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.
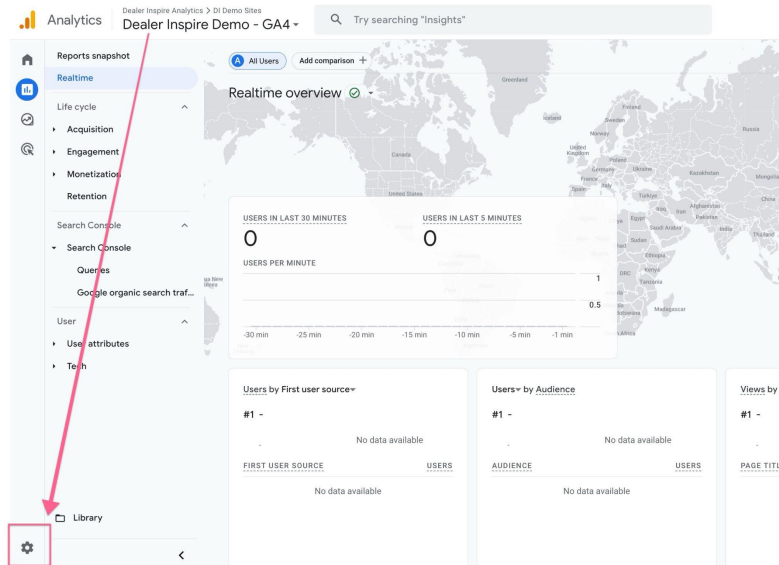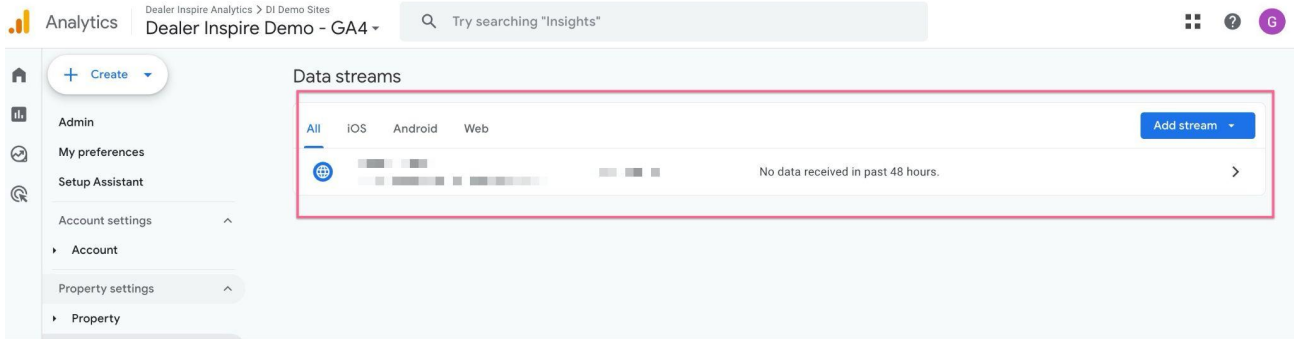

- In the Admin settings, click on **Data streams** under the **Data collection and modification** section.
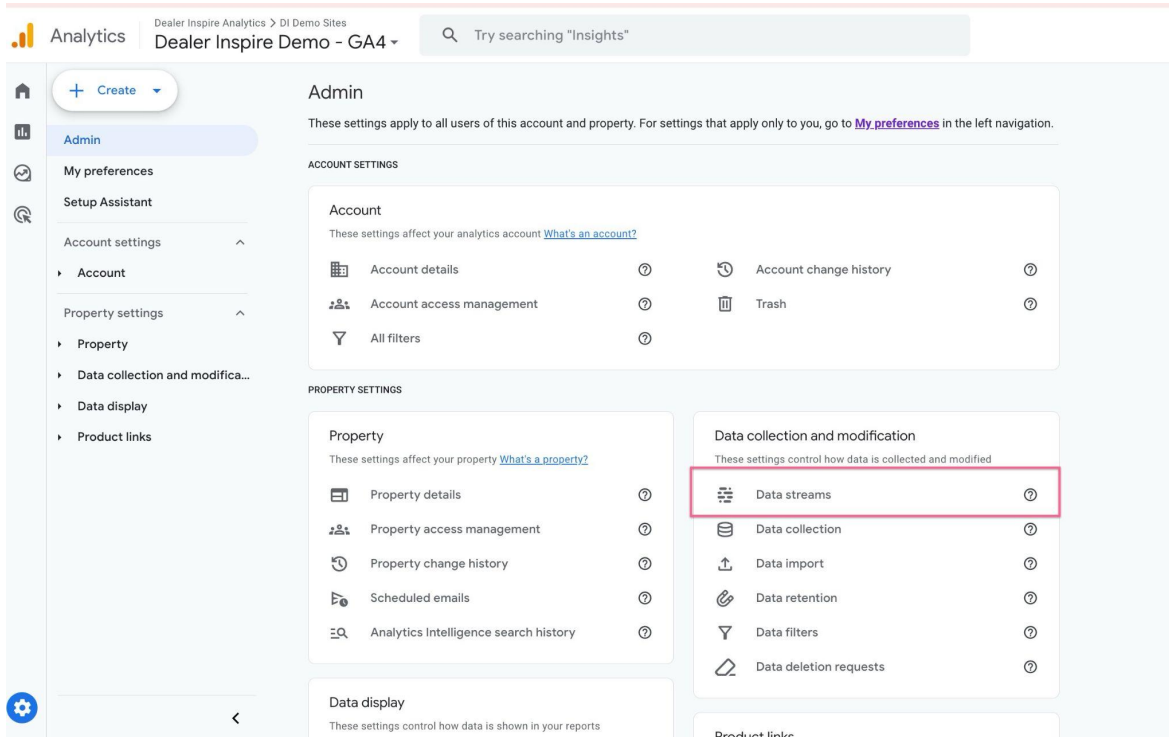
Defining Internal Traffic in a GA4 Property, continued

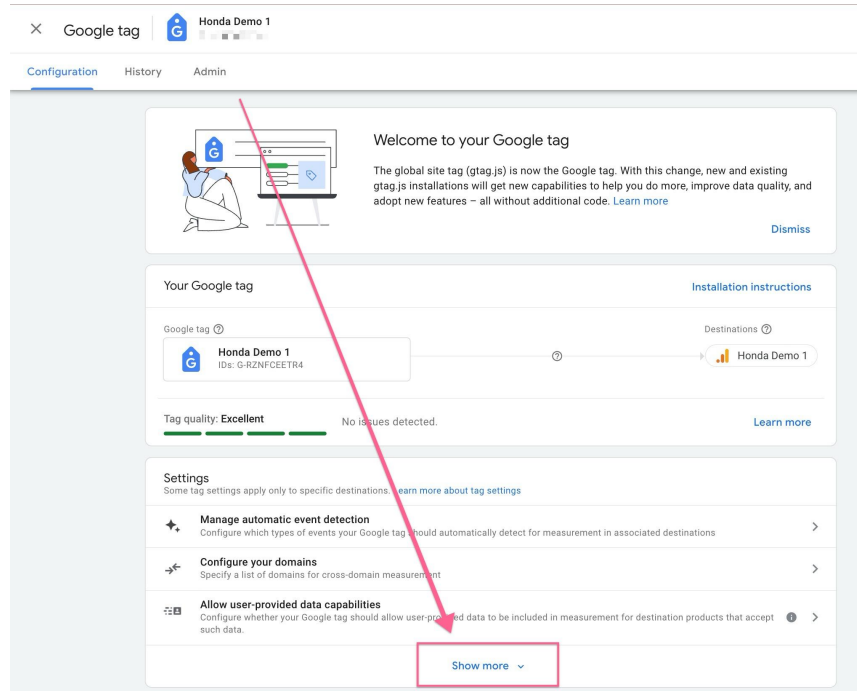- Click on the data stream that needs internal traffic defined. Internal Traffic can be defined in each data stream if needed.

- Once the **Web steam details** pages loads, scroll down to the **Google tag section** and click on **Configure tag settings**.
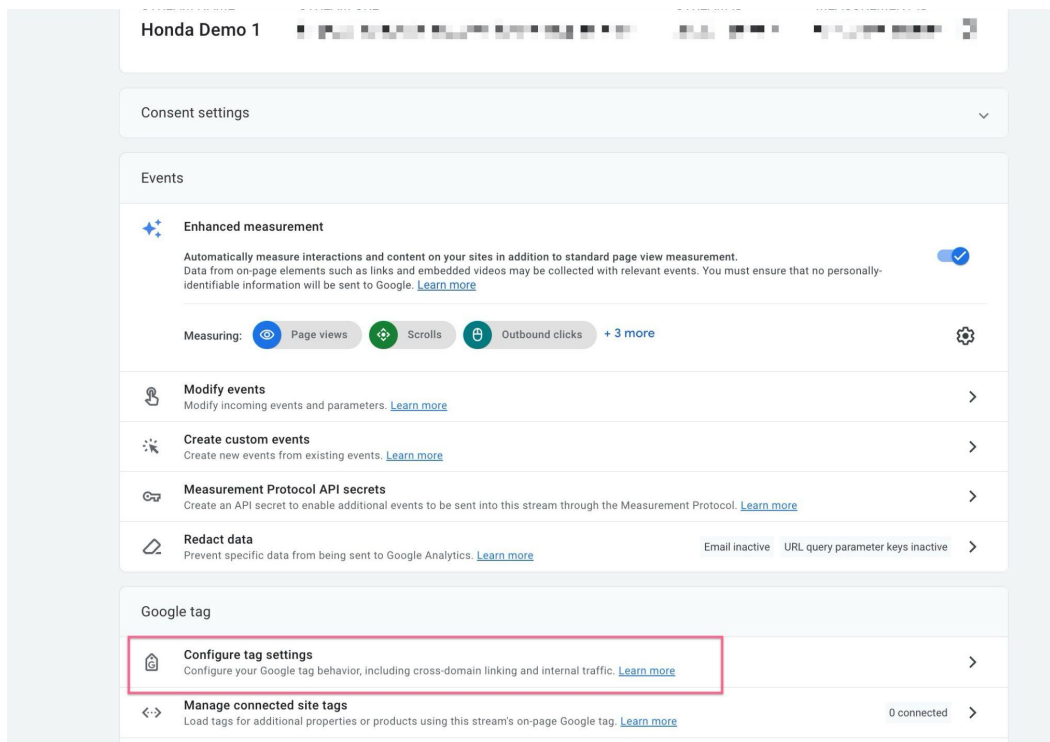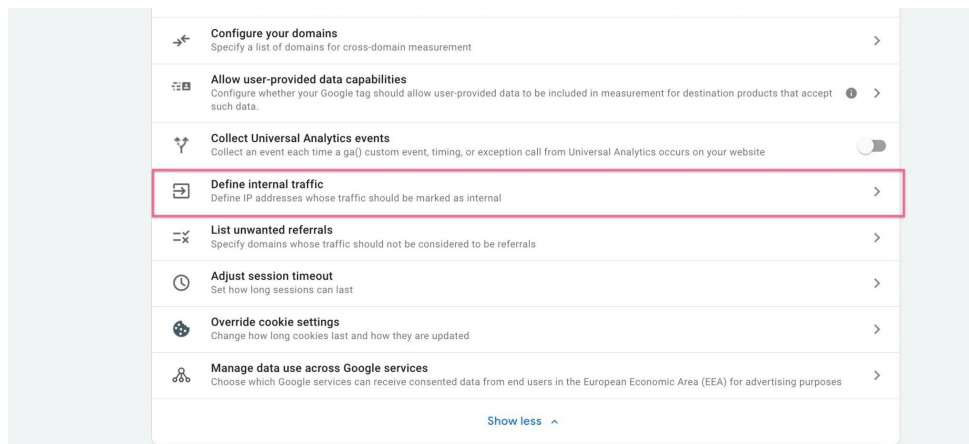
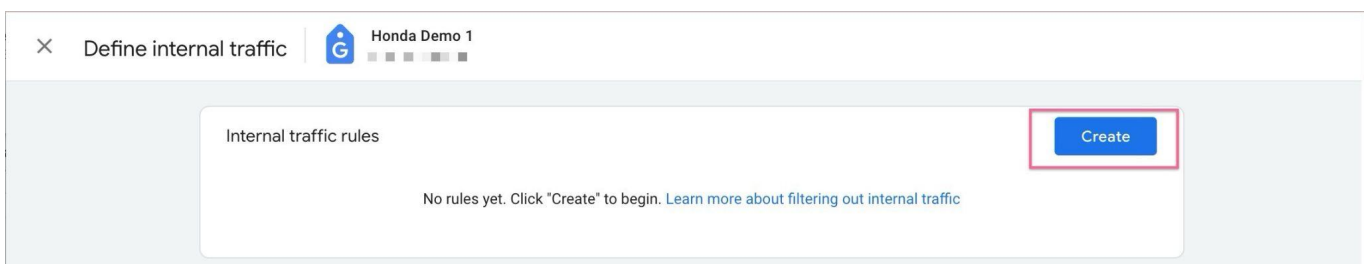## Defining Internal Traffic in a GA4 Property, continued

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

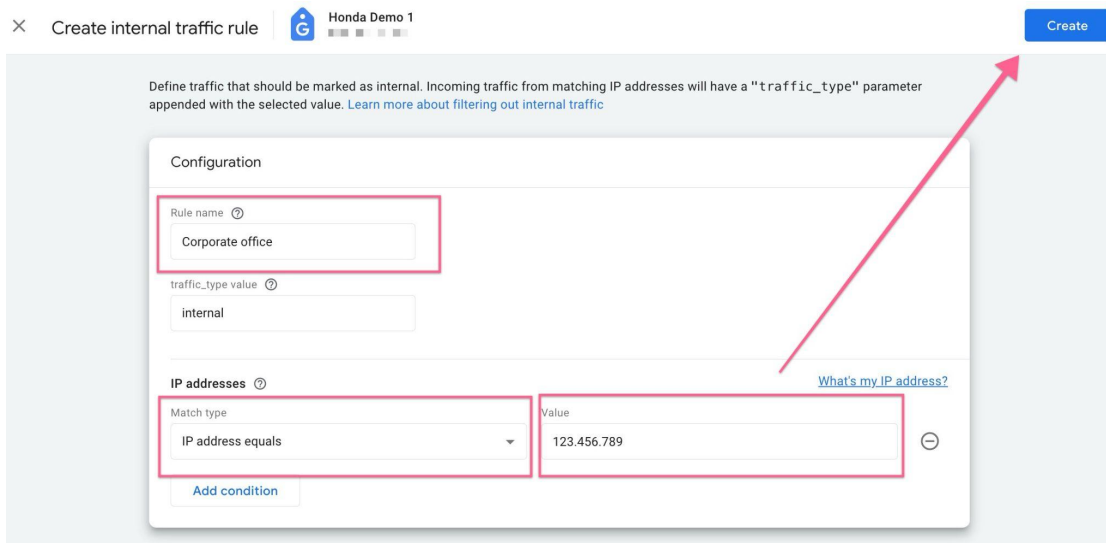- Click on **Define internal traffic.**

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

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.**
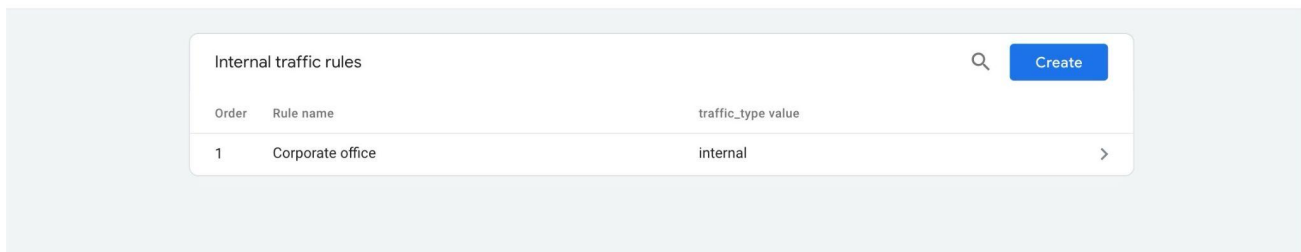
- Once done, click **Create** to create the rule.

- Once the rule is created, it will be visible in the **Define internal traffic** screen.

- 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).

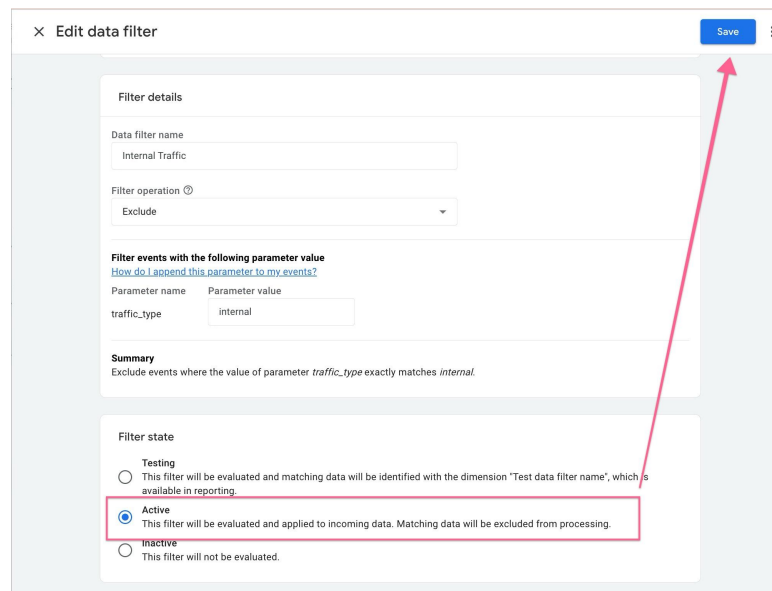## Actively Filtering Out Internal Traffic in a GA4 Property

- In the Admin settings, click on **Data filters** under the **Data collection and modification** section.
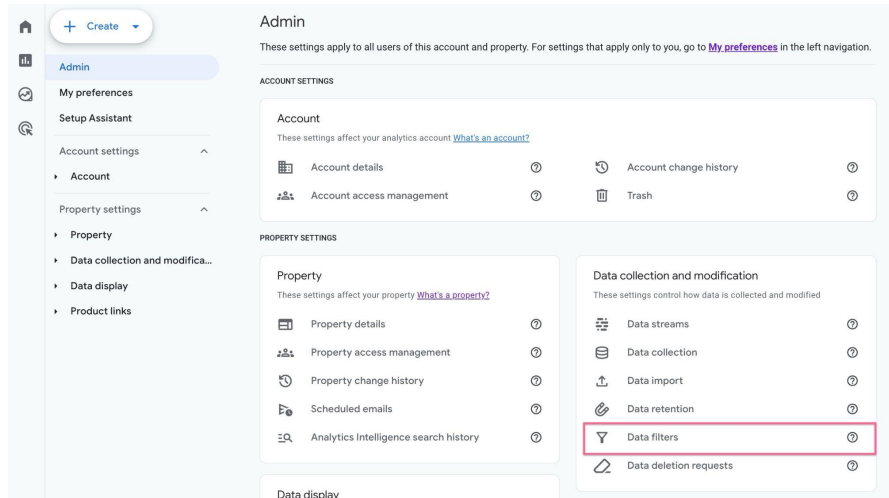
- Internal traffic that has been defined will display in this list. It should show **Testing** under **Current state**. Click on the filter that should be excluded from the raw data.
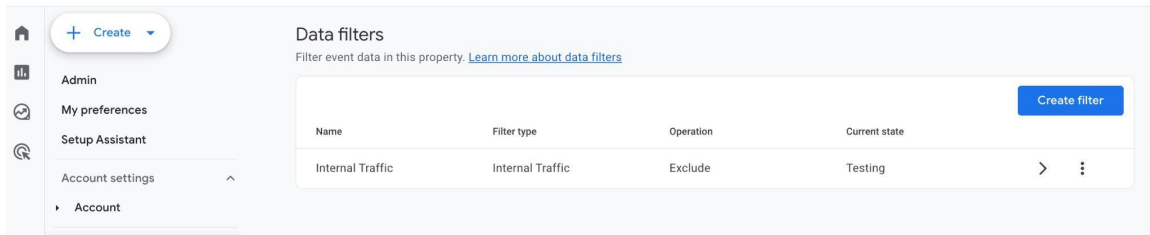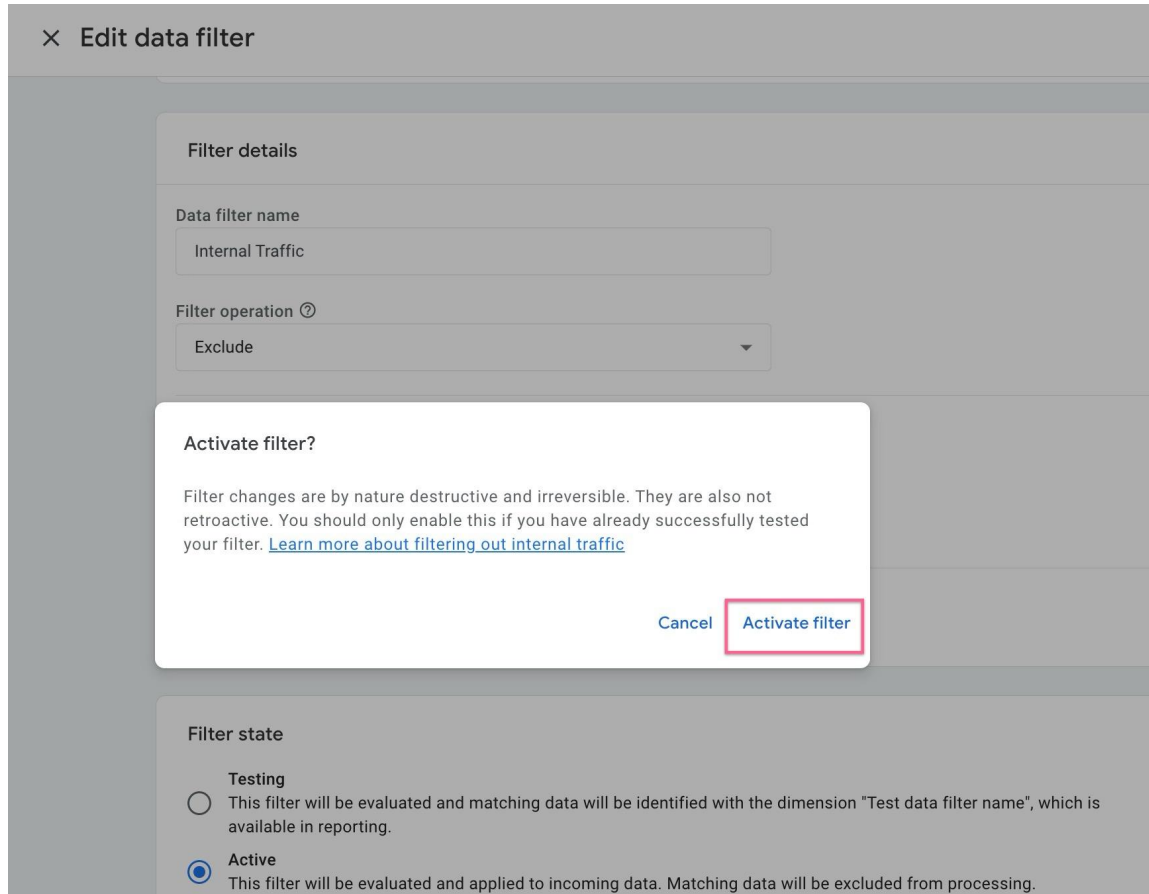

- This will open the **Edit data filter** screen. Scroll down, and change the Filter state from **Testing** to **Active**. Click **Save**.
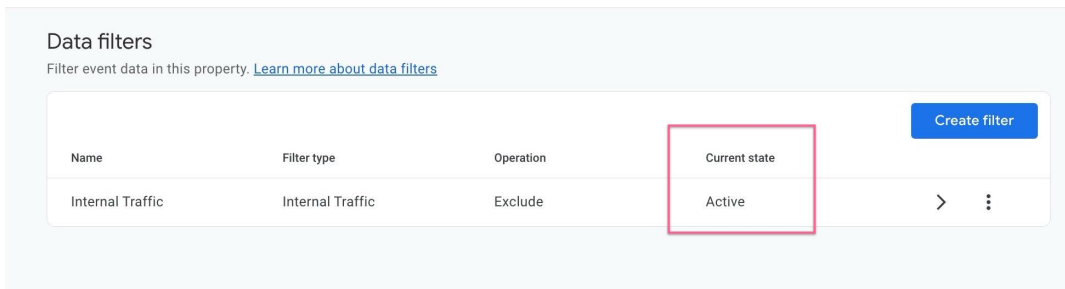
Actively Filtering Out Internal Traffic in a GA4 Property, continued

- 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.

- 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**.

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.
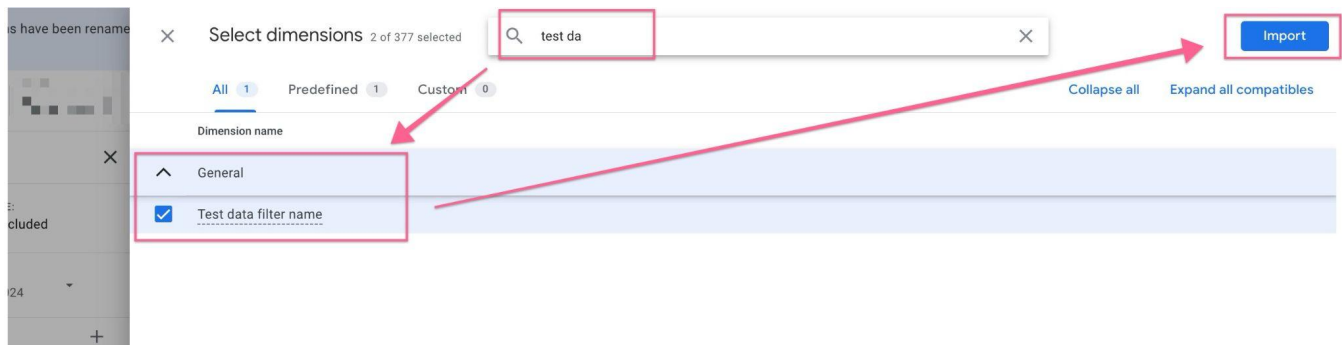
Filtering Defined 'Internal Traffic' in an Exploration Report

Step 1: Add the dimension of Test data filter name

- In the existing exploration report, click on the plus sign **+** next to **Dimensions**
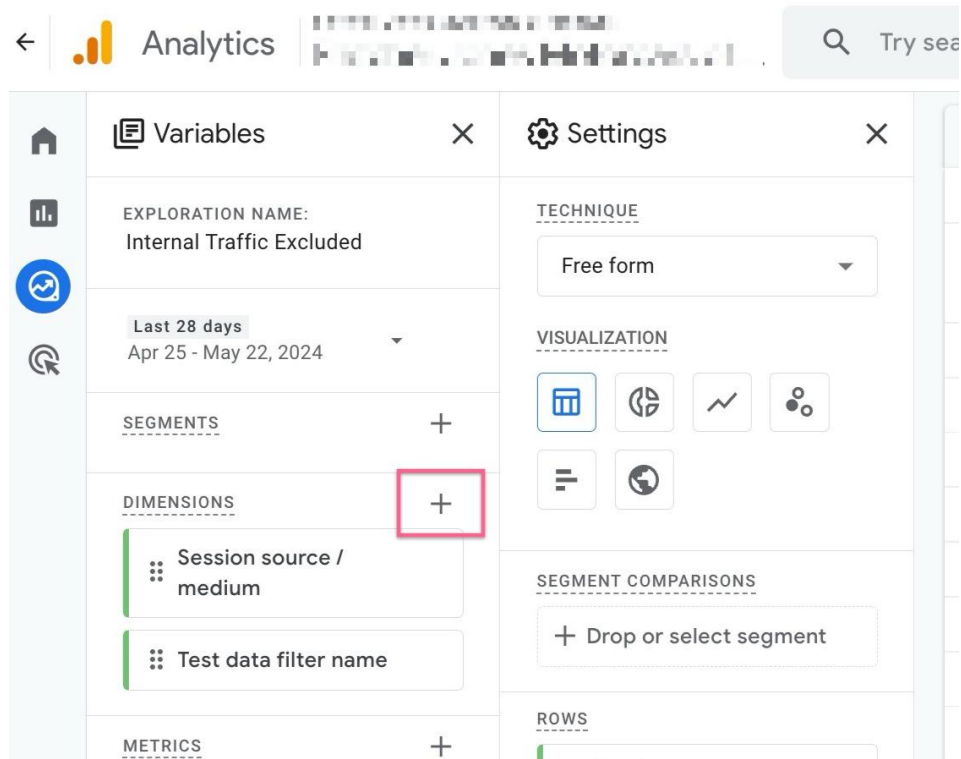
- In the search box, start typing **test data filter name.** Select this dimension once it displays and click on **Import.**
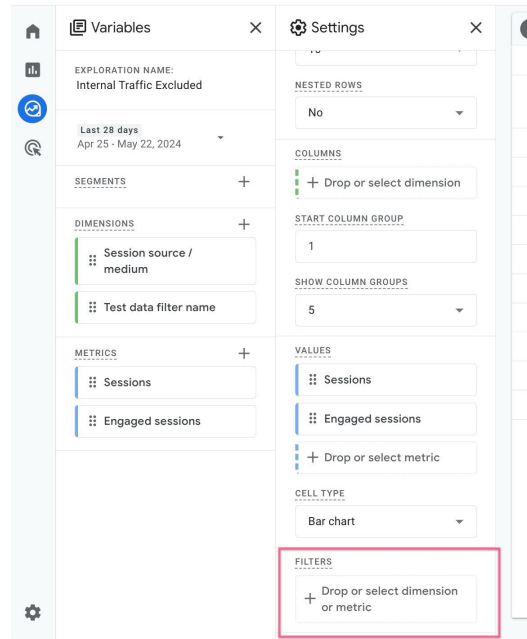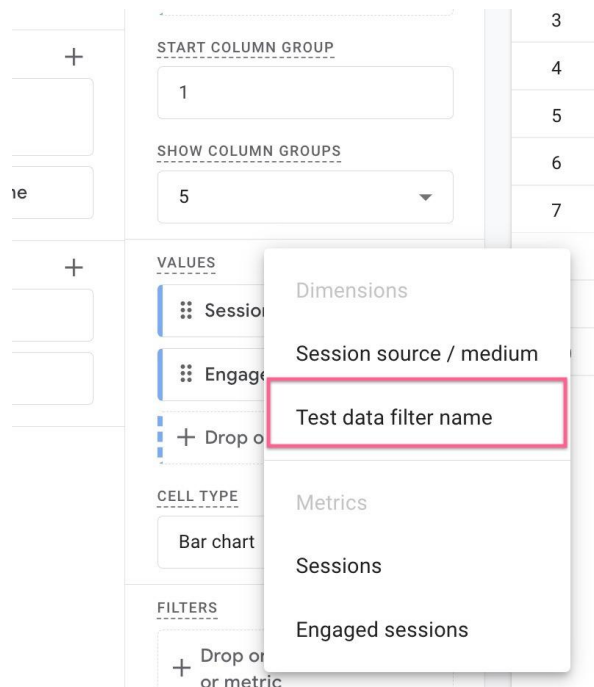
Filtering Defined 'Internal Traffic' in an Exploration Report, continued

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 T**est data filter name**, select the **Conditions** of **does not exactly match** and enter the value of I**nternal 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.
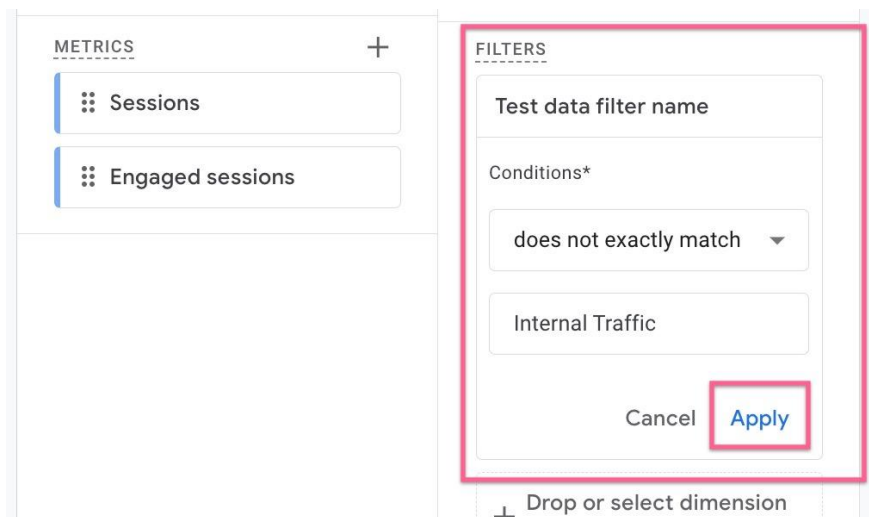
- Once **Apply** is clicked, the filter will automatically be applied to the tab. The report should now show only traffic that is NOT labeled as Internal Traffic.

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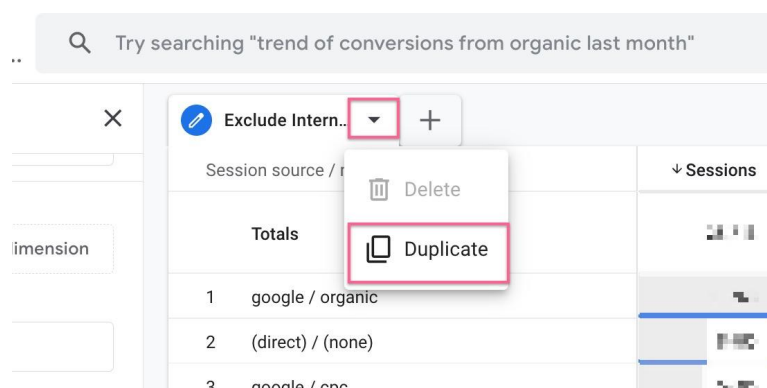
Filtering Defined 'Internal Traffic' in an Exploration Report, continued

- 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.
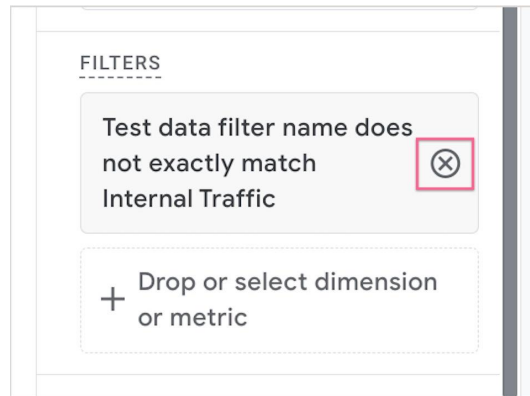
- In order to view ONLY internal traffic, the filter can also be updated by clicking on the filter box, and then changing the **Conditions** to **exactly matches** and hitting **Apply**. Now the tab will only show internal traffic as defined in your tag settings.
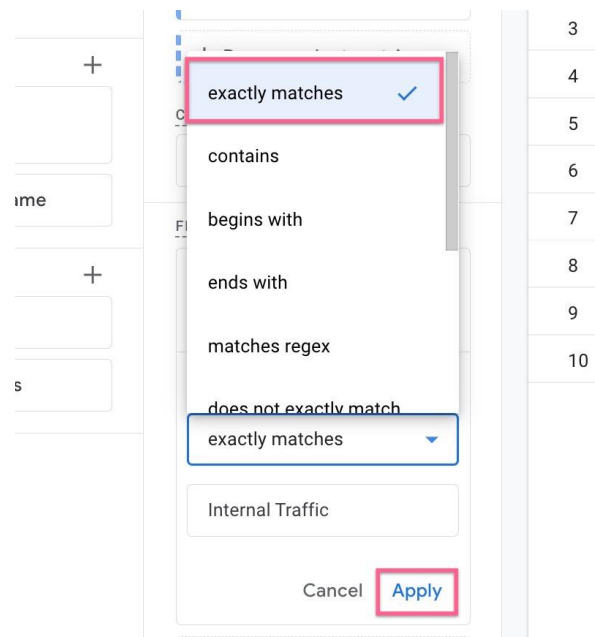
Creating these additional tabs will allow a user to easily see and compare how metrics change. This is a great way to see how much (or how little) of an impact internal traffic is having on a site's performance. We do recommend updating the name of the tabs to accurately reflect the data being pulled 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.