

RESOURCE

Defining Key Events for Google Analytics 4

Optimizing Automotive Campaigns with Actionable
Conversion Signals for Better Bid Strategies

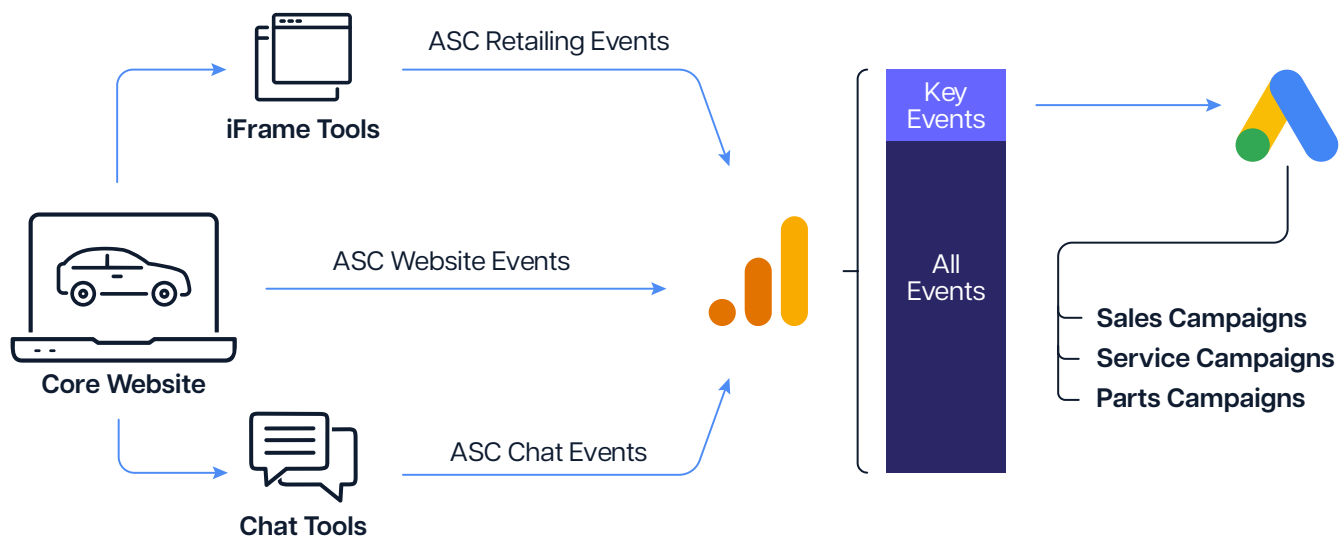
Introduction

Every click, hover, swipe, and conversion can be tracked in Google Analytics if events are fired from IFRAME software applications (i.e., trade tool, chat) and the core website platform. The **Automotive Standards Council** (ASC) has defined [36 event names](#) and associated parameters that reflect the common activities consumers will take on a dealership website. This document outlines which of the ASC events should be marked as a key event.



Key events in GA4 can be used to send signals into Google Ads for campaign optimization. Each Google Ads campaign can be associated with a subset of the key events in GA4 which will be used for bidding optimization. Key events can also be weighted in Google Ads since the value of key events are not equal.

The ASC specification has created conversion events by department: sales, service, parts, and others. This allows sales campaigns to use key events for sales activities. Service campaigns would use key events for service activities, and the same would go for parts/accessories campaigns.

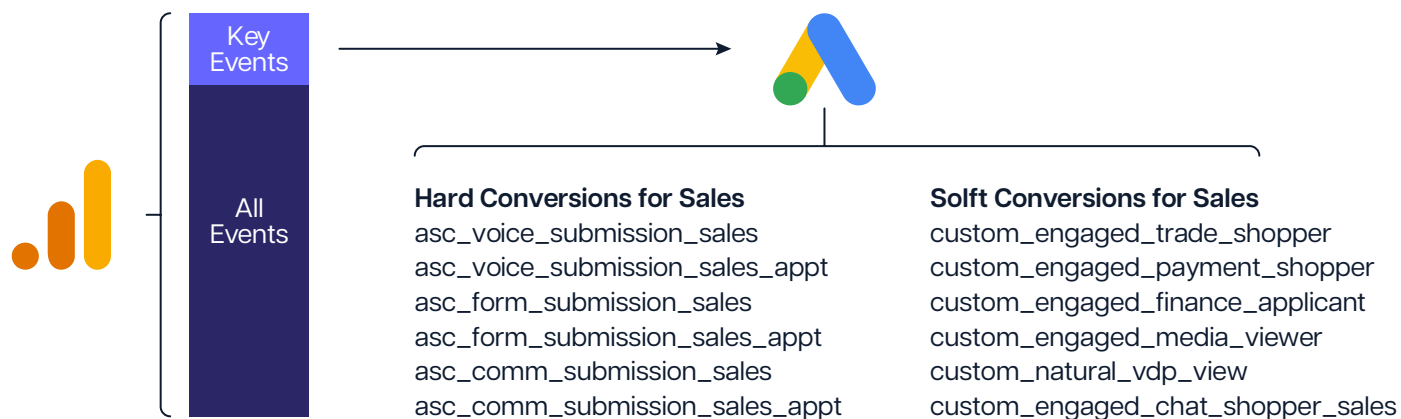


Many of the key events listed in this document are considered a **“hard conversion”** or a **lead** since a consumer provides their contact information in a form, chat session, or on the phone. However, compared to the number of clicks from a Google Ads campaign, hard conversions are a small percentage of visits. We are proposing that the key events created in Google Analytics for Google Ads should also include meaningful engagement activity (**soft conversions**) which show shopper intent.

The combination of hard conversion and soft conversions will be best to optimize Google Ads because Google has more meaningful signals to use for bid optimization.

Keep in mind that soft conversions are limited in scope. Agencies should never create a key event (soft conversion) for a page view, VDP view, or SRP view.

Sales Campaign Example using a Subset of the 26+ Key Events



An example of a **hard conversion** would be the **asc_form_submission_sales** event which is fired when a sales form (i.e., Check Availability) is completed. An example of a soft conversion would be **custom_engaged_trade_shopper**, which is a custom event outside of the ASC specification, which can be programmed to fire when a consumer completes a few steps in a trade valuation tool but may not complete a lead form.

Google Engagement Rate - Don't Inflate This Metric

Google defines the engagement rate as the number of engaged sessions divided by the total number of sessions over a specified time period. An engaged session is a session that lasted longer than 10 seconds, **had a conversion event**, or had at least 2 pageviews or screen views.

Since GA4 does not have a bounce rate metric, I am finding that agencies are marking NON key events as key events (conversion event) so the Google engagement rate metrics are higher. This is a practice that must be stopped and anyone who is marking silly events as key events is exposed.

Key Event Checklist

Hard Conversions

- asc_voice_submission_sales (Call for confirmed as a sales opportunity)
- asc_voice_submission_sales_appt (Call for a confirmed test drive appointment)
- asc_voice_submission_service (Call for confirmed as a service opportunity)
- asc_voice_submission_service_appt (Call for a confirmed service appointment)
- asc_voice_submission_parts (Call for confirmed as a parts opportunity)
- asc_voice_submission_other (Call that is important: i.e. compliant)

- | | |
|------------------------------------|--|
| • asc_form_submission_sales | (They send in a general lead for a car or sales) |
| • asc_form_submission_sales_appt | (They book a test drive) |
| • asc_form_submission_service | (They send a general service question) |
| • asc_form_submission_service_appt | (They book a service appointment) |
| • asc_form_submission_parts | (They want to purchase parts) |
| • asc_form_submission_other | (They fill out a general form: ie. employment) |
| | |
| • asc_comm_submission_sales | (They send in a general lead for a car or sales) |
| • asc_comm_submission_sales_appt | (They book a test drive) |
| • asc_comm_submission_service | (The chat was about a service need) |
| • asc_comm_submission_service_appt | (They booked a service appointment) |
| • asc_comm_submission_parts | (They want to purchase parts) |
| • asc_comm_submission_other | (Misc conversion: i.e. customer complaint) |

Soft Conversions

These are the suggested soft conversions which are custom events. All of these events should start with the letters “custom_”. This naming convention will separate custom engagement events from any events that are part of the ASC specification.

- custom_engaged_trade_shopper
- custom_engaged_payment_shopper
- custom_engaged_service_scheduler
- custom_engaged_finance_applicant
- custom_engaged_media_viewer
- custom_natural_vdp_view_with_media
- custom_engaged_chat_shopper_sales
- custom_engaged_chat_shopper_service

Note: Agencies should NOT create any derivative events with the starting letters “asc_” and for this framework, all derivative events should start with custom_.

To create custom events, you will use existing ASC events with specific conditions using the parameters. In many cases, the events will be based on the **asc_retail_process**, **asc_form_engagement**, or **asc_comm_engagement** events.

If you want to create a custom event based on playing a video or scrolling through a photo gallery, then you would base that custom event on the **asc_media_interaction** event. This custom event should be weighed much lower than others because of the frequency which these events will occur.

A few examples of custom events are provided in this document. We welcome any additional definitions based on the tool which dealers are using in the marketplace. We will add additional examples as we receive them from the vendor and dealer community.

custom_engaged_trade_shopper

TradePending

Here is the definition of the custom event when you have TradePending as the trade tool:

Configuration

Custom Event Name

custom_engaged_trade_shopper

Matching Conditions

Parameter

event_name

flow_outcome

event_owner

Operator

equals

equals

equals

Value

asc_retail_process

vehicle selected

tradepending

Parameter Configuration

☒ Copy parameters from the source event

Parameter

event_owner

New Value

brian_pasch

When a consumer clicks the TradePending CTA button to start a trade valuation, and selects their year, make, and model this event will fire regardless if they decide to complete the trade form which will ask for their name, email, and phone number. Any consumer who makes these actions is showing intent but may not want to give up their email and phone number. So this is a meaningful event which would be considered a **soft conversion**.

If your website is using a different trade tool, you would look at the event parameters they use for **flow_stage** and **flow_outcome** to decide when to trigger the custom event.

When ANY custom events are created, the checkbox for “copy parameters from the source event” should be checked, as shown on the previous page. The event_owner parameter should be overwritten with the name of the person who created the event. You could also add a date that the event was created by using “sam_smith_8_2024” as the event_owner name.

Darwin

Below is an example for Darwin customers who want to create the event: custom_engaged_trade_shopper. This event construct is a pattern for custom_engaged_payment_shopper as well, because they use the flow_stage parameter very well and flow_name can be trade, financing, and ecommerce.

Configuration**Custom Event Name**

custom_engaged_trade_shopper

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_retail_process
event_owner	equals	Darwin
flow_name	equals	trade
flow_outcome	equals	start

Parameter Configuration☒ Copy parameters from the source event

Parameter	New Value
event_owner	brian_pasch_8_2024

CarNow

Here is an example for CarNow which triggers when the consumer starts the trade-in workflow.

Configuration**Custom Event Name**

custom_engaged_trade_shopper

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_retail_process
event_owner	equals	carnow
flow_name	equals	trade_in
flow_outcome	equals	start

custom_engaged_payment_shopper**Gubagoo**

Here is how you can define a custom event when you have Gubagoo as the digital retailing tool and you want to track who was estimating payments. This event will fire when they are moving through the payments section of the workflow.

If the Gubagoo digital retailing tool is configured to require a form fill (gated entry) before allowing a consumer to calculate their payments, the session would have a hard conversion and a soft conversion. Keep in mind that when tools are gated, the form conversions may be hostile and contain information with a fake email address. This makes this event even more valuable because it shows what was done after the form gate was completed.

In the example shown, I have added a date to the new event_owner parameter to indicate when the custom event was created. This may help reporting ranges since until custom events are created they will not be visible to reports.

Configuration

Custom Event Name

custom_engaged_payment_shopper

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_retail_process
event_owner	equals	Gubagoo
flow_name	equals	payments
flow_outcome	equals	proceed

Parameter Configuration

☒ Copy parameters from the source event

Parameter	New Value
event_owner	brian_pasch_8_2024

Each digital retailing tool will have its own unique values for flow_name, flow_stage, and flow_outcome so agencies should contact the owner of the tool to see how they would recommend creating a custom event which shows engagement with the payment calculator.

Darwin

Here is an example for dealers who have Darwin as their digital retailing platform and want to create the custom_engaged_payment_shopper event:

Configuration

Custom Event Name

custom_engaged_payment_shopper

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_retail_process
event_owner	equals	Darwin
flow_name	equals	ecommerce
flow_outcome	equals	start

Parameter Configuration

☒ Copy parameters from the source event

Parameter	New Value
event_owner	brian_pasch_8_2024

CarNow

Here is an example of how to create this event using CarNow:

Configuration

Custom Event Name

custom_engaged_payment_shopper

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_retail_process
event_owner	equals	carnow
flow_name	equals	payments
flow_outcome	equals	edit

custom_engaged_finance_applicant

This is an example where you can track when consumers start to fill out a finance or credit pre-approval application but may not complete the process. You will need to check with your vendor who provided your credit applications or credit soft-pull technology to better understand how they use the ASC parameters.

Darwin

Configuration

Custom Event Name

custom_engaged_finance_applicant

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_retail_process
event_owner	equals	Darwin
flow_name	equals	financing
flow_outcome	equals	start

Parameter Configuration

☒ Copy parameters from the source event

Parameter	New Value
event_owner	brian_pasch_8_2024

CarNow

Below is an example of how to create this custom event with CarNow for a soft credit pull:

Configuration

Custom Event Name

custom_engaged_finance_applicant

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_retail_process
event_owner	equals	carnow
flow_name	equals	credit_app
flow_outcome	equals	submit

custom_natural_vdp_view

This event can be created to trigger when a consumer visits a VDP from another page and NOT from directly landing on a VDP. This event is designed to avoid setting a key event for a VDP view.

Why? Google VLA campaigns drive consumers to a VDP from search, which would trigger a simple VDP view key event 100% of the time. This creates waste and bad bidding optimization.

Configuration

Custom Event Name

custom_natural_vdp_view

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_pageview
page_type	equals	item
page_referrer	starts with (ignore case)	https://www.kiaforangepark.com

Parameter Configuration

☒ Copy parameters from the source event

Parameter	New Value
event_owner	brian_pasch

A better thought would be to see which visitors from a Google Ads campaign (broad message) navigated naturally to look at vehicles on an SRP or VDP. When you create this event, you would change the **page_referrer** value to the homepage URL of your dealer's website (highlighted).

To give readers context, take a look at this dealer's GA4 account who set events for VDP views:

Event name ↑	Count	% change	Users	% change
custom_external_landing_vdp_view	11,437	↑ 38.8%	5,419	↑ 19.5%
custom_natural_vdp_view	8,890	↑ 27.3%	3,261	↑ 16.5%
new_vdp	17,144	↓ 12.8%	3,600	↓ 47.1%
used_vdp	17,742	↑ 12.5%	3,115	↑ 0.3%

The total VDP views for this time period is $17,144 + 17,742 = 34,886$. The number of natural VDP views, which means they did not land on a VDP, is 8,890. The value 8,890 is all natural VDP views and not all of those page views came from Google Ads. You can see that if you wanted to see which consumers intentionally explored vehicles, the number (8,890) might be better as a shopping signal than 34,886.

We are not recommending that any agency make a soft conversion based on a simple VDP view, but agencies may want to TEST using natural VDP view events, if your hard conversions are very low. The natural VDP event would mean that if they landed on an SRP or landed on a VDP, they navigated to another vehicle detail page. That may be a signal that you use, but place a lower weight on it compared to someone who abandoned a trade tool or finance application.

custom_engaged_media_viewer

This event can be created to trigger when a consumer visits a page and plays a video, uses a 360 spin tool, or scans through a photo gallery. Photo engagement may or may not be a great indicator of intent, since the second time a consumer looks at a vehicle they may not look at photos. Playing a video, especially if the consumer watches the video can be a good signal of intent. If a consumer uses the 360 degree spin investigation tool, this could also be a good signal of intent.

A media play should not be weighted the same as a hard conversion but can be a nice soft conversion to add into the optimization mix. If you wanted the event to trigger when someone clicked through the photo gallery, played a video, or used the 360 spin feature, then you would need to use a regular expression which looks for the words spin, play, next, and previous in the event_action_result parameter.

Configuration

Custom Event Name

custom_engaged_media_viewer

Matching Conditions

Parameter

event_name

event_action_result

Operator

equals

matches regular expression (ing...

Value

asc_media_interaction

spin|play|next|previous|Next|Previ...

Parameter Configuration

☒ Copy parameters from the source event

Parameter

event_owner

New Value

brian_pasch_8_2024

For simplicity, I used both the upper and lower case words for next and previous. There is more complicated syntax which makes the matching more exact, regardless of case but this syntax is easy to explain.

Focusing on Only One Media Event

In the example below, we are setting an event to trigger when a consumer uses only the 360 spin tools on a vehicle. You could update this custom name to be **custom_engaged_media_viewer_360** if you want to include separate events for video plays and photo gallery views.

Configuration

Custom Event Name

custom_engaged_media_viewer_360

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_media_interatction
event_action_result	equals	spin

Parameter Configuration

☒ Copy parameters from the source event

Parameter	New Value
event_owner	brian_pasch_8_2024

custom_natural_vdp_view_with_media

You can also test a bonus custom event which looks at natural VDP views with a consumer who engages with the media on the page. This could be used if the dealer does not want to use the custom_natural_vdp_view event because it may be too high in counts.

Configuration

Custom Event Name

custom_natural_vdp_view_with_media

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_media_interatction
event_action	matches regular expression	spin play next previous Next Pre...
page_type	equals	item
page_referrer	starts with	html://www.hondaofocala.com/

Parameter Configuration

☒ Copy parameters from the source event

Parameter	New Value
event_owner	brian_pasch_9_9_2024

Note: Copy this text to use for the regular expression in **event_action** so this event works:
spin|play|next|previous|Next|Previous|swipe_right|swipe_left|Pasch

custom_external_vdp_view_with_media

While this event is NOT recommended to be a key event, dealers and agencies may want to inspect how many VDP views, coming from external sources (i.e., VLA ads) are from consumers who look at the photo gallery or video on the VDP landing page. This would be an indication on the quality of traffic which these VDP direct sources deliver.

Configuration

Custom Event Name

custom_external_vdp_view_with_media

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_media_interatction
page_type	equals	item
page_referrer	does not contain	www.kiaoforangepark.com
event_action	matches regular expression	spin play next previous Next Pre...

Parameter Configuration

☒ Copy parameters from the source event

Parameter	New Value
event_owner	brian_pasch_9_9_2024

custom_engaged_chat_shopper

Chat engagement can be tricky because not all chat providers have leveraged all the parameters which are available in this ASC event. The comm_status parameter is likely the best parameter to differentiate chat sessions that open vs. chat sessions where engagement starts. See the example below for this one dealer who uses Gubagoo over 30 days:

comm_status 

CUSTOM PARAMETER	EVENT COUNT	TOTAL USERS
(total) 4 items	4.6K	1K
engage	2.4K	532
	1.2K	333
(not set)	617	267
start	423	263

Gubagoo sent 2,400 events with the comm_status parameter set to “engage” and another 1,200 with a blank value for comm_status. They did however send 423 events with comm_status set to “start” which is likely the sessions which responded. Gubagoo also determines which department the chat engagement was assigned.

CUSTOM PARAMETER	EVENT COUNT	All Users TOTAL USERS
(total) 6 items	4.6K	1K
sales	2.5K	614
service	1.1K	265
(not set)	620	260
unknown	247	35
customer support	27	2
parts	25	1

This allows agencies to create custom chat engagement events for sales and service separately. Here is the definition example for Gubagoo chat to create the event **custom_engaged_chat_shopper_sales**:

Configuration

Custom Event Name

custom_engaged_chat_shopper_sales

Matching Conditions

Parameter	Operator	Value
event_name	equals	asc_comm_engagement
page_type	equals	Gubagoo
comm_status	equals	start
department	equals	sales

Parameter Configuration

☒ Copy parameters from the source event

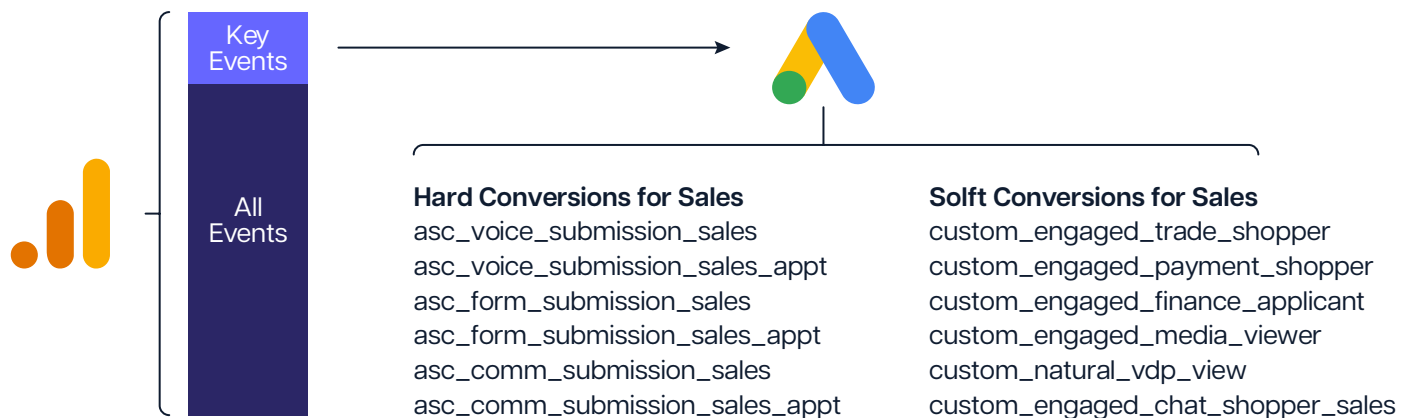
Parameter	New Value
event_owner	brian_pasch_8_2024

If the chat platform does not send events by department, then you will need to understand that using **custom_engaged_chat_shopper** would be sending mixed signals: sales and service. We never recommend that campaign optimization strategies use “roll-up” events. If your chat provider does not send engagement events by department, you may want to consider switching chat platforms. You could consider using **custom_engaged_chat_shopper** for basic branding campaigns where the goal is to drive consideration for sales and service.

Example Google Sales Campaign - New Car Acquisition

If you have a Google Ads campaign which is promoting a new vehicle model or even new car inventory using a VLA ad strategy, your campaign would import these key events which pertain to vehicle sales:

Sales Campaign Example using a Subset of the 26+ Key Events



Depending on the website platform and tech stack which is being utilized you may have other “custom” events which can show shopper intent or when a form is abandoned. If you have a vendor that has done a good job of tracking each step in a form, with the asc_form_engagement event, you might also have a custom_event trigger when certain data is provided by the consumer.

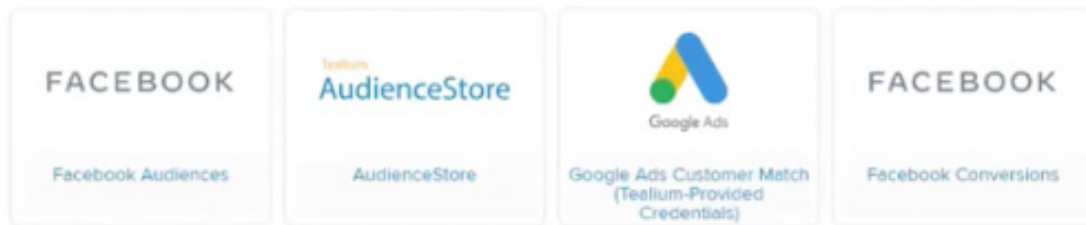
For VLA campaigns you would never set a key event for a VDP view, since VLA campaigns send all clicks to the VDP. This would signal to Google that every click on the ads was a good result, which is not the case. However, you could test adding the “custom_natural_vdp_view” event which would trigger if the consumer clicked off the landing page VDP and looked at other cars in stock.

The weight of the “custom_natural_vdp_view” event should be weighted much lower than a hard conversion and lower than an event which shows that the consumer started to calculate payments (custom_engaged_payment_shopper) or enter their trade information (custom_engaged_trade_shopper).

Using Facebook Conversion API and Tealium

Key events can be easily imported into Google Ads and used to optimize bidding, once Google Ads is connected to Google Analytics (GA4). The good news is that the same events which are being used for Google Ads can now be used for Facebook advertising! Using the Facebook Conversion API, agencies can select the events by which Facebook campaigns are optimized.

For example, inside Tealium there is a Facebook Audience connector (left icon) and a Facebook Conversion connector (right icon). The audience connector is used to move audiences into Facebook but the Facebook Conversion connector can be used to send the full set of conversion signals into Facebook.



To enable the Tealium partner integration in your Facebook Ads account settings, use the following steps:

1. Log into your Facebook Ads Manager account and select Events Manager from the menu.
2. In the menu, select Data Sources, then select the Pixel and click the Settings tab.
3. Scroll down to the Server-Side API section.
4. In the Partner Integration section, click Choose a Partner.
5. Select Authorize Tealium Connection, and click Continue to enable Tealium.

The steps to configure the Facebook Conversion API is found here:

[Tealium Facebook Conversions Connector Setup Guide](#)



Agencies who are running Facebook campaigns will see a significant lift in conversion signaling to Facebook when the API is used.

**Get the current version
of the ASC Specification:**







