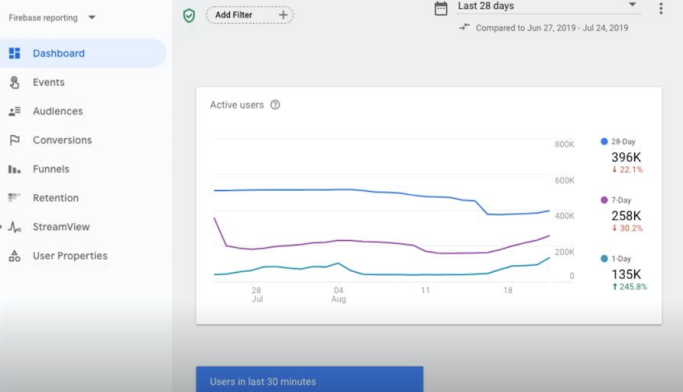
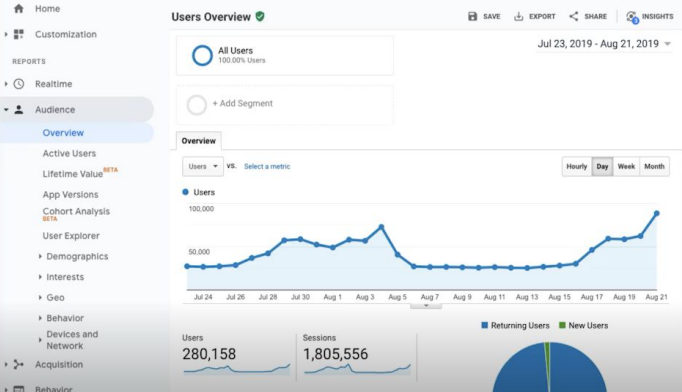


GA4 Overview (as of 01.21)

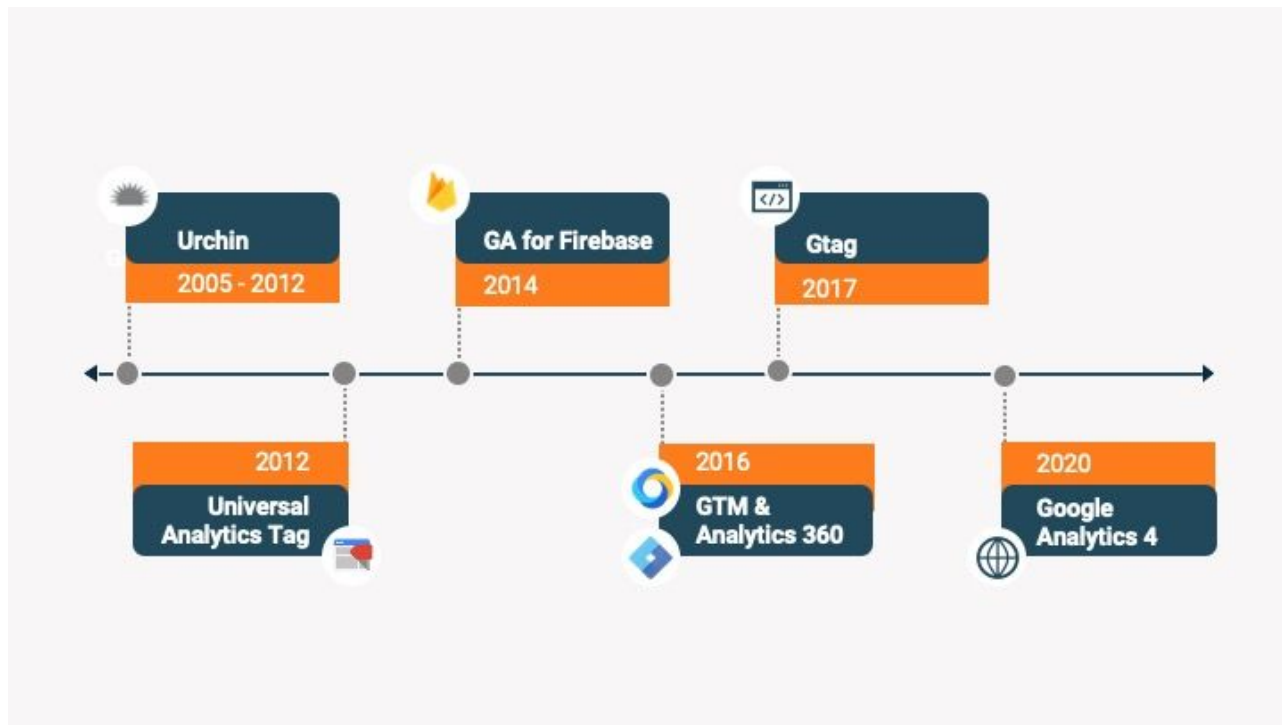
# Intro

- What will GA4 replace in the current set up we are using?  
(a brief description of UA)
- What is actually GA4? (a brief description of GA4)
- What are the major differences between UA and GA4?
- How does GA4 look like?
- Why is this valuable to work on and how this transition could affect Global Analytics?
- Should we switch to GA4 right now? (short answer is **NO**)

# Intro



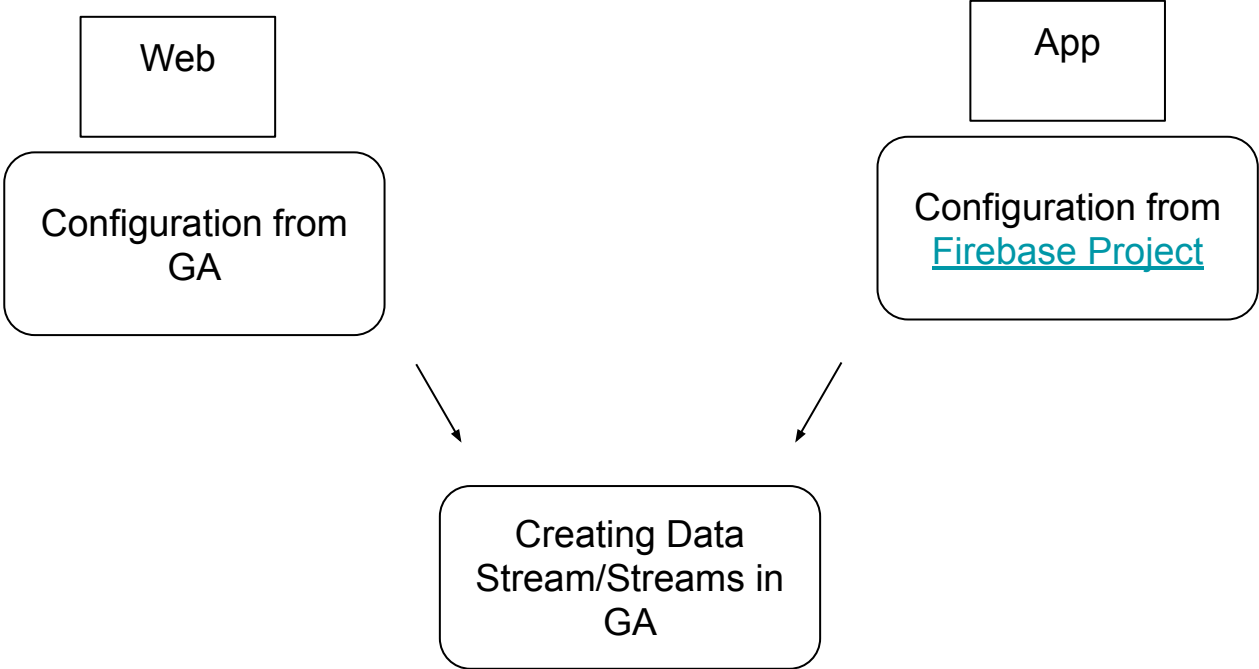
# Intro



# Core Implementation & Admin Section

Properties, Data Streams, Identity...

# GA4 Configuration




# GTM Config - Universal Analytics

Web

Tag Configuration

Tag Type

 **Google Analytics: Universal Analytics**  
Google Marketing Platform

Track Type

Page View

Google Analytics Settings ⓘ

{{GoogleAnalyticsSettings}} ⓘ

Enable overriding settings in this tag ⓘ

Custom Dimensions

Index	Dimension Value
40	{{userLoggedIn}}
41	{{userId}}
15	{{locationCountry}}
14	{{locationAddress}}
16	{{locationCity}}
18	{{locationLon}}
19	{{locationLat}}
108	{{shopType}}
134	{{languageSelected}}
17	{{locationArea}}
29	{{cartValue}}
145	{{cartEmpty}}
13	{{userTotalOrders}}
21	{{userTimeStamp}}

Advertising


Enable Display Advertising Features ⓘ

True

App

Tag Configuration

Tag Type

 **Google Analytics: Universal Analytics**  
Google Marketing Platform

Track Type

Screen View

Google Analytics Settings ⓘ

{{GoogleAnalyticsSettings}} ⓘ

Enable overriding settings in this tag ⓘ

Custom Dimensions

Index	Dimension Value
53	{{LT_deepLink}}
4	{{eventFeatureFlags}}
5	{{eventFeatureFlags}}
41	{{userId}}
15	{{locationCountry}}
40	{{userLoggedIn}}
6	0:{{groupOrderUserType}} ; 1:{{groupOrderUserCount}}

# GTM Config - Google Analytics 4

Web

Tag Configuration

Tag Type

```
gtag('set', 'user_properties', {  
  user_property_1: 'value_1',  
  user_property_2: 'value_2',  
  user_property_3: 'true'  
});
```

Trigger: *.. in addition to the automatically logged user properties*

Firing Rule: Page View

App

Choose tag type

Featured

- Google Analytics (Firebase)
- Google Analytics: Universal Analytics
- Floodlight Counter
- Floodlight Sales
- Google Ads Conversion Tracking
- Google Ads Remarketing

Custom

- Custom Image
- Function Call

More

- adjust
- AppsFlyer
- Apsalar Tag
- Kochava Event Tracking
- Tune Mobile App Tracking



# User Properties

## Firebase

Filter not applicable

User property name	Description
build_number	App's Build Number
city_id	backend's city id of the most recent's user location
country_code	country code of the user (all caps)
customer_code	Backend's Customer Code
email	Email address of the user
external_id	External user id, e.g. DE_123456
firebase_last_notification	Auto generated user property to identify the most recent notification opened by the user
language	the 2 letter language code of the user
push_enabled	are push notifications enabled or disabled for the user
total_orders_count	Total orders count

Rows per page: 10 1-10 of 12

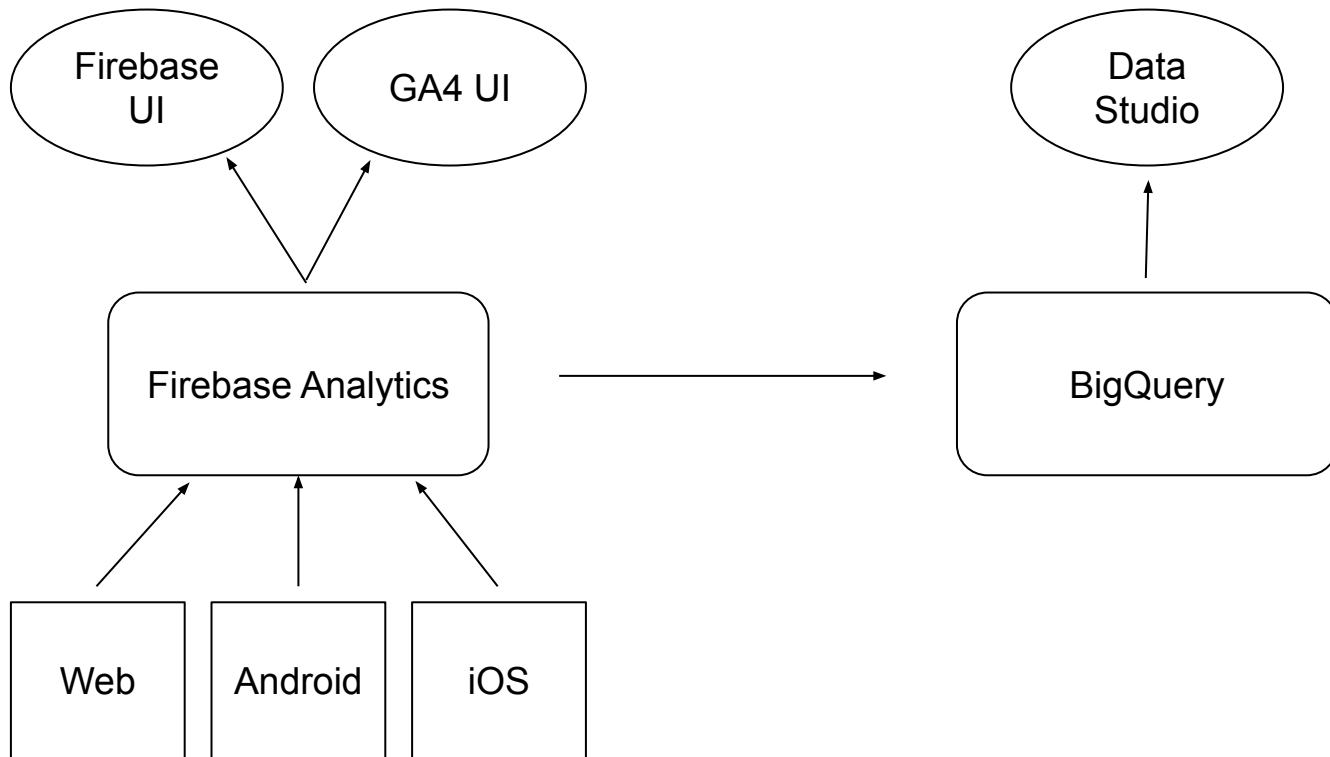
## GA - Web + App

Try searching "compare conversions from organic vs direct channels"

User property name	Description
build_number	App's Build Number
city_id	backend's city id of the most recent's user location
country_code	country code of the user (all caps)
customer_code	Backend's Customer Code
email	Email address of the user
external_id	External user id, e.g. DE_123456
firebase_last_notification	Auto generated user property to identify the most recent notification opened by the user
language	the 2 letter language code of the user
push_enabled	are push notifications enabled or disabled for the user
total_orders_count	Total orders count

Rows per page: 10 1-10 of 12

# Data Flow



# Admin

## UA

**ADMIN** **USER**

Account [+ Create Account](#)  
helloworld.com

- Account Settings
- Account User Management
- All Filters
- Account Change History
- Rubbish Bin

Property [+ Create Property](#)  
helloworld.com/UA-160717557-1

- Upgrade to GA4
- Property Settings
- Tracking Info
- Property Change History
- Data Deletion Requests
- PRODUCT LINKING
  - Google Ads Linking
  - AdSense Linking
  - Ad Exchange Linking
  - Optimise and Tag Manager Linking
  - All Products
- PERSONAL TOOLS & ASSETS
  - Segments
  - Annotations
  - Multi-Channel Funnels Settings
  - Custom Channel Grouping **BETA**

View [+ Create View](#)  
helloworld.com - All Web - Universal Analytics

- View Settings
- Goals
- Content Grouping
- Filters
- Channel Settings
- E-commerce Settings
- Calculated metrics **BETA**
- Annotations

## GA4

**ADMIN** **USER**

Account [+ Create Account](#)  
helloworld.com - GA4 Test

- Account Settings
- Account User Management
- All Filters
- Account Change History
- Rubbish Bin

Property [+ Create Property](#)  
helloworld.com - All Web - GA4 Demo Property (254911467)

- Setup Assistant
- Property Settings
- Property User Management
- Data Streams
- Data Settings
- Default Reporting Identity
- Property Change History
- Data Deletion Requests
- PRODUCT LINKING
  - Google Ads Linking
  - BigQuery Linking
- ADDITIONAL SETTINGS
  - Analytics Intelligence Search History

# Admin



# Data Streams

## Account structure

### Principles applied

- Account: One account. Data is owned by a single legal entity.
- Property: One property for a single logical user base.
- Data streams: One data stream for the website. One data stream for each version of the app.

Structure	Rationale
One Analytics account.  If there's an existing Analytics account, there's no need to create a new one.	The umbrella corporation has legal ownership of the data for all business entities.
One Google Analytics 4 property.	A single property with data streams for each website and each app implementation makes all the data available for inclusion in the same reports. You can combine data for sites and apps as necessary to see how users journey between the two. The umbrella corporation has a unified view of all data, and can compare data between different business entities.
One data stream for each regional business entity's website.	A separate data stream for each website allows each business entity to isolate its own data.
One Firebase project for the Android and iOS implementations of the app. The Firebase project is linked to the Google Analytics 4 property.  One data stream each for the iOS and Android version of the app (i.e., two data streams).	A separate data stream for each app implementation makes it possible to isolate iOS vs Android data.
Each Google Ads account is linked to the property.	With each Google Ads account linked to the single property, audiences from the property are available to each Google Ads account for bidding.

# Data Streams

Property

[+ Create Property](#)

Hellominaste - All Web - GA4 Demo Property (254911467)

hellominaste-demo

analytics\_254911467

events\_20201204

# Identity

Analytics Hello Minaste > Hellominaste - GA4 Test  
Hellominaste - All Web - GA... ▾

Try searching "path analysis"

ADMIN USER

Property [+ Create Property](#)

Hellominaste - All Web - GA4 Demo Pro...

- Setup Assistant
- Property Settings
- Property User Management
- Data Streams
- Data Settings
- Default Reporting Identity**
- Property Change History
- Data Deletion Requests



PRODUCT LINKING

- Google Ads Linking
- BigQuery Linking

ADDITIONAL SETTINGS

### Default Reporting Identity

How would you like to identify your users for 'Hellominaste - All Web - GA4 Demo Property'? [Learn more](#)

By User ID and device  [?](#)      By device only  [?](#)

[Save](#) [Cancel](#)

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# New Data Model - Events & Conversions



# UA Events

Tag Configuration

Tag Type

 **Google Analytics: Universal Analytics**  
Google Marketing Platform 

Track Type

Page View ▼

Google Analytics Settings ⓘ

Select Settings Variable... ▼

Enable overriding settings in this tag ⓘ

> Advanced Settings

Track Type

- ✓ Page View
- Event
- Transaction
- Social
- Timing

# GA4 Events

Tag Configuration

Tag Type

Google Analytics: GA4 Event  
Google Marketing Platform BETA

This tag type is in beta

Configuration Tag

Select Configuration Tag...

Event Name

Event Parameters

Parameter Name	Value
<a href="#">Add Row</a>	

Event  
Param 1

Event  
Param 2

rs

Event name ↑	Count
▶ click 4	799
file_download	56
first_visit	1
▶ page_view 4	5,972
scroll	5,140
session_start	2,750

Param 1

Param 2

## GA4 Events

### UA

ec: android.order\_confirmation

ea: transaction

el: acquisition // transactionType

cd108: darkstores // vendorType

cd20: 123

cd36 : 567 // transactionId

cd35: KWD // currencyCode

cm1: 10 // transactionRevenue

### GA4

event\_name: transaction

operating\_system: android

screen\_name: order\_confirmation

vendorType: darkstores

vendor\_id: 123,

transaction\_id: 567,

value: 10.0,

currency: KWD,

items: [product\_1, product\_2]

BigQuery

# BQ Linking

× BigQuery Linking

### Completed link details

**Project ID**  
hellominaste-demo

**Project name**  
hellominaste-demo

**Project number**  
1083450752203

**Default location for data set creation** ⓘ  
europe-west4

**Created by**  
taylorboibu1@gmail.com

**Creation date**  
4 Dec 2020

**Data configurations**

**Data streams**

1 out of 1 data stream [Edit](#)

Include advertising identifiers for mobile app streams

---

**Frequency**

Streaming only available for Cloud Projects with Billing enabled.

**Daily**  
A full export of data that takes place once a day

**Streaming**  
Continuous export, within seconds of event arrival.

```
events_intraday_YYYYMMDD  
  
events_YYYYMMDD
```

## BQ Tables

- **Crashlytics** *enables you to export fatal, non-fatal, and stack trace data for apps*
- **The Cloud Messaging** *export enables to evaluate whether the messages we send reach the user*
- **The Performance** *export creates a table that includes all the captured performance events*
- **The Predictions** *export creates a table for each app in the project that includes the Predictions data for each user*
- **Firebase A/B tests**
- **Events**

# Recall to Data Streams

Query editor

```
1 SELECT
2   event_name,
3   stream_id,
4   param
5 FROM [hellominaste-demo.analytics_254911467.events_20201207],
6 UNNEST(event_params) param
```

Run Save query Save view Schedule query More

Query results SAVE RESULTS EXPLORE DATA

Query complete (1.6 sec elapsed, 1.4 MB processed)

Job information Results JSON Execution details

Row	event_name	stream_id	param.key	param.value.string_value
1	first_visit	2189416763	session_engaged	null
2	first_visit	2189416763	ga_session_number	null
3	first_visit	2189416763	page_referrer	https://www.google.com/
4	first_visit	2189416763	engaged_session_event	null
5	first_visit	2189416763	ga_session_id	null
6	first_visit	2189416763	page_location	https://hellominaste.com/yuzyllik-sifa-palo-sa
7	first_visit	2189416763	page_title	Yüzyillik Şifa: Palo Santo   Hello Minaste
8	session_start	2189416763	ga_session_id	null
9	session_start	2189416763	page_location	https://hellominaste.com/yuzyllik-sifa-palo-sa
10	session_start	2189416763	engaged_session_event	null
11	session_start	2189416763	ga_session_number	null
12	session_start	2189416763	page_referrer	https://www.google.com/
13	session_start	2189416763	page_title	Yüzyillik Şifa: Palo Santo   Hello Minaste
14	page_view	2189416763	page_referrer	https://www.google.com/
15	page_view	2189416763	engaged_session_event	null

Property [+ Create Property](#)

Hellominaste - All Web - GA4 Demo Proper

hellominaste-demo

analytics\_254911467

events\_20201204

# Limitations



## Limitations

<b>Logged/Configured Item</b>	<b>Limit</b>
Distinct events	500 per app instance (not automatically collected events)
Length of event name	40 characters
Event parameters per event	100
Length of event-parameter name	40 characters
Length of event-parameter value	100 characters
User properties	100 per property
Length of user-property names	24 characters
Length of user-property values	36 characters
Registered user properties	100
Event parameters	100 (50 numeric, 50 string)

## Useful Sources

[Confluence](#)

[UA vs GA4](#)

[Account Arch Options](#)

[Naming Conventions](#)

[Limits](#)

[Cross-Domain Tracking](#)

[GA4 Measurement Protocol \(alpha\)](#)

[BQ Export Schema](#)

[User Properties](#)

[Consent Mode \(beta\)](#)

[Ecom Guide for GTM](#)

[Google Signals & Privacy](#)