Summaries

Overview

Summaries#top

Summaries create aggregated totals in order to provide the user with higher level data as part of a more detailed report. There are several types of summary that can be included in a table:

1. Field Totals
2. Categorical Sub Totals
3. Section Totals
4. Section Summary Tables
5. Grand Totals

Depending on the type of summary you are creating, you will have access to a selection of the following types:

Symbol	Summary type	Description
Σ	Sum	This will add all of the values in the field to create the total.
%	Average	This will find the mean value of all the values in the field to create the total.
#	Count	This will count the number of values in the field to create the total.
#!	Count Distinct	This will count the number of unique values in the field to create the total.
f(x)	Calculated Total	This is only available if the field is a calculation, and uses the calculation to create the total. Note: To display the total of a calculated field, ensure that each individual field included in the calculation formula: - is also added to the report - displays its total summary in the report

Standard Table Summaries

Total Aggregation

Year	Invoiced	Athletes
2007	$17,633,473	127
2008	$8,611,470	138
2009	$11,012,244	563
2010	$81,690,100	630
2011	$158,353,519	795
2012	$152,912,577	848
2013	$28,199,351	736
2014	$12,522,605	50
	$470,935,339	

There are two methods for adding a total to a field in a standard Column or Row based table:

Field Drop Down

1. Click on the field's drop down menu, in either of these locations:
    a. Through the Columns/Rows list

Columns	Year	Invoiced Amo...
Rows		

    b. Through the Table Preview

Year	Invoiced Amount
2007	$3,349
2007	$3,525
2007	$5,122
2007	$5,360
2007	$5,392
2007	$5,580
2007	$6,628

2. Select the Total option from the list and click on the aggregation you wish to use for the summary.

Invoiced
- Σ Aggregation ►
- Sort ►
- Advanced Function
- Format
- Clear Formatting
- Conditional Formatting
- Totals
- Hide Field
- Delete

- None
- Σ Sum
- % Average
- # Count
- #! Count Distinct

3. You should now have a total on your field.

Year	Invoiced	Athletes
2007	$17,633,473	127
2008	$8,611,470	138
2009	$11,012,244	563
2010	$81,690,100	630
2011	$158,353,519	795
2012	$152,912,577	848
2013	$28,199,351	736
2014	$12,522,605	50
	$470,935,339	

Column Formatting menu

1. Click on the Column Formatting menu in the main navigation bar of the page
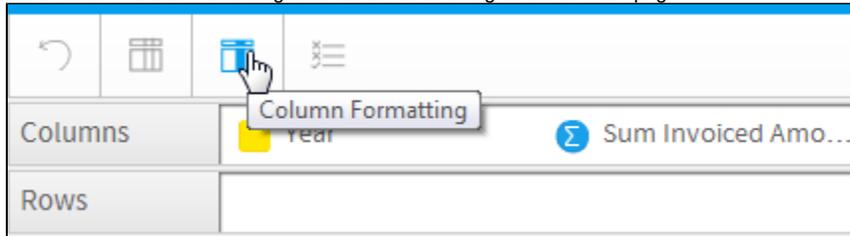
2. Select the field you wish to apply a total to in the Report Fields list panel on the left of the menu
3. Open the Summary section of the menu to view the available options
4. Define the Total Aggregation option.
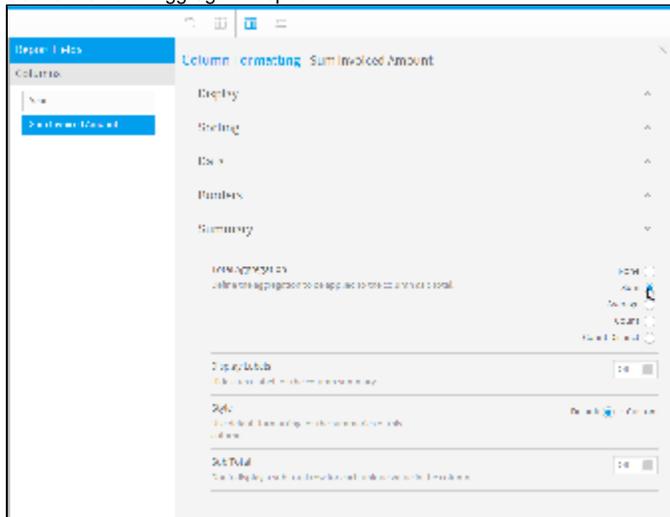
You will notice that using the Column Formatting menu rather than the Field Drop Down list means that you have a range of additional options, rather than just the ability to select the aggregation to use. These will be explored below.

5. You should now have a total on your field.

Year	Invoiced	Athletes
2007	$17,633,473	127
2008	$8,611,470	138
2009	$11,012,244	563
2010	$81,690,100	630
2011	$158,353,519	795
2012	$152,912,577	848
2013	$28,199,351	736
2014	$12,522,605	50
	$470,935,339	

Display Labels

Year	Invoiced
2007	$17,633,473
2008	$8,611,470
2009	$11,012,244
2010	$81,690,100
2011	$158,353,519
2012	$152,912,577
2013	$28,207,858
2014	$12,522,605
	Sum: $470,943,846

1. Click on the Column Formatting menu in the main navigation bar of the page

Columns	Year	Σ Sum Invoiced Amo...
Rows		

Column Formatting
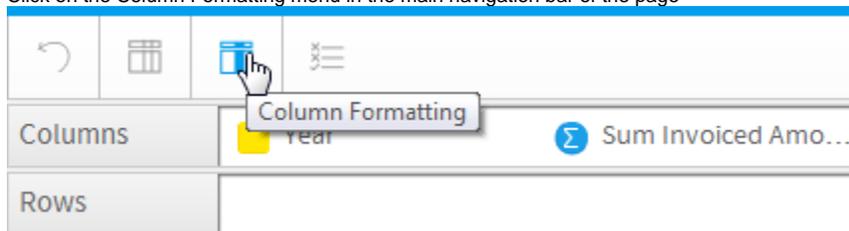
2. Select the field you wish to apply labels to in the Report Fields list panel on the left of the menu
3. Open the Summary section of the menu to view the available options

4. Set **Display Labels** to **On**
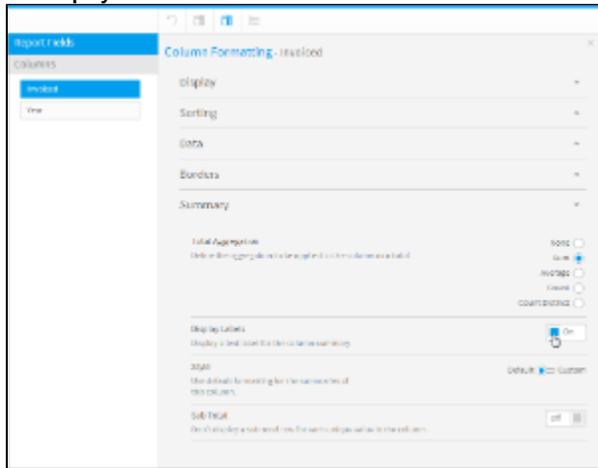
5. You should now have a label on your total. The label will reflect the aggregation used for the total and cannot be customised.

Year	Invoiced
2007	$17,633,473
2008	$8,611,470
2009	$11,012,244
2010	$81,690,100
2011	$158,353,519
2012	$152,912,577
2013	$28,207,858
2014	$12,522,605
	Sum: $470,943,846

Style

Year	Invoiced
2007	$17,633,473
2008	$8,611,470
2009	$11,012,244
2010	$81,690,100
2011	$158,353,519
2012	$152,912,577
2013	$28,207,858
2014	$12,522,605
	Sum: $470,943,846

1. Click on the Column Formatting menu in the main navigation bar of the page

2. Select the field you wish to style the total of in the Report Fields list panel on the left of the menu
3. Open the Summary section of the menu to view the available options
4. Set **Style** to **Custom**
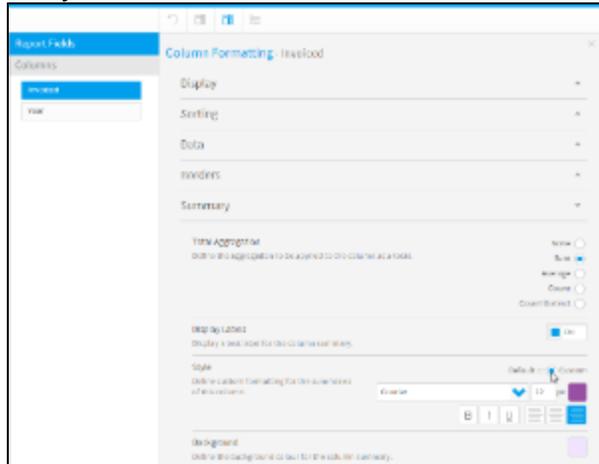
5. Apply the formatting you wish to use. This will only customise the look of the total cell for the field selected.

Year	Invoiced
2007	$17,633,473
2008	$8,611,470
2009	$11,012,244
2010	$81,690,100
2011	$158,353,519
2012	$152,912,577
2013	$28,207,858
2014	$12,522,605
	Sum: $470,943,846

Sub Total

Year	Quarter	Invoiced
2012	Quarter 1	$14,604,660
	Quarter 2	$832,122
	Quarter 3	$41,453,312
	Quarter 4	$96,022,483
2012		Sum: $152,912,577
2013	Quarter 1	$12,869,675
	Quarter 2	$947,281
	Quarter 3	$944,589
	Quarter 4	$13,446,313
2013		Sum: $28,207,858
2014	Quarter 1	$12,522,605
2014		Sum: $12,522,605
		Sum: $193,643,041

Sub Totals are used when there are multiple records per category, possibly caused by having multiple dimension fields in a table, and it would be beneficial to view a total value for each category value. The example shown here could use a sub total for Year, as there are multiple rows per year value due to the Quarter field.

Note: You can apply conditional formatting to sub totals in *regular* and *cross-tab* charts.

Year	Quarter	Invoiced
2012	Quarter 1	$14,604,660
2012	Quarter 2	$832,122
2012	Quarter 3	$41,453,312
2012	Quarter 4	$96,022,483
2013	Quarter 1	$12,869,675
2013	Quarter 2	$947,281
2013	Quarter 3	$944,589
2013	Quarter 4	$13,446,313
2014	Quarter 1	$12,522,605
		Sum: $193,643,041

Note: in order to have a sub total display, you **must** have a total applied to the column you wish to populate the sub total row. For example, in the table above you will set the sub total on the Year category field, but you will have the total applied to the Invoiced field.

1. Click on the Column Formatting menu in the main navigation bar of the page
2. Select the category you wish to create a sub total for in the Report Fields list panel on the left of the menu
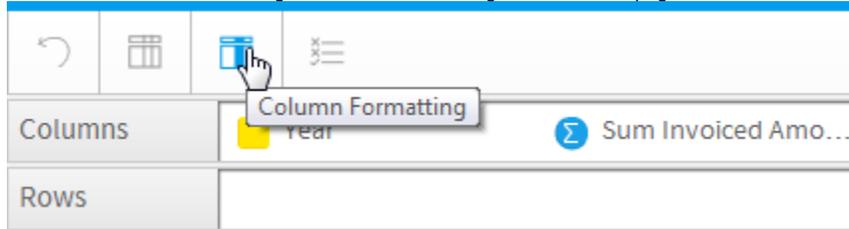3. Open the Summary section of the menu to view the available options

4. Set **Sub Total** to **On**.
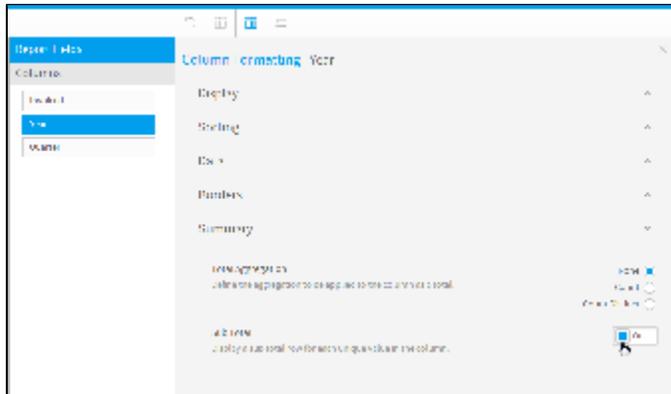
5. You will now have a sub total row for each category value, populated by any metric that already has a total applied to it.

Year	Quarter	Invoiced
2012	Quarter 1	$14,604,660
2012	Quarter 2	$832,122
2012	Quarter 3	$41,453,312
2012	Quarter 4	$96,022,483
2012		Sum: $152,912,577
2013	Quarter 1	$12,869,675
2013	Quarter 2	$947,281
2013	Quarter 3	$944,589
2013	Quarter 4	$13,446,313
2013		Sum: $28,207,858
2014	Quarter 1	$12,522,605
2014		Sum: $12,522,605
		Sum: $193,643,041

When using Sub Totals, we often pair this functionality with the Suppress Duplicates option, to make the report output easier to consume. To apply this option:

1. Click on the Column Formatting menu in the main navigation bar of the page
2. Select the category you applied the sub total to in the Report Fields list panel on the left of the menu
3. Set the **Suppress Duplicates** option to **On**.
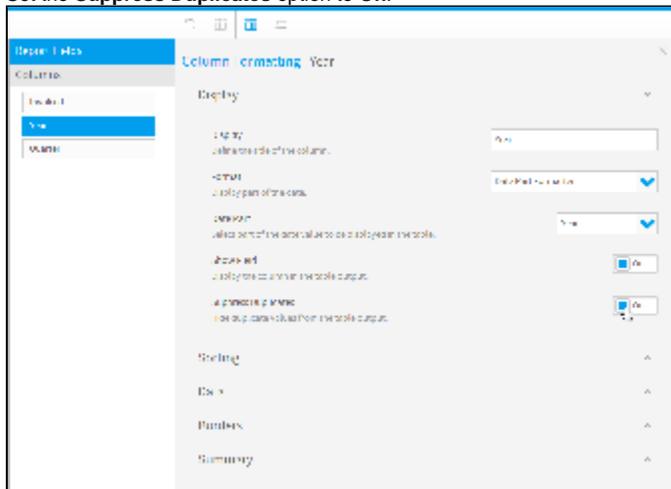
4. You will now have a clearer report output

Year	Quarter	Invoiced
2012	Quarter 1	$14,604,660
	Quarter 2	$832,122
	Quarter 3	$41,453,312
	Quarter 4	$96,022,483
2012		Sum: $152,912,577
2013	Quarter 1	$12,869,675
	Quarter 2	$947,281
	Quarter 3	$944,589
	Quarter 4	$13,446,313
2013		Sum: $28,207,858
2014	Quarter 1	$12,522,605
2014		Sum: $12,522,605
		Sum: $193,643,041

Totals and subtotals can be moved to the start of a table or section too, so totals might appear in the top row and left column and subtotals might appear at the top row or column of their section within a table. In the Column Formatting dialog box, look for the **Move Total Value Location** toggle (and the **Move Sub Total Value Location** toggle, further down) and activate them to see totals at thes tart of a table and subtotals at the start of a section.

Summary

Total Aggregation
Define the aggregation to be applied to the column as a total.

None ○
Count ◉
Count Distinct ○

Display Total Value
Display the value of this column in the total row.

Move Total Value Location
Move totals to the start of the table.

Section Summaries

Section Summary

Gender	Athletes	Avg Age	Invoiced
Female	1599	32	$150,322,813
Male	2288	35	$320,612,526

Gender: Female

Demographic	Athletes	Avg Age	Invoiced
Adventure	549	29	$83,212,854
Culture	156	34	$754,951
Family	287	28	$7,879,590
Luxury	201	36	$43,831,215
Relaxation	173	37	$8,209,006
Sport	233	29	$6,435,198
	1599	32	$150,322,813

(Top)

Gender: Male

Demographic	Athletes	Avg Age	Invoiced
Adventure	930	32	$134,323,098
Culture	212	36	$1,078,368
Family	369	32	$37,380,013
Luxury	98	35	$107,675,539
Relaxation	232	40	$8,849,848
Sport	447	32	$31,305,660
	2288	35	$320,612,526

(Top)

1. Click on the Section Formatting menu in the main navigation bar of the page

2. Select the section field you wish to use as the category in the section summary table at the top of the report

3. Close the menu. You will now have a section summary table at the top of the page that links down to each individual section

Gender	Athletes	Avg Age	Invoiced
Female	1599	32	$150,322,813
Male	2288	35	$320,612,526

Gender: Female

Demographic	Athletes	Avg Age	Invoiced
Adventure	549	29	$83,212,854
Culture	156	34	$754,951
Family	287	28	$7,879,590
Luxury	201	36	$43,831,215
Relaxation	173	37	$8,209,006
Sport	233	29	$6,435,198
	1599	32	$150,322,813

(Top)

Gender: Male

Demographic	Athletes	Avg Age	Invoiced
Adventure	930	32	$134,323,098
Culture	212	36	$1,078,368
Family	369	32	$37,380,013
Luxury	98	35	$107,675,539
Relaxation	232	40	$8,849,848
Sport	447	32	$31,305,660
	2288	35	$320,612,526

(Top)

Section Total & Labels

Gender: Female

Demographic ▾	Athletes ▾	Avg Age ▾	Invoiced ▾
Adventure	549	29	$83,212,854
Culture	156	34	$754,951
Family	287	28	$7,879,590
Luxury	201	36	$43,831,215
Relaxation	173	37	$8,209,006
Sport	233	29	$6,435,198
	1599	32	$150,322,813
Total for Gender: Female			
	1599	32	$150,322,813

1. Click on the Section Formatting menu in the main navigation bar of the page
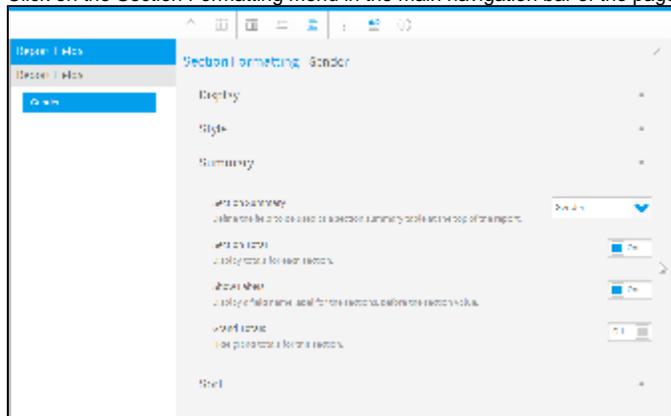
2. Enable the Section Total and Show Labels options as desired
3. You will now have a total row for each section of the report

Gender: Female

Demographic ▾	Athletes ▾	Avg Age ▾	Invoiced ▾
Adventure	549	29	$83,212,854
Culture	156	34	$754,951
Family	287	28	$7,879,590
Luxury	201	36	$43,831,215
Relaxation	173	37	$8,209,006
Sport	233	29	$6,435,198
	1599	32	$150,322,813
Total for Gender: Female			
	1599	32	$150,322,813

Grand Totals

Gender: Male

Demographic ▼	Athletes ▼	Avg Age ▼	Invoiced ▼
Adventure	930	32	$134,323,098
Culture	212	36	$1,078,368
Family	369	32	$37,380,013
Luxury	98	35	$107,675,539
Relaxation	232	40	$8,849,848
Sport	447	32	$31,305,660
	2288	35	$320,612,526

Total for Gender: Male

	2288	35	$320,612,526

Grand Totals

	3887	33	$470,935,339

(Top)

1. Click on the Section Formatting menu in the main navigation bar of the page
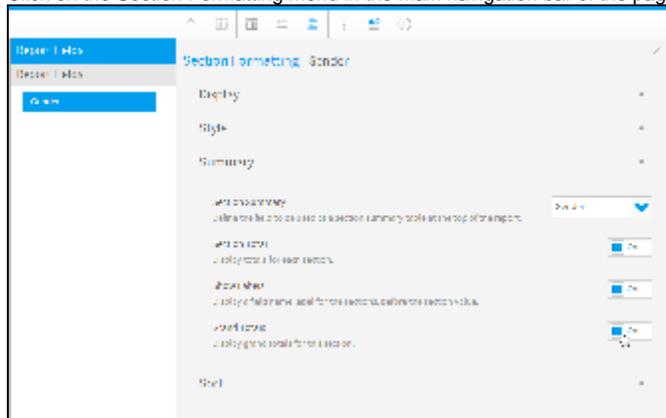
2. Enable the Grand Totals option
3. You will now have a single Grand Total row at the bottom of the last section that totals up the entire report.

Gender: Male

Demographic ▼	Athletes ▼	Avg Age ▼	Invoiced ▼
Adventure	930	32	$134,323,098
Culture	212	36	$1,078,368
Family	369	32	$37,380,013
Luxury	98	35	$107,675,539
Relaxation	232	40	$8,849,848
Sport	447	32	$31,305,660
	2288	35	$320,612,526

Total for Gender: Male

	2288	35	$320,612,526

Grand Totals

	3887	33	$470,935,339

(Top)

Cross Tab Summaries

Column Totals

Athletes	Age Group at Camp									
Year	0 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 +
2007	20	13	0	7	21	15	19	22	10	0
2008	11	11	32	15	32	17	7	8	5	0
2009	0	91	66	30	63	143	62	48	55	5
2010	0	106	147	61	56	104	60	51	32	13
2011	0	142	134	91	68	147	78	58	57	20
2012	0	125	157	82	60	174	80	68	75	27
2013	0	91	110	93	60	136	99	53	62	32
2014	0	0	29	20	1	0	0	0	0	0
Total	31	579	675	399	361	736	405	308	296	97

1. Click on the field drop down menu of the Column header in the report preview
2. Select the **Column Totals** option from the drop down list

Athletes	Age Group at Camp									Age Group at Camp
Year	0 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	
2007	20	13	0	7	21	15	19	22	10	Format
2008	11	11	32	15	32	17	7	8	5	Clear Formatting
2009	0	91	66	30	63	143	62	48	55	Conditional Formatting
2010	0	106	147	61	56	104	60	51	32	
2011	0	142	134	91	68	147	78	58	57	Group Data
2012	0	125	157	82	60	174	80	68	75	Column Totals
2013	0	91	110	93	60	136	99	53	62	Delete
2014	0	0	29	20	1	0	0	0	0	0

3. You will now have a total row for each column

Athletes	Age Group at Camp									▼
Year ▼	0 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 +
2007	20	13	0	7	21	15	19	22	10	0
2008	11	11	32	15	32	17	7	8	5	0
2009	0	91	66	30	63	143	62	48	55	5
2010	0	106	147	61	56	104	60	51	32	13
2011	0	142	134	91	68	147	78	58	57	20
2012	0	125	157	82	60	174	80	68	75	27
2013	0	91	110	93	60	136	99	53	62	32
2014	0	0	29	20	1	0	0	0	0	0
Total	31	579	675	399	361	736	405	308	296	97

Row Totals

Athletes	Age Group at Camp									▼	
Year ▼	0 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 +	Total
2007	20	13	0	7	21	15	19	22	10	0	127
2008	11	11	32	15	32	17	7	8	5	0	138
2009	0	91	66	30	63	143	62	48	55	5	563
2010	0	106	147	61	56	104	60	51	32	13	630
2011	0	142	134	91	68	147	78	58	57	20	795
2012	0	125	157	82	60	174	80	68	75	27	848
2013	0	91	110	93	60	136	99	53	62	32	736
2014	0	0	29	20	1	0	0	0	0	0	50

1. Click on the field drop down menu of the Column header in the report preview
2. Select the **Column Totals** option from the drop down list

Athletes	Age Group at Camp									▼
Year ▼	0 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 +
200 **Year**					21	15	19	22	10	0
200 Format					32	17	7	8	5	0
200 Clear Formatting					63	143	62	48	55	5
201 Conditional Formatting					56	104	60	51	32	13
201					68	147	78	58	57	20
201 Group Data					60	174	80	68	75	27
201 Row Totals 🖐					60	136	99	53	62	32
201 Delete					1	0	0	0	0	0

3. You will now have a total row for each column

Year	0 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 +	Total
2007	20	13	0	7	21	15	19	22	10	0	127
2008	11	11	32	15	32	17	7	8	5	0	138
2009	0	91	66	30	63	143	62	48	55	5	563
2010	0	106	147	61	56	104	60	51	32	13	630
2011	0	142	134	91	68	147	78	58	57	20	795
2012	0	125	157	82	60	174	80	68	75	27	848
2013	0	91	110	93	60	136	99	53	62	32	736
2014	0	0	29	20	1	0	0	0	0	0	50

Sub-Totals

Sub-totals work on multiple levels in cross-tabs reports. You can calculate row totals across columns, and column totals across rows. You can even get totals of column totals and row totals. This is also done at the grand total level; that is, a total of two separate sections can be done across rows and columns. Refer to the example screenshots.

Row sub-totals on columns

Columns		Demographic		Gender		% Average Age at Ca...													
Rows		Currency Code																	

Average Age at Camp	Adventure		Sub Total	Relaxation		Sub Total	Family		Sub Total	Culture		Sub Total	Luxury		Sub Total	Sport		Sub Total	
Currency Code	Female	Male		Female	Male		Female	Male		Female	Male		Female	Male		Female	Male		Total
AUD	29	30	30	38	40	39	27	30	29	29	33	31	34	0	34	28	31	30	32
CAD	29	31	30	38	37	38	30	32	31	35	35	35	36	35	36	29	33	31	33
EUR	28	33	31	38	40	39	27	33	30	34	37	36	0	0		31	34	33	34
JPY	29	32	31	33	40	37	21	33	27	0	0		34	36	35	35	27	31	32
Total	29	32	30	37	39	38	26	32	29	33	35	34	35	36	35	31	31	31	33

Column sub-totals on rows

	Columns		🟨 Gender		% Average Age at Ca...	
	Rows		🟨 Demographic		🟨 Currency Code	

Average Age at Camp			Gender ▾		
Demographic ▾	Currency Code ▾		Female	Male	Total
Adventure	AUD		29	30	30
	CAD		29	31	30
	EUR		28	33	31
	JPY		29	32	31
Sub Total			29	32	30
Relaxation	AUD		38	40	39
	CAD		38	37	38
	EUR		38	40	39
	JPY		33	40	37
Sub Total			37	39	38
Family	AUD		27	30	29
	CAD		30	32	31
	EUR		27	33	30
	JPY		21	33	27
Sub Total			26	32	29
Culture	AUD		29	33	31
	CAD		35	35	35
	EUR		34	37	36
Sub Total			33	35	34
Luxury	AUD		34	0	34
	CAD		36	35	36
	JPY		34	36	35
Sub Total			35	36	35
Sport	AUD		28	31	30
	CAD		29	33	31
	EUR		31	34	33
	JPY		35	27	31
Sub Total			31	31	31
Total			31	34	33

Summaries#top