ObservePoint

Migrating to GA4 in 4 Phases

How to Smoothly Transition from Universal Analytics

UPDATE: Google has announced that Universal Analytics (or GA3) will stop processing new hits as of July 1, 2023, while Universal Analytics 360 will end on October 1, 2023, which means it's time to migrate to GA4 if you haven't done so already. Data from Universal Analytics will be available for at least 6 months after July, so you will have time to export historical reports. However, you'll need several months to plan and implement this transition, so the time to get started is now, especially if you want to have year over year data available in GA4.

Up until now, the recommendation from Google and other experts had been to have both Universal Analytics and Google Analytics 4 tags running side-by-side while you start ramping your team up to become GA4 experts. You can still have both platforms live as you make the migration to help determine what you'll need to transition. GA4 is different from GA3 in terms of its interface, organization, reporting, and, most importantly, data schema.

This tip sheet discusses those differences as well as the advantages of GA4 and a general 4-phased approach towards migrating your analytics implementation so that you can jump into the next generation of analytics.

What's New in GA4?

Google Analytics 4 is fundamentally different from Universal Analytics, beloved and utilized by millions, but always more of a desktop-centric tool. Google built GA4 to track users across desktop and mobile devices, apps, domains, and platforms. In addition, advanced machine learning models will alert users to trends and anomalies as well as predict future actions a customer might take. Lastly, as marketers adjust to increasing privacy regulations, Google Analytics 4 has also been developed for a privacy-focused future.

Most Valuable Differentiators of GA4:

Event Based Tracking - GA3 uses a session-based model to track pageviews, events, and transactions as hits. In GA4, all hits are now events. Conversions are tied to user-driven events like form submissions and button clicks that you customize in each property. While this may seem more challenging at first, it allows for more flexibility and tracking across multiple devices.

Combined Website and Mobile App Data Streams - Tracking users across multiple properties and attributing revenue to multiple touch points has always been a challenge for marketers, Google is beginning to address this by allowing multiple data sources called "Data Streams" to merge into one property and show up in the reporting interface together, like an Android app or an iOs app and a consumer website. The idea is to provide a more comprehensive picture of the user's paths to conversion.

***One thing to keep in mind is that filtered views are gone, so you'll need to use comparisons within the GA4 interface to view segments of your data like you did in UA.**

Enhanced Measurement - These are GA4's out-of-the-box events that will track a data stream automatically without additional tags. They measure things like page views, scroll, outbound clicks, site searches, YouTube video engagement, and file downloads. You can create custom events if they don't already exist.

Machine Learning - Providing AI-powered insights that might not be immediately evident to human analysts is at the core of GA4. Automatic alerts for trends in your data can show you what products are rising in demand, what anomalies might be occurring in your traffic, and other comparisons over time.

Predictive Metrics & Audiences - One of the most powerful aspects of machine-learning algorithms is the ability to predict user behaviors. Currently, the predictive features are for e-commerce sites and can show you:

- **Churn probability:** an active user within the last 7 days will not be active with the next 7 days (helps you build retention strategies)
- **Purchase probability:** an active user will purchase within the next 7 days (helps you build audiences likely to buy)
- **Revenue prediction:** revenue expected from purchase events within the next 28 days from active users

Privacy-Centric Data - As regulations, browsers, and user preferences move toward privacy, Google has designed GA4 to be adaptable to a future that may not have cookies. GA4 offers better controls for both you and your customers on how data is collected and retained for a privacy-minded future. IP anonymization is enabled by default (disabled by default in GA3), and granular controls for ads let you choose when to use data for optimization or just measurement.

Reporting and Analysis - While many early adopters noticed there were some essential reports that were still not available in GA4, particularly for ecommerce and attribution modeling, Google has been continuously rolling out new features and reports. In the Explore section of GA4, you can see the following reports:

- **Free form:** custom charts and tables
- **Funnels exploration:** customizable visualizations of the steps users took to complete a task (previously only for GA360 users, but now free for all GA4 users)
- **Path exploration:** the sequence of pages and actions users took
- **Segment overlap:** comparison of up to three user segments and how they overlap
- **User explorer:** which users make up your segments and what activities individuals took
- **Cohort exploration:** behaviors of users with common attributes
- **User lifetime:** the entire life cycle of a user

In addition, there is a new section called Advertising where you can now find some of these useful tools that GA3 users were missing:

- **Model comparison:** comparisons of different attribution models
- **Conversion paths:** visualization of multiple paths to conversion

BigQuery Integration - A free integration with BigQuery means you can export all of your raw event data into a data warehouse for connecting to an external data source or to perform queries and analyze data at a more granular level. In GA3, only premium customers had access to BigQuery. The GA4 integration exports much faster than what current customers of GA360 are seeing. In addition, you can choose to store your data to comply with data governance frameworks.

The Migration: From Preparation to Completion

Now that we've discussed some of the differences between GA4 and GA3 and what the advantages of the new platform are, let's walk through the steps to migrate.

Phase 1
Strategize

At a minimum, the goal of a successful migration from any solution to another is to at least maintain the status quo of analytics tracking while moving from your legacy to your new analytics. By the time you're ready to make the complete switch, GA4 should give you not just the status quo but an improvement on your analytics data with more flexibility, cross-device tracking capabilities, and machine-learning tools.

First, let's address a pre-migration, non-technical challenge you will likely face when preparing for the switch: getting buy-in from your boss (or your boss's boss).

Getting Your Boss's Blessing

A technology migration can take a lot of time and resources, and if you have a manager who doesn't fully understand the value of optimizing your analytics solutions and staying up to date with the latest advancements, you might need to communicate the importance of the project and address the points below:

- **Business Objectives (Why?)** - You'll likely have already made your decision and justified it, but it's best to have a record so you can map your efforts back to your initial goals and keep your team focused.

- **Personnel (Who?)** - Outline specifically who will be involved in the migration. Doing so is especially important when you don't have a team dedicated to marketing and analytics technologies, and you have to get help from other teams. Include the following:
  - Who will be involved
  - What they will contribute
  - What percent of their week it will take
  - How long you estimate the project will take overall

- **Timelines (When?)** - Try to be as specific as possible. You can use the four phases in this tip sheet with the specifics of your own implementation for your project timelines.

Decide how to document and migrate

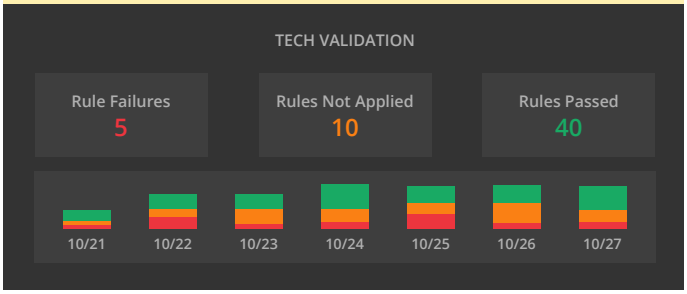
If you've been running both tags simultaneously, you'll better understand what reports or configurations you'll need to replicate in GA4. Prioritizing which tags you want to keep, deciding which reports need to be adjusted, and making sure your data layer works with the GA4 data collection method should all be considered.

Plan your testing and QA strategy

One of the most important parts of the Strategize phase is to plan how you're going to test your implementation to make sure everything is deployed correctly after you've migrated. Manual testing is possible using tools like **tag debuggers** or the developer tools in your browser, but these options are highly manual and prone to human error. Automated solutions like ObservePoint allow you to set up regular scans of your implementation with rule-based testing that reports when the data being collected doesn't match expectations.

Rules

Create specific testing rules or use an existing portfolio of tests to audit your GA4 implementation and ensure it's deployed and functioning as expected.



Phase 2
Catalog

You need to establish a baseline (a snapshot or catalog of your current implementation) to check against as you create your new GA4 implementation. There are a couple ways to create this catalog: manually or via automation.

Manually - Tagging plans are typically highly manual to create, difficult to navigate, and get outdated quickly, but you need one to give you a baseline to compare against. So if you're cataloging manually, factor in time for building the solution design.

Via Automation - As an alternative to manually cataloging the technologies on your site, you can use an automated solution like ObservePoint. ObservePoint's software can conduct a comprehensive scan of your website and create a record of all technologies found.

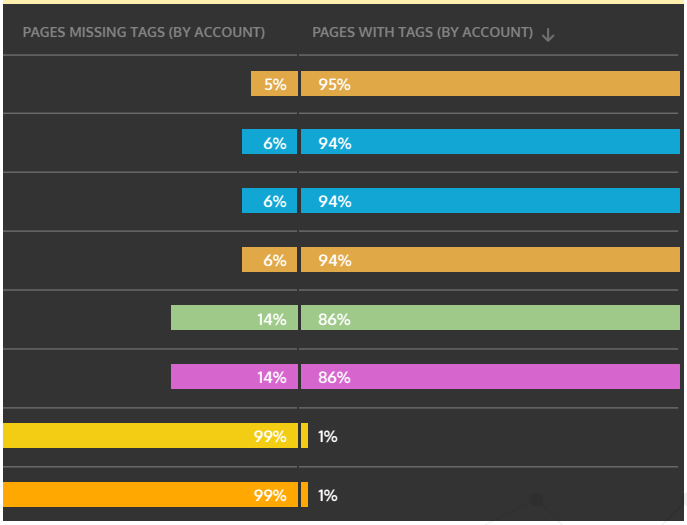
Here is an example report for a single page. Some of the benefits of using automation include the following:

TAG NAME	TAG CATEGORY	PAGES TAGGED	PAGES NOT TAGGED	AVERAGE TAG LOAD (ms)	ACCOUNTS	VARIABLES
Google Analytics 4	Analytics	1,784	610	281	2	19
Google Global Site	Tag Management	1,784	610	278	2	2
Google Optimize	Experience Management	170	2,224	1,271	1	0
Google Tag Manager	Tag Management	1,789	605	617	2	0
Google Universal Analytics	Analytics	1,784	610	283	2	45

- **Speed -** Audit and catalog at least 5 times faster than any human. You will likely have to scan thousands of pages, in which case ObservePoint is definitely faster.
- **Currency -** Tagging plans quickly become outdated, but automated solutions can run scans frequently, giving you an up-to-date catalog
- **Accuracy -** Humans make mistakes. Automated solutions minimize errors by carrying out a repeatable process, at scale, and without missing technologies.

Audits

ObservePoint's Audits can quickly create an up-to-date catalog of your legacy implementation to compare against your GA4 implmentation and then set up ongoing tests to monitor it automatically over time.



Phase 3
Migrate

With the availability of running both Since the current recommendation is to run GA3 and GA4 simultaneously, your migration steps won't be either of the common methods: a fresh start or a copy-and-paste approach. It'll be more of a side-step, hand-in-hand shift like this:

1. **Implement parallel tracking -** Audit your current GA3 tracking implementation and identify what you'd like to continue tracking in GA4. You know best what critical paths and revenue-generating journeys are most important to your company. Register the custom dimensions and metrics that you want to know about your users in GA4.

2. **Map configurations -** Strategize what GA3 configurations you want to transport to GA4 such as your filters, goals (now events), content and channel groups, and ecommerce tracking.

3. **Plan for apps -** Consider what new mobile devices, events, and paths you want to track now that you will have the capability.

4. **Prepare reporting -** Compare reporting between the two properties as you start to use GA4 reporting and analysis tools. This should help you determine what was important in GA3 and how you can either replicate things that are still missing or if there's better data in the new GA4 schema.

5. **Link to Google Ads & BigQuery -** Remember to take advantage of these and other integrations as they become available so that you can fully utilize the predictive metrics and granular analysis capabilities.

6. **Make the full migration -** When you're comfortable enough with GA4 and its new capabilities, make the full switch. With all the parallel usage and documentation that you've done, taking the GA3 tags off should be a pretty smooth transition.

Phase 4
Test

Testing will be the final step in the migration process, though you should perform incremental tests every time you add a new tag to GA4.

The essence of testing is comparison, whether you're comparing your GA4 implementation against documentation or your production environment. Your options for testing are either manual or automated, depending on the resources you have available and the complexity of your implementation.

When testing, prioritize the most important parts of your site, such as:

Critical Conversion Paths

If your site has a booking, shopping, or other important conversion path, you should focus testing on those paths.

Conversion paths are action-oriented, as are the tag triggers along these paths. You will want to replicate the actions of each conversion path under as many circumstances as possible, in which case automation will be your best friend.

Journeys

ObservePoint's Journeys can replicate various user actions, like clicking, inputting data into a text field, checking a box, and more, while also testing for expected tags to fire with each action.

Top Pages

Test your highest traffic pages to make sure all technologies are working properly. For high-traffic pages, having your Google Analytics tag go down for even a short window of time can have a significant effect on your data.

ObservePoint's Audits can run frequent scans of your top pages, perform actions on each page, and even wait for time-based triggers to fire in order to verify that all tags are firing as expected.

Data Layer

Your analytics solution and other technologies rely on the data within the data layer object. While testing, you should verify that the data in your data layer matches your standard formatting conventions. ObservePoint's Data Layer Validation feature can help you test this across your website.

Ideally you will carry out these tests in your dev and staging environments before pushing live to production, or using a Remote File Map feature to locally switch out scripts during a test. Doing so will make finding errors easier and relieve the stress of pushing your new implementation into production
.

Remote File Map

Remote File Mapping lets you modify network requests that fire on your site during an Audit or Journey. You can test migrations without interrupting visitors on your live site.

Tags & Variables

VARIABLES (530)	# UNIQUE VALUES	PAGES WHERE VARIABLE IS SET	PAGES WHERE VARIABLE IS NOT SET
0.gtm.uniqueEventId	1	495	1
1.0	1	1	495
1.1	1	1	495
1.event	1	494	2

Finishing Your GA4 Migration

Universal Analytics has served you well for many years. But the time has come, and your company will soon enough be a GA4 powerhouse.

Once you've successfully completed the migration, there are few more important steps you must not neglect:

- ☑ Close your eyes.
- ☑ Breathe in for exactly 5 seconds.
- ☑ Release a deep sigh of relief.
- ☑ Grab your things and go treat yourself.

ObservePoint is here to help you make it to the post-migration phase as quickly as possible. To learn more about how ObservePoint's automated analytics testing and digital governance technology can simplify the next few months and beyond, try now.

START A FREE TRIAL