Google Ads + GA4: What Auto-Tagging Controls, What You Control.

The complete system: how GA4 classifies Google Ads traffic, why Display shows up as Paid Search, and how to build custom channel grouping that works with auto-tagging.

This guide covers Google Ads auto-tagging (gclid). If your organization runs Display through DV360 or serves ads through Campaign Manager 360, those platforms use a separate auto-tagging system (dclid) with different source/medium behavior. A DV360 + GA4 guide is coming separately.

By Balázs Turán | Creative Data Engineers

SECTION 1

The Hook

You run a Display campaign in Google Ads. You check GA4. The traffic shows up as Paid Search.

You did not misspell anything. You did not forget a UTM parameter. The campaign name in Google Ads says "Summer_Display" in plain text. GA4 still calls it Paid Search.

This happens because GA4 does not use source/medium to classify Google Ads traffic into channels. It uses a dimension called "ad network type" that it retrieves from the gclid, server-side. You never see it in the URL. You cannot tag it. You cannot override it. If the campaign type was set up wrong in Google Ads, the channel is wrong in GA4. No amount of UTM tagging fixes it after the fact.

Most teams discover this when the numbers stop making sense. Display spend goes up, but the Display channel in GA4 stays flat. Paid Search grows instead. The agency says "we launched Display." GA4 says "that is Paid Search." Both are telling the truth about different things.

This guide breaks down the full system. What Google Ads auto-tagging actually sets (3 dimensions you cannot change). How GA4 translates those into channels (a mechanism that is invisible to you). And the 2 dimensions you do control through naming conventions, which are the only fields available for custom channel grouping when auto-tagging is active.

By the end, you will have:

- The complete dimension map (who controls what, where it lives in GA4)
- The default channel group classification rules for Google Ads traffic vs manual traffic
- Two ready-to-use naming conventions for utm_campaign and utm_content (7 fields each, underscore-separated)
- A custom channel grouping setup that works with auto-tagging, not against it
- A three-column exploration report to verify your own data

SECTION 2

Three Layers

Google Ads traffic flows through three layers before it lands in your GA4 reports. Each layer is controlled by a different system. Understanding which layer does what is the difference between reports that make sense and reports that contradict your ad spend.

Layer 1: Google Ads sets your dimensions.

When someone clicks a Google Ads ad, the gclid appended to the URL carries three cross-channel dimensions into GA4:

→ Source: google

→ Medium: cpc

→ Campaign: whatever you named the campaign in Google Ads

All three. Every campaign type. Search, Display, Shopping, Performance Max, Video. Source and medium are always google/cpc. The campaign type distinction does not live here.

This means you cannot tell the difference between a Search click and a Display click by looking at source/medium. They are identical.

Layer 2: GA4 translates the gclid into a channel.

GA4 does not use source/medium to classify Google Ads traffic. Instead, it retrieves a dimension called "ad network type" from the gclid via a server-side lookup to Google Ads. You never see this value in the URL. It is not a parameter you can set or override.

The mapping:

→ Ad network type = "Google Search" or "Google Partners" → Paid Search

→ Ad network type = "Google Display Network" or "Google TV" → Display

→ Ad network type = "YouTube" → Paid Video

→ Ad network type = "Cross-network" or "Google owned channels" → Cross-network (PMax, Demand Gen)

→ Campaign type = "Shopping" → Paid Shopping

This is invisible to you. When the agency picks "Display campaign" in Google Ads, ad network type comes back as "Google Display Network," and GA4 classifies the traffic as Display. When the agency picks the wrong campaign type, the wrong ad network type flows through, and GA4 classifies it into the wrong channel. The gclid carried that classification. You cannot fix it with UTMs.

Layer 3: You classify through naming conventions.

Two dimensions survive auto-tagging AND are available as custom channel grouping conditions:

→ Campaign name: whatever you name your campaign in Google Ads flows into the "Campaign name" dimension. That dimension is a CCG condition. Your naming convention is your first governance tool.

→ utm_content: lands in "Manual ad content." Also a CCG condition. Your free-form classification field. The one UTM parameter that both survives auto-tagging and is available for custom channel grouping.

Everything else you tag manually (utm_source, utm_medium, utm_campaign) lands in separate "manual" dimensions. GA4 does not use them for channel grouping when auto-tagging is active. They survive for reporting and comparison, not for classification.

SECTION 3

The Rules

GA4 runs two completely separate classification engines for default channel groups. Which engine fires depends on whether the click came from Google Ads or from a manually tagged URL. You need to know both, because your UTM fallback only works if the manual rules match your tagging.

Engine 1: Google Ads traffic (gclid resolved)

When GA4 resolves a gclid to a linked Google Ads account, it ignores source and medium for channel classification. Instead, it reads two metadata fields from the gclid: ad network type and campaign type. Both are set inside Google Ads when the campaign is created. You never see them in the URL.

The rules:

- → Source platform = "Google Ads" AND ad network type = "Google Search" or "Google Partners" -> Paid Search
- → Source platform = "Google Ads" AND ad network type = "Google Display Network" or "Google TV" -> Display
- → Source platform = "Google Ads" AND ad network type = "YouTube" -> Paid Video
- → Source platform = "Google Ads" AND ad network type = "Cross-network" or "Google owned channels" -> Cross-network (this is where Performance Max and Demand Gen land)
- → Source platform = "Google Ads" AND campaign type = "Shopping" -> Paid Shopping
- → Source platform = "Google Ads" AND ad network type = "Social" -> Paid Social

Every rule starts with source platform = "Google Ads." That condition is met when GA4 successfully resolves the gclid through a linked Google Ads account. If the Google Ads account is not linked, the gclid still sets source/medium to google/cpc, but source platform falls back to "Manual" and the manual classification engine takes over.

Engine 2: Manual traffic (UTM-tagged, no resolved gclid)

- → When there is no resolved gclid, GA4 falls back to pattern matching on source and medium. These are the rules that apply to your non-Google Ads paid traffic, your email campaigns, your social posts, and your UTM fallback when the gclid breaks.
- → Paid Search: source matches a list of known search engines (google, bing, yahoo, duckduckgo, and others) AND medium matches the regex ^(.*cp.*|ppc|retargeting|paid.*)$
- → Display: medium is one of "display", "banner", "expandable", "interstitial", "cpm"
- → Paid Video: source matches a list of video platforms AND medium matches the paid regex
- → Paid Social: source matches a list of social platforms AND medium matches the paid regex
- → Organic Search: source matches a search engine list AND medium is "organic"
- → Organic Social: source matches a social platform list OR medium matches ^(social|social-network|social-media|sm|social network|social media)$

→ Email: source = "email" OR medium = "email" OR source = "e-mail" OR medium = "e-mail"

Why this matters for your UTM fallback

When gclid breaks (consent blocks it, a redirect strips it, cross-domain tracking loses it), GA4 falls back to your UTM parameters. But it uses the manual rules, not the Google Ads rules. So your utm_medium needs to match the right pattern.

If your Google Ads Display campaign loses its gclid and your UTM says utm_medium=cpc, GA4 classifies that session as Paid Search (because cpc matches the Paid Search regex). Your Display traffic just moved to the wrong channel, not because of auto-tagging this time, but because your fallback UTM medium did not match the Display pattern.

The fix: set utm_medium=display for Display campaigns, utm_medium=cpc for Search campaigns, utm_medium=video for Video campaigns. That way, when the gclid fails and UTMs take over, the manual classification rules put the traffic in the right channel.

Google recommends setting all UTM parameters (utm_source, utm_medium, utm_campaign, utm_id, utm_source_platform) even when auto-tagging is active. Missing UTM parameters become (not set) in the manual dimensions, and if the gclid breaks, any parameter you did not set is lost.

Two engines, one session

A single session cannot be classified by both engines. If the gclid resolves, Engine 1 runs. If it does not, Engine 2 runs. There is no blending. This means the default channel for a session is determined entirely by which engine fired, and the rules are different enough that the same traffic can land in different channels depending on whether the gclid survived the click.

SECTION 4

Your Levers

Custom channel grouping in GA4 lets you split default channels into finer categories. Brand vs nonbrand search. Prospecting vs retargeting display. Dealer campaigns vs national campaigns. GA4 gives you seven fields to write rules against. When auto-tagging is active, most of them are locked. Two are useful.

The seven custom channel grouping conditions

1. Source (auto-tagged: always "google" for Google Ads)
2. Medium (auto-tagged: always "cpc" for Google Ads)
3. Campaign name (auto-tagged: your Google Ads campaign name)
4. Campaign id (auto-tagged from Google Ads, or your utm_id)
5. Default channel group (already classified by ad network type)

6. Manual ad content (your utm_content)
7. Source platform ("Manual" or "Google Ads")

Source and medium are useless for splitting Google Ads traffic. They are identical for every campaign type. Source platform distinguishes resolved from unresolved gclids, but that is a data quality signal, not a business classification. Campaign id is a numeric identifier with no readable structure.

That leaves three fields with real classification power.

Lever 1: Default channel group

GA4 already classifies Google Ads traffic into the right default channel (Paid Search, Display, Paid Video, Cross-network, Paid Shopping). You can use that as a starting condition and split further. This is the cleanest approach because you are building on top of a classification that is already correct, not rebuilding it from scratch.

Example rules:

→ Default channel group = "Paid Search" AND Manual ad content contains "brand" -> Paid Search Brand

→ Default channel group = "Paid Search" AND Manual ad content contains "nonbrand" -> Paid Search Non-Brand

→ Default channel group = "Display" AND Manual ad content contains "ret" -> Display Retargeting

→ Default channel group = "Display" AND Manual ad content does not contain "ret" -> Display Prospecting

Lever 2: Campaign name

Whatever you name your campaign in Google Ads flows into the "Campaign name" dimension in GA4. This dimension is a custom channel grouping condition. If your campaign naming convention is structured, you can write rules against it.

The naming convention is your first governance tool. If every campaign name starts with a market code and contains a funnel stage, you can split channels by market or funnel without touching UTM parameters. The campaign name is set once inside Google Ads. It requires no URL parameters. It cannot be stripped by redirects or blocked by consent.

The trade-off: campaign name is controlled by whoever manages Google Ads. If the agency does not follow the naming convention, the classification breaks. You need alignment between the analytics team and the media team on naming rules.

Lever 3: Manual ad content (utm_content)

This is your free-form classification field. utm_content lands in the "Manual ad content" dimension. It survives auto-tagging. It is available as a custom channel grouping condition. And unlike campaign name, you control it entirely through your tracking template.

You can pack multiple classification fields into utm_content using a structured naming convention with underscore separators. Brand flag, ad format, audience segment, funnel stage, explicit channel identifier. All in one parameter. Your custom channel grouping rules read the relevant field from the string.

One limitation: Manual ad content is not available alongside cost, click, or impression metrics from Google Ads. You can use it for session-based and conversion-based reporting, but you cannot cross it with ad spend data in GA4.

What is NOT available for custom channel grouping

These dimensions exist in GA4 but cannot be used as custom channel grouping conditions:

- → Manual campaign name (your utm_campaign): reporting and comparison only. Useful for auditing what UTM campaign values were set alongside auto-tagged sessions, but GA4 does not let you write CCG rules against it.
- → Manual source (your utm_source): reporting only.
- → Manual medium (your utm_medium): reporting only.
- → Manual term (your utm_term): reporting only.

This is why utm_content matters more than utm_campaign for classification purposes. Both survive auto-tagging. Only utm_content is available for custom channel grouping.

The dimension map

When both auto-tagging and UTMs are present on the same URL, GA4 splits them into two parallel sets of dimensions:

Auto-tagged (from gclid): Session source = google. Session medium = cpc. Session campaign = your Google Ads campaign name. These drive default channel classification.

Manual (from UTMs): Session manual source = your utm_source. Session manual medium = your utm_medium. Session manual campaign name = your utm_campaign. Manual ad content = your utm_content. Manual term = your utm_term. These are available for reporting, comparison, and (in the case of Manual ad content) custom channel grouping.

Session campaign and Session manual campaign name are always different for Google Ads traffic. Google Ads sets Session campaign from its own campaign naming. Your utm_campaign goes to Session manual campaign name. They serve different purposes: one is the media team's name, the other is the analytics team's name.

SECTION 5

Naming Conventions

You have two fields that both survive auto-tagging and carry classification power: your Google Ads campaign name (which becomes "Campaign name" in GA4) and your utm_content (which becomes "Manual ad content"). Both need a structured naming convention. Here are two ready-to-use templates with seven fields each, underscore-separated.

Campaign name convention (set inside Google Ads)

`Syntax: market_product_description_funnel_type_stage_startDate`

→ Field 1 - market: Two-letter country code. DE, AT, CH, UK, US. Lets you split channels by market without creating separate properties.

→ Field 2 - product: Product line or model identifier. Keep it short. Max 10 characters.

→ Field 3 - description: Free-text campaign descriptor. What is this campaign about, in one word. "purebrand", "crossover", "summer", "promo". Max 10 characters.

→ Field 4 - funnel: Marketing funnel position. Use fixed codes: aw (awareness), cs (consideration), cv (conversion), ly (loyalty). Four options, no ambiguity.

→ Field 5 - type: Campaign scope. "national", "dealer", "event". Tells you whether this is a central campaign or a local activation.

→ Field 6 - stage: Campaign lifecycle. "presales", "launch", "sales". Where in the product lifecycle this campaign sits.

→ Field 7 - startDate: Four digits, MMYY format. "0426" = April 2026. Tells you when this campaign started without opening Google Ads.

Final example: de_cx30_summer_aw_national_launch_0626

This convention gives you six dimensions to filter on in GA4 reports, plus a date stamp. Every field is position-fixed, so you can write custom channel grouping rules like "Campaign name contains _cv_" to isolate conversion campaigns, or "Campaign name starts with de_" to isolate Germany.

utm_content convention (set in your tracking template)

`Syntax: stream_format_goal_brandFlag_placement_product_channel`

→ Field 1 - stream: Audience type. "blank" for prospecting (new audiences, first touch), "ret" for retargeting (returning audiences). This field is independent of the funnel stage. You can retarget at any funnel level: awareness retargeting, consideration retargeting, conversion retargeting. This single field splits your entire paid media into two audience buckets.

→ Field 2 - format: Ad format. "banner", "video", "text", "carousel", "native", "responsive". Tells you what creative type was served.

→ Field 3 - goal: Campaign goal, meaning the specific KPI or conversion action this campaign optimizes toward. This is tied to the funnel stage but it is NOT the funnel stage name.

Examples per stage: for awareness campaigns, goals might be "scroll", "bouncerate", "timeonsite". For consideration: "pdfdownload", "configuratorstart", "forminteraction". For conversion: "lead", "purchase", "request". The goal tells you what success looks like for this specific campaign.

→ Field 4 - brandFlag: "brand" or "nonbrand". The single most important split for search campaigns. Also useful for display (brand safety targeting vs open exchange).

→ Field 5 - placement: Platform-specific placement code. "gdn" for Google Display Network, "yt-instream" for YouTube in-stream, "search-partners" for Google Partners. Gives you placement-level reporting in GA4.

→ Field 6 - product: Ad product identifier. "pmax" for Performance Max, "demandgen" for Demand Gen, "standard" for standard campaigns. Distinguishes campaign types at the UTM level.

→ Field 7 - channel: The default channel name this traffic belongs to. "paidsearch", "display", "video", "paidsocial". One value, matching the GA4 default channel group. No sub-channels here. The sub-splits come from reading other fields in the same string (brandFlag for brand/nonbrand, stream for prospecting/retargeting).

Final example (display prospecting): blank_banner_scroll_nonbrand_gdn_standard_display

Final example (display retargeting): ret_banner_configuratorstart_nonbrand_gdn_standard_display

Final example (brand search): blank_text_lead_brand_search_standard_paidsearch

How custom channel grouping reads utm_content

Your CCG rules combine the default channel group (already classified correctly by GA4 for Google Ads traffic) with fields from utm_content to create sub-channels.

→ Default channel group = "Paid Search" AND Manual ad content contains "brand" -> Paid Search Brand

→ Default channel group = "Paid Search" AND Manual ad content contains "nonbrand" -> Paid Search Non-Brand

→ Default channel group = "Display" AND Manual ad content contains "brand" -> Display Brand

→ Default channel group = "Display" AND Manual ad content contains "nonbrand" -> Display Non-Brand

The channel field at position 7 serves as a fallback classifier. When the gclid breaks and GA4 falls to manual rules, having "paidsearch" or "display" in utm_content gives you a secondary classification path. Your CCG can read it as an additional condition if needed.

The relationship between the two conventions

Campaign name is the media team's tool. It lives inside Google Ads. It describes the campaign from a media buying perspective (market, product, funnel, dates).

utm_content is the analytics team's tool. It lives in the tracking template. It describes the traffic from a measurement perspective (brand/nonbrand, format, placement, explicit channel).

Both are custom channel grouping conditions. Use campaign name for broad splits (by market, by funnel stage). Use utm_content for precise channel sub-classification (brand vs nonbrand, prospecting vs retargeting).

SECTION 6

Verify Your Own Data

Everything in this guide can be verified in your own GA4 property with a single exploration report. No BigQuery. No API. Just three columns in a free-form exploration that show you exactly how auto-tagging, manual tagging, and channel classification interact in your data.

Build the exploration

Go to Explore > Free form. Set the date range to the last 30 days. Add these three dimensions as rows:

Column 1: Session source/medium. This shows you what auto-tagging set. For Google Ads traffic, it will be google/cpc. If you see anything else (a publisher name, an exchange, "doubleclick"), that traffic came through a different auto-tagging system (DV360, CM360) or fell back to UTM parameters.

Column 2: Session default channel group. This shows you how GA4 classified the traffic. For Google Ads traffic, the channel comes from ad network type (Paid Search, Display, Paid Video, Cross-network, Paid Shopping). For manual traffic, it comes from source/medium pattern matching. Compare this column to what you expected. If Display spend is up but Display sessions are flat, look for those sessions in Paid Search.

Column 3: Manual ad content. This shows you your utm_content values. If this column is empty for Google Ads traffic, you have no utm_content set in your tracking templates. That means you have no custom channel grouping lever and no fallback classification if the gclid breaks.

Add Sessions as the metric.

What to look for

Filter for Session source/medium = google / cpc. Every row should be Google Ads traffic. Check the default channel group column. If all your campaigns show as Paid Search and you know you are running Display, the campaign type is set wrong in Google Ads. The ad network type flowing through

the gclid says "Google Search" when it should say "Google Display Network." That is a Google Ads setup problem, not a GA4 problem. The fix happens in Google Ads, not in your tagging.

Filter for Session default channel group = Display. Check the source/medium column. If you see google/cpc, that is Google Ads Display Network traffic classified correctly through ad network type. If you see publisher names with medium = cpm or display, that is DV360 or CM360 traffic. If you see your own UTM values, the gclid broke and GA4 fell back to manual classification.

Check the Manual ad content column. If your naming convention is in place, you should see structured values with underscore separators. Read the brandFlag field (position 4). Read the channel field (position 7). If those fields are populated and consistent, your custom channel grouping has what it needs. If they are empty or inconsistent, your tracking template needs work.

The three questions this report answers

1. Is my Google Ads traffic classified into the right default channels? Compare default channel group against what you know you are running in Google Ads.
2. Do I have utm_content populated for custom channel grouping? If Manual ad content is empty, you have no classification lever beyond the default.
3. What happens when the gclid breaks? Filter for rows where source/medium is NOT google/cpc but default channel group is a paid channel. Those sessions fell back to UTM parameters. Check whether the manual classification matches what auto-tagging would have produced. If your utm_medium was set to "cpc" for a Display campaign, the fallback sent it to Paid Search instead of Display.

One report. Three columns. Every assumption tested.

This exploration takes five minutes to build. Run it once a month. It catches campaign type misconfigurations, missing utm_content values, and gclid fallback problems before they corrupt a full reporting period.

What comes next

You now know how the system works. The naming conventions give you control over the two fields that matter. The next step is operationalizing them: configure your syntax once, generate URLs that follow it, hand the tools to your agency so they cannot deviate. That is what Trakr does. One place to define, generate, and govern your tracking URLs. No spreadsheets, no guessing, no "the agency used a different format." And I am building a version 2 with an API layer that catches misconfiguration at the ads platform level before the first click fires.

Join the waitlist: https://trakr.studio/#waitlist