



# CUSTOMIZABLE STRAIGHT TABLE

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QlikView Technical Brief

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QlikView 11.2



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# QlikView

## Introduction

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In this document, the steps to create a customized ad-hoc report or straight table in a QlikView application will be covered. A customizable report allows the user to select the dimensions and expressions that they would like to see in the report. While experienced QlikView users can create their own charts in a QlikView application, having a customizable report set up for the users is a nice feature that anyone can use.

### SUPPORTING MATERIALS

- **DEMO.** The customized report in the Call Detail Record Analysis demo will be referenced in this document:  
<http://eu.demo.qlikview.com/detail.aspx?appName=Call%20Detail%20Record%20Analysis.qvw>

## Set the Scene

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Instead of creating a straight table with preselected dimensions and measures, allow the user to select the dimensions and measures they would like to see in a straight table.

### **FUNCTIONS, FEATURES AND TRICKS USED**

The following features were used to create the ad-hoc report:

- Load Inline
- Calculated Condition
- Conditional dimensions
- Conditional expressions

## Inline Tables

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Once the QlikView application is complete, it is easy to add the necessary tables to be used in a customized report. For example, in the Call Detail Record Analysis demo there was the need to have a straight table that the user could populate independently. In order to do this, a list of the dimensions and measures that users may want to include in their report were loaded into the data model. Two tables need to be created – one for the dimensions and one for the measures. To do this, inline tables were loaded as seen in the script below.

Dimensions:

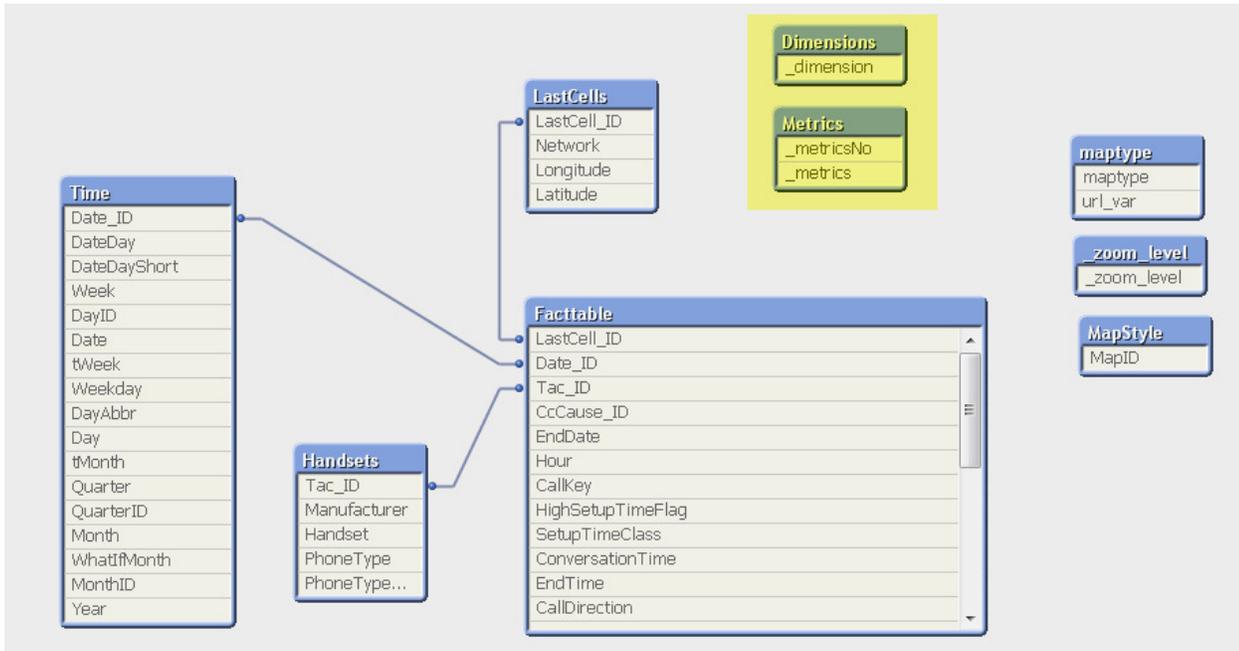
```
LOAD * INLINE [
_dimension
Call Date
Calling Number
Called Number
Cell Towers Visited
IMSI
Direction
First Cell Tower
Last Cell Tower
Manufacturer
Phone Type
Reason for Drop
Week
];
```

Metrics:

```
LOAD * INLINE [
_metricsNo, _metrics
1, Calls
2, Distinct Cell Towers
3, Dropped Call
4, Handovers
5, Setup Time
6, Talk Time
];
```

The Dimensions table includes all possible fields that may be used as a dimension and the Metrics table stores all the possible measures the user may want to see. There is no limit to the number of dimensions or measures used. It is just important to include all possible options the user may want to see. It is also possible to use more user friendly names here. For instance, in the Dimensions table, “Call Date” will be displayed versus “Date” which is the actual field used in the chart.

The Dimensions and Metrics tables are loaded are a part of the data model but they are not associated with the rest of the data model as seen in the image below. Therefore selections in these fields do not influence the other fields in the data model.

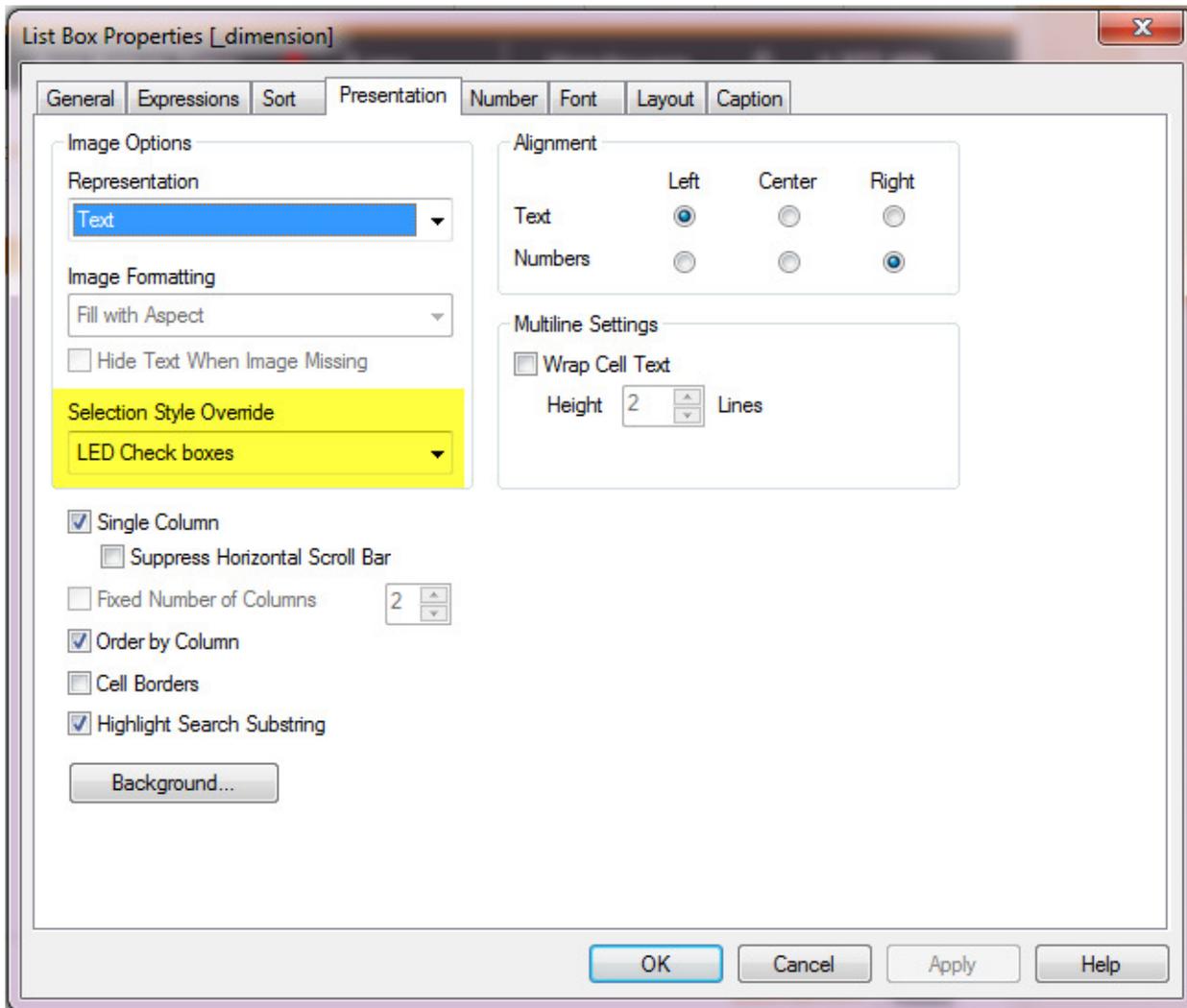


## Creating the Report

Once the Dimensions and Metrics inline table have been loaded into the data model, the report sheet can be created. In the case of the Call Detail Record Analysis demo, the sheet was designed like the other sheets with some list boxes that the user could use to filter the data. Here is what the final Report sheet looked like:

The screenshot shows the QlikView Report sheet interface. At the top, there is a navigation bar with tabs: Intro, Dashboard, Dropped Call Details, Setup Time Details, Cell Tower Details, and Report (selected). Below the navigation bar, the report title "Report" is displayed, along with a date range selector set to "Week - 2013-31" and other week options (2013-32, 2013-33, 2013-34, 2013-35). A summary bar shows key metrics: Calls (1,234,507), Dropped % (0.42%), Avg Setup Time (3 sec), and Handovers (1,377,656). The main content area is divided into three sections: "Current Selections" (empty), "Reset" (button), and "Customized Report". The "Customized Report" section contains a message: "Select Dimensions and Metrics from the left to create a custom report". Below this message are two lists of items with checkboxes: "PICK DIMENSION(S)" and "PICK METRIC(S)". The "PICK DIMENSION(S)" list includes: Call Date, Called Number, Calling Number, Cell Towers Visited, Direction, First Cell Tower, IMSI, Last Cell Tower, Manufacturer, Phone Type, Reason for Drop, and Week. The "PICK METRIC(S)" list includes: Calls, Distinct Cell Towers, Dropped Call, Handovers, Setup Time, and Talk Time. At the bottom of the interface, there is a footer with "Powered by QlikView" and "TERADATA THE BEST DECISION POSSIBLE".

A list box for dimensions and metrics were added to the sheet. These list boxes use the field names that were added by the Dimensions and Metrics inline tables, `_dimension` and `_metrics` respectively. The style of the list boxes was changed to LED Check boxes making it easier for the user to select multiple values and maintain the order of the items in the list box when selections are made.



# QlikView

In the open area of the sheet is a straight table.

**Reset**

Customized Report

**PICK DIMENSION(S)**

- Call Date
- Called Number
- Calling Number
- Cell Towers Visited
- Direction
- First Cell Tower
- IMSI
- Last Cell Tower
- Manufacturer
- Phone Type
- Reason for Drop
- Week

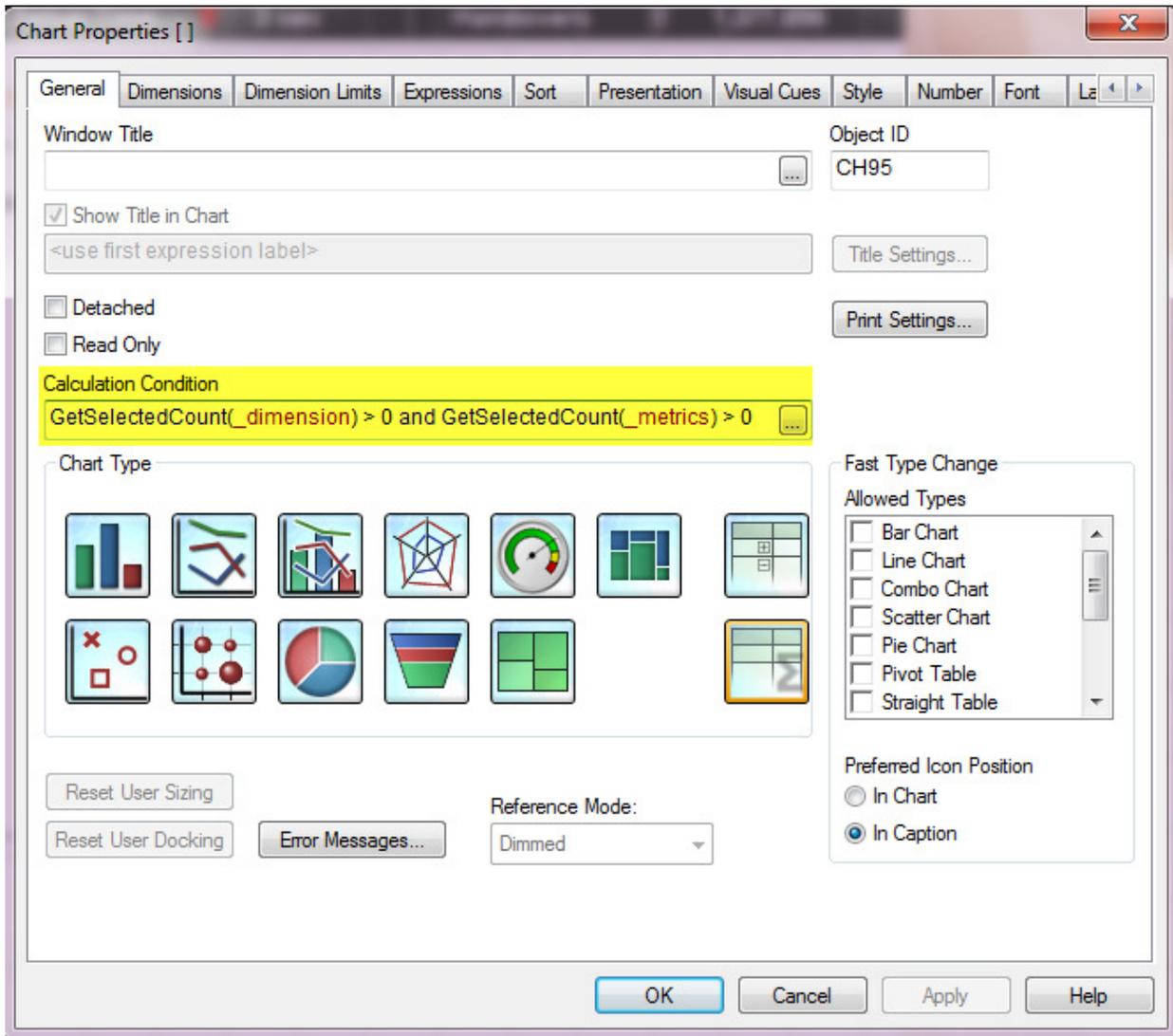
**PICK METRIC(S)**

- Calls
- Distinct Cell Towers
- Dropped Call
- Handovers
- Setup Time
- Talk Time

Select Dimensions and Metrics from the left to create a custom report

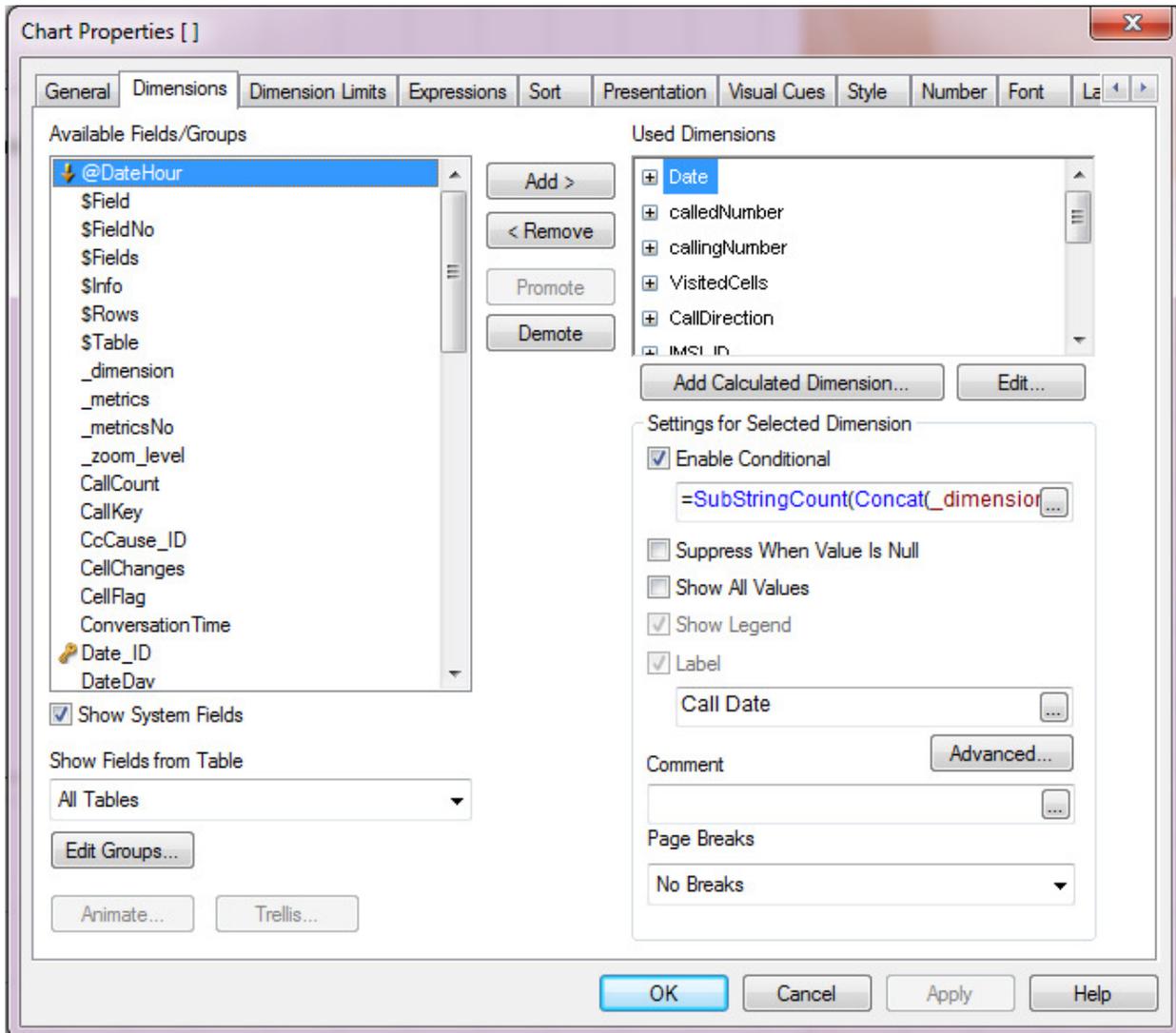
Since no dimension or metric selections have been made, the report does not show up. This is done by adding the expression below to the Calculated Condition of the chart.

`GetSelectedCount(_dimension) > 0 and GetSelectedCount(_metrics) > 0`

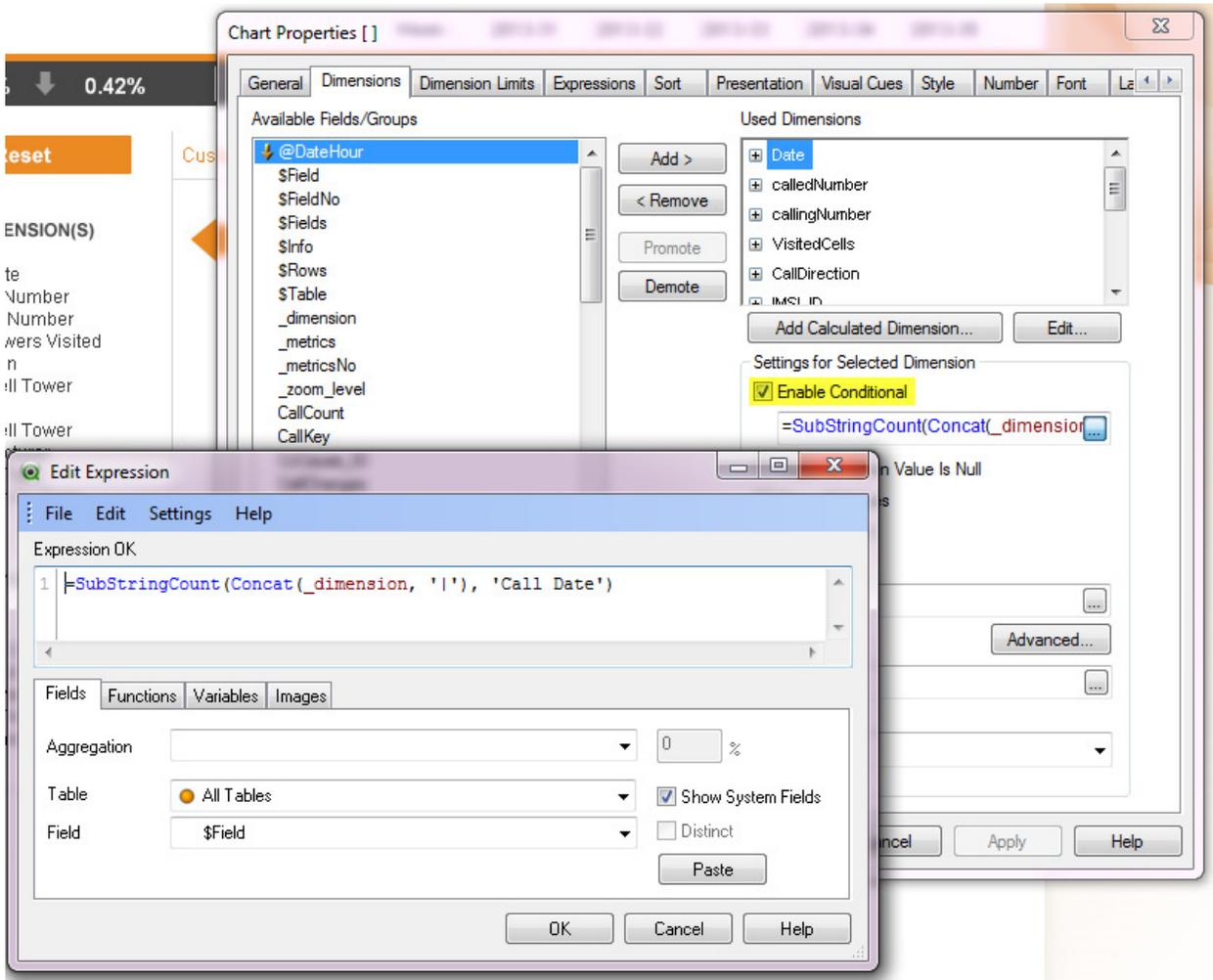


The chart will only be displayed if at least 1 dimension and 1 metric is selected.

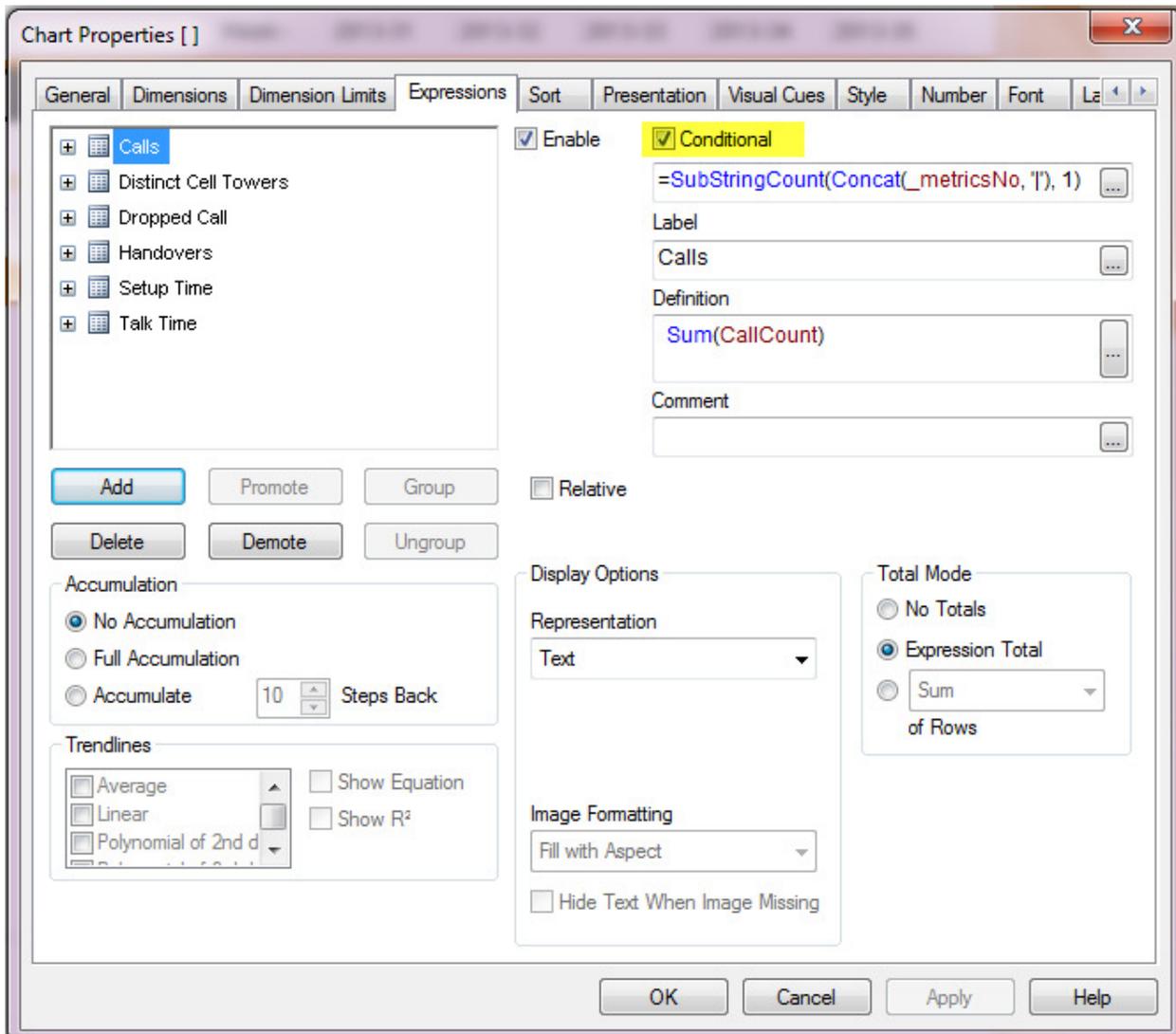
Now let's take a look at the Dimensions tab.



A dimension was added for each dimension listed in the list box and the Enable Conditional check box was selected for each dimension. The dimension will only be visible in the chart if the expression is true. A closer look at the Date dimension shows that Date field will be displayed if “Call Date” is one of the dimensions selected. The Concat() function will concatenate all the selected dimensions selected from the \_dimensions list box. The SubStringCount() function will check that concatenated list for the ‘Call Date’ dimension. If it is found, the function will return 1 thus enabling the dimension in the chart. This was done for each dimension.



The same was done for the expressions in the chart. For each metric listed in the list box, there is a corresponding expression in the chart properties.



The Conditional check box is checked to display the expression in the chart only if the conditional expression is true. Similar to the dimensions expression, the metric is displayed only if it is selected. In this case, the `_metricsNo` was used instead of the `_metrics` field.

Now as dimensions and metrics are selected, they will be displayed in the straight table or customizable report.

Reset

Customized Report

PICK DIMENSION(S)

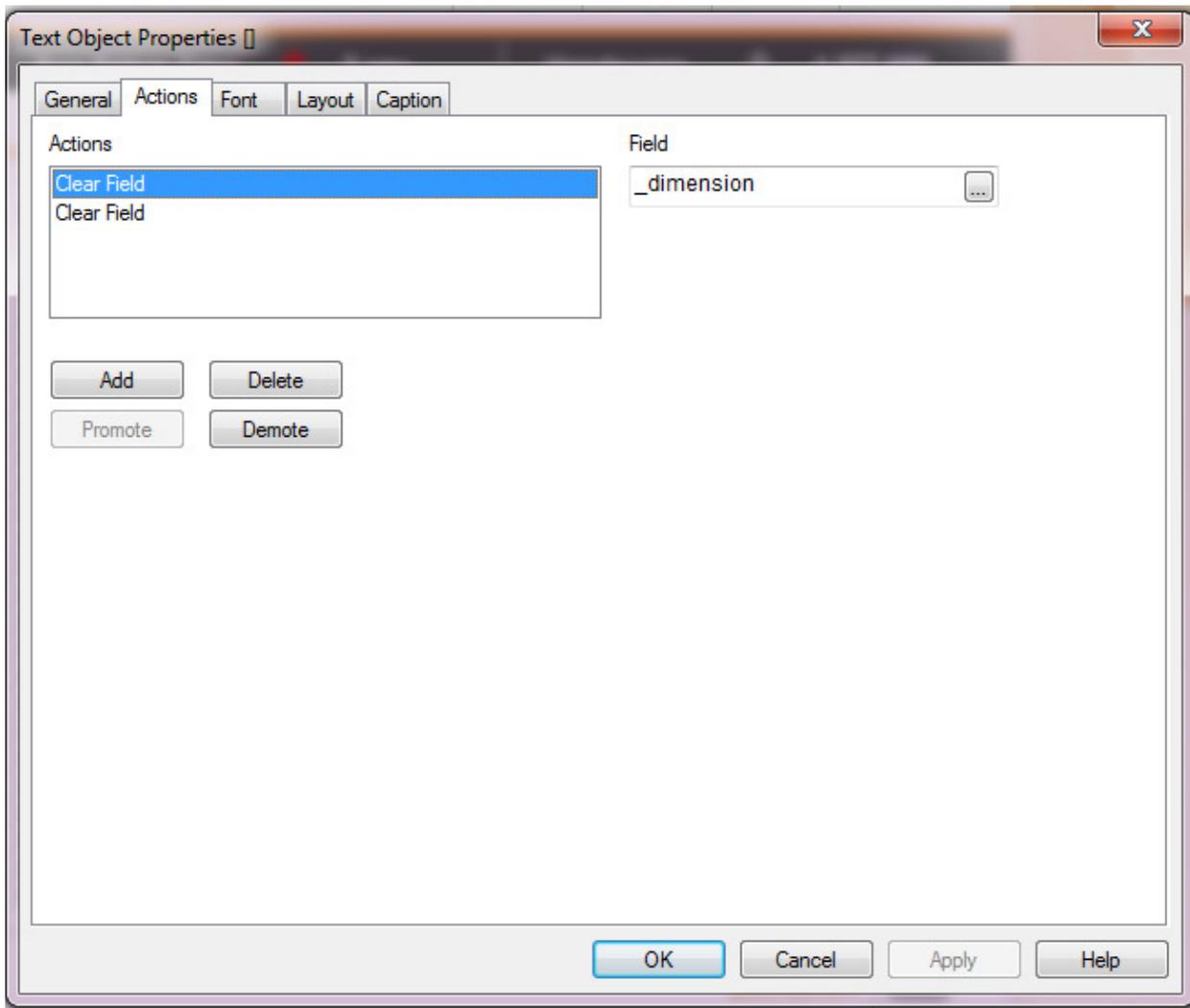
- Call Date
- Called Number
- Calling Number
- Cell Towers Visited
- Direction
- First Cell Tower
- IMSI
- Last Cell Tower
- Manufacturer
- Phone Type
- Reason for Drop
- Week

PICK METRIC(S)

- Calls
- Distinct Cell Towers
- Dropped Call
- Handovers
- Setup Time
- Talk Time

Call Date	Last Cell Tower	Calls	Dropped Call	Handovers
		<b>1,234,507</b>	<b>5,228</b>	<b>1,377,656</b>
08-01-2013	62F210014731	5	0	14
08-01-2013	62F210012E40	10	0	24
08-01-2013	62F2100141C0	8	0	18
08-01-2013	62F2100116D6	5	0	12
08-01-2013	62F2100105F6	9	0	29
08-01-2013	62F210010FAA	2	0	5
08-01-2013	62F210011585	5	0	5
08-01-2013	62F2100101D0	5	0	23
08-01-2013	62F210012D50	3	0	13
08-01-2013	62F210011E3F	6	0	30
08-01-2013	62F210010BE5	6	0	36
08-01-2013	62F2100133E9	4	0	7
08-01-2013	62F2100120BD	4	0	11
08-01-2013	62F210011B9D	2	0	5
08-01-2013	62F21001430B	3	0	11
08-01-2013	62F21001038F	2	0	6
08-01-2013	62F210010493	9	0	19
08-01-2013	62F21001231E	4	0	10
08-01-2013	62F210013837	1	0	0
08-01-2013	62F210010572	10	0	27
08-01-2013	62F2100132AD	5	0	18
08-01-2013	62F210010EA7	5	0	5
08-01-2013	62F210013259	8	0	5

A reset button was also added to this sheet enabling the user to clear the dimensions and metrics selections without clearing all other selections that may have been made in the application. The actions of the Reset button clear the \_dimension and \_metrics fields only.



Now the report is complete and a user can select the dimensions and metrics they would like to see in the report.

# QlikView

## Summary

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In this technical brief we looked at how a customizable straight table can be created providing users with the ability to add and remove dimensions and measures from the table. This is a nice feature to add to a QlikView application when a report-like table is necessary. Instead of including everything (dimensions and measures) in one table for the user to parse through, only the necessary dimensions and measures are added keeping the report clean.

## References

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Below are supporting materials that may be helpful:

**Demo** – Call Detail Record Analysis demo:

<http://eu.demo.qlikview.com/detail.aspx?appName=Call%20Detail%20Record%20Analysis.qvw>

[www.qlikview.com](http://www.qlikview.com)