

Google Analytics Utility v2

Empower your designers to track user interactions with Google Analytics

More Info

The Google Analytics Utility allows your designers to track how users interact with their application SAIL interfaces. It provides a means of tracking both page views as well as interaction events by leveraging the [Google Analytics Measurement Protocol](#).

Key Features and Functionality

- Understand the user traffic to your applications
- Track pageviews and saveInto interactions
- Fully configurable by designers

Pre-requisites

- A Google Analytics account
- A property created in Google Analytics for each app to be tracked

Supported versions

- 21.2+

Universal Analytics vs Google Analytics 4

Google Analytics 4 is replacing Universal Analytics. On July 1, 2023 all standard Universal Analytics properties will stop processing data. 360 Universal Analytics properties will stop processing data on July 1, 2024. For more information, read [Universal Analytics is going away](#) on the Google Support site.

The Appian Google Analytics Utility has been updated with new rules for interacting with Google Analytics 4. If you used a previous version of the Google Analytics Utility, you will need to migrate your code to use the newer rules. See the [Migration](#) section below.

The following sections explain how the new Google Analytics 4 functionality works.

Note: because of a change in how the Google Analytics 4 API works compared to Universal Analytics, it is now recommended that you have a single Google Analytics Property for each Appian environment instead of for each Appian site in the past. All calls to save page views or events will be sent to the same Property as determined by the Measurement ID.

Configuration

To track page views and events in Google Analytics, first you need to create a Google Analytics property and get the Measurement ID and secret value so the Google Analytics Utility can connect to your property.

1. Go to <https://analytics.google.com/> and accept any prompts. If this is your first time, it will walk you through the process of creating a new property. If not, use the Admin screen to create a new property.
2. Create a new Data Stream and select "Web" as the platform
3. Enter the URL and name of your Appian site.
4. Disable Enhanced Measurement
5. Ignore any suggested Installation instructions.
6. Copy the Measurement ID into the `GA_GA4_MEASUREMENT_ID` constant.
7. Click "Measurement Protocol API secrets" and create a new Secret.
8. Copy the secret value into the value for the `api_secret` in the `GA_GA4_MeasurementProtocol` connected system.

Note: if you are getting started with the Google Analytics Utility for the first time, you should enter your Measurement ID and `api_secret` into the import customization properties file before importing the application zip.

Design

The app functionality can be used in two different ways:

1. **Pages Views:** Track pageviews as `page_event` events.
2. **Events:** Track saveInto events as custom events.

Data Fields

Both page view and event tracking require specifying a Measurement ID. See [here](#) for how to find your Measurement ID.

In addition, page view tracking requires fields:

- title (text) - the title of the page that will show up in Google Analytics
- path (text) - the location of the page that can uniquely identify the page (in case the title is not unique)

Event tracking also passes the following fields:

- eventName (text) - the type of event
- eventData - (LabelValue array) - the custom data for your event

Usage

Page views

At the bottom of any interface, add the following code snippet (provide the *title* and *location* of your choice)

```
/* Google Analytics Pageview Tracking */  
...  
rule!GA_GA4_recordPageView(  
  title: "<your page title>",  
  path: "/relative/path/to/your/page"  
)
```

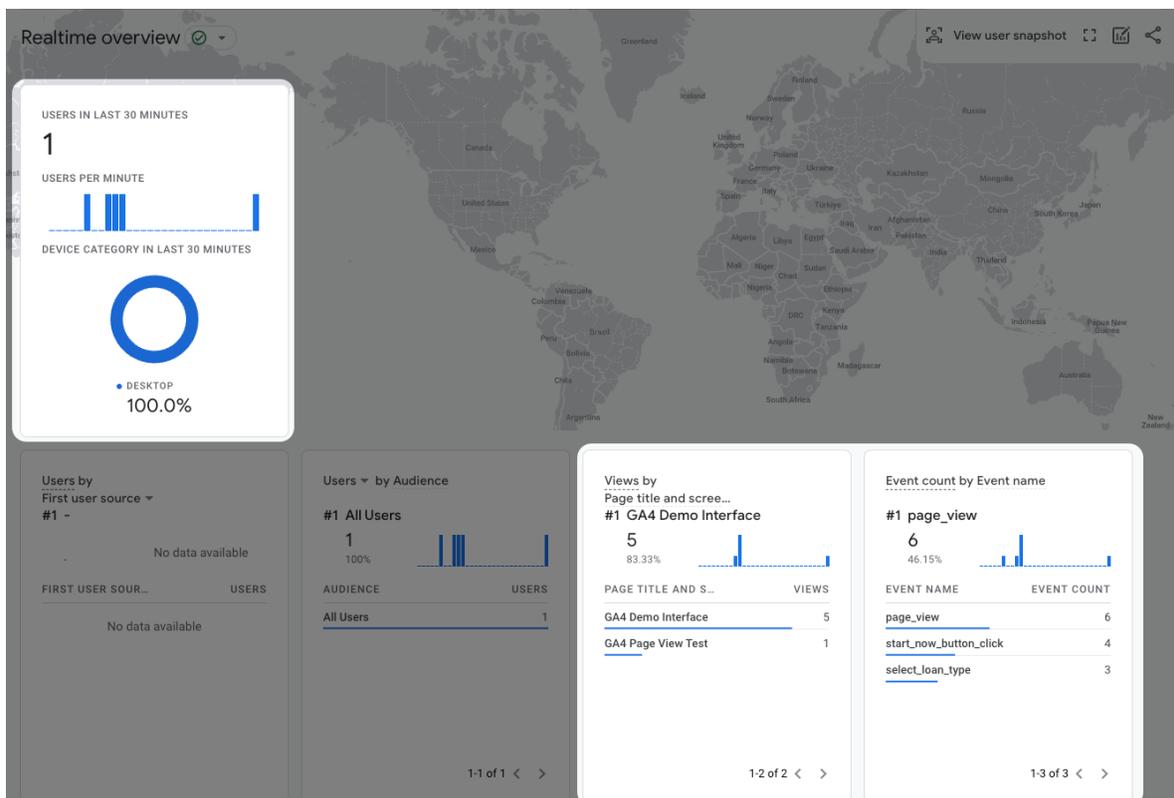
Events

Inside any saveInto, add the following code (specify the *eventName* and *eventData* of your choice)

```
...
saveInto: {
  /* your own saves */,
  a!save(
    rule!GA_GA4_recordSaveIntoEvent(
      ActionType: "<your user interaction action type>",
      /* actionData is optional */
      actionData: "<some value>"
    )
  )
}
...
```

Demo

1. Open the included GA Demo site
 2. Click the "GA4 Demo (Newer)" page
 3. Change the dropdown value and click the button
 4. Notice in your Google Analytics Property > Realtime Overview that page views and events are tracked.
- Note: it may take up to 60 seconds for new events to appear in the Realtime Overview



Migrating from Universal Analytics to Google Analytics 4

Your Universal Analytics property will display a banner at the top which looks like this:

 On July 1, 2023, this property will stop processing data. Starting in March 2023, for continued website measurement, you should create a new Google Analytics 4 (GA4) property, or one will be created for you based on your original property and reusing existing site tags. [Dismiss](#) [Learn more](#) [Manage GA4 migration](#)

1. Click the "Manage GA4 Migration" link.
2. Click to either migrate to a new Google Analytics 4 property or connect to an existing Google Analytics 4 property (use the latter if you've already created one for your site)
3. Follow the wizard steps to finish the migration
4. Ignore any instructions to install the Google tag
5. Go to your GA4 Property
6. Follow steps 6-8 in the [Configuration](#) section above
7. Enter the Measurement ID and api_secret into the included "Google Analytics Utility v2 - 21.2.properties" import customization file
8. Import the "Google Analytics Utility v2 - 21.2.zip" into your environment
9. Refactor uses of the old rules in your app:
 - a. Change interfaces which use GA_UA_recordPageView to use GA_GA4_recordPageView instead
 - b. Change interfaces which use GA_UA_recordSaveIntoEvent to use GA_GA4_recordSaveIntoEvent instead
 - c. We recommend changing the title and path to be globally unique if they aren't already
 - d. See the [Usage](#) section above for how to use the new rules
10. Confirm that data is being sent to your new Google Analytics 4 property