# **Google Analytics 4 - Reports**

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#### Resources

#### **Getting Started**

Official Google Analytics Help

- 1. <u>https://support.google.com/analytics</u>
- 2. <u>https://developers.google.com/analytics</u>

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Julius Fedorovicius has both a YouTube channel and a website that contains a lot of information on many aspects of Google Analytics. His content is a good starting point for how to do things and for dealing with various problems.

- 1. <u>https://www.analyticsmania.com/</u>
- Google Analytics Tutorials Playlist https://www.youtube.com/playlist?list=PLVz1bbeMX6hzdLVTdivgmUkCpgebOsjpr

The value **(Not set)** is going to be an ongoing problem in all reports. For an explanation of what it is all about and how to fix some aspects of it see.

3. Not set in Google Analytics 4. How to fix it? <u>https://www.analyticsmania.com/post/not-set-in-google-analytics-</u> <u>4/?utm\_medium=video&utm\_source=youtube.com&utm\_campaign=am+yt+-</u> <u>+not+set+in+ga4+2023</u>

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#### Regular Expressions:

Another feature that will recur in all reports is filtering. In a number of cases there will be a need for regular expressions as the best way of getting the expected result. Regular Expressions are a standard IT tool used for finding character patterns in text and files.

Here are some sites to get you started.

- 1. <u>https://www.optimizesmart.com/regular-expression-guide-for-seos/</u>
- 2. <u>https://measureschool.com/regular-expressions-google-tag-manager/</u>
- 3. https://www.lovesdata.com/blog/regex-google-analytics

Highly recommended: <u>https://regex101.com/</u>

This site will enable you to create and more importantly test any regex. It contains reference information, tools to explain what each part of the expression does, a debugger to track the effects of a regex, etc.

### Part 1: Standard reports:

These are similar to the types of reports that were available in the older version of Google Analytics. For example, the age and gender reports are located in the **User Attributes** section, source/medium is in the **Acquisition** section and device category reports are contained in the **Tech** section. All sections have an Overview page from which you can then go to a more detailed page for each specific report.

See also <u>Canva Related Data</u> below and then for creating your own standard reports see <u>Part 4</u> below.

#### Part 2: Exploration reports:

These are entirely new. They are more flexible and configurable than the standard reports. It is this type of report that will be of most use to us and from which we would mostly export our data into a csv file. These reports can include all the custom data fields we want to use in whatever combination is useful. By comparison the standard reports can have only at most two dimensions viewable at a time.

## Part 1: Standard Reports

	Reports snapshot Realtime	GA4 – Landing Page
	Life cycle <ul> <li>Acquisition</li> <li>Overview</li> <li>User acquisition</li> </ul>	1) Select - Engagement 2) Select – Landing page
	Traffic acquisition ✓ Engagement Overview Events	I will use the landing page report as a guide to the other standard reports as they all mostly follow the same format and can be used in much the same way.
	Conversions Pages and screens Landing page	You are able to create a modified version of one of the standard reports if the need arises. See <u>Part 5</u> below.
	<ul> <li>Monetization</li> <li>Retention</li> </ul>	For modifications that cannot be done in the standard reports you can design an exploration report that can replicate and extend the type of data available in a report. See <u>Part 2</u> below.
	User User Attributes Overview Demographic details Library	

Typical output for a Landing Page report. Unfiltered other than a specified date range. Date Range in this example: Jan1 – Jun 26, 2023

Analytics https://saco	ommunity.org - G Q Try searching "E	ehavior overview"						
Reports snapshot	🗛 🕀 🕴 Landing page: Landing pa	ge 🔺 🔹 🕂				Custom J.	an 1 - Jun 26, 2023 🔻	li < *
Realtime	Man Harrison	x x x x x x x x x x x x x x x x x x x	that has		ARACA	CHARLEN AND	and	mand
Life cycle	01 01 Jan Feb	01 Mar		01 Apr	V - W -	01 May	01 Jun	
Acquisition	<ul> <li>/search /org/202583-Births%2C_Deaths_%2526</li> </ul>	_Marriages_Registration_Office • /a	z/14289-Social_%2526_A	tivity_Groups • /org/2	205609-Greenbanks_Recy	cling_Depot		
- Engagement	Q Search					Rows per page: 10 💌	Go to: 1	( 1-10 of 1859
Overview Events Conversions	Landing page	+	↓ Sessions	Users	New users	Average engagement time per session	Conversions All events 👻	Total revenu
Pages and screens			270,259 100% of total	<b>199,365</b> 100% of total	180,829 100% of total	Om 43s Avg 0%	0.00	\$0.00
Landing page	1 (not set)		19,500	14,243	0	0m 05s	0.00	\$0.0
Monetization	2		13,218	10,139	8,665	1m 58s	0.00	\$0.00
Retention	3 /search		2,677	1,986	1,460	2m 15s	0.00	\$0.00
User ^	/org/202583- Births%2C_Deaths_%2526_Marriages_Re	gistration_Office	2,412	2,054	1,884	0m 28s	0.00	\$0.00
User Attributes	5 /az/14289-Social_%2526_Activity_Group	s	2,317	2,109	1,735	2m 26s	0.00	\$0.00
• Tech	6 /org/205609-Greenbanks_Recycling_Dep	ot	1,541	1,362	1,243	0m 30s	0.00	\$0.00
	7 /org/232697-Justices_of_the_Peace0	nkaparinga	1,525	1,189	1,056	0m 40s	0.00	\$0.00
	8 /az/14456-Food_Assistance		1,523	1,286	1,001	1m 23s	0.00	\$0.00
	9 /org/236678-Justices_of_the_PeaceP	layford	1,503	1,168	1,065	0m 28s	0.00	\$0.00
	10 /org/200616-Gawler_On-Demand_Bus_Se	ervice	1,465	981	840	0m 27s	0.00	\$0.00

#### Search Landing Pages.

For when we need to search for a specific SAcommunity page.



Type in the search criteria next to the Lens symbol.

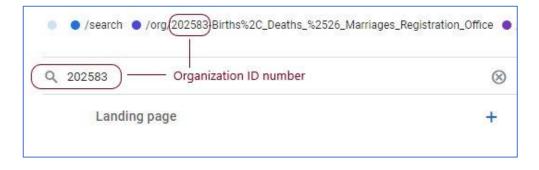
You can search by any text here:

e.g., a search for the text "Georganas" will lead you to the following landing page data. /org/203559-Georganas%2C\_Steve\_MP\_-\_Federal\_Member\_for\_Adelaide

#### **Organization Search by ID number**

Type in the ID number next to the Lens symbol.

This is the ID number for the Births, Deaths & Marriages Registration Office - 202583 Page Path: /org/202583-Births%2C\_Deaths\_%2526\_Marriages\_Registration\_Office



The landing page data for the Births, Deaths & Marriages Registration Office 2412 Sessions recorded in the selected date range.

Overview		
Events		1
Conversions		A
Pages and screens		MMM
Landing page		V $V$
Monetization     Retention	accord the second	a hat a
User ^	01 01 0 Jan Feb M	
User Attributes	/search /org/202583-Births%2C_Deaths_%2526_Marriages_Registration_Office	e 🔮 /az/14289-Social_%2526_
<ul> <li>Tech</li> </ul>	Q 202583	8
	Landing page -	+ ↓ Sessions
		<b>2,412</b> 0.89% of total
	/org/202583- Births%2C_Deaths_%2526_Marriages_Registration_Office	2,412
Library		

#### **Remove Search Filter**

To remove a search filter, click on the cross within circle symbol. Just deleting the number or text from the search box will not revert the screen to an unfiltered output.

Search Org/202583-Birtl	ns%2C_Deaths_%2526_Marriages_Registration_Office
Q 202583	Click here to clear search: 🛞
Landing page	+

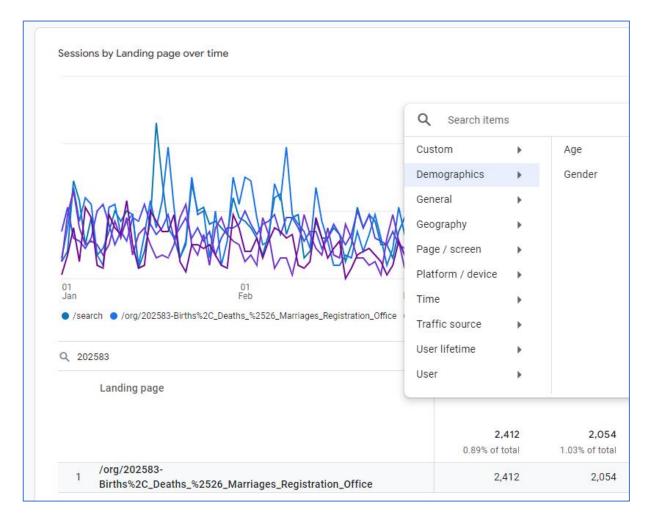
#### Additional Fields

You can also modify a landing page report to combine the default dimension with another data field column.

Click on the blue + symbol to see and select an additional data field. You can add a number of additional fields or dimensions to the report but only one of the extra fields will be active or viewable at any one time.

/search /org/202583-Births%2C_Deaths_%2526_Marriages_Registration_Office		C_Deaths 9-Social_ 509-Gree	
Q 202583	⊗	/org/205609-Gree	
Landing page	Click here to add new elements to the output	essions	
	0.89%	2,412 of total	
/org/202583- Births%2C_Deaths_%2	26_Marriages_Registration_Office	2,412	

#### Choose from a whole range of built in data fields from GA4. Our Custom Data fields are also available.



## Age data for this specific landing page.

202	2583		$\otimes$	
	Landing page	Age 👻	×	↓ Sessions
				<b>2,34</b> 1.05% of tota
1	/org/202583- Births%2C_Deaths_%2526_Marriages_Registration_Office	unknown		2,079
2	/org/202583- Births%2C_Deaths_%2526_Marriages_Registration_Office	35-44		72
3	/org/202583- Births%2C_Deaths_%2526_Marriages_Registration_Office	25-34		65
4	/org/202583- Births%2C_Deaths_%2526_Marriages_Registration_Office	45-54		65
5	/org/202583- Births%2C_Deaths_%2526_Marriages_Registration_Office	55-64		60

## Gender data for this specific landing page.

4	202583		8		
	Landing page	Gender 👻	×	↓ Sessions	
				<b>2,412</b> 1.06% of total	
	/org/202583- 1 Births%2C_Deaths_%2526_Marriages_Registration_Office	unknown		2,066	
	/org/202583- Births%2C_Deaths_%2526_Marriages_Registration_Office	female		188	
	/org/202583-	male		158	

#### **Canva Related Data**

The following types of information can all be obtained by temporarily changing a setting in one of the existing standard reports.

**Filtering:** They can all also have a filter applied to them to narrow the results to a specific council, electorate, or any other desired criteria. (see <u>Standard Report Filter</u> below)

## Age, Gender

1) Open the "**Demographic details**" report in the User -> User Attributes section.

User	^
<ul> <li>User Attributes</li> </ul>	
Overview	
Demographic details	
Audiences	

#### 3) Select Age or Gender from the list

	Q Search items
	Country
	Region
1	City
-	Language
2	Age
3	Gender
4	Interests

2) Click on the drop-down list arrow next to the default displayed item "Country"

Change the default data field to the one you need.

Country	•	+

#### 4) The output of this report is now Age.

	Age 👻	+	↓ <u>Users</u>
			<b>52,697</b> 100% of total
1	unknown		44,407
2	25-34		1,780
3	35-44		1,690
4	45-54		1,483
5	55-64		1,161
6	18-24		1,069
7	65+		1,054

## **Device Category**

1) Open the "**Tech details**" report in the **Tech** section.

✓ Tech	
Overview	
Tech details	
<ol> <li>Select Device category from the list</li> </ol>	2
Q Search items	
Browser	
Device category	
Device model	
Screen resolution	

**2)** Click on the drop-down list arrow next to the default displayed item "Browser"

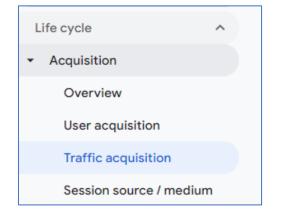
Browser	•	+

4) The output of this report is now Device Category.

	Device category 👻 🕂	↓ Users
		<b>52,694</b> 100% of total
1	mobile	29,631
2	desktop	21,336
3	tablet	1,484

## Source/Medium

1) Open the "Traffic acquisition" report in the Life Cycle -> Acquisition section.



**2)** Click on the drop-down list arrow next to the default displayed item "Session Default channel group"

Q Search...

Session default channel group 👻 🕂

#### 3) Select Session source / medium from the list

		-		
	Q Search items			Session source / medium 👻
	Session default channel group			
	Session source / medium			
	Session medium		1	google / organic
			2	(direct) / (none)
1	Session source		3	bing / organic
2	Session source platform		4	m.facebook.com / referral
3	Session campaign		5	onkaparingacity.com / referral
		1		

#### 4) The output of this report is now Source / Medium.

↓ Users

52,323 100% of total 45,892 5,128 557 138 119

#### **Standard Report Filter:**

We would also want to separate out the results of these reports based on such criteria as a Council or State or Federal electorate. Since all the above reports follow the same standard format, they all also have the same method for implementing a filter.

1) Click on	Add Filter +
All Use	Add comparison +
,	etails: Device category
Add filter	<u>+</u> )

#### **3)** Filter with selection criteria filled in.

$\leftarrow$ Build filter X
CONDITIONS (BUILD UP TO 5)
Dimension
Council -
Match Type 🕐
contains -
Value
Salisbury
+ Add new condition

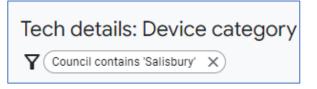
 This new section will appear on the right-hand side of the window.

← Build filter	×
CONDITIONS (BUILD UP TO 5)	
Dimension	Ū
Select dimension	•



There is an Apply button further down towards the bottom of this section. This button will save the filter and make it active.

4) The filter is now active.



**NOTE:** Only up to 5 filters can be used at any one time.

Unfiltered report: All areas and users for the selected time period

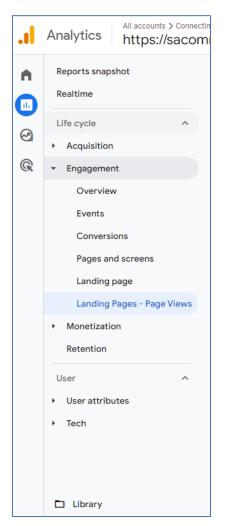
	Device category 👻 🕂	↓ Users
		<b>52,694</b> 100% of total
1	mobile	29,631
2	desktop	21,336
3	tablet	1,484

Filtered: Council contains Salisbury, i.e., City of Salisbury

	Device category 👻 🕂	↓ Users
		<b>2,089</b> 100% of total
1	mobile	1,155
2	desktop	891
3	tablet	44

#### Landing Pages – Page Views

## s (custom report)



The purpose of this report is to measure the page views for SAcommunity. By contrast most other reports use sessions as the main metric.

This report is a modified version of the "*Pages and screens*" report. The changes include,

**Dimensions**: "Landing page + query string" or "page\_title" have replaced the default dimension of "Page path and screen class"

**Metrics**: "Conversions" and "Total revenue" have been deleted from the modified report. They are not relevant to anything that SAcommunity does or the information we need in this report.

**Filter**: A filter may be included to limit the report output to only the organization listings. You can always remove or change a filter to select a different subset of data.

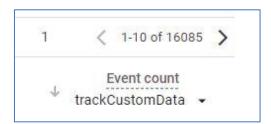
For example, Landing page + query string contains '/org/

Or use the regular expression version: Landing page + query string matches regex ^/org/[0-9-].+\$





Search: You can combine a filter with the search function to get different results again.

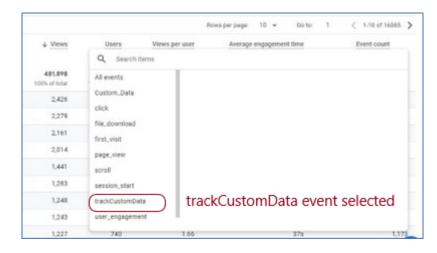


#### **Event Count**:

This by default shows all events. Not all are useful to know.

If you select trackCustomData as the event to be viewed, then you also get a metric that is directly equivalent to page views.

Select an event from the list of events information collected by Google Analytics including our custom event of trackCustomData.



#### Typical Output:

2	Search,			Rows per page	10 👻 Golta:	1 < 1-10 of 16085
	Landing page + query string + +	4 Views	Users	Views per	Average engagement	Event count trackCustomDate *
		481,898	267,403	1.80 Aug 0%	40s Avg 0%	456,697 17.57% of tota
1.	/org/236678-Justices_of_the_PeacePlayford	2,426	1,425	1.70	44s	2,30
2	/org/205609-Greenbanks_Recycling_Depot	2,279	1,353	1.68	30s	2,15
3	/org/202693-Eastern_Community_Mental_Health_Service	2,161	1,191	1.81	43s	2.000
4	/org/232697-Justices_of_the_PeaceOnkaparinga	2,014	1,235	1.63	48s	1,89
5	/org/222697-Port_Pirie_GP_Plus_Health_Care_Centre	1,441	377	3.82	2m 34s	1,434
6	/org/200452-Gordon_McKay_Child_Development_Unit _Lyell_McEwin	1,283	763	1,68	326	1,21

#### **Download Report Data**

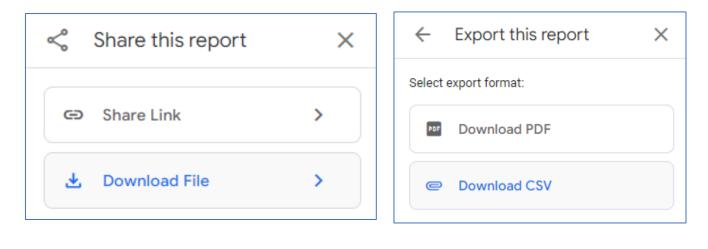
#### **Standard Reports:**

1) Top Right Corner, click on the Share Report symbol

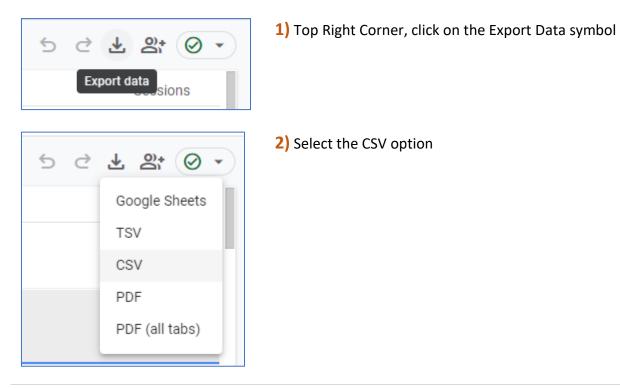
#### 2) Click on Download File

#### 3) Click on Download CSV

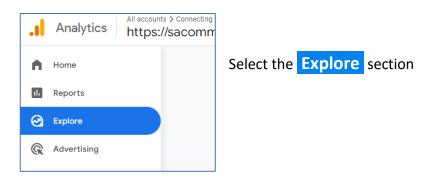
坐



#### **Exploration Reports:**



## Part 2: Exploration Reports



#### **Prepared Templates:**

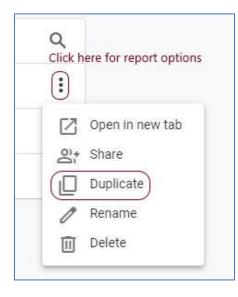
I have created several reports here. Template reports are prefixed with R1, R2...R6 etc. Each has a specific purpose and has been optimized for that purpose.

#### Please treat these created reports as templates and guides. They are not to be directly used.

Туре	Name 🗸	Owner	Last modified 🛛 🗸	Property
2	R1-Custom Data-All Pages	SAcommunity Volunteers	10:18 AM	https://sacommunity.org - GA4
2	R2-Non Organization Pages	SAcommunity Volunteers	11:05AM	https://sacommunity.org - GA4
2	R3-Organization Pages Only	SAcommunity Volunteers	11:05AM	https://sacommunity.org - GA4
8	R4-Electorates and Council	SAcommunity Volunteers	11:33 AM	https://sacommunity.org - GA4

Make a **COPY** of a template report (**Duplicate**) and work with the copy. Experiment with the copy as you like but the original template should remain intact.

#### Further specialised template reports will be created over time.



The report **R3-Organization Pages Only** is the one that we would mostly use and is the most appropriate for getting council data. (Equivalent to what we have been using in the older version of Google Analytics)

You may delete a copy of a report when you are done with it.

If you create a new type of report that may be useful for everyone else please mark it as a template; continue the R1, R2...R6 sequence.

#### Report purpose and usage.

These reports are designed to also work with our custom data. This will include such fields as DatasetID and Primary Category. Further custom fields that can be included are OrgType (Organization Type), State Electorate and Federal Electorate. Also, we can get an actual Council Name as opposed to just the DatasetID.

Most of the reports will have the following information:

- Page Title "Waikerie District Historical Society |SAcommunity Connecting Up Australia"
- Page path and screen class "/org/227303-Waikerie\_Australia\_Day\_Committee"
- Sessions
- Event count
   With Event count is trackCustomData or "Event Label exactly matches trackCustomData" then this value is functionally identical to the number of page views.

#### Exclude (not set)

The reports will all also normally have a setting that removes the output (not set). Leaving the (not set) items will contaminate our results. Fortunately, they are easily filtered out. The (not set) items can be excluded via a Segment setting or you can get the same result by using a Filter instead.

All the reports have a date range option. Use that to select the time period for which to create an excel file and then a Power BI report, e.g., July1, 2023 – June 30, 2024

#### **R1-Custom Data-All Pages**

This will list all SAcommunity pages that have been visited in a specified time period.

#### **R2-Non-Organization Pages**

This report is designed to get only the pages that are not an organisation listing. This will include such pages as.

Page path and screen class	Page path and screen class
/ (SAcommunity Home Page)	/orglist/K
/thesaurus/13745-	/orglist/L
Members_of_Parliament_%28State%29	/orglist/M
/orglist	/node/856 (blog entry)
/thesaurus/14210-Stagecraft	/node/842 (blog entry)
/az	/taxonomy/term/16563

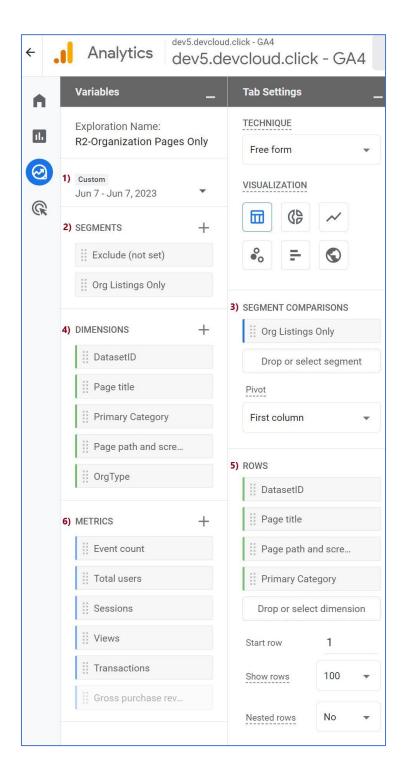
#### **R3-Organization Pages Only**

This report is optimized for extracting data about organization listings only. The reverse of the above report.: it will include entries such as below. Other dimensions are available to be included.

DatasetID	Page path and screen class
09COP17	/org/232872-Ellis%2C_Fraser_MPState_Member_for_Narungga
09MIDM17	/org/208221-Mannum_LPO
09TTG17	/org/203988-0%27Grady_DramaWynn_Vale
09WATR17	/org/210800-Kangaroo_Inn_Area_School

## What is inside an Exploration Report.

Variables Column:These are the data fields or Dimensions that you may use in the report.Tab Settings Column:These are the data fields that are currently active or in use in the report.



#### Variables / Tab Settings Columns

 Date Range – click on the down arrow next to a displayed date to open up a standard date selection window.

#### 2) Segments

The first step in selecting the type of data that will appear in the report. (see below - <u>Create a segment</u>)

Maximum of 10 segments allowed per exploration report.

#### 3) Segment Comparisons

The segments that are currently active.

Drag and Drop from the list of defined segments onto the Segment Comparisons list to make a segment take effect.

#### 4) Dimensions

These are the data fields that may be included in the report. (See image below for sample output.)

#### 5) Rows

These are the dimensions currently active in the report. Maximum of 5 rows or dimensions usable at any one time.

#### 6) Metrics

Counts of relevant events, summary, and totals figures for activity on the SAcommunity website.

Continuation of Variables and Tab Settings section.

	METRICS +		VALUES	
	Event count		Event cour	nt
	Total users		Sessions	
	Sessions		Drop or s	elect metric
	Views		Cell type	Plain t 💌
	Transactions			
	Gross purchase rev	8)	FILTERS	
			DatasetID	begins wi
x				ct dimension or etric

#### 7) Values

Metrics that are currently active and that will appear in the report. The metrics listed here are standard predefined objects that are automatically collected by Google Analytics.

It is possible to create custom metrics, but we are not using any such in our reports.

#### 8) Filters

The next step in refining the data that appears. See below for an example.

You can apply up to 10 filters per tab

Sample Output from the above report.

- The filter active in this example is "DatasetID begins with 53LOWA33" or Loxton Waikerie District Council.
- The event count shown here is our custom event **trackCustomData** that is activated via PHP & JavaScript code whenever any SAcommunity page is viewed. For our purposes this is effectively identical to page views.

				Segment	Org Listings Only	ý	Totals	
Data	asetID	Page title	Page path and screen class	Primary Category	Event count	Sessions	↓ Event count	Session
	Totals				<b>2</b> 100.0% of total	<b>1</b> 100.0% of total	<b>2</b> 100.0% of total	100.0% of tota
1	53LOWA33	Waikerie Australia Day Committee   SAcommunity - Connecting Up Australia	/org/227303- Waikerie_Au stralia_Day _Committee	Community Organisation & Development	1	1	1	13
2	53LOWA33	Waikerie District Historical Society   SAcommunity - Connecting Up Australia	/org/194111-W aikerie_Dist rict_Histori cal_Society	Environment & Heritage	1	1	1	

See, Add a Dimension further below on how to select dimensions (variables) to be included in a report.

See, **Exploration Report Filters** further below on how to create and use filters.

## Create a Segment:

I am using segments to implement a subset of permanent filters on a report. Separate from any other filtering conditions we might want to use.

The main intended purpose for segments however is to create comparisons between, for example, different market areas for sales of products, or to compare different types of user activity etc.

1) Click on the cross next to Segments

; +	+

#### 2) Select: Event Segment

Create a custom segment Select the type of segment you want to create		
Ser segment For example, users who have previously purchased a product.	Session segment For example, all sessions originating from Campaign A.	Sevent segment For example, all events that took place at a particular location.
Use a reference Prebuilt audience suggestions for you to consider. General	Templates	🎢 Predictive
Prebuilt audience suggestions for you to consider.	Templates           Non-purchasers           Users that have not made a purchase	<ul> <li>Predictive</li> <li>Purchasers</li> <li>Users that have made a purchase</li> </ul>

#### Typical segment setup page.

← Untitled segment	C'H
Provide a short description	
Include events when:	\$ - D
Add new condition 👻	Or 🛞
And	
+ Add condition group to include	
C Add group to exclude	

<del>\</del>	Untitled segment
	Provide a short description
	Include events when:
A	Add new condition 👻
A	nd
+	Add condition group to include
Ō	Add group to exclude

#### "Untitled segment"

Change this to a meaningful name. Just overtype where it says "Untitled segment" with the new name.

Click on arrow next to **Add New Condition** to get a list of Dimensions (as below)

It is possible to get very complex combinations of conditions, using AND, OR. Include, Exclude, regex etc.

You can usually build up all required filter conditions within the one condition group.

The option "Include events when" can be changed to "Exclude events when" instead.

All the event scoped dimensions that are available to the report. We are mostly interested in our custom data dimensions.

← Untitled	segmer	it	
Provide a sh	ort descrip	tion	
Include even	ts when:		
Q Search ite	ems		
Events	^	Event-scoped	^
Events	•	Council	Council
Dimensions	^	DatasetID	DatasetID
Attribution	•	Event Category	event_category
Custom	•	Event Label	event_label
Demographics	•	Federal_Electorate	Federal_Electorate
Ecommerce	•	OrgType	OrgType
Event	•	PostCode	PostCode
Gaming	•	Primary Category	Subject
General	•	State	State

### **R3-Organization Pages Only**

Include events when:	:	
DatasetID	•	does not contain (not set) ×
AND		
DatasetID	•	does not match regex *\$ ×
AND		
DatasetID	•	does not contain (data deleted) $\times$
AND		
Landing page + query string	•	matches regex ^/org/[0-9-].+\$ ×

This segment based on DatasetID will retrieve only the data for organizations and none of the other pages with-in SAcommunity that people may have looked at.

regex = Regular Expression

^\$ = blank field, no characters at all in the selected data field.

## ^/org/[0-9-].+\$

This expression is designed to locate any Landing page + query string entries that have a pattern that matches e.g. /org/195350-

must include the text string "/org/" followed by a set of numbers, followed by the "-" dash symbol.

This will collect only the entries that are a direct page view of the organization listing itself and not any page views that may lead or have led to the organization page or any subsequent page that is not itself also an organization listing.

Will Output /org/195350-LIFE /org/194961-Para\_Hills\_Club\_-\_City\_of\_Salisbury /org/197115-Eureka\_Care\_Communities\_-\_Salisbury

#### Will NOT Output

/az/14145-Crafts Para Hills Club - City of Salisbury
/thesaurus/14715-Community\_Transport
/az/14429-Table\_Tennis Mawson Lakes Sports Centre
/user Northern Futures Inc.

Filter from the custom Engagement section report

# Landing page + query strin... X

Landing page + query string contains '/org/'

#### **Landing Pages - Views**

Or alternatively when we don't want to use a regular expression, we may use the simpler text pattern: /org/

e.g., Landing page + query string contains '/org/'

#### **Event Count as a substitute for Page Views**

Some reports do not display the Views (Page Views) attribute in a way that is useful for us. But if there is an Event Count column then we can change that to show only the event trackCustomData. This will then operate identically to page views.

In some cases, we may need to use the filter:- "Event Label exactly matches trackCustomData".

## **R2-Non-Organization Pages**

4	Non Org Pages	
	Provide a short description	
	Include events when:	
C	DatasetID	▪ matches regex ^\$ ×
A	And	
+	Add condition group to inclu	de
0	Add group to exclude	

Any pages within SAcommunity that are not an actual organization listing.

The reverse of the above example.

This will include such pages as, thesaurus entries, A-Z lists, subject searches, blog entries, anything in the about section etc.

#### matches regex ^\$

All non-organization pages will **not** have any data for the DatasetID variable. We are actually looking for blanks in this variable. This same condition will also automatically exclude any (not set) entries or other unwanted entries in this report.

## **R5-Blog Entries**

This report is for obtaining which blog entries have been viewed or edited. The only dimensions required are Page Location and Page Title. As usual the most useful metrics are Event Count and Sessions. All blog entries have the text pattern **/node/** and using this as a filter will exclude any result that is not a Blog page.

1) Use either a Segment	2) Or use a Filter
Include events when:	FILTERS
Page location	Page location contains /node/

#### **Typical Result**

Pag	je location	Page title	Event count	Sessions
	Totals		<b>3,580</b> 100.0% of total	820 100.0% of total
1	https://sacommunity.org/ node/1054	Feature: K-pop - Modern Dancing in Adelaide   SAcommunity - Connecting Up Australia	155	64
2	https://sacommunity.org/ node/948/edit	Robe Council (District Council of Robe)   SAcommunity - Connecting Up Australia	136	8

## {Data Field} does not match regex (\(not set\)|(^\$))

One very useful filter that can be applied to any data field is (\(not set\)|(^\$)). It will find all entries that are either a blank or contain the string pattern (not set).

This must be inverted to work correctly. Use it with the "does not match regex" condition.

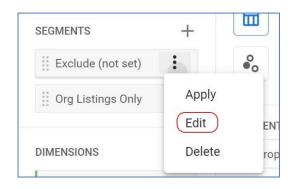
This will then filter out any entries in a data field that are either a blank or (not set) resulting in data field values that we actually want to see.

^	Primary Category 🕢 🔹
	Primary Category does not match regex '(\(not set\) (^\$))'

#### **Edit a Segment**

If you need to change a segment. You can do so by clicking on the three dots and then selecting "Edit".

You will get a warning about using an active segment if it is currently in use. If need be, hit Apply after you finish editing or drag and drop it again to the Segment Comparisons section.



#### **Segment Failure**

If at any time you apply a segment and get this result, then you might be able use a filter or combination of filters instead to get the required result.

No data for this combination of segments, values, filters, and date range. Try editing the variables or settings or remove them.

This usually occurs when the *combination* of data fields that you are trying to display may not actually have any data in one or some of the data fields, or it may just be GA4 being temporarily weird for no known reason at all.

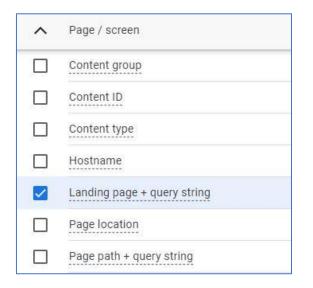
#### **Create a Dimension**

Click on the + symbol		
	DIMENSIONS	+
	]] DatasetID	
	E Council	

This will open a window as below. In this example, some dimensions have already been added to this report. (indicated by the white tick in a blue box)

÷ .		nmunity.org - GA4 Sacommun	×	Select dimensions 7 of 177 selected Q Search dimensions		import
	Variables	Tab Settings		All 177 Predefined 167 Custom 10	Collapse all	Expand all compatibles
	Exploration Name: R4-Electorates and Council	TECHNIQUE		Dimension name		
0		Free form	$\sim$	Attribution		
G.	Custom Jul 17 - Jul 17, 2023 💌	VISUALIZATION	^	Custom		
~	SEGMENTS +			Council		
	Exclusions	•₀ =		DatasetID		
	DIMENSIONS +			Event Category		
	ii DatasetID	SEGMENT COM		Event Label		
	II Council	Drop or se		Federal_Electorate		
	Eederal_Electorate	Pivot		OrgType		
	ii State	First column		PostCode		
	II State_Electorate			Primary Category		
	Eanding page + que	ROWS	<b>~</b>	State		
	II Page title	ii DatasetID	<b>~</b>	State_Electorate		
		💠 Page title	$\sim$	Demographics		

Landing page + query string already exists as a dimension in this report. To add another dimension simply click on the relevant tick box, repeat as necessary.



When you have selected the dimensions you need, click on the **Import** button.

The selected dimension/s will now be usable in the report.

	Import
Collapse all	Expand all compatibles

You can have many dimensions imported into a report **BUT**, there is a **maximum of 5 rows** (of dimensions) displayable or usable for any one report at any one time on any one tab.

You can get around this to some extent by adding a new tab or page to the report and including the additional dimensions on the new tab. See below: <u>Tabbed Pages</u>

\_\_\_\_\_

## **Exploration Report Filters:**

#### **View Existing Filter:**

To see how an existing filter is configured you can either.

**1)** Click on the filter dimension

	c to see filter tents.
Filter	
begins with	*
53LOWA33	
CANCEL	APPLY

2) hover the mouse over the existing filter.



#### DatasetID

Could be instead any other dimension that exists in this report.

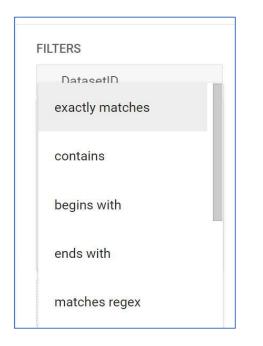
#### **Create a Filter:**

- **1)** Click on the Filters box.
- 2) Select a dimension from the list of dimensions that exist in the report. e.g., DatasetID

VALUES		Dimensions
Event count		DatasetID
E Sessions		Page title
Drop or	select n	Primary Category
	_	Page path and screen class
Cell type	Pla	Metrics
TERO	-	Event count
Drop or sel	ect dime	Sessions
	netric	

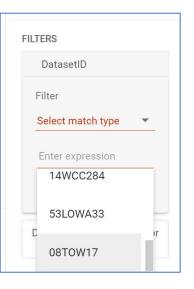
**4)** Once the dimension is selected then choose the match type

Not all match conditions will display a drop-down list.



5) Select the expression to filter against.

You can choose an expression from a dropdown list or type it in directly if it is not on the list.



## 6) APPLY the filter

## **Tabbed Pages**

Each Exploration Report can also have multiple tabs or pages showing different dimensions and / or types of objects and charts on each tab.

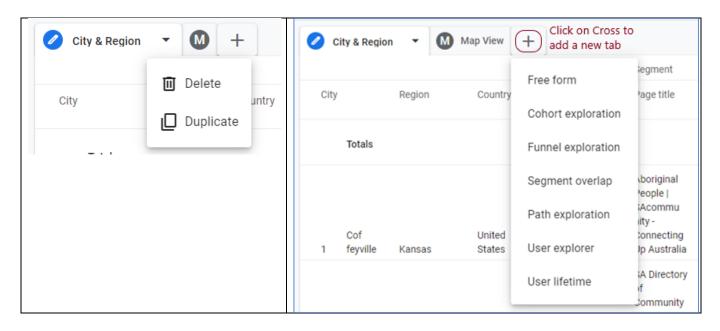
#### Example 1: Report - R8-External Page Referrers

Page Referrers	•	S Search Engines	+
			Segment
Page title		Landing page + query string	↑ Page referrer

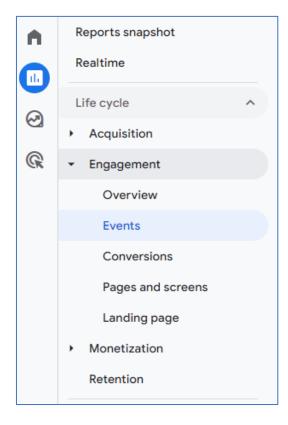
P Page Referrers	Search Engines	•	+
	Se	gment	t
Landing page + que	ry string Pa	ge ref	errer

#### Example 2: Report - R6-International Searches

- 1: Click on the down arrow next to a tab name to duplicate the page or to delete the page.
- 2: Click on the cross at the end of the tab list to add a new page.
- 3: You can rename the page by directly overwriting the default text that appears as the name of the an existing page or new page.



## Part 3: Events



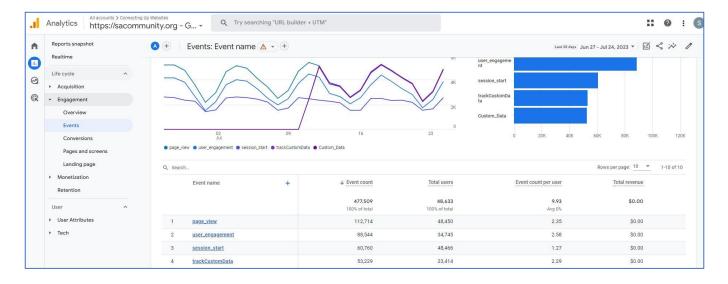
There are a number of standard events that take place as a web page is loaded and is viewed and interacted with by a user.

The parameters or variables related to an event can be seen in a summary page for that event.

Select the **Events** section to access the data for any standard event and also our custom event.

Use the other standard reports or create some exploration reports to work with this data in more detail or to export any of the selected data. Or copy and modify a standard report to display the exact data needed. See <u>Modified</u> <u>Standard Reports</u> below.

The CSV exports from the Events pages are not especially useful or easy to read and use.



#### Overview page for Events

The 3 topmost occurring standard events for a webpage plus our custom event - trackCustomData. Click on any of the events to see a more detailed page for that event.

You can add a second field to the data view by clicking on the + symbol to the right of Event Name. e.g., include a breakdown by country.

	Event name +	↓ Event count	Total users
		<b>477,509</b> 100% of total	<b>48,633</b> 100% of total
1	page_view	112,714	48,450
2	user_engagement	88,544	34,745
3	session_start	60,760	48,466
4	trackCustomData	53,229	23,414

#### The page view event – Overview report:

Event count	Total users	Event count per user	Event value	▲ •	EVENTS IN LAST 30 MINUTES	Include Event na	me = user_engagement	AND Include Platfor
113K	48K	2.3	0		516	User engagement > Pag	je title	•
				8К	PARAMETER NAME	TITLE	% TOTAL	AVG. TIME
					campaign 👻	Search   SAustralia	5.9% ↓ 1.5%	0m 20s 🕴 11.3%
		~		6K		One OrganiAustralia	3.5% † 18.2%	0m 16s 🕴 1.6%
	$\frown$		$\sim$	/	PARAMETER VALUE COUNT %	SA DirectoAustralia	2.0% ↓ 8.6%	0m 17s 👃 5.9%
$\sim$				4K	(organic) 112 97%	Social & Ac Australia	1.7% † 7.2%	0m 34s † 1.9%
$\langle \rangle$		$\sim$	$\checkmark$		(referral) 3 39	Halls For H Australia	1.5% ↓ 1.9%	0m 34s † 15.3%
V				2K	(reterral) 3 3%	Choirs   SAustralia	0.7% † 5.5%	0m 21s 👃 24.3%
						Food Assis Australia	0.6% ↓ 1.9%	0m 21s 🕴 0.3%
				0		Organisati Australia	0.6% + 44.1%	0m 22s 🕴 1.4%
	02 Jul	09	16	23		User accouAustralia	0.5% ↓ 1.9%	0m 22s 🕇 18.2%
	50				View realtime	<b>&gt;</b>		1-9 of 5000 < 💙
						<b>&gt;</b>		
Event count by				Ø •	View realtime -	•		1-9 of 5000 < >
Event count by			COUNTRY	O .		EVENT COUNT / SESSIONS		
Event count by			COUNTRY Australia			EVENT COUNT / SESSIONS 1.8		
Event count by				EVENT COUNT		EVENT COUNT / SESSIONS		
Event count by			Australia	EVENT COUNT		EVENT COUNT / SESSIONS 1.8		Ø •
Event count by			Australia United States	EVENT COUNT 106K 2K		EVENT COUNT / SESSIONS 1.8	~^ ^	Ø •
Event count by			Australia United States India	EVENT COUNT 106K 2K 1.1K		EVENT COUNT / SESSIONS 1.8	~~~	Ø •
Event count by			Australia United States India New Zealand	EVENT COUNT 106K 2K 1.1K 879		EVENT COUNT / SESSIONS 1.8	~~~	Ø •

#### Custom Event: -- trackCustomData:

All of the custom data gathered by GA4 is based off a custom event called trackCustomData.

This event exists as a combination of PHP and JavaScript code that is implemented on every SAcommunity webpage. This code extracts the relevant data from the backend database and then pushes it through to GA4 itself via what is called the Global Site Tag, also a very specific piece of JavaScript code.

Parameter, Dimension and Variable all refer to the same piece of data depending on where you look at it from. It is called a variable in PHP and JavaScript code, a parameter in a GA4 summary page, or a dimension in GA4 reports.

For more information on tracking web page events see below; Part 6. Debugging & Event Tracking

Sample output from the code used to run this event, from any SAcommunity web page use "View page source" to see how it changes for each page.

```
<!-- Google tag (gtag.js) -->
<script async src="https://www.googletagmanager.com/gtag/js?id=G-0CKPXS6L80"></script>
<script>
    window.dataLayer = window.dataLayer || [];
    function gtag(){dataLayer.push(arguments);}
    gtag('js', new Date());
    gtag('config', 'G-0CKPXS6L80');
</script>
<!-- Google Analytics 4 - custom data event. -->
<script>
   gtag('event', 'trackCustomData', {'event_label': 'trackCustomData',
    'DatasetID': '82PBAJI7',
    'PostCode': '5221',
      'State': 'South Australia',
     'Subject': 'Community Organisation & Development',
'OrgType': 'Community',
'Council': 'Kangaroo Island Council',
      'State_Electorate': 'Mawson',
      'Federal Electorate': 'Mayo'
});
</script>
```

#### **Overview Page; trackCustomData.**

This overview page version is reached by going to the Engagement Section --> Events report and then clicking on the trackCustomData event.

Acquisition		Event name	+	↓ Event count
<ul> <li>Engagement</li> </ul>				688,123
Overview	1	page_view		100% of total 131,979
Events	2	trackCustomData	Click on trackCustomDa of this events' data field	

#### Overview Page - trackCustomData: some standard data as provided by Google Analytics.

🔕 🕀 🔰 trackCustomData 👻					Last 28 days Jun 27 - Jul 24, 20	23 ▼ 🖾 쑥 🌣
Event count by Country		Ø •	Event count by Gender			Ø •
	COUNTRY	EVENT COUNT			EVENT COUNT / SESSIONS	
and the second	Australia	50K			0.87	
	United States	866				2.5
	India	551			$\wedge \sim$	
	New Zealand	404				1.5
	Philippines	220				1.0
N V 🔿	United Kingdom	139				1
	Togo	75	• FEMALE 56.6%	• MALE 43.4%	02 09 16 Jul	0.5 0 23

#### Overview Page - trackCustomData: Display of our custom parameters linked to this event.

DatasetID		▲ -	PostCode		A -	Federal_Electorate		A -
CUSTOM PARAMETER	EVENT COUNT	TOTAL USERS	CUSTOM PARAMET	EVENT COUNT	TOTAL USERS	CUSTOM PARAMET	EVENT COUNT	TOTAL USERS
(total) 58 items	53K	23K	(total) 144 items	50K	22K	(total) 12 items	53K	23K
	18K	6.2K		18K	6.4K		22K	7.9K
0SCHQ921	4K	2.4K	5000	зк	2.2K	Adelaide	5.8K	3.9K
08ADE17	3.1K	2.3K	5112	966	629	Grey	3.9K	2.4K
58896CV0	2К	1.3K	5290	909	669	Barker	3.8K	2.4K
0RNG2BN4	1.6K	1.1K	5168	719	528	Mayo	ЗК	2K
36CCCNU0	1.6K	959	5108	610	434	Kingston	2.8K	1.8K
					145		~ ee	
Council		▲ •	OrgType		A •	Primary Category		
	EVENT COUNT	TOTAL USERS	OrgType CUSTOM PARAMET_	EVENT COUNT	TOTAL USERS	Primary Category CUSTOM PARAMET	EVENT COUNT	TOTAL USERS
Council CUSTOM PARAMETER (total) 57 items	event count 53K			EVENT COUNT 53K			EVENT COUNT 53K	
CUSTOM PARAMETER		TOTAL USERS	CUSTOM PARAMET_		TOTAL USERS	CUSTOM PARAMET		TOTAL USERS
CUSTOM PARAMETER	53K	TOTAL USERS	CUSTOM PARAMET	53K	TOTAL USERS	CUSTOM PARAMET	53K	TOTAL USERS
CUSTOM PARAMETER (total) 57 items	53K 22K	TOTAL USERS 23K 7.9K	CUSTOM PARAMET	53K 21K	TOTAL USERS 23K 12K	CUSTOM PARAMET	53K 18K 8.6K	total users 23K 6.2K
CUSTOM PARAMETER (total) 57 items City of Onkaparinga	53K 22K 3.3K	TOTAL USERS 23K 7.9K 2K	CUSTOM PARAMET	53K 	TOTAL USERS 23K 12K 6.2K	CUSTOM PARAMET (total) 19 items Recreation	53K 18K 8.6K	TOTAL USERS 23K 6.2K 4.6K
CUSTOM PARAMETER (total) 57 items City of Onkaparinga City of Adelaide	53K 22K 3.3K 3.2K	TOTAL USERS 23K 7.9K 2K 2.3K	CUSTOM PARAMET	53K 21K 18K 11K	тотаl USERS 23К 12К 6.2К 7.7К	CUSTOM PARAMET (total) 19 items Recreation Community Oevelopment	53K 18K 8.6K t 6.7K	TOTAL USERS 23K 6.2K 4.6K 4.3K

Sample data fields. None of these displayed custom parameters link to a detail report.

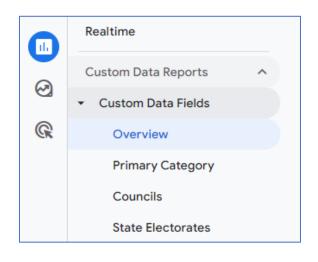
#### Council

Council		
CUSTOM PARAMETER	EVENT COUNT	TOTAL USERS
(total) 57 items	53K	23K
	22К	7.9K
City of Onkaparinga	3.3K	2К
City of Adelaide	3.2K	2.3K
City of Port Adelaide Enfield	1.7K	1.2K
nil	1.5K	993
City of Salisbury	1.3K	943

#### **Federal Electorate**

CUSTOM PARAMET	EVENT COUNT	TOTAL USERS
(total) 12 items	53K	23K
	22K	7.9K
Adelaide	5.8K	3.9K
Grey	3.9K	2.4K
Barker	3.8K	2.4K
Мауо	ЗК	2К
Kingston	2.8K	1.8K

## **Custom Overview Page & Reports**



This overview report and collection of detail reports is based on a set of custom reports and summary cards I have created and then added to a new collection in the library.

Unlike the summary cards that are shown in the standard GA4 overview reports the summary cards in this overview report also link to a Detail Report for each of the displayed data fields.

See below; Part 5: Library

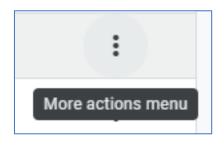
## Part 4: Modified & Custom Standard Reports

It is possible to modify the default pre-built Reports in the Acquisition, Engagement, Monetization, User Attributes and Tech sections.

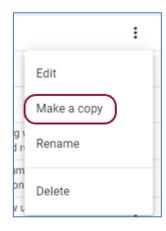
## Do not permanently change the standard built-in reports Make a copy, modify the copy, and then add the copy to the library of reports.

Existing reports may be found in the Library. This is also where you can begin to create new reports. See below: <u>Part 5: Library</u>

#### **New Report**



Option 1:	Make	а сору	of an	existing	report
-----------	------	--------	-------	----------	--------



#### **Option 2:** Start from the beginning

Two types of reports may be created: Overview reports or Detail reports. Look at the existing reports to get an understanding of the differences.

		+ Create new report	Search
Template	Collecti	Create overview report	
Pages and screens	Life cy	Create detail report	:
Generate leads overview	Busines objectiv		:

## **Detail Reports:**

You may create a new blank report or use one of the existing report templates as the starting point for the new report.

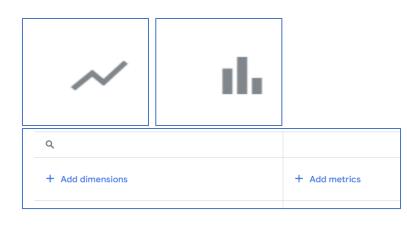
←	Create ne	W				
		+	Blank Add dimensions, metrics, and other cards.	Start with predefine	out any d template	
		Start from a templa	ate			
			User acquisition User count by medium, along with engagement, event count, key event count, and revenue metrics. Dimensions: First user primary channel group (Default Channel Group), First user default chan		Traffic acquisition User count by source/medium, along with engagement, event count, key event count, and revenue metrics. Dimensions: Session primary channel group (Default Channel Group), Session default chann	User acquisition cohorts New user count, total revenue, transactions, and LTV by channel group for users that were first acquired within a given date range. Dimensions: First user primary channel group (Default Channel Group), First user default chan
			Events Event count by event name, along with total users that triggered the event, event count per user, and revenue per event. Dimensions: Event name		Pages and screens Web pages and app screens by total views, number of users who viewed each page/screen, average engagement time, and Dimensions: "Page title and screen class, Page path and screen class, Page title and screen na	Landing page Landing Page by Views, New users, Key events, and Total Revenue. Dimensions: Landing page

https://www.infinity-group.pl/blog/en/2023/10/05/how-to-customize-the-reports-in-google-analytics-4/

If you start with a blank report. You will see a space for two charts and a prompt to add Dimensions and Metrics.

All the elements that you can play around with are the same items that you would see in any of the prebuilt reports provided by Google Analytics.

If you have already used any filters and built your own Exploration reports, then all this should already be familiar to you.



	Customize report	
REPOR	RT DATA	
Dim	nensions	>
Met	trics	>
REPOR	T FILTER	
+ /	Add filter	
CHART	TS .	
0	🗱 Line Chart	>
0	\rm Bar Chart	>
REPOR	T TEMPLATE	
No te	mplate	<i>ڌ</i> ي:
SUMM	ARY CARDS	
+ 0	Create new card	

## Summary Cards:

"A summary card is a visual element used to display information on an overview report. It typically includes one or more dimensions and metrics."

#### https://support.google.com/analytics/answer/13817100?hl=en

REPORT DATA         Dimensions         Metrics         REPORT FILTER         + Add filter         CHARTS
Metrics >
REPORT FILTER + Add filter
+ Add filter
CHARTS
I Line Chart >
◎ 🗄 Bar Chart >
REPORT TEMPLATE
No template
SUMMARY CARDS
Sessions by Primary Category
+ Create new card

SUMMARY CARDS	
Sessions by Primar	y Category
+ Create new card	Click on the do to Edit or Delet

You need to have created a Detail Report before you can create a summary card. Any summary card you create in any detail report then becomes available to be included in any overview report.

This summary card is already complete. It is a section of the "Primary Category" detail report.

The dimensions and metrics used must already exist in the detail report to which the summary card is attached.

A name for the card is automatically generated. It takes the first metric and the first dimension listed as the name. Hence the one shown here became; "<u>Sessions</u> by <u>Primary Category</u>"

#### Typical Summary Card -- "Sessions by Primary Category"

DIMENSIONS DROPDOWN		CARD PREVIEW	
Primary Category	$\otimes$	Sessions <del>-</del> by Primary Category	
METRICS DROPDOWN		PRIMARY CATEGORY	SESSIONS
Sessions	$\otimes$	Community Organisation & Develo	13k
Event count	$\otimes$	Recreation	11k
		Health & Disability	6K
VISUALIZATION	_	Accommodation	4.6K
₽ 《} ~ ₹		Finance, Income, Business	2.7k
CARD FILTER		Communication & Information Ser	2.6k
+ Add filter		Personal & Family Support	2.4K

#### **Overview Reports:**

#### **Overview - Custom Data**

An overview report is made up from a set of summary cards. It has no data fields or filters of its own.

A maximum of 16 cards may be used in any one overview report.

Drag and drop cards to set the order in which they are displayed.

verview - Custom Data						L.	ot 20 million Apr 16 - May 13, 20	024 🖬 Save	CARDS SUP TO 11	<u>8</u>	
									E Users by	Country	
HERE ARE YOUR USERS VISITING FROM?									E Users by	City	
Users+ by Country			Users*	by City			N LAST 38 MINUTES		E Realtime		
	COUNTRY	USERS	CITY		USERS	102	2				
	Azztalia	476	Adelaid		258	100000	FER MINUTE		E Sessions	by Primary Catego	ery
1000	United States	1.6K	Melbour	Ne	8.28			and a little	E Sessions	by Council	
A Mary	New Zealand	782	Sydney		28		ايتيناناليانييين				
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	inda	241	Union T	ownahip	1.1K		UNTRES	052.95	II Session	by Federal_Bector	rate
	United Kingdom	181	Danvin		827	Australia	1	87	E Sessions	by State_Electoral	te .
	Philippines	124	Mount 0	tarvibler	704	Philippie	-	-	E Sessions	he Carlins	
€	Indonesia	117	Hillowel		420	Picersia		1	a deserve	of culture.	
						Sri Lank	a	1	E Sessions	by PostCode	
					View cities $\Rightarrow$		v	/lew realtime →	E Setalors	by State	
									E Sessions	by DeteortID	
Sessions* by Primary Category	Sessions+ by Council			Sessionsy by Federal	Bectorate		Sessionsv by State_Ele	ctorate	+ Add Card	ls.	
PRIMARY CAT 100	NS COUNCIL	9	SSIONS	FEDERAL ELECTORATI		\$5085	STATE ELECTORATE	SESSIONS	REPORT TEMPLA	a 🖉	~
Community Dr Apr 16, 2024 - May 13, 2024	2K Oity of Onkaparings		5.76	Adelaide		116	Advisida	6.1K	No template	(8)	
Recreation Handh & Stanhilly Artes 7	2K City of Adelaida		5.45	Dray		75	Kauma	2.1K		_	-

(in)	Customize report	
CAR	05 (UP TO 16)	
11	Users by Country	8
	Users by City	8
=	Realtime	⊗
#	Sessions by Primary Category	8
=	Sessions by Council	8
H	Sessions by Federal_Electorate	۲
#	Sessions by State_Electorate	8
11	Sessions by OrgType	8
	Sessions by PostCode	8
H	Sessions by State	⊗
1.00	Sessions by DatasetID	8

#### About overview reports

https://support.google.com/analytics/answer/13818312?hl=en&ref\_topic=13818299

## Adding a Card to an Overview Report.

There are two sections: 1) Summary Cards and 2) Other Cards.

X Add Cards 0 of 5 selected	Q Search		
Summary Cards Other Cards			
Lifetime value	Key events by Primary channel group (Default C +	Users + by Country +	Users+ by App version+
Line Chart	BAR CHART	DATA TABLE	DATA TABLE
User activity over time	User stickiness	Insight	Users, +3
		INSIGHTS CARD	SCORE CARD

Any cards you have created in a detail report will normally be visible in the "Other Cards" section. Scroll down until you find the required card or use the search box at the top to find the card.



Click on the tick box next to the desired card or cards. This will activate the "Add Card" button.



B Save...

If a card you have created does not appear, you might need to add its parent detail report to a collection first. More information in the link below.

https://www.optizent.com/blog/how-to-create-a-custom-overview-report-in-ga4/

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## Part 5: Library

#### Library

Click on the Library icon at the bottom left of the Google Analytics page.

The Library contains two sections, **Collections** and **Reports**.

**Collections** are where you customize what reports are visible to the users of GA4. You may also create new collections to organize the existing standard and/or custom reports in whatever way is useful.

The collection Custom Data Reports is one that I have created, along with the related overview report, detail reports and summary cards.

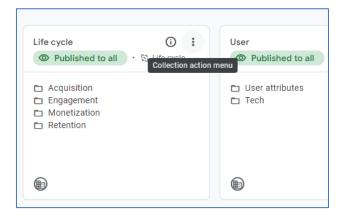
+ Create new collection	Business objectives       ①       :         Unpublished · S Business object           □       Generate leads          □       Drive online sales          □       Raise brand awareness          □       Examine user behavior	Life cycle () : O Published · S Life cycle Acquisition Engagement Monetization Retention	User (i) : Ø Published · 🕲 User User attributes D Tech
	Edit collection	Edit collection	Edit collection

The **Reports** section contains the reports that can be added to any of the collections. It is also where you may copy existing reports, modify existing reports, or create entirely new reports.

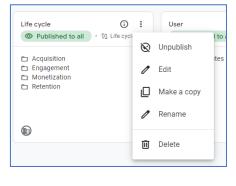
orts	0							
						+ Crea	ate new report Q Search	
	Туре	Name	Creator	Last modified $\downarrow$	Template	Collection	Description	
		Landing Pages - Page Views	SAcommunity Volunteers	Apr 2, 2024 SAcommunity Volunteers	Pages and screens	1 lfs such	Custom Report: odified version of "Pages and screens" report	
		Generate leads overview	(*)	(24)	Generate leads overview	Business objectives		
		Audiences	-	1991	Audiences	Business objectives,User		
		User acquisition		323	User acquisition	Business objectives	User count by medium, along with engagement, event-count, conversion, and re	ŝ
		Traffic acquisition	201	-	Traffic acquisition	Business objectives	User count by source/medium, along with engagement, event-count, conversion, and re	

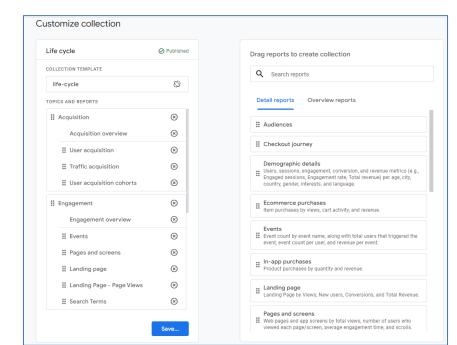
## **Edit Collection**

1) Click on a Collection action menu



## 2) Select Edit.





#### Left hand list:

A hierarchical list of the sections within the selected collection and the reports within each of these sections.

#### Right hand list:

All reports that may be added to a collection.

This list is in turn separated into either Detail reports or Overview reports. The Landing Pages – Page View custom report has already been added to the Detail reports list.

**Detail** Reports tab

Drag reports to create collection Drag reports to create collection Q Search reports Q Search reports Detail reports Overview reports Detail reports Overview reports Landing Page Landing Page by Views, New users, Conversions, and Total Revenue. Acquisition overview Pages and screens Dashboard overview of user count and the sources, mediums, and campaigns by which you acquired users. Web pages and app screens by total views, number of users who viewed each page/screen, average engagement time, and scrolls. # Promotions II Drive online sales overview # Purchase journey Engagement overview Dashboard overview of user engagement with your business from the perspective of engagement time (session duration), and screens and events (e.g., screens viewed most often, events triggered most often). Tech details Users, sessions, and engagement and revenue metrics (e.g., Engaged sessions, Engagement per user, Event count, Revenue) per dimension (e.g., Browser, App version, OS version). Examine user behavior overview Traffic acquisition User count by source/medium, along with engagement, event-count, conversion, and revenue metrics. Generate leads overview User acquisition User count by medium, along with engagement, event-count, conversion, and revenue metrics. Monetization overview Dashboard of ecommerce activity from the perspective of revenue, purchases, items, and coupons. Custom Report -Landing Pages - Page Views Added to the Library Raise brand awareness overview

Drag and Drop a report to add it the collection section you want it to appear in, for example, the custom report Landing Pages – Page View report exists as a previously created report in the Details tab.

After the Drag and Drop operation, it became be a part of the **Engagement** section which in turn is part of the **Life Cycle** collection.

		Drag reports to create collection
COLLECTION TEMPLATE		Q Search reports
life-cycle	<i>\$</i> 3	
OPICS AND REPORTS		Detail reports Overview reports
# Acquisition	8	Product purchases by quantity and revenue.
Acquisition overview	$\otimes$	Landing page
User acquisition	8	Landing Page by Views, New users, Conversions, and Total Revenue.
Traffic acquisition	8	Pages and screens Web pages and app screens by total views, number of users who viewed each page/screen, average engagement time, and scrolls.
# Engagement	$\otimes$	
Engagement overview	$\otimes$	# Promotions
# Events	8	II Purchase journey
Conversions	$\otimes$	Tech details Users, sessions, and engagement and revenue metrics (e.g., Engaged
Pages and screens	8	sessions, Engagement per user, Event count, Revenue) per dimension (e.g., Browser, App version, OS version).
# Landing page	8	*
🗄 Landing Pages - Page Views	⊗ ‼	nding Pages - Page Views pagement, event-count,
II Monetization	Drag al	Drop a report to add it to a specific collection section User acquisition User count by medium, along with engagement, event-count, conversion, and revenue metrics.

**Overview** Reports tab

## **Additional Events Notes**

#### page view

There are a number of standard events recorded in GA4. The most useful of these events is page\_view. This event triggers every time a person opens and views a web page. This is standard behaviour for all web browsers, independent of any custom code we have introduced.

Because of the way we have coded the SAcommunity website our custom event trackCustomData also triggers on every page view. So, the count for both of these events closely matches each other. Either of these measures can give a decent view of activity on the SAcommunity website.

#### Custom\_Data

This is an event which I have defined within GA4 itself. It is based on the event and event parameters of the trackCustomData event. The difference being that trackCustomData exists as code in the web page while the Custom\_Data event exists as an attribute within the GA4 web application instead, specifically in the Google Tab Manager part of Google Analytics.

I had created this event when I was still learning what was useful or not in GA4. It turned out that the Custom Data event is redundant and unnecessary. Unfortunately, unlike most other items created within GA4 this is one of the few items that is not at all easy to delete and so for now it still continues to display data. For all practical purposes we can ignore it. It may be fixed at a later date.

#### **Event Label**

You may notice an item in any trackCustomData report called 'Event Label'. This is a result of an attribute set in the web page code.

Event Label		▲ •
CUSTOM PARAMETER	EVENT COUNT	TOTAL USERS
(total) 2 items	122K	52K
Council Data	120K	51K
trackCustomData	1.2K	690

During testing the label was called "Council Data" but I later changed it to "trackCustomData" on 28/09/2023. This is to better reflect the fact that we are collecting more than just council data and also to make things more consistent with the programming code throughout. In this context, the label trackCustomData is just a continuation of what was called "Council Data".

In the backend web page code:

This bit of code:	gtag('event', 'trackCustomData', {'event_label': 'Council Data',
Was changed to:	<pre>gtag('event', 'trackCustomData', {'event_label': 'trackCustomData',</pre>

## Part 6: Debugging & Event Tracking

Should you be interested in understanding some of the background loading and interaction events in a web page, there are two tools that can help you track the changes as they occur.

These maybe of use in debugging the Google Analytics web page code and or testing any changes in the code if this ever becomes necessary.

#### **Tag Assistant**

This is a separate web page you can open in conjunction with GA4.

https://tagassistant.google.com/

#### Some more information here:

https://www.analyticsmania.com/post/track-site-search-with-google-tag-manager-and-google-analytics/

On the initial Tag Assistant page, we get a choice of available Google Analytics properties or domains we can access.

devcloud.click is the development server. Unless this has been activated for testing purposes you do not need to concern yourself with it. What you will see here is the same as you would on the live site.

The sacommunity.org property or domain is a connection to our website.

#### 1) Select a domain

omains		Add domain
etive Domains sacommunity.org https://sacommunity.org/	G-0CKPX56L80 5/15/24 1:24 PM	Stop debugging >
devcloud.click     https://dev5.devcloud.click/	G-ONKECMRPX5 5/15/24 1:24 PM	Stop debugging

2) Tag Assistant page is now connected. This will open a new instance of the SAcommunity home page. Use this instance to navigate to different pages on the website as these pages will have the debug attribute activated.

×	Connected sacommunity.org				
1	Google tag found	G-OCKPXS6L80			
s	Summary F Summary		Connected!		
	SA Directory of Comm Window Loaded	Tag Details	<b>®</b>		<b>#</b>
7	DOM Ready	SAcommunity - GA4 🔀	Tag Assistant		sacommunity.org
	Custom_Data	Source On-page gtag('config')	Debug information from the connected window will appear in this window. Both windows must remain open for debug mode to operate. Learn more		
	Config		Continue		
3	-	Output of G-OCKPXS6L80 ③	Datalaura		Consent
2	Initialization 0	Hits Sent	Data Layer		Consent
1	Consent Initialization	Custom_Data trackCustomData	Google Analytics Hit Google Analytics Hit	Page View	
		Google Analytics Hit Google Analytics Hit		Google Analytics Hit	

3) Looking at a fully loaded page. Hits sent is a list of events that have occurred. You can click on any of the hits to view additional information about the event.

22 Config					
21 Container Loaded 💀	Output of G-0CKPXS	66L80 @			
20 Initialization 😡		Hits Sent		Data Layer	
19 Consent Initialization 👩	Custom_Data	trackCustomData	Page View	Coords Application Life	User Engagement
Organisations A-Z   SA	Google Analytics Hit	Google Analytics Hit	Google Analytics Hit	Google Analytics Hit	Google Analytics Hit
18 Link Click					
17 Window Loaded 😡					

4) The trackcustomData event is selected. The Data Layer tab is selected, and the API Call section has been expanded.

Summary	API Call			
Alcoholics Anonymou	<pre>gtag("event", "trackCustomData", {     event_label: "trackCustomData",</pre>			
26 Window Loaded 💀	DatasetID: "1JCE7163", PostCode: "5700", State: "South Australia", Subject: "Health & Disability", OrgType: "Community",			
25 DOM Ready				
24 Custom_Data	Council: "Port Augusta City Council", State_Electorate: "Giles", Federal Electorate: "Grey"			
23 trackCustomData	<pre>})</pre>			
22 Config	Output of G-0CKPXS6L80 ②			
21 Container Loaded 💀	Hits Sent	Data Laye		
20 Initialization 😡				
19 Consent Initialization	Data Layer values after this Message:			
♦ Organisations A-Z   S	<pre>1 { 2 event: "trackCustomData", 3 gtm: {uniqueEventId: 8, start: 1716254004955},</pre>			
18 Link Click	<pre>4 eventModel: { 5 event_label: "trackCustomData",</pre>			
17 Window Loaded 👩	6 DatasetID: "1JCE7163", 7 PostCode: "5700", 8 State: "South Australia",			
16 DOM Ready 👩	9 Subject: "Health & Disability", 10 OrgType: "Community",			
15 Custom_Data	<pre>11 Council: "Port Augusta City Council", 12 State_Electorate: "Giles", 13 State_Electorate: "Giles",</pre>			
14 trackCustomData	<pre>13 Federal_Electorate: "Grey", 14 send_to: "G-0CKPXS6L80" 15 }</pre>			
13 Config	16 }			

5) The Custom\_Data event is selected. The API Call section has been expanded and is showing a different set of information from the API Call section of the trackCustomData event.

Summary	
	API Call
Alcoholics Anonymous	<pre>gtag("event", "Custom_Data", {</pre>
26 Window Loaded 👩	event_label: "trackCustomData", DatasetID: "1JCE7163",
25 DOM Ready 👩	PostCode: "5700", State: "South Australia",
24 Custom_Data	Subject: "Health & Disability", OrgType: "Community", Council: "Port Augusta City Council",
23 trackCustomData	<pre>State_Electorate: "Giles", Federal_Electorate: "Grey", client id: "1592569024.1666064558",</pre>
22 Config	session_number: 43,
21 Container Loaded 👩	<pre>session_engaged: 1, page_location: "https://sacommunity.org/org/207960-Alcoholics_Anony" +</pre>
20 Initialization 👩	<pre>page_referrer: "https://sacommunity.org/orglist", page_title: "Alcoholics Anonymous - Port Augusta   SAcommunity - Co" +</pre>
19 Consent Initialization 😡	"nnecting Up Australia", language: "en-us", screen resolution: "1920x1080",
Organisations A-Z   SA	_user_agent_architecture: "x86", _user_agent_bitness: "64",
18 Link Click	_user_agent_full_version_list: "Chromium;124.0.6367.119 Google%20Ch" + "rome;124.0.6367.119 Not-A.Brand;99." + "0.0.0",
17 Window Loaded 😡	_user_agent_mobile: "0", _user_agent_model: "",
16 DOM Ready	<pre>_user_agent_platform: "Windows", _user_agent_platform_version: "10.0.0", _user_agent_wow64: "0",</pre>
15 Custom_Data	<pre>conversion_api: "1", _protected_audience_enabled: true,</pre>
14 trackCustomData	<pre>iframe_state: 0,     cookie_deprecation: "noapi",     send to: "G-0CKPXS6L80"</pre>
13 Config	<pre>})</pre>

## **Debug View**

#### Enable Debug View

Debug View needs tag assistant to be active or alternatively use the preview mode from Google Tag Manager.

\_\_\_\_\_

https://support.google.com/analytics/answer/7201382?hl=en&utm\_id=ad

"To enable debug mode for your personal device, use the Google Tag Assistant through <u>tagassistant.google.com</u> or <u>preview mode</u>. Tag Assistant adds a parameter to your website address to enable debug mode."

\_\_\_\_\_

#### This can be accessed via the Admin Button at the bottom left of GA4.

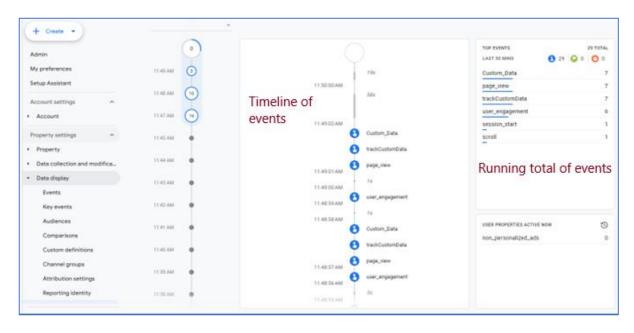


#### 1) Select DebugView

Prop	erty		Data collection and modification			
These	settings affect your property What's a property?		These settings control how data is collected and modified			
	Property details	0	Data streams	0		
T	Property change history	0	Data collection	0		
			1 Data import	0		
Data display			🕑 Data retention	0		
These	settings control how data is shown in your reports		♀ Data filters	0		
B	Events	0	Data deletion requests	0		
Þ	Key events	0				
a≣	Audiences	0	Product links			
0	Comparisons	0	These settings control which products link to this property			
Â	Custom definitions	0	💋 Google AdSense links			
¢	Channel groups	0	🔥 Google Ads links			
S,	Attribution settings	0	🍫 Ad Manager links			
1	Reporting identity	0	BigQuery links			
ş	DebugView	0	Display & Video 360 links			

#### 2) Overview of Debug

This is a close to real time view, it can take a few moments before the first data appears.



3) An instance of trackCustomData selected. (from one of the events shown in the timeline) The parameter "Subject" has been expanded.

Click to unpause	)	trackCustomData	×
	52s	Parameters User propert	ies
11:50:00 AM		▶ Council	1
	58s	▶ DatasetID	1
11:49:02 AM		Federal_Electorate	1
8	Custom_Data	► OrgType	1
8	trackCustomDat		
11:49:01 AM	page_view	▶ PostCode	1
• 11:49:00 AM	1s	▶ State	1
11:48:59 AM	user_engagemei	State_Electorate	1
11:48:58 AM	1s		
11.40.30 AM	Custom_Data	▼ Subject	1
	trackCustomDat	Community Organisation & Development	
	page_view	batch_ordering_id	1
11:48:57 AM	user_engagemei	batch_page_id	1
11.46.30 AM		• • • •	

4) The "User Engagement" event selected, ( from the running total section) letting us see several examples of this event that have occurred from the separate web pages that have recently been viewed. The parameter "page\_title" has been selected,

user_engagement (6)	From 11:21 AM - 1	11:51 AM	×	TOP EVENTS
Parameters	User properties	\$		Custom_Data
patch_ordering_id	6	SA Directory of C	11:47:42 AM	page_viewtrackCustomData
atch_page_id	6	Organisations A	11:48:59 AM	user_engagement
ebug_mode	6			session_start
ngagement_time_msec	6		11:48:56 AM	scroll
a_session_id	6		11:47:55 AM	
ja_session_number	6			
page_location	6		11:47:46 AM	
age_referrer	6	South Australian	11:48:51 AM	
page_title	6			
gnore_referrer	5			USER PROPERTIES ACTIVE NOW
ampaign	1			non_personalized_ads
nedium	1			
ource	1			

5) A page\_title parameter expanded to show even more information about that variable.

user_engagement (2)	From 2:57 PM - 3	27 PM	×
Parameters	User properties	5	
batch_ordering_id	2	SA Directory of C	3:27:49 PM
batch_page_id	2		
debug_mode	2	<ul> <li>SA Community B</li> </ul>	3:27:52 PM
		batch_ordering_id	4
engagement_time_msec	2	batch_page_id	1717480669585
ga_session_id	2	debug_mode	1
ga_session_number	2	engagement_time_m	1709
		ga_session_id	1717480651
page_location	2	ga_session_number	48
page_referrer	2	ignore_referrer	true
page_title	2	page_location	https://sacommunity
page_une	9	page_referrer	https://sacommunity
campaign	1	page_title	SA Community Blog
medium	1	(2) User properti	es
source	1	non_personalized_ads	0