

No Bull\$h!t Guide to Mobile Attribution

Futureproof your marketing
with next-gen measurement
and analytics

An abstract graphic consisting of several thick, curved lines in shades of blue, purple, orange, and yellow, flowing from the right side of the page towards the left, creating a sense of movement and depth.

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01 Introduction

Mobile marketers have never faced more change

It's not just iOS 14 and IDFA changes. There's change everywhere: platforms, national restrictions on apps, antitrust investigations into major ecosystem players, and legal challenges to how much control platform owners can exert. Plus, we have the ongoing impact of COVID-19 and evolving consumer behavior.

None of it changes companies' imperative to grow.

So mobile marketers have to cut through marketing jargon and choose growth tech that works.

This No Bull\$h!t Guide to Mobile Attribution maps out what you need to stay ahead of industry trends, win at marketing measurement in a privacy-first world, and optimize web to app user journeys as well as cross-device user engagement.

Your growth stack needs to adapt to futureproof your growth. Traditional attribution won't cut it; you need next-generation mobile attribution that is customizable, full-funnel, proactive on fraud, offers complete access to your data and provides first-rate marketing measurement at all levels of granularity and aggregation.

	Legacy Attribution	Next-Gen Attribution
Attribution Settings	One-size-fits-all Don't settle for default attribution settings and blackbox configurations.	Fully customizable Control attribution settings at the campaign and source level for reliable measurement.
Reporting and Insights	Partial, inaccurate reporting Legacy providers lack accurate and complete cost tracking, resulting in fewer insights.	Holistic and full-funnel Unify campaign data and attribution data to uncover timely, accurate performance insights.
Fraud Prevention	Reactive detection Fails to block fraud before an attribution decision, resulting in lost budgets and bad data.	Proactive protection Keep budgets focused on real users by rejecting fraud attempts before they are attributed.
Data Accessibility	Limited access to your data Your attribution data is yours-- it shouldn't be held hostage by your vendors.	Complete access to your data Robust APIs (free of charge) and ETL tools to load your data directly into internal tools.
Privacy	Checks the box Bare minimum doesn't cut it in today's privacy-centric world. And your data should never be commoditized.	Goes above & beyond Measurement that enables data-driven strategies without compromising your users' privacy.

02 The foundations of Mobile Attribution

Beyond legacy attribution: it's more than counting installs

Basic attribution solutions were meant to answer one simple question: where did my install originate from? Today's marketers have so many more questions to answer in order to grow in a crowded space:

- What is the actual return on each conversion?
- What are my most ROI-positive media sources?
- Where am I acquiring my highest value users and ad whales?
- What are my top and worst-performing creatives?
- What was my best bidding strategy?

Implementing next-gen mobile attribution is a core function of answering the above questions and ultimately understanding exactly where and how to invest your next ad dollar. Let's start with the basics... ensuring you have the ability to measure all the channels and media sources you work with today and may need to test tomorrow.

100% Network Coverage: measure and report on all the channels you work with

It's probably a given that you're advertising with one of the major ad platforms, like Facebook or Google AdWords. So step #1 for picking a mobile attribution partner is ensuring that they're certified to work with all of the big players.



But if you're like most marketers, you're constantly looking to test new ad networks and channels to extend your reach and gain incremental users. And you obviously still need to measure and analyze the campaigns you're running with those mid-tail or long-tail networks. That's why you need 100% network coverage.

Luckily, you can check both boxes with Singular since we're an official Measurement Partner for every major platform. And thanks to our open integration framework, we have thousands of attribution integrations with all the other ad networks.

But again... we go beyond just counting installs. We also have direct integrations for your marketing campaign data on these networks, so we can [collect all your costs automatically](#) and combine that data with your install data to uncover performance metrics, like ROI, at the most granular levels, such as creative.

But wait, there's more. Does part of your revenue consist of ad revenue from in-app ad monetization? [Singular's Ad Monetization Attribution](#) is integrated with all mediation platforms and monetization partners so you can tie in ad revenue into your ROAS reporting. Lastly, but not least, our Audience integrations enable you to tap into your attribution data to create and distribute custom audience segments for lookalike, retargeting, and suppression lists to your ad partners.

Combine all of the above, and you get the ability to measure all your conversions across all your channels to give you a complete view of marketing performance.

Flexible Attribution Methodology: overcoming fragmentation of conversion data

Historically speaking, mobile conversion data was centralized with your mobile attribution provider and primarily relied on device advertising IDs, like the IDFA for iOS and GAID for Android.

But with Apple's big privacy announcement at WWDC 2020, attribution data has become more fragmented. Starting in "early 2021," apps will need to receive permission from users to use the Identifier for Advertisers, [the IDFA](#). But Apple isn't going to leave marketers completely in the dark. They introduced SKAdNetwork; a privacy-preserving framework for iOS marketing measurement that provides not the user or device level, but aggregated conversion data for attribution.

This massive change in attribution methodology means that there are now going to be a few different types of data sets for attribution that marketers need to connect and make sense of. Long story short, in order to measure the impact of marketing across devices, they need a provider that supports all of the following:

1. Ability to attribute conversions on Android devices using **GAID** (Google ad ID). This is your traditional user-level conversion data that powers granular and deterministic measurement.
2. Ability to attribute conversions on Apple devices where the user has explicitly provided consent to collect their **IDFA**. Again, this is user-level conversion data that powers granular, deterministic measurement but for a much smaller pool of your users.
3. Ability to attribute conversions on Apple devices where consent to collect IDFA was not given using **SKAdNetwork**. This is aggregated conversion reporting that is anonymized.
4. Ability to measure website to app conversions, influencer campaigns, email campaigns, and more across operating systems with **link-based measurement**. This should include support for deep links and deferred deep links, which are critical for re-engagement campaigns.
5. Ability to measure conversions across devices and platforms, based on your first-party identity, with **Cross-device attribution**. This consists of Google Tag Manager support as well as mobile attribution using one of the methods above, plus web attribution using a Web SDK and the ability to dedupe across these trackers.

“ Being able to measure marketing performance and ROI across platforms and devices with Singular is valuable for Lyft. This ability enables us to intelligently optimize our marketing efforts and grow our business.

Sherry Lin, Growth Marketing Operations Lead



Mobile attribution providers now need to bring together device-level data via GAID (the Google ad ID), and IDFA (from people who opt-in), aggregate data from SKAdNetwork, plus, potentially, data from web-to-app marketing flows that preserve both privacy and granularity.

iOS 14 Measurement: overcoming the gaps and limitations

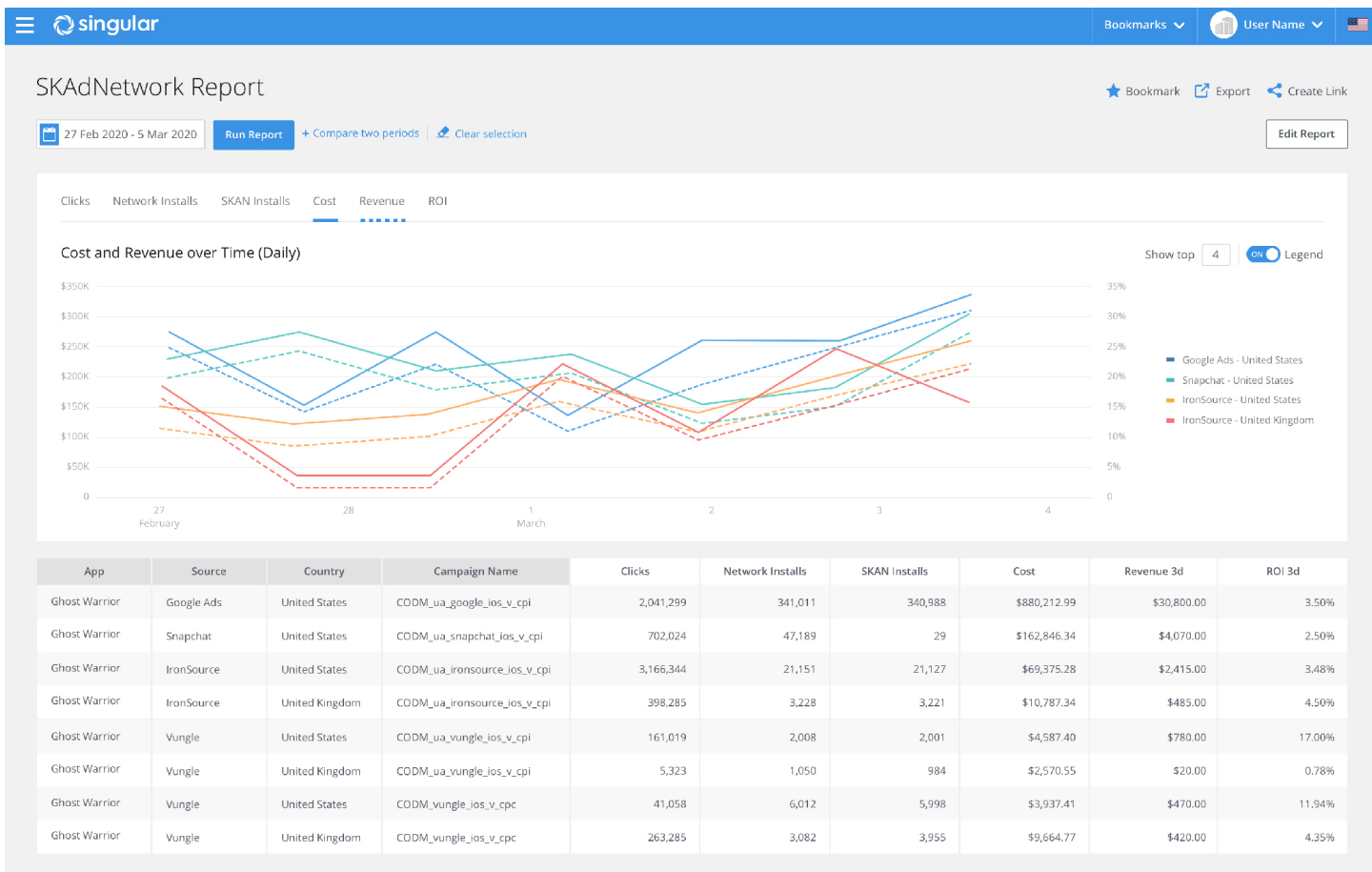
Besides the fragmentation of attribution data sets, Apple's big privacy changes, and specifically SKAdNetwork, pose additional challenges for marketers. Namely:

1. SKAdNetwork postbacks are reported directly to the networks, and each network reports them with different nomenclature, making collection and standardization challenging. Marketers need a solution that **collects, standardizes, and aggregates SKAdNetwork postbacks** into a single dataset.
2. SKAdNetwork postbacks are cryptographically signed, but the **conversion value itself is not signed**, leaving the door open for bad players to misreport conversion values.
3. You only have 64 numeric values to represent post-install conversions. You only get one chance to trigger a post-install conversion postback. This means it's difficult to **understand what the right conversion model** is for your business, and furthermore, how to leverage it to get **cohort reporting and ROI** (or other bottom-funnel metrics).

At Singular, we've built on top of the SKAdNetwork framework provided by Apple to provide marketers with [the world's most advanced solution for SKAdNetwork Attribution and Analytics](#).

We address the above challenges by:

1. Tap into Singular's industry-leading marketing aggregation solution to automatically **collect and standardize SKAdNetwork postbacks across all ad partners**.
2. Singular's Secure-SKAN goes a huge step further and **validates every postback conversion** to ensure your reporting is reliable and fraud-free.
3. Singular lets you use your historical data to model multiple conversion models and identify which is the best for your app. **Smart Conversion Management** supports revenue, retention, engagement, internal predictive LTV, and more. For the icing on the cake, you can change conversion models in real-time without touching code or resubmitting your app.
4. Singular has the only SKAdNetwork solution that unlocks **ROAS and cohort reporting**, powering you to continue to optimize your bottom-line and drive growth for your app in iOS 14.



Apple's big privacy changes are the single most impactful shift we've seen in the industry, and it's critical to adapt to stay ahead of the competition and continue to drive growth in iOS 14 and beyond.

Flexible attribution models: going beyond last-click mobile attribution

All campaigns are not created the same. All customer journeys aren't identical. In order to measure your entire user lifecycle (from acquisition to re-engagement and retention) across all platforms (think mobile ad to app or even mobile ad to website to app), you need flexible attribution models. Everything from view-through attribution for those brand campaigns, to click-through attribution, to even multi-touch tracking.

Singular supports more attribution models than any other provider including customized re-engagement flows, multi-touch tracking (MTA), SKAdNetwork, UTM tracking, website-to-app forwarding, and even cross-device attribution.

Configurable attribution: granular control to measure every touchpoint

Default attribution settings don't cut it anymore. Each app and user journey is unique. You need the ability to control the following:

- **Lookback windows:** A window that determines whether or not an attributed event will trigger the postback to the partner. For example, if an Event Postback Lookback Window of 7 days based on the install is used for an event "Purchase," a postback will only be sent to the partner if the attributed "Purchase" event occurred within seven days of the install.
- **Inactivity windows:** Measured time between sessions that determines if re-engagement will be possible. E.g., an inactivity window of 7 days means that re-engagement will only be considered for a session if the last session for the device happened >7 days in the past.
- **Touchpoint prioritization:** Touchpoints are all the relevant user engagements with ads before the install. In Singular, the user's option to install the app organically is also considered a touchpoint - although Singular will attribute the install to it only if no other valid touchpoints exist.

Attribution shouldn't be a black box with one-size-fits-all settings. It's important to have a solution that enables you to achieve the measurement that is suitable for your business and unique user journey.

Security & privacy: protecting your data and your users' data with built-in protection

Today's attribution providers have to maintain a critical set of design principles and methodologies for building, testing, and auditing every single part of the platform to maximize data security. While there is no silver bullet in security, prioritizing security when building products, comprehensive security knowledge, and organization-wide awareness can minimize the chances for a breach.

Serving the world's top advertisers and our engineering team composed of cybersecurity veterans, we are more than equipped to secure your most sensitive data. To date, Singular has never had a security breach, and with GDPR in place, we are compliant and prepared in case of any breach to provide the regulatory requirement report within 72 hours.

Authentication is also of vital importance: your attribution provider must support two-factor authentication, single-sign-on, and strong passwords to ensure your marketing data stays private.

Security experts agree that periodic audits and penetration testing by respectable parties are another great tool to evaluate how secure your provider is with handling your data. You have the right to see these proofs, and an honest vendor will be happy to show them to you.

Privacy, although often coupled with security, is a requirement on its own. Here, there are several important factors to consider around privacy:

- **Regulatory compliance:** Everyone claims they comply, but Singular goes the extra mile. We comply with GDPR, CCPA, COPPA, SOC2, and other standards. And we enable privacy-related requests such as the Right of Erasure and Right of Access programmatically through a set of API endpoints. That's scalable privacy.
- **Respecting user privacy & App Store policies:** You need to protect your users' privacy at all costs. That includes SDK-based methods to cease tracking for underage users or users who did not consent, and to never, ever mix your user data with other datasets. This also includes abiding by Apple's new App Store policy to avoid risking your app being kicked out by avoiding risky solutions that incorporate fingerprinting, device graphs, and people-based attribution.



[SSAE16 SOC2](#)



[Privacy Shield Framework EU/US](#)



[CSA STAR](#)



[SOC2 - e Privacy](#)



[GDPR](#)



[CCPA](#)

03 Streamlined Marketing Data Infrastructure

With more sources, more data, and more tools than ever before, the data explosion has made marketing data anything but simple. Marketers are not data engineers by trade, so they need an attribution and analytics provider that allows them to ditch the spreadsheets, automate data collection and processing, and get straight to uncovering performance insights to help them optimize campaigns and reach goals.

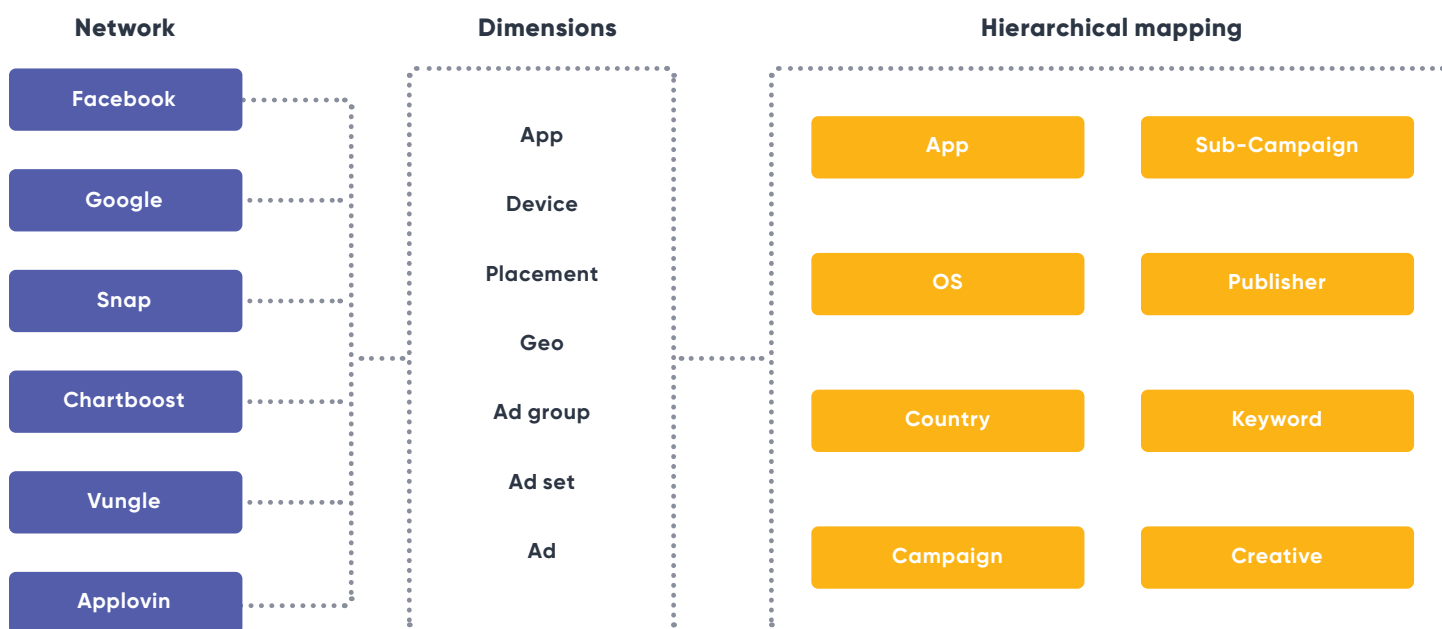
Automatic collection and combining of your most important datasets

You have questions. Your mobile attribution and marketing analytics tool should have answers.

But if you're stuck in Excel trying to aggregate campaign data from multiple ad networks and combine it with conversions and events, you're not only drowning in tedious data transformation tasks, but your conclusions will inevitably be inaccurate. No matter how analytical a marketer is, they're not typically data engineers.

Marketing data doesn't match on a multitude of levels. First, every ad network or publisher structures its campaign reporting and nomenclature differently. There is no standard across them, making it difficult to aggregate and normalize campaign data to get a side-by-side view of performance across ad partners.

Standardization of campaign data



But even more challenging is trying to unify this upper-funnel campaign data with lower-funnel attribution data. Campaign data is reported in aggregate, while conversion data (except for SKAdNetwork conversions) is reported on the user-level. It needs to be standardized, merged, and enriched to provide actionable insights.



Marketing Data

Defined by 2000+ ad networks
No standard



Attribution Data

Manual input
Depends on your "Tracking Links"

Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Ad Name			Ad_campaign_Name		
CampID			{Offer_Name}		
Offer_ID	Ad_info_name		Campaign_id_external	Offer_ID	
Offer	Creative_ID		CampaignName	Raw_Ad_Creative_ID	
Campaign.Name	Asset		AD_INFO	Creative_Name	
Campaign Tag	Ad Name	Source-app-name	Campaign['AppKey']	{{Ad Name}}	From_ID
	Video_Offer_Name	App site		Asset_ID	{PublisherAppID}
	Creative Tag	Pub		Ad_ID	Generic_Source
		Site Name			Aplication
		Sub-Publisher			Site_Name
		Publisher ID			\${APP_NAME}_\${APP_ID}

Combining your campaign data with your attribution data to understand ROI is one of the most daunting challenges for today's marketers. If you cannot join your campaign data and attribution data, you end up with inaccurate, unhelpful, meaningless performance data. It means optimizing on vanity metrics like CTR instead of growth-oriented metrics like ROI.

The solution is standardized and normalized data in the top-funnel that is completely aligned with standardized and normalized data from the bottom-funnel across all your ad partners. Now marketers can achieve comprehensive ROI reporting at all dimensions of their data... without an army of fully-dedicated data engineers.

Campaign data (standardized)

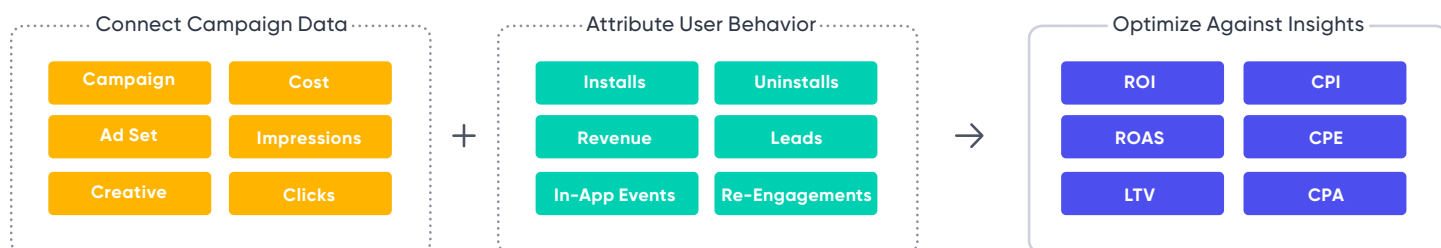
Campaign Name	Campaign ID	 ≈
Sub-Campaign Name	Sub-Campaign ID	 ≈
Publisher Name	Publisher ID	 ≈
Placement Name	Placement ID	 ≈
Creative Name	Creative ID	 ≈

Attribution data (aligned, wherever applicable)

Campaign Name	Campaign ID
Sub-Campaign Name	Sub-Campaign ID
Publisher Name	Publisher ID
Placement Name	Placement ID
Creative Name	Creative ID

Singular automatically combines your campaign data with attribution data to expose accurate, timely and actionable insights marketers need to drive growth at scale. We ensure that your data is perfectly aligned at every dimension, fill in missing data, and identify discrepancies between what ad networks report and attribution conversions you see.

Now you can compare apples to apples. And oranges to oranges.



“ We were not able to get ROI at a very granular level before we started working with Singular. Now, thanks to Singular, our front-end data gets automatically joined with our backend data, exposing ROI on a publisher, creative, campaign and partner level.

Nebojsa Radovic, Director of User Acquisition

N3TWORK

Many marketers also have first-party data, like recurring revenue conversions and predictive LTV models that they may want to consider in their analysis of ROI and performance. To do so, you need to work with an attribution provider who is able to also ingest that data, along with the conversion data sourced from your MMP SDK, in order to enrich your performance insights and optimize against the complete business impact of your marketing campaigns.

Standardization with data governance

At the core of unifying different data sets is data governance, which we internally at Singular refer to as the glue of unified marketing data.

Connecting campaigns and conversions is impossible without strict data governance: campaign naming conventions, tracking link conventions, and standardized taxonomies. At the most basic level, you'll need your reporting fields (campaign attributes like creative ID) to match up with your tracking link macros (components added to a tracking link).

But creating a data governance playbook and ensuring everyone sticks to it can be a challenge. Even if you've figured out a schema that is going to tie together campaign data and attribution data at the most granular levels, there will inevitably be human error, either in the naming of new campaigns or in generating a new tracking link, and that will break your ability to match data and analyze that specific campaign.

Singular customers offload the stress of defining and enforcing data governance to us and gain peace of mind from knowing their data is accurate, timely, and actionable. Our easy-to-use Link Generator ensures that your cost data and attribution data align for each of your sources, every single time.

CrossInstall Reporting Fields	Singular Link Macros for CrossInstall
Campaign name	<code>pcn=%AD_CAMPAIGN_NAME%</code>
Campaign id	<code>pcid=%CAMPAIGN_ID%</code>
Sub-Publisher name	<code>psn=%PUBLISHER_NAME%</code>
Sub-Publisher ID	<code>psid=%PUBLISHER_ID%</code>
Creative	-
Creative ID	<code>pcrid=%CREATIVE_ID%</code>
Country	-



TRACKING LINK:

```
https://c.singular.net/api/v1/ad?st=295259743331&andi=%ANDROID_ID%&aifa=%ANDROID_AD_ID%&s=%PUBLISHER_ID%&idfa=%IDFA%&cl=%CROSS
INSTALL_ID%&cr=%CREATIVE_ID%&pcrid=%CREATIVE_ID%&pc=%CAMPA
IGN_ID%&pcn=%AD_CAMPAIGN_NAME%&pcid=%CAMPAIGN_ID%&psn
=%PUBLISHER_NAME%&psid=%PUBLISHER_ID%&h=1b0460e8c0a3f111e
671ea7ab14e6621d83b9e8e
```

Vungle Reporting Fields	Singular Link Macros for Vungle
campaign name	<code>pcn={{(campaign_name)}}</code>
campaign id	<code>pcid={{(campaign_id)}}</code>
site name / site id	-
site name / site id	<code>psid={{(site_id)}}</code>
creative_name	<code>pcrn={{(creative)}}</code>
creative_id	<code>pcrid={{(creative_id)}}</code>
country	<code>country_name={{(country_name)}}</code>



TRACKING LINK:

```
https://c.singular.net/api/v1/ad?st=372124114475&andi={{(isu)}}&aifa={{(a
aid)}}&s={{(site_name)}}_{{(site_id)}}&idfa={{(ifa)}}&vungleappid={{(app_i
d)}}&cl={{(id)}}&pc={{(campaign_id)}}&pcn={{(campaign_name)}}&pcid
={{(campaign_id)}}&cr={{(creative_id)}}&pcrn={{(creative)}}&pcrid={{(cr
eative_id)}}&psn={{(site_name)}}&psid={{(site_id)}}&country_name={{(c
ountry_name)}}&h=999be4b2ff713db0f4ced8b3a6ad6acb3f44008e
```

Audience management to create and distribute segments for campaign targeting

Most audience solutions deliver exports of segments of customers or users that a brand wants to communicate with, support, sell to, or re-engage. The problem is that existing tools suffer from rigid creation capabilities and slow to no dynamic syncing with media sources to ensure audiences stay fresh.

The results are wasted impressions, irrelevant campaigns, and mistargeted customers or users. And that translates to poor performance. For example, the customer who hadn't purchased yet when the audience was created buys an hour later ... and gets an invitation to essentially re-buy the same shoes the very next day.

Audience management solutions need to do three things:

1. Enable you to create audiences with laser-precisions
2. Automatically distribute your new audience segments across all your media sources for activation
3. Regularly auto-sync to keep those dynamic audiences relevant and fresh

Empowered by built-in consultation with the world's best marketers at globally-recognizable brands, Singular's re-envisioned audience management automatically refreshes audience segments on an hourly basis, ensuring your marketing campaigns respond much faster to changes. That makes them much more relevant to your customers and users.

New Audience Segment

Details

Name

High Retention Users

Description

Engage users that have had more than 3 sessions in the last 7 days.

Apps

Select an App

Location

Select a Location

Device Model

Select a Device Model

OS Version

Select an OS Version

include  users

Session Filter

Where number of sessions is

in the last

High Retention Users 

3



Week



 Add a filter 

In addition, our Audience Builder is highly customizable with multiple and/or conditions that enable precision targeting. This ensures brands send only the right messages to the right people at the right time.

Full access to your data

Having complete access to your data should be a given because it's your data. And your data is your special sauce for modern marketing success. But a lot of mobile attribution providers will actually charge you extra to access your data the way that makes sense for you. For example, some attribution providers offer an API to ingest your attribution data into other systems, like your internal BI, but will charge you to access that API.

Our customers can access their data in whichever way suits their needs, with no extra cost like the other guys. We offer five simple options for piping back aggregated, standardized, and enriched data from Singular to wherever you'd like:

1. Marketing ETL - Fully-managed data pipelines to load analysis-ready data to all your internal tools
2. Postbacks - Real-time postbacks to your BI in JSON via HTTPS
3. API - Performance, creative, cohorts, filtering, and more
4. Exports - Configurable, ad hoc device-level export queries
5. Amazon S3 - Scheduled exports dropped securely into an S3 bucket

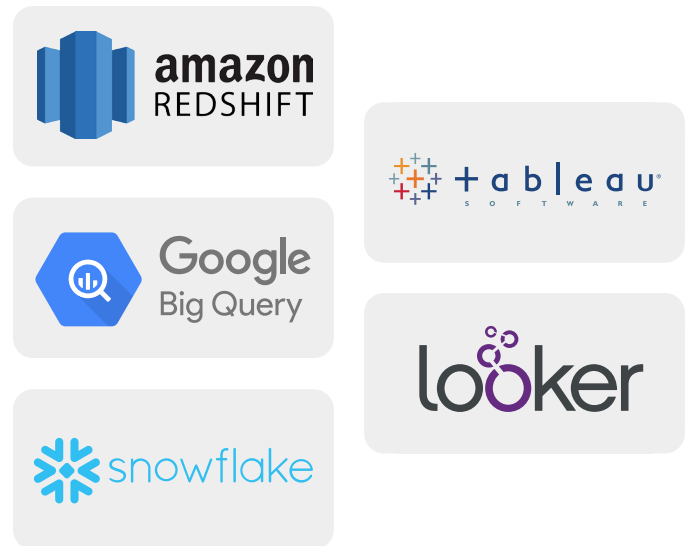
We'll store user-level attributions indefinitely and exports for 90 days by default. GDPR matters, so we also offer the GDPR Erasure API to delete data for specific users.

Building your dream marketing database with a Marketing ETL

Let's take a look at the benefits of working with a mobile attribution provider who has a built-in Marketing ETL.

Marketers dream of having all their marketing data at their fingertips, nicely organized in their internal data warehouses. We know from experience that building pipelines and pulling APIs to make that a reality is a challenging task that requires resources, time, and expertise.

[Singular's Marketing ETL](#) automatically extracts your marketing data from Singular, organizes it into best-in-class schemas, and pushes it directly into your favorite data warehouse (e.g. Redshift, BigQuery, Snowflake, Postgres, etc.) or storage services (S3, GCS, SFTP, etc.) to power your reporting tools.



So what does this mean? Singular ETL eliminates the need for you to build data pipelines, plan schemas, handle errors, monitor and scale your pipeline, and handle late arrival data.

The biggest value that teams experience is saving precious engineering resources by offloading the need to build and maintain marketing data pipelines, allowing internal BI and Analytics teams to focus on needle-moving projects, like advanced LTV modeling.

04 Granular, timely, actionable ROI and Performance Analytics

You're running analytics to identify pockets of profitable growth and areas of potential waste and you need to do so in a timely manner. That's the name of the growth game, understanding where to invest your next marketing dollar to get the most bang for your buck.

That's precisely what Singular has been built to do, faster, easier, and more accurately.

Unrivaled ROI & performance analytics

Reporting global marketing performance is table stakes, right? Except when you can see a snapshot of all your data at once, across all your apps, then drill down into deeper granularity with a single click ... and customize that drill-down by a dimension you can choose. And that's just the beginning with our unrivaled [Performance Analytics](#).

Executive Summary or Weekly UA Report										↓ ↗ ↻
eCPI	ROI 7ds	ROI 14d	Subscription 7d	Subscription 14d	Revenue 7d	Revenue 14d	Clicks	Registration 7d	Registration 14d	
\$ 2.90	3.99%	5.20%	4,079	5,312	\$ 13,687.12	\$ 17,824.69	909,295	5,098	6,639	

OS Report								↓ ↗ ↻
OS	Clicks	Installs	Cost	Revenue 14d	eCPI	ARPU 14d	ROI 14d	
Total	909,295	118,253	\$ 342,637.97	\$ 17,824.69	\$ 2.90	\$ 0.15	5.20%	
iOS	487,255	63,581	\$ 184,018.58	\$ 9,541.73	\$ 2.89	\$ 0.15	5.19%	
Android	422,040	54,672	\$ 158,619.38	\$ 8,282.95	\$ 2.90	\$ 0.15	5.22%	

“ Singular has been the key to uncovering ROI across our entire customer journey, which powers us to intelligently grow our business. By utilizing Singular’s attribution as part of its larger platform to unify the data across our entire marketing stack, we’ve gained access to unrivaled granularity to optimize against.

Kasim Zorlu, VP of Performance Marketing



Custom dimensions, events, metrics

If all user journeys were the same, all apps could use the same exact reporting. But this isn't the case; each app is unique. And the KPIs you need to hit are too. So your tools need to be customized to what acquisition, monetization, and retention means to you, and ultimately report on the KPIs that are tailored to your business.

If your attribution provider cannot display the KPIs that matter – for example, "Cost to first purchase" against every campaign on every network – that's something you'll end up doing manually. Or you'll waste precious BI time to achieve this level of reporting. (Oh, and if you have to do that ... you no longer have a single source of truth for marketing data.)

Singular's Custom Dimensions enables you to dictate data views that matter to you. Organize your analytics by geo, channel, date, UA manager, or whatever dimension your heart desires – up to 70 different rules per custom dimension. All you need to use is simple AND and OR operators.

“ As an on-demand food platform with unique geographic markets, it's critical for us to be able to break out our views by different cities and custom market definitions. Previously, we'd spend many hours each week manually breaking out reporting. With Singular's Custom Dimensions, we've automated this process fully and are able to create completely custom reports that meet our specific analytical needs.

Andy Wells, Head of Customer Acquisition



Your imagination is the limit: You can build strategy dimensions or objective dimensions. One example is bundling up all your re-engagement campaigns in order to compare their ROI, clickthrough rate, or conversion rate to prospecting or branding campaigns.

“ With Custom Dimensions, we're able to report by parameters that matter... such as custom geographic regions, languages and business units. We're even able to see creative performance broken down by different stages in the funnel, enabling precise optimizations to maximize results.

Paul Bloom, Senior Account Manager



You don't have an app that's just like everyone else's. Your attribution analytics should be just as unique.

Beyond Dimensions, you also need **Custom Metrics**. You don't need generic metrics – you need actionable reporting on dimensions that matter to you. That means analytics that adapt to you, your unique app, and your unique business. Creating custom metrics about how much it costs to achieve that – and other things that matter – should be available by default from your attribution provider.

Custom Metrics: examples	
Cost per registration	Cost per tutorial complete
Cost per first purchase	Cost per level 5
Cost per activation	Cost per first delivery

Maybe you need to map multiple events to a single metric. Maybe you want to have a single name for similar concepts across your entire app portfolio, like first purchase or a user quality indicator. Or maybe you just wanted a calculated custom metric, like Cost per First Purchase.

That's why Singular lets you customize reporting not just by raw metrics but by calculated metrics that you can set up once and use forever, saving your BI team tens of hours weekly. If your team doesn't love you today, they will soon.

Last but not least, you'll want the ability to define **Custom Events**. Instead of simply measuring and reporting on conversions, you should have the ability to measure meaningful actions users take within your app. For example, maybe you've found that gamers who make it to level 10 are more likely to have a higher LTV, or you're an on-demand app who wants to not only track installs but track the first ride/delivery a user has ordered.

Custom Events: examples	
Completed level 5	Entered CC information
10-day in-app streak	Entered shipping address
10th IAP	100 ads viewed
Joined league/team	Shared game with friends

Singular lets you define custom events that appear in your query options, allowing you to see cost and performance data for those custom events and slice and dice by dimensions that matter to you. Events that are auto-tracked and do not require custom event creation include installs, session starts, revenue events, uninstalls, and reinstalls.

Visualize creative ad assets side-by-side with metrics

Knowing which ads perform is great. Knowing why is much more powerful.

The best creative drives [11X more growth](#) than average creative, so it's critical to analyze and optimize your creative strategy. But creative optimization, as impactful as it can be to performance, is not a walk in the park. A brand may have hundreds, maybe even thousands, of different ad creative variations live at any given time. Thus, it's commonplace for marketers to limit their creative analysis to answering basic questions like the top ten and bottom ten performing creatives.

05 Fraud Prevention that blocks fraud before it wreaks havoc on reporting

All MMPs have fraud prevention. But not all fraud prevention is equal, and there are large variances in the amount of fraud that these solutions can prevent.

There are even some attribution providers that offer “detect-only solutions,” meaning your attribution provider will still give credit to the fraudsters and make you do the work to get your money back from the ad networks. But maybe even more frustrating, since these solutions don’t reject the fraud outright, before the attribution decision is made, they result in inaccurate reporting which leads to misinformed optimizations. Another implication of subpar fraud prevention is that you end up having fraudsters on your payroll – unbeknownst to you.

Others charge per paid installs, which creates a level of conflict in also offering strong, automatic solutions that proactively block fraud before attribution (and payment!).

“ Singular’s new fraud-fighting technology helps our User Acquisition team focus on legitimate campaigns and significantly boost return on ad spend.

John Parides, Senior Director of User Acquisition.



Deterministic, not probabilistic

Most standard fraud prevention is probabilistic. Meaning they’ll detect when something is “probably” fraud. The resulting guesses with varying degrees of certainty can’t be too aggressive because that increases error rates and false positives, wasting marketers’ time and money.

What you need is deterministic fraud prevention, meaning your solution should detect and block when something is “definitely” fraud. In order to do this, fraud prevention detection needs to run on the actual individual installs, devices, and users, not blanket-level sources or publishers.

Pre-attribution Fraud Rejection

Finding fraud after it has already occurred is too late. Advertisers have already paid for traffic or users or customers, and then they'll have to engage in time-consuming and difficult cost reconciliation conversations with partners.

A potentially bigger problem when you let fake users in: marketers get fraudulent engagement and purchase data along with the fake users, muddying your analytics and making it hard to decide where to re-invest. And even worse, legitimate ad networks' algorithms can adapt to the fraud in real-time, de-prioritizing campaigns and sources that are actually working because they are getting fewer installs attributed, thanks to theft by the fraudsters.

So it is absolutely critical to eliminate fake installs, clicks, and users BEFORE attribution.

Transparent, not opaque

Both advertisers and ad networks need to know what constitutes fraud, and they need transparent reasons why traffic, installs, or other activity has been classified as fraud. So Singular provides user-level decision logic for every single install, click, and impression.

Additionally, we have not one, but three different fraud reports:

1. **The Rejected Report** to analyze what fraud was blocked, and what kind of fraud attack you were able to stop which helps you understand how fraudsters are targeting your particular app or setup.
2. **The Suspicious Report** to analyze suspicious activity that wasn't outright blocked but that you should investigate.
3. **The Protected Report** to understand the legitimate source of conversions after a fraud attack was prevented. This saves the original attribution (could even be organic) so you could give credit where credit is due and maintain accurate reporting.

Customizable, not hard-coded

We enable you to personalize your fraud prevention strategy and dictate how aggressively you want to combat fraud by creating custom rules to automatically reject or flag fraudulent installs.

Fraud Custom Rules

Search rule description to narrow down table

Create New Rule

Rule	Updated By	Last Updated	Action	Status
▼ New Rule			Mark as Suspicious	

Conditions

SourceinSelect...

+ Add Condition

Action

Mark as Suspicious

Rule Status

☒ Active

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

Select by campaign, by country, by publisher, ad network, or even SDK version to customize how you want to deal with installs from any media source you're leveraging. Mark it as suspicious or automatically reject it ... or whitelist it for installs from a source you know is good.

Then add as many rules as you like.

And let's be clear, more fraud prevention methods = more money saved and reallocated to actual growth.

[Singular's multi-faceted fraud prevention suite](#) simply checks more fraud signals, uses deeper data, and catches more fraud before it ever gets inside your campaigns. Not to mention you save even more time and money – and train your ad partners on how to deliver better users – by being proactive.

Fraud prevention methods	Singular
iOS install validation	✓
Android install validation	✓
Click hijacking prevention	✓
Hyper engagement	✓
Short time to install (TTI)	✓
Android organic poaching prevention	✓
Android click injection prevention	✓
Blacklisting	✓
Geographic outliers	✓

Singular's Fraud Prevention, built and maintained by a highly-skilled set of cybersecurity experts, provides the most effective ad fraud protection available to mobile marketers. New clients who transition from a legacy attribution provider with limited fraud prevention typically find 20-50% more fraud than long-term Singular clients. And Singular's Fraud Prevention reveals that many of our new customers' ad partners for paid mobile user acquisition actually have 80% fraud or higher.

“ Singular's updated Fraud Prevention Suite is the most powerful mobile app install fraud prevention I've seen. This saves us literally hundreds of thousands of dollars every month, and leads us to make more effective marketing decisions.

Channy Lim, Head of BI Department

com2us

06 The Switcher's Guide to seamless migrations

Are you ready to futureproof your growth and level up your user acquisition, but are worried about a painful migration? Don't fret! Upgrading your provider shouldn't be painful. We've provided some guidelines on how to ensure a smooth transition.

First, let's define "seamless migration." Simply put, seamless migration is upgrading to a new measurement and analytics provider that ensures you can continue to see the KPIs and insights you need to make optimization decisions. You shouldn't even "feel" any adverse impacts of switching providers with seamless migrations; instead, you should benefit from the value-adds and new capabilities of your new solution.

Let's break this down a bit. Here are the requirements for a seamless migration:

- ☐ **Quick turnaround time:** You can't afford to turn off your campaigns or slow down your advertising scaling when going through a migration. You need to be able to continue to make optimizations and launch new campaigns.
- ☐ **Data continuity:** You shouldn't experience any data loss and should be able to report on all the KPIs (including custom metrics) that you've always been measuring and optimizing against so you can continue to benchmark current performance against historical. Also, you need to ensure users that are already customers are not being attributed as net new.
- ☐ **Support for all your ad partners:** Your new provider should be able to account for all the ad partners that you're working with (and may want to test in the future). Your ad partners should continue to receive postbacks to ensure optimization of performance
- ☐ **Internal BIs aren't adversely impacted:** Your attribution and performance data is critical to internal BI systems and even reporting for other teams like Finance for Profit and Loss analysis and Product for user experience analysis. Make sure your migration doesn't negatively impact your internal data processes, modeling, and visualization.
- ☐ **Onboarding and training support:** Learning a new tool can be daunting, but it doesn't have to be. Work with a provider who offers hands-on training, dedicated Customer Success Managers, clear documentation, a fully-functioning support portal, and in-product tours.

Singular is proud to offer all of the above, plus more.

Are you an app developer? We have multiple integration modalities, from server-to-server to SDKs, to ensure you have the right setup for your apps. And with our SDK Testing Console, you can ensure you have successful deployment quickly and easily.

Are you a BI Analyst or Data Engineer? Our ETL reduces the need to custom configure integrations and build and maintain data pipelines so you can skip to the fun stuff... modeling and analyzing your data. Plus, we have a full range of export capabilities like APIs and periodic exports to give you complete control of exporting business-ready data from Singular.

Are you a Marketer? We also have built-in tech that streamlines the migration of tracking URLs, so there is absolutely no need to recreate your tracking URLs (headache averted). You get not one, but several reporting visualizations built right inside Singular— from visual creative analytics to drag-and-drop pivot tables. With fully dedicated Customer Success and Onboarding Managers, and best-in-class Customer Support, you can start running reports and unlocking insights to help you grow from day one.

The Ultimate Mobile Attribution RFP Checklist

So you're ready to evaluate a new attribution provider to help you level up your growth game. How're you going to know which one stacks up and is the best fit for you?

We've put together this checklist to help you kick things off. When evaluating your next provider, ensure that they meet the below criteria to start with.

- ☐ **Certified mobile measurement provider**, for all the big publishers (Facebook, Google, Twitter, Pinterest, Snapchat, TikTok) and supports measurement for **100% of your channels** (ad networks, TV, email, etc.)
- ☐ Comprehensive mobile measurement that brings together device-level data via **GAID** (the Google ad ID) and **IDFA** (from people who opt-in), aggregate data from **SKAdNetwork**, and **web attribution** (via a web SDK), while having the ability to combine all the above for **cross-device attribution**.
- ☐ **SKAdNetwork solution** that unlocks for **ROAS and cohort reporting**, enabling you to continue to optimize off performance metrics instead of vanity metrics.
- ☐ Flexibility to **configure attribution settings** for every channel, like touchpoint prioritization, lookback windows and inactivity windows **at the source and link level** to properly measure every touchpoint in the user journey.
- ☐ Attribution that **strictly complies with GDPR, CCPA, COPPA, SOC2 and other privacy standards**, while enabling privacy-related requests such as Right of Erasure and Right of Access programmatically through a set of API endpoints.
- ☐ Collects upper-funnel marketing data, like ad spend, from all your ad partners, and combines that with attribution data so you can optimize on performance **metrics like ROI, LTV, CPA and more**.
- ☐ Provides an **Audience Management solution** that enables you to create audiences and distribute them to all your ad partners, and re-syncs audience segments on an hourly basis to keep audiences relevant.
- ☐ Built-in **Marketing ETL** so you can automatically load analysis-ready data into your internal tools like your data warehouse and visualization tools.

- ☐ **ROI and Performance Analytics** that allow you to analyze the impact of ad spend on the campaign, publisher, creative, and keyword level.
- ☐ **Linking toolset that ensures seamless user experience** while enabling tracking across mobile, web, paid channels, organic channels, and owned properties.
- ☐ Support for **custom dimensions and custom metrics** for tailored measurement and reporting.
- ☐ **Creative Reporting that lets you visualize the actual ad asset**, whether it be image or video, side-by-side with it's respective performance metrics.
- ☐ Fraud Prevention that **blocks** fake impressions, clicks, installs, and conversions **before the attribution decision** to avoid misreporting and alleviates time-consuming reconciliation with ad networks.
- ☐ Fraud Prevention that **employs all available fraud rejection methods** including, Android install validation, iOS install validation, click hijacking prevention, Android organic poaching prevention, Android click injection prevention, hyper engagement, short time-to-install and geographic outliers.

07 Conclusion

Switching your attribution provider is not something to approach lightly. Singular makes it as easy as possible, but let's be honest: it's a big deal.

What's even a bigger deal is setting yourself up for mobile marketing success in 2021 with next-generation analytics, attribution, and insights. What's an even bigger deal is staying two or three steps ahead of your competitors.

Doing that requires proactive fraud prevention that detects fraud before it pollutes your marketing data. It requires the most connectors to the most marketing partners anywhere. It demands unmatched flexibility in attribution windows, fraud rules, and how you configure marketing measurement on the fly, in real-time. And that means the most accurate data, easily accessible in multiple ways, in systems that scale for the biggest and highest-volume brands.

What's the next step?

Schedule a demo with one of our experts. There's no pressure. There's no hassle. Just a collaborative walkthrough of your needs and the Singular solution.

Special offer

Your first month of Singular is free with the download of this guide.*

[Schedule a demo](#)

*Up to \$3000 discount applied.