



Documentation

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through Xcode

In the Xcode **File** menu, click **Add Packages**. You'll see a dialog where you can search for Swift packages. In the search field, enter the URL to this repository:

```
https://github.com/segment-integrations/analytics-swift-firebase
```

You'll then have the option to pin to a version, or specific branch, as well as which project in your workspace to add it to. Once you've made your selections, click the **Add Package** button.

through Package.swift

Open your `Package.swift` file and add the following to your the `dependencies` section:

```
.package(  
    name: "Segment",  
    url: "https://github.com/segment-integrations/analytics-swift-firebase.git",  
    from: "1.1.3"  
)
```

Using the Plugin in your App

Open the file where you setup and configure the Analytics-Swift library. Add this plugin to the list of imports.

```
import Segment
import SegmentFirebase // <-- Add this line
```

Just under your Analytics-Swift library setup, call `analytics.add(plugin: ...)` to add an instance of the plugin to the Analytics timeline.

```
let analytics = Analytics(configuration: Configuration(writeKey: "<YOUR WRITE KEY>")
    .flushAt(3)
    .trackApplicationLifecycleEvents(true))
analytics.add(plugin: FirebaseDestination())
```

Your events will now begin to flow to Firebase in device mode.

Identify

When you call `identify` Segment will map to the corresponding Firebase Analytics calls:

- If there is a `userId` on your `identify` call, Segment triggers `setUserId` using the Firebase SDK
- If there are traits included, Segment will set user properties for each trait you include on the `identify` call

You can use these traits to create audiences and views to analyze your users' behavior.

Note: Google prohibits sending PII to Firebase unless ["robust notice" is given to your app users](#). For iOS apps, some Analytics features, such as audiences and campaign attribution, and some user properties, such as Age and Interests, require the [AdSupport framework](#) to be enabled.

Learn more about [Firebase's reporting dashboard](#) here.

Firebase has strict requirements for User Property names; they must:

- Begin with a letter (not a number or symbol, including an underscore)
- Contain only alphanumeric characters and underscores
- Be no longer than 40 characters

User Property values must be fewer than 100 characters.

You are limited to 25 unique user properties per Firebase Console.

Firebase automatically collects [these user properties](#).

Track

When you call `track` Segment will log the event with Firebase. Firebase automatically tracks [the events listed here](#) and it will still do so when bundling with Segment.

Firebase has a limit of 500 distinctly named events so it pays off to be [intentional in what you track](#).

When you call `track`, Segment maps from the [Segment spec](#) to those that match Firebase's spec. For anything that does not match, Segment will pass the event to Firebase as a custom event. Custom parameters cannot be seen directly in the Firebase Analytics dashboard but they can be used as filters in **Audiences**.

Like with user properties, Segment will perform the following transformations on both your event names and event parameters. Unlike user properties, you do not need to pre-define event parameters in your Firebase dashboard.

- Trims leading and trailing whitespace from property names
- Replaces spaces with underscores
- Trims property names to 40 characters (Android only)

Event parameter values must be fewer than 100 characters.

Event Mappings

Segment adheres to Firebase’s semantic event specification and maps the following Segment spec-matching events (left) to the corresponding Firebase events (right):

SEGMENT EVENT	FIREBASE EVENT
Products Searched	search
Product List Viewed	view_item_list
Product Viewed	view_item
Product Clicked	select_content
Product Shared	share
Product Added	add_to_cart
Product Added To Wish list	add_to_wishlist
Checkout Started	begin_checkout
Promotion Viewed	present_offer
Payment Info Entered	add_payment_info
Order Completed	purchase
Order Refunded	purchase_refund

Property Mappings

Segment maps the followed Segment spec-matching properties (left) to the corresponding Firebase event parameters (right):

SEGMENT PROPERTY	FIREBASE PROPERTY	ACCEPTED VALUE(S)
category	item_category	(String) “kitchen supplies”
product_id	item_id	(String) “p1234”
name	item_name	(String) “Le Creuset pot”
price	price	(double) 1.0
quantity	quantity	(long) 1
query	search_term	(String) “Le Creuset”
shipping	shipping	(double) 2.0
tax	tax	(double) 0.5

SEGMENT PROPERTY	FIREBASE PROPERTY	ACCEPTED VALUE(S)
total	value	(double) 3.99 or (long) 3.99
revenue	value	(double) 3.99 or (long) 3.99
order_id	transaction_id	(String) "o555636"
currency	currency	(String) "USD"

Passing Revenue and Currency

Ecommerce events containing "revenue" or "total" must also include the appropriate ISO 4217 "currency" string for revenue data to populate to the Firebase dashboard. If a "currency" value is not included, Segment default to "USD".

```
Properties properties = new Properties()
    .putValue("orderId", "p966540")
    .putValue("revenue", 25.00)
    .putCurrency("USD");

Analytics.with(this).track("Order Completed", properties);
```

```
struct TrackProperties: Codable {
    let orderId: String
    let revenue: Int
    let currency: String
}

analytics.track(name: "Order Completed", properties: TrackProperties(orderId: "order-123", revenue: 23.00, currency: "USD"))
```

Screen

Segment doesn't map screen events to Firebase - that's because Firebase's SDK collects screen information out of the box for you.

For iOS, you can configure `recordScreenViews` which will automatically track screen views, or pass in a screen manually using a `screen` call. You should be able to disable the Automatic Screen reporting by adding the plist flag `FirebaseScreenReportingEnabled` to `Info.plist` and set its value to `NO` (Boolean).

Google Analytics for Firebase iOS does NOT support the case of manual-only screen reporting. Firebase only supports automatic + manual screen reporting or no screen reporting at all.

Firestore Dynamic Linking (iOS only)

Firestore Dynamic Links are smart URLs that can change behavior dynamically depending on the platform where the user clicks them. Use them in web, email, social media, referral and physical promotions to increase user acquisition, retention and lifetime value. Key features include ability to survive app installs, controlling user experience depending on what platform they access the link on and knowing which content and campaigns are working using tracking in the Firebase console. [Check out Firestore's Docs here.](#)

To use Firestore Dynamic Links, search for the Firestore package in Swift Package Manager and add the Dynamic Links library:

<https://github.com/firebase/firebase-ios-sdk>

Then, enter the deep link URL scheme in your Segment Firestore destination settings. [Here's a sample app delegate that shows how to implement the Dynamic Linking Logic.](#)

Conversion Tracking and Adwords Conversions

Firebase is Google’s recommended method for reporting conversions to Adwords. To use Firebase, track the conversion events as you normally would with Segment and Segment will send them through to Firebase.

Troubleshooting

Firebase has great logging. If you are having any issues, you can enable debug mode as outlined in Google’s [Debug events](#) docs.

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