759417?hl=en



About the Author



BharathyKannan Udhayasuriyan is a senior cloud / digital advisor at LTIMindtree. He has worked with esteemed clients throughout their cloud and digital journey by assisting them in transforming their businesses. He has a tenure of over a decade in architecting and building solutions across technologies.

BharathyKannan UdhayasuriyanSenior Specialist - Cloud Services and Software

LTIMindtree is a global technology consulting and digital solutions company that enables enterprises across industries to reimagine business models, accelerate innovation, and maximize growth by harnessing digital technologies. As a digital transformation partner to more than 750 clients, LTIMindtree brings extensive domain and technology expertise to help drive superior competitive differentiation, customer experiences, and business outcomes in a converging world. Powered by nearly 90,000 talented and entrepreneurial professionals across more than 30 countries, LTIMindtree — a Larsen & Toubro Group company — combines the industry-acclaimed strengths of erstwhile Larsen and Toubro Infotech and Mindtree in solving the most complex business challenges and delivering transformation at scale. For more information, please visit **www.ltimindtree.com.**