Defining and Filtering Internal Traffic

The Analytics team often receives requests to filter out a client's internal traffic. Dealers, especially those within large groups that share inventory, may see internal traffic from employees on their sites checking inventory, pricing, or pulling up info for customers. This traffic, if significant, may inflate events and traffic in GA4. So what options do our clients have to avoid this?

Option 1: Filter out all internal traffic

GA4 allows for labeling internal traffic using IP addresses and then actively filtering out that internal traffic. Once this traffic has been defined and the filter is set to active, all ready-made reports in GA4, exploration reports, Looker Studio reports, and Prizm reports will reflect this change. Keep in mind that these filters are **not** retroactive, so they will only filter out internal traffic from the day they are created forward.

There are a few caveats to this:

First, and most importantly, when it comes to filters on GA4 properties, it's important to note that there is **no way** to retrieve filtered data once a filter is added.

With Universal Analytics, we had the luxury of having a raw (unfiltered) view that was reliable for unfiltered data. However, with GA4, any data manipulation (i.e. adding an IP filter) is conducted on the raw property itself, so there is no way to retrieve this data. Once it's filtered out of the raw data, it is gone for good.

Additionally, IP data isn't necessarily always accurate due to privacy concerns from Google, so adding an IP filter isn't a fix-all situation. Privacy and browser settings on individual devices may affect how accurate filters actually are at grabbing all of the internal traffic.

Option 2: Defining internal traffic

In addition to offering an option to filter out internal traffic via IP addresses from the raw data, GA4 also offers an option to define internal traffic.

What's the difference? Defining internal traffic allows a user to mark all traffic coming from internal IP addresses as **Internal Traffic**. By doing so, users can then build out exploration reports and set up a filter in the report to include or exclude that Internal Traffic without losing that data completely. It will still exist in the raw data, but can be viewed separately or removed altogether from reports.

Keep in mind: Internal traffic will have to be manually filtered out of every exploration report, ready-made GA4 report, and Looker Studio. However, we cannot filter the defined internal traffic out of Prizm, so it will not match GA4 reports or Looker Studio reports where the filter has been applied.

Instructions for defining internal traffic within the GA4 property, filtering defined internal traffic out of reports, and filtering out internal traffic of the raw data are provided in the following pages.



Defining Internal Traffic in a GA4 Property

• Log in to the GA4 account and navigate to the desired property. Once it has loaded, click on the gear icon in the bottom left corner of the screen.



• In the Admin settings, click on **Data streams** under the **Data collection and modification** section.

Analytics Dealer Inspire Analytics	Demo Sites Demo - GA4 - Cry searching "Insig	ghts"		
 Create Admin My preferences Setup Assistant 	Admin These settings apply to all users of this account and pr account settings Account	roperty. For settir	ngs that apply only to you, go to <u>My preferences</u> in f	the left navigation.
Account settings	These settings affect your analytics account <u>What's an a</u> Account details :옵: Account access management All filters	© © ©	3 Account change history面 Trash	0 0
 Data collection and modifica Data display Product links 	PROPERTY SETTINGS Property These settings affect your property <u>What's a property?</u>		Data collection and modification These settings control how data is collected and m	odified
	 Property details Property access management Property change history Scheduled emails Analytics Intelligence search history 	0 0 0 0	 ⇒ Data streams ⇒ Data collection ↑ Data import ⊗ Data retention ♀ Data filters ⊘ Data deletion requests 	0 0 0 0 0
• <	Data display These settings control how data is shown in your reports		Product links	



Defining Internal Traffic in a GA4 Property, continued

• Click on the data stream that needs internal traffic defined. Internal Traffic can be defined in each data stream if needed.

.ıl	Analytics Dealer Inspire Analytics	> DI Demo Sites a Demo - GA4 - Q Try searching "Insights"	:: 0 🕒
 ■ ● ●	+ Create Admin My preferences Setup Assistant Account settings Account Property settings Property settings Property	Data streams	Add stream •

• Once the **Web steam details** pages loads, scroll down to the **Google tag section** and click on **Configure tag settings**.

Even	ts	
+;	Enhanced measurement Automatically measure interactions and content on your sites in addition to standard page view measurement. Data from on-page elements such as links and embedded videos may be collected with relevant events. You must ensure that no personally- identifiable information will be sent to Google. <u>Learn more</u>	0
	Measuring: O Page views Scrolls O Outbound clicks + 3 more	¢3
B	Modify events Modify incoming events and parameters. Learn more	>
派	Create custom events Create new events from existing events. Learn more	>
Сī	Measurement Protocol API secrets Create an API secret to enable additional events to be sent into this stream through the Measurement Protocol. <u>Learn more</u>	>
0	Redact data Email inactive URL query parameter keys inactive URL query parameter keys inactive	>
Goog	gle tag	





Defining Internal Traffic in a GA4 Property, continued

• Scroll down to the bottom of the **Google tag** page and click on **Show more**.

× Google tag	
Configuration History Admin	
	Welcome to your Google tag The global site tag (gtag.js) is now the Google tag. With this change, new and existing gtag.js installations will get new capabilities to help you do more, improve data quality, and adopt new features – all without additional code. Learn more Dismiss
Your Google tag	Installation instructions
Google tag ⑦ Honda Demo 1 IDs: G-RZNFCEETR	Destinations ©
Tag quality: Excellent	No issues detected.
Settings Some tag settings apply only to	specific destinations, carn more about tag settings
Manage automatic e Configure which types of	f events your Google tap should automatically detect for measurement in associated destinations
→ Configure your doma Specify a list of domain	ins s for cross-domain measurement
Allow user-provided Configure whether your such data.	data capabilities Google tag should allow user-provided data to be included in measurement for destination products that accept 0 >
	Show more 🐱

• Click on **Define internal traffic.**

→←	Configure your domains Specify a list of domains for cross-domain measurement	>
#B	Allow user-provided data capabilities Configure whether your Google tag should allow user-provided data to be included in measurement for destination products that accept such data.	•
Ŷ	Collect Universal Analytics events Collect an event each time a ga() custom event, timing, or exception call from Universal Analytics occurs on your website	
€	Define internal traffic Define IP addresses whose traffic should be marked as internal	>
Ξ×	List unwanted referrals Specify domains whose traffic should not be considered to be referrals	>
0	Adjust session timeout Set how long sessions can last	>
٩	Override cookie settings Change how long cookies last and how they are updated	>
&	Manage data use across Google services Choose which Google services can receive consented data from end users in the European Economic Area (EEA) for advertising purposes	>
	Show less	

• Click **Create** to create a new internal traffic rule.

× Defir	e internal traffic 6 Honda Demo 1	
	Internal traffic rules Create No rules yet. Click "Create" to begin. Learn more about filtering out internal traffic	



Defining Internal Traffic in a GA4 Property, continued

- Fill out the **Rule name**, **Match type** and **Value** sections. We recommend leaving the **traffic_type value** as **internal**.
 - **Rule name**: the name can be anything to help clarify which internal traffic is being defined. In this example, we are using Corporate office.
 - **Match type**: choose the appropriate type of match from the list.
 - **Value**: IP address(es) are added here and should be formatted according to the match type chosen.
 - Multiple IP addresses can be added per rule by clicking on Add Condition.

×	Create internal traffic rule	G Honda Demo 1			Create
	Define traffic that sho appended with the sel	uld be marked as internal. Incoming lected value. Learn more about filteri	traffic from matching IP addresses will ng out internal traffic	have a "traffic_type" paramete	1
	Configuration				
	Rule name ⑦ Corporate office				
	traffic_type value ⑦ internal				
	IP addresses ⑦			What's my IP add	ress?
	Match type IP address equal	s	Value 123.456.789		Θ
	Add condition	1			

- Once done, click **Create** to create the rule.
- Once the rule is created, it will be visible in the **Define internal traffic** screen.

Internal traffic rules Q Create Order Rule name traffic_type value 1 Corporate office internal	Internal traffic rules Q Create Order Rule name traffic_type value 1 Corporate office internal	Define inter	nal traffic 🔓 Honda Demo 1		
Order Rule name traffic_type value 1 Corporate office internal	Order Rule name traffic_type value 1 Corporate office internal		Internal traffic rules		Q Create
1 Corporate office internal >	1 Corporate office internal >		Order Rule name	traffic_type value	
			1 Corporate office	internal	>

Repeat the preceding steps as many time as needed to define additional internal traffic.

Now that the internal traffic has been defined, users can either set the filter to be active which will remove internal traffic from the raw data (instructions on pages 6-7), or skip this step and manually filter out the defined internal traffic from exploration reports (instructions on pages 8-11).



Actively Filtering Out Internal Traffic in a GA4 Property

• In the Admin settings, click on **Data filters** under the **Data collection and modification** section.

+ Create -	Admin	roperty For setti	ings that apply only to you go to My preferences in the	left nevination
Il. Admin		operty. For setti	inga mar apply only to you, go to <u>my preferences</u> in the	. Ion navigation.
My preferences Setup Assistant Account settings ^ Account Property settings ^	ACCOUNT SETTINGS ACCOUNT SETTINGS These settings affect your analytics account <u>What's and</u> Account details Account access management	ecount? ⑦ ⑦	 Account change history Trash 	0 0
 Pote collection and modifica Data display Product links 	Property These settings affect your property <u>What's accounty?</u> Image: strain of the setting	0 0 0 0 0	Data collection and modification These settings control how data is collected and modification	ified ⑦ ⑦ ⑦ ⑦ ⑦ ⑦ ⑦ ⑦ ⑦

• Internal traffic that has been defined will display in this list. It should show **Testing** under **Current state**. Click on the filter that should be excluded from the raw data.

•	+ Create •		Data filters Filter event data in this property.	earn more about data filters				
0	My preferences Setup Assistant		Name	Filter type	Operation	Current state	Crea	te filter
Cri	Account settings Account 	^	Internal Traffic	Internal Traffic	Exclude	Testing	>	:

• This will open the **Edit data filter** screen. Scroll down, and change the Filter state from **Testing** to **Active**. Click **Save**.

× Edit d	ata filter	Save	:
	Filter details	1	
	Data filter name	/	
	Internal Traffic		
	Filter operation \odot		
	Exclude ~		
	Filter events with the following parameter value How do Lappend this parameter to my events?		
	Parameter name Parameter value		
	traffic_type internal		
	Summary Exclude events where the value of parameter <i>traffic_type</i> exactly matches <i>internal</i> .		
	Filter state Testing This filter will be evaluated and matching data will be identified with the dimension "Test data filter name", which available in reporting.	s	
	Active This filter will be evaluated and applied to incoming data. Matching data will be excluded from processing.		
	This filter will not be evaluated.		



Actively Filtering Out Internal Traffic in a GA4 Property, continued

• Once Save is clicked, GA4 will display the following warning. Activate filter must be clicked before the filter will be active. Clicking cancel will not activate the filter.

× Edit data filter
Filter details
Data filter name
Internal Traffic
Filter operation ③
Exclude
Activate filter?
Filter changes are by nature destructive and irreversible. They are also not retroactive. You should only enable this if you have already successfully tested your filter. <u>Learn more about filtering out internal traffic</u>
Cancel Activate filter
Filter state
Testing This filter will be evaluated and matching data will be identified with the dimension "Test data filter name", which is available in reporting.
• Active This filter will be evaluated and applied to incoming data. Matching data will be excluded from processing.

- Repeat the preceding steps as many time as needed to activate any additional filters.
- Verify that desired filters are now displaying as **Active** under **Current state**.

rty. <u>Learn more about data filters</u>	2		
Filter type	Operation	Current state	Create filter
Internal Traffic	Exclude	Active	> :
	ty. <u>Learn more about data filters</u> Filter type Internal Traffic	ty. Learn more about data filters Filter type Operation Internal Traffic Exclude	ty. Learn more about data filters

Once these steps have been completed, internal traffic matching the IP addresses will now be actively filtered out of the raw data in all GA4 reports for this property, and well as any Google Looker Studios and Prizm. Remember that this is only from the day the filter is set to active and moving forward. Any dates prior to that will be still include traffic from the provided IP addresses.



Filtering Defined 'Internal Traffic' in an Exploration Report

Step 1: Add the dimension of Test data filter name

• In the existing exploration report, click on the plus sign + next to Dimensions

🖻 Variables	×	🔅 Settings	
EXPLORATION NAME:		TECHNIQUE	
Internal Traffic Excluded		Free form	*
Last 28 days Apr 25 - May 22, 2024	•	VISUALIZATION	
SEGMENTS	+		• •
DIMENSIONS	+	₽	
Session source / medium		SEGMENT COMPARISONS	
: Test data filter name		+ Drop or select segn	nent

• In the search box, start typing **test data filter name**. Select this dimension once it displays and click on **Import**.

is have been rename	×	Select dimensions 2 of 377 selected	ed Q test da]	×		Import
Sec. 1		All 1 Predefined 1 Custo Dimension name	0			Collapse all	Expand all compatibles
×	^	General					
:: cluded		Test data filter name					
124							



Filtering Defined 'Internal Traffic' in an Exploration Report, continued

Step 2: Add a filter to remove defined internal traffic

• Once the test data filter name dimension has been added, scroll to the bottom of the Settings column and click on the plus sign + under **Filters**.



• In the Filters pop up box, click on Test data filter name.





Filtering Defined 'Internal Traffic' in an Exploration Report, continued

• Now that the filter is set for Test data filter name, select the Conditions of does not exactly match and enter the value of Internal Traffic in the bottom box before hitting Apply.

Note: **Internal Traffic** should automatically pop up as an option to select. If it does not, that means there hasn't been any traffic from those defined internal IP addresses. If the internal traffic has just been defined that may be why. This traffic is only labeled *after* it has been defined in the GA4 tag settings, not retroactively. It can take a few days for data to become available.

METRICS +	FILTERS
Sessions	Test data filter name
: Engaged sessions	Conditions*
	does not exactly match 👻
	Internal Traffic
	Cancel Apply
	Drop or select dimension

• Once **Apply** is clicked, the filter will automatically be applied to the tab. The report should now show only traffic that is NOT labeled as Internal Traffic.

A user can also now easily compare how the metrics change when internal traffic is included or excluded by duplicating the tab and either removing the filter or updating the filter to *only* show internal traffic.

• Duplicate the tab by clicking on the drop-down arrow to the right of the tab name, and select **Duplicate**.

Q Try s	earching "trend of conversions from organic	last month"
×	Exclude Intern +	
	Session source / r	↓ Sessions
imension	Totals Duplicate	2011
	1 google / organic	1.00
	2 (direct) / (none)	140
	3 google / cpc	5. S.



Filtering Defined 'Internal Traffic' in an Exploration Report, continued

• Update the new tab to show all traffic (including internal traffic) by simply removing the filter added in the first tab by clicking the **x** that appears in the **filter** box when it is hovered over.



• In order to view ONLY internal traffic, the filter can also be updated by clicking on the filter box, and then changing the **Conditions** to **exactly matches** and hitting **Apply**. Now the tab will only show internal traffic as defined in your tag settings.

i		3
+	exactly matches 🗸	4
C		5
	contains	6
ime Fl	begins with	7
+	ends with	8
		9
	matches regex	10
5	does not exactly match	
	exactly matches 🔹	
	Internal Traffic	
	Cancel Apply	

Creating these additional tabs will allow a user to easily see and compare how metrics change. This is a great way to see how much (or how little) of an impact internal traffic is having on a site's performance. We do recommend updating the name of the tabs to accurately reflect the data being pulled in as this will make it easier to differentiate between them in the future.

DI clients who wish to have their internal traffic defined or filtered out of the DI-managed GA4 property can reach out via support@dealerinspire.com or through their Performance Manager.

