Data Table Variations: Count Unique Sets

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This tool lets you select the column for which you'd like to count the unique values.

## How Does 'Count Unique Sets' Work?

Where **Count All** counts all rows in a data table that meet your indicator filters, **Count Unique Sets** looks at the combination of the Count Unique Columns and will count only the **unique** rows defined by those criteria. So, for example, if you have a Training table with a Count Unique set up to look for First Name + Last Name, if you train the same person multiple times, they will only be counted once.

Have a look at the training log below. In this example:

- **Count All** would give the result of 10. There are 10 rows.
- **Count Unique Sets** for the **Trainee** column would give you the result of 4. There are 4 different values in this column:
  - leia@devresults.com
  - chewbacca@devresults.com
  - han@devresults.com
  - Iuke@devresults.com
- Count Unique Sets for both the Trainee and Training Type column would give you the result of 6. There are 6 unique pairs of values in the Trainee and Training Type columns:
  - leia@devresults.com / Swordswmanship
  - chewbacca@devresults.com / Launching & Landing
  - han@devresults.com / Launching & Landing
  - han@devresults.com / Swordsmanship
  - Iuke@devresults.com / Swordsmanship
  - chewbacca@devresults.com / Swordsmanship

T D	Data Design							
Show	All uploaded	data 🔻 🔹	Manage U	ploads				
	Date	Place	Activity	Trainee	Training Type	Session #	Points Earned	
	04 May 2014	Tatooine	MFBWY	leia@devresults.com	Swordsmanship	2	63	
	04 May 2014	Tatooine	MFBWY	chewbacca@devresults.com	Launching & Landing	2	48	
	04 May 2014	Tatooine	MFBWY	han@devresults.com	Launching & Landing	2	20	
	03 Jan 2014	Tatooine	MFBWY	han@devresults.com	Swordsmanship	1	55	
	03 Jan 2014	Tatooine	MFBWY	chewbacca@devresults.com	Launching & Landing	1	43	
	03 Jan 2014	Tatooine	MFBWY	han@devresults.com	Launching & Landing	1	25	
	04 May 2014	Tatooine	MFBWY	luke@devresults.com	Swordsmanship	2	65	
	03 Jan 2014	Tatooine	MFBWY	leia@devresults.com	Swordsmanship	1	60	
	03 Jan 2014	Tatooine	MFBWY	chewbacca@devresults.com	Swordsmanship	1	52	
	03 Jan 2014	Tatooine	MFBWY	luke@devresults.com	Swordsmanship	1	58	

## **Configure a Count Unique Sets Indicator**

For basic information about mapping indicators to data tables, first see **Data Source: Populate from a Data Table**. To create a Count Unique indicator, set the data table Calculation to **Count Unique Sets**.

DevResults   Kate's World Kate's Test Site					
Dashboard Activities	Results Calendar Documents Photos Administration				
Home 🕨 Results 🕨 Indicat	tors 🕑 # of new trainers trained				
DV-1.4a # of 1	new trainers trained				
Definition Targets &	Data Reports Forms Documents				
Data Source					
Data Source	<ul> <li>Enter indicator results directly</li> <li>Calculate from a formula</li> <li>Populate from a data table</li> </ul>				
Data Table	User Trainings				
	View Table Data				
Calculation	Count Unique     using       Count All     unt Unique Column(s)       Sum     Average				
Date Column	Add column				

Once you select **Count Unique Sets** in the calculation, this will add some **Count Unique Column(s)**.

By default, if the indicator is set for **Results are reported separately for each activity** the **Activity** column will be added and not removable from the Count Unique Columns. (To remove Activity here, you will need to uncheck the **Results are reported separately for each activity** box in the Disaggregations section.)

If any disaggregations are assigned to the indicator, these will also be automatically added to the **Count Unique Columns**. To remove the disaggregation from the Count Unique Columns, remove it from the Disaggregations section of the indicator.

Also, if you are not using the top-level geography for your site (such as the world or country) as your reporting level, you will also need to include

Add any columns that uniquely identify your rows. For example, this definition will take the Activity + Trainee First Name + Trainee Last Name to determine uniqueness:

DevResults   Kate's World Kate's Test Site						
Dashboard Activities <b>Results</b> Calendar Documents Photos Administration						
Home   Results  Indicators   Hone trainers trained						
<b>DV-1.4a</b> # of 1	DV-1.4a # of new trainers trained					
Definition Targets &	Data Reports Forms Documents					
Data Source						
Data Source	Enter indicator results directly					
	Populate from a data table					
Dete Telle						
Data Table	User Trainings					
	View Table Data					
Calculation	Count Unique vusing					
	Count Unique Column(s)					
	• Activity					
	Trainee First Name					
Trainee Last Name						
	Location					
Date Column	Date					
	Data will be associated with the latest date from this column. Add the date column to the count unique columns to					
	distribute data across the dates.					

Note: if your indicator is set to report at any **Reporting Level** below your top level, you will need to include a Geography column from your data table in your Count Unique Columns for it to calculate properly. If you don't, you'll see a warning like this:

<ul> <li>Add a disaggregation</li> <li>Results are cross-disaggregated</li> <li>Results are parallel disaggregated</li> <li>Note: this setting will be ignored because there are no disaggregations</li> </ul> Reporting Level Results are reported by: <ul> <li>The current reporting level is more granular than the selected count unique columns. Change your reporting level or select an appropriate geography column in your count unique list.</li> <li>Location</li> <li>Commune</li> <li>Canton</li> <li>Entity</li> <li>Bosnia and Herzegovina</li> </ul>	Disaggregations	Disaggregation		Values	D	Disable
<ul> <li>Results are cross-disaggregated</li> <li>Results are parallel disaggregated</li> <li>Note: this setting will be ignored because there are no disaggregations</li> <li>Reporting Level Results are reported by:</li> <li> <ul> <li>The current reporting level is more granular than the selected count unique columns. Change your reporting level or select an appropriate geography column in your count unique list.</li> <li>Location</li> <li>Commune</li> <li>Canton</li> <li>Entity</li> <li>Bosnia and Herzegovina</li> </ul> </li> </ul>		+ Add a disaggregation			A Master list of disaggre	gations
Note: this setting will be ignored because there are no disaggregations  Reporting Level Results are reported by:  The current reporting level is more granular than the selected count unique columns. Change your reporting level or select an appropriate geography column in your count unique list.  Location Commune Canton Entity Bosnia and Herzegovina		Results are cross-disa	ggregated	Results are paralle	el disaggregated	
Reporting Level       Results are reported by:         Image: Second		Note: this setting will be igno	red because there are no disagg	regations		
Reporting Level       Results are reported by:         Image: The current reporting level is more granular than the selected count unique columns. Change your reporting level or select an appropriate geography column in your count unique list.         Image: Location         Image: Commune         Image: Canton         Image: Entity         Image: Bosnia and Herzegovina		interest and became in series.		Sactorio		
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<ul> <li>Location</li> <li>Commune</li> <li>Canton</li> <li>Entity</li> <li>Bosnia and Herzegovina</li> </ul>	$\longrightarrow$	The current reporti level or select an ap	ng level is more granular than t opropriate geography column ir	ne selected count unique your count unique list.	columns. Change your re	porting
<ul> <li>Commune</li> <li>Canton</li> <li>Entity</li> <li>Bosnia and Herzegovina</li> </ul>	$\longrightarrow$	The current reporti level or select an ap	ng level is more granular than t ppropriate geography column ir	ne selected count unique your count unique list.	e columns. Change your re	porting
<ul> <li>Canton</li> <li>Entity</li> <li>Bosnia and Herzegovina</li> </ul>	$\longrightarrow$	The current reporting level or select an approximately consistent of the select o	ng level is more granular than t opropriate geography column ir	ne selected count unique your count unique list.	e columns. Change your rej	porting
<ul> <li>Entity</li> <li>Bosnia and Herzegovina</li> </ul>	$\rightarrow$	The current reporting level or select an approximation     Commune	ng level is more granular than t ppropriate geography column ir	ne selected count unique your count unique list.	e columns. Change your rej	porting
<ul> <li>Bosnia and Herzegovina</li> </ul>	$\rightarrow$	The current reporting the current reporting the current report of the current report report of the current report of the current report of the curren	ng level is more granular than t ppropriate geography column ir	ne selected count unique your count unique list.	: columns. Change your rej	porting
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	$\longrightarrow$	The current reportilevel or select an ap     Location     Commune     Canton     Entity     Percia and Horzogou	ng level is more granular than t opropriate geography column ir	ne selected count unique your count unique list.	: columns. Change your rej	porting
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To fix this error, simply change your reporting level or add the appropriate geography column to your Count Unique Columns list:

Calculation	Co	unt Unique v using
		Count Unique Column(s)
	0	Activity
		Location
		Trainee First Name
		Trainee Last Name
	Ad	d column 🔻

For the **Dates**, you have two options:

 If you do not include a Date column in your Count Unique Columns list, all data for this indicator will be associated with the most recent date in the Date column.

DevResults   Kate's World Kate's Test Site					
Dashboard Activities	Results Calendar Documents Photos Administration				
Home 🕨 Results 🕨 Indica	tors 🕑 # of new trainers trained				
<b>DV-1.4a</b> # of 1	new trainers trained				
Definition Targets &	Data Reports Forms Documents				
Data Source					
Data Source	<ul> <li>Enter indicator results directly</li> <li>Calculate from a formula</li> <li>Populate from a data table</li> </ul>				
Data Table	User Trainings				
	View Table Data				
Calculation	Count Unique 🔹 using				
	Count Unique Column(s)				
	Activity				
	Location				
	Trainee First Name				
Trainee Last Name					
	Add column				
Date Column	Date •				
	Data will be associated with the latest date from this column. Add the date column to the count unique columns to distribute data across the dates.				

 If you want rows to be calculated based on their date and put into differing reporting periods, etc., you must add the Date column to your Count Unique Columns list.

DevResults   Kate's World Kate's Test Site					
Dashboard Activities	Results Calendar Documents Photos Administration				
Home 🕨 Results 🕨 Indicat	tors 🕑 # of new trainers trained				
DV-1.4a # of 1	new trainers trained				
Definition Targets &	Data Reports Forms Documents				
Data Source					
Data Source	<ul> <li>Enter indicator results directly</li> <li>Calculate from a formula</li> <li>Populate from a data table</li> </ul>				
Data Table	User Trainings				
	View Table Data				
Calculation	Count Unique vising				
	Count Unique Column(s)				
	Activity				
Date					
Location					
Trainee First Name					
	Trainee Last Name				
	Add column				
Date Column	Date Column Date   Date				

To see this in action, let's return to our earlier Training Log example:

	Data Design						
Show	All uploaded	data 🔻 🔋	Manage U	ploads			
	Date	Place	Activity	Trainee	Training Type	Session #	Points Earned
	04 May 2014	Tatooine	MFBWY	leia@devresults.com	Swordsmanship	2	63
	04 May 2014	Tatooine	MFBWY	chewbacca@devresults.com	Launching & Landing	2	48
	04 May 2014	Tatooine	MFBWY	han@devresults.com	Launching & Landing	2	20
	03 Jan 2014	Tatooine	MFBWY	han@devresults.com	Swordsmanship	1	55
	03 Jan 2014	Tatooine	MFBWY	chewbacca@devresults.com	Launching & Landing	1	43
	03 Jan 2014	Tatooine	MFBWY	han@devresults.com	Launching & Landing	1	25
	04 May 2014	Tatooine	MFBWY	luke@devresults.com	Swordsmanship	2	65
	03 Jan 2014	Tatooine	MFBWY	leia@devresults.com	Swordsmanship	1	60
	03 Jan 2014	Tatooine	MFBWY	chewbacca@devresults.com	Swordsmanship	1	52
	03 Jan 2014	Tatooine	MFBWY	luke@devresults.com	Swordsmanship	1	58

If we do not include the Date column in our Count Unique Columns list, all calculations for this indicator will be associated with 04 May 2014, the most recent date in the Date column. **Count Unique** for both the Trainee *and* Training Type column would give you the result of 6 as of 04 May 2014:

- leia@devresults.com / Swordswmanship
- chewbacca@devresults.com / Launching & Landing
- han@devresults.com / Launching & Landing
- han@devresults.com / Swordsmanship
- Iuke@devresults.com / Swordsmanship
- chewbacca@devresults.com / Swordsmanship

If we **do** include the Date column in our Count Unique Columns list, **Count Unique** for the Trainee, Training Type, and Date column would give you the result of 9:

- leia@devresults.com / Swordswmanship / 04 May 2014
- chewbacca@devresults.com / Launching & Landing / 04 May 2014
- han@devresults.com / Launching & Landing / 04 May 2014
- han@devresults.com / Swordsmanship / 03 Jan 2014
- chewbacca@devresults.com / Launching & Landing / 03 Jan 2014
- han@devresults.com / Launching & Landing / 03 Jan 2014
- Iuke@devresults.com / Swordsmanship / 03 Jan 2014
- leia@devresults.com / Swordsmanship / 03 Jan 2014
- chewbacca@devresults.com / Swordsmanship / 03 Jan 2014

## **Adding Filters**

When using Count Unique, you can add filters as usual. Filters are a way of ignoring any rows of your data table that do not meet the criteria that you define. In this case, the indicator will pull data from the data table only where the **Train the Trainers Training Completed?** column equals **Yes**.

DevResults   Kate's World Kate's Test Site						
Dashboard Activities Results Calendar Documents Photos Administration						
Home 🕨 Results 🕨 Indica	tors 🕑 # of new trainers trained					
DV-1.4a # of 1	new trainers trained					
Definition Targets &	Data Reports Forms Documents					
Data Source	<ul> <li>Enter indicator results directly</li> <li>Calculate from a formula</li> <li>Populate from a data table</li> </ul>					
Data Table	User Trainings					
	View Table Data					
Calculation	Count Unique v using					
	Count Unique Column(s)					
	Activity					
	Date					
	Location					
	Trainee First Name					
	Trainee Last Name					
Add column						
Date Column						
Date Date						
	Data will be associated with dates from this column.					
Filters	Train the Trainers Training Completed?  Ves					
	O Add filter					

For the data table above, this mapping would give you a result of 4. There are 4 unique pairs of pairs of values in the Trainee and Training Type columns where the Training Type column is set to "Swordsmanship".

## **Troubleshooting Tips for Count Unique Columns**

- If you don't count per unique date, the calculation results are assigned to the most recent date in the data table.
- If you don't count per unique geography, the calculation results are assigned to the largest geographic division in the system, such as the whole country or the whole world.
- If the indicator is designated to be reported per activity, then the calculation generates separate unique counts for each activity.
- You can still add filters as usual so that the indicator calculation ignores any rows of data that do not meet the filter criteria.

Didn't answer your question? Please email us athelp@devresults.com .

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