



# One Analytics Desktop

last updated for the November 2017 release

Handbook

**CAPITA**

## Revision History

Version	Published on
December 2017 - 1.0	21/11/2017

## Doc Ref

One Analytics Desktop Handbook/November 2017/2017-11-21

© Capita Business Services Ltd 2017. All rights reserved. No part of this publication may be reproduced, photocopied, stored on a retrieval system, translated or transmitted without the express written consent of the publisher. Microsoft® and Windows® are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

[www.capita-one.co.uk](http://www.capita-one.co.uk)

## Contacting One Application Support

You can log a call with One Application Support via the Customer Service tool available on [My Account](#).

## Providing Feedback on Documentation

We always welcome comments and feedback on the quality of our documentation including online help files and handbooks. If you have any comments, feedback or suggestions regarding the module help file, this handbook (PDF file) or any other aspect of our documentation, please email:

[onepublications@capita.co.uk](mailto:onepublications@capita.co.uk)

Please ensure that you include the document name, version and aspect of documentation on which you are commenting.

# Contents

<b>01/ Introduction .....</b>	<b>1</b>
Introduction to the One Analytics Desktop Handbook .....	1
One Analytics Overview .....	1
<b>02/ One Analytics Desktop .....</b>	<b>2</b>
The One Analytics Desktop Application .....	2
Data Sources .....	2
Workbooks .....	4
<b>03/ Connecting to Data in One Analytics Desktop .....</b>	<b>6</b>
Connecting to Data Sources .....	6
Connecting to a Data Source on the One Analytics server .....	6
Connecting to a Saved Data Source .....	10
Connecting to GIS Shape Data .....	10
<b>04/ Using Workbooks .....</b>	<b>13</b>
Connecting to a Workbook .....	13
Creating a New Workbook .....	14
Adding a Data Source to a Workbook .....	14
Publishing Workbooks to the One Analytics Server .....	15
<b>05/ Editing Data Sources .....</b>	<b>19</b>
Introduction .....	19
Downloading a Data Source .....	19
Editing the Data source .....	20
Introduction .....	20
Adding and Editing Calculated Fields .....	20
Adding UDFs to Data Sources .....	23
Converting Data Item Types .....	28
Publishing the Data Source to the One Analytics Server .....	29
Manually Replacing Data Sources in Workbooks .....	31
<b>06/ Hints and Tips .....</b>	<b>32</b>
Bins .....	32
Customising Colour Schemes .....	32
Capita Colour Palettes .....	32
Adding Additional Colour Palettes .....	33
Hierarchies .....	34
Pausing Auto Updates: Worksheets .....	35
Pausing Auto Updates: Filters .....	36
Reporting on Vulnerable Groups .....	37
<b>07/ Using Maps within One Analytics .....</b>	<b>38</b>
Introduction .....	38
Plotting Polygons on Maps .....	39

Using Polygon Maps to Create Geographical Heat Maps .....	43
Point Maps .....	47
Geographic Roles .....	51
Assigning Geographic Roles to outbound postcodes .....	52
Plotting Counties .....	56
<b>08/ Attendance Data Source .....</b>	<b>60</b>
Mark Type Hierarchy .....	60
Attendance Below Parameter Visualisation .....	61
Unauthorised Absence Heat Map Visualisation .....	64
Using Bins to Create the % Attendance Steps Visualisation .....	66
<b>09/ Attainment Data Source .....</b>	<b>73</b>
Aspect Hierarchy .....	73
Aspect Name Filter .....	73
Comparing the Percentage of Students Achieving Results Above a Parameter for Different Vulnerable Groups .....	74
Levels of Progress Calculation .....	79
Updating Aspect Parameters .....	84
<b>10/ Creating an Interactive Student Summary Dashboard using URL Actions .....</b>	<b>88</b>
URL Actions .....	88
Interactive Student Summary Dashboards .....	88
Configuring the Student Summary Workbook .....	89
Publishing the Student Summary Dashboard .....	93
Creating Hotlinks to the Student Summary Dashboard from a Different Workbook .....	94
Creating a Single Interactive Dashboard .....	96
<b>11/ Appendix A: UDF Dimensions .....</b>	<b>99</b>
<b>12/ Appendix B: Capita-Branded Colour Codes .....</b>	<b>103</b>
Introduction .....	103
Colour Code .....	103
Colour Schemes: Discrete .....	105
Colour Schemes: Ordered .....	105
<b>Index .....</b>	<b>106</b>

# 01 / Introduction

## Introduction to the One Analytics Desktop Handbook

This handbook is designed to help you use One Analytics Desktop. The handbook should be used alongside your training materials. Because One Analytics is built upon the Tableau® business intelligence toolset, the Tableau help guides are referenced where appropriate within the document. If you have questions about the software that are not covered within the manuals or training guides, you should check the Tableau online help guides:

Tableau desktop (application): <http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm>

**NOTE:** The Tableau help guides fully apply to One Analytics except where they reference connections to other (external) data sources. In One Analytics, you can only connect to data sources provided by Capita One or imported using the One Analytics Import Tool.

## One Analytics Overview

One Analytics is a reporting and analysis solution enabling Local Authorities to:

- Provide all levels of management with access to information through dashboards displaying trends within their Capita One data.
- Provide self-service reporting, enabling all users with the appropriate permissions to report on their data, even if they do not consider themselves to be report writers.
- Analyse geographic patterns within their One data to identify different needs and levels of service provision across each local area.
- Use filters and dashboards to understand the impact of particular services on vulnerable groups, and identify those where additional support is required.
- Support multi-agency working, early intervention and close relationships with other agencies by sharing dashboards (and self-service reporting, if desired) with partners such as schools, academies, health and police.
- Access prebuilt dashboards and reports available through the Report Catalogue.

# 02 / One Analytics Desktop

## The One Analytics Desktop Application

One Analytics Desktop is a desktop authoring environment that enables you to create and edit workbooks and visualisations and publish them to the One Analytics server. It is primarily aimed at report writers and system administrators.

It enables you to create interactive dashboards displaying visualised data patterns, perform in-depth data analysis and calculations and display data by geographical area on maps. You can share created content on the One Analytics server for others to access through the One Analytics Console.

You will need to upgrade the desktop application when new versions are released. The person responsible for One Analytics in your local authority can help you with this.

You must log in to One Analytics Desktop using your One Analytics username and password. If you have not received these details, contact your One Analytics administrator.

## Data Sources

One Analytics uses data sources to organise the data from the data warehouse in a way that makes it easy for you to create visualisations.

The data sources within One Analytics represent different 'views' of the data within the data warehouse. The first data sources that have been released focus on viewing the data associated with a specific module. However, they also include common core data around students and bases. This means that you can often answer many questions from a single data source, even if the question requires data that is not the main subject of that data source.

The data sources provide you with the materials you need to create visualisations. They include:

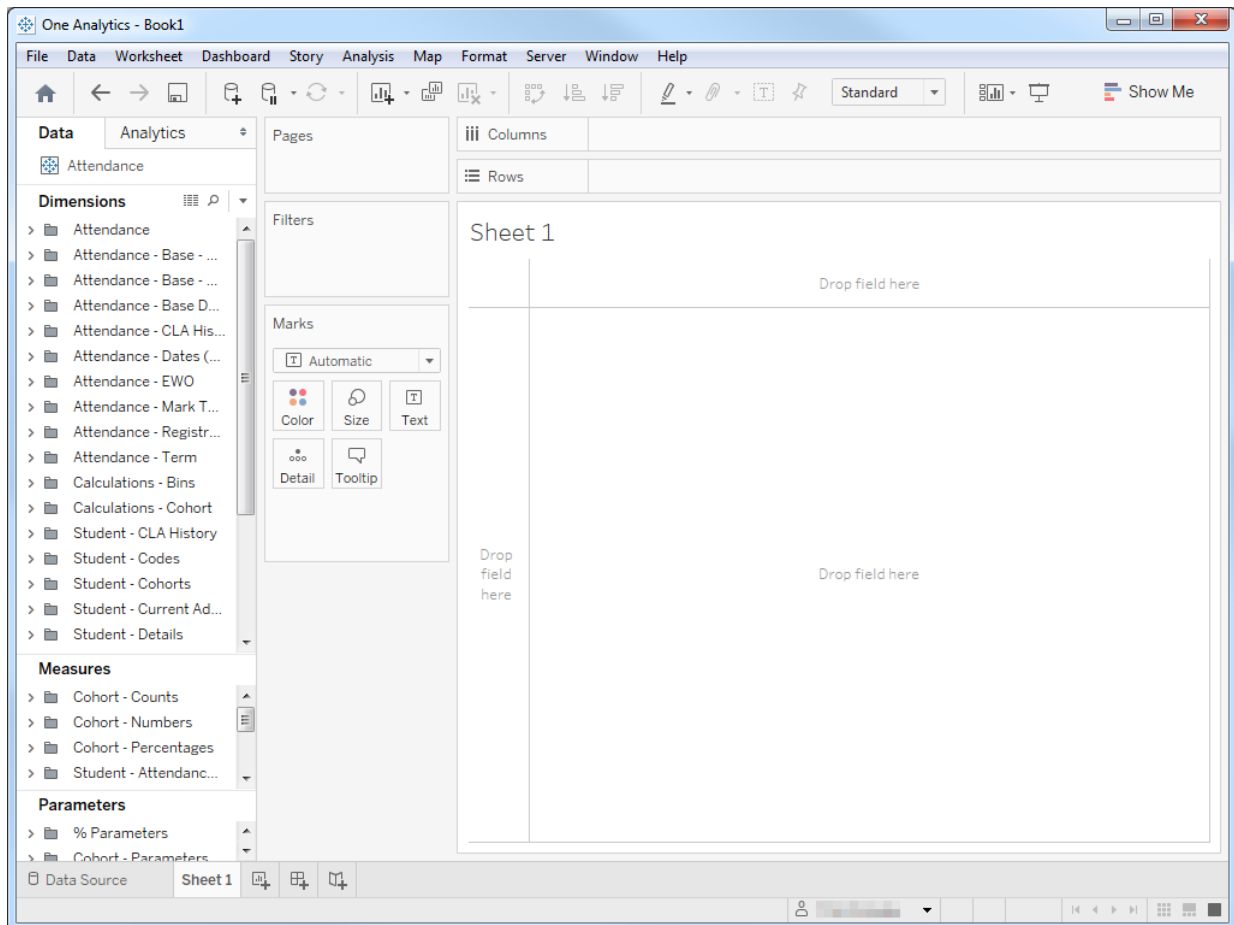
- Pre-joined tables enabling report writers to drag and drop dimensions to create visualisations without having to consider how best to link the tables together.
- Dimensions and measures intuitively named and organised into folders.
- Metadata in tool tips to provide additional context on the dimension or measure.
- Frequently used calculated fields to make it easier for you to create visualisations.
- Logical hierarchies to enable drill-down through data layers within visualisations.

Where available, you can use joint data sources to report across different areas. Joint data sources combine data from different areas into a single data source. You can report from these as you would from any other data source. The CSS, SEN, Provision, Activity & Attainment joint data source is currently available, others are planned for future release.

If you have the required permissions, you can make copies of the data sources provided by Capita One in order to edit them to suit your own needs. This does not change the data within the data source, just the way you interact with it.

Most data sources have a similar setup consisting of dimensions, measures and parameters. These are displayed in the **Data** tab when you create or open a worksheet and connect it to a data source. The data sources to which you are connected are displayed above the

**Dimensions** pane in the **Data** tab. If you are connected to multiple data sources, the **Dimensions**, **Measures** and **Parameters** panes are displayed for the highlighted data source.



## Dimensions

Dimensions are independent data items with which you can interact without aggregating. Dimensions usually represent discrete data items.

**NOTE:** Discrete data items are identified in the shelves by a blue lozenge, continuous ones by a green lozenge.

The **Dimensions** pane contains module-specific folders as well as a set of core **Student** folders that are common to most data sources. The **Student** dimensions include student details and identifiers, as well as codes and flags, e.g. Free School Meals and Children Looked After.

**NOTE:** Many flags are either current, e.g. **Currently CLA**, or historic, e.g. **CLA Ever**. These indicate whether the student currently has that flag, or has had it in the past.

## Measures

Measures are a function of one or more dimensions, and are usually continuous. The **Measures** pane contains a similar set of folders, although there are fewer measures than dimensions. The folders for measures are often name-matched to the corresponding folders for dimensions.

## Parameters

Parameters are pre-defined elements that enable you to replace constant values in calculations, filters or reference lines with a dynamic value that can be changed within worksheets or dashboards to provide a range of information from a single calculation. Parameters are shared

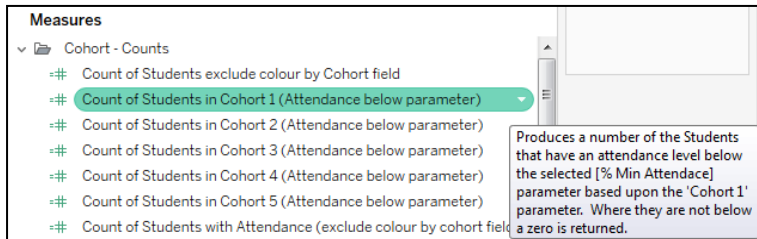


across data sources, and can be matched with their associated dimensions and measures by the folder names.

**MORE INFORMATION:**

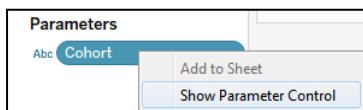
Parameters: [http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#parameters.html%3FTocPath%3DAdvanced%2520Analysis%7CParameters%7C\\_\\_\\_\\_\\_0](http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#parameters.html%3FTocPath%3DAdvanced%2520Analysis%7CParameters%7C_____0)

Where a measure or dimension requires the use of a parameter, a note is included in the measure or dimension’s metadata identifying the parameter and providing a brief description. The metadata is included in a tool tip displayed by hovering the cursor over the measure or dimension.

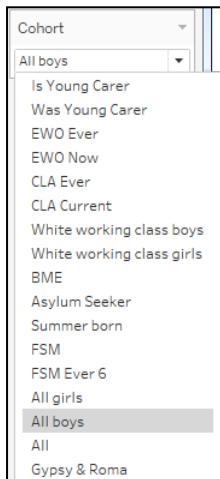


When using measures or dimensions associated with a parameter to build a worksheet, you should display the parameter control. This enables you to keep track of the parameter values and avoid confusing or unexpected results.

To display the parameter control, in the **Parameters** pane right-click the required parameter and select **Show Parameter Control**.



The parameter control card is displayed beside the visualisation in the worksheet. You can select the parameter to use from the drop-down list.



## Workbooks

Visualisations (reports and dashboards), are created within workbooks. Workbooks connect to data sources which provide the data structure for your visualisations. A single workbook can connect to multiple data sources. They can also contain multiple worksheets (one per report) and dashboards.



After workbooks have been uploaded to the One Analytics server, they become part of a project. Each workbook can only belong to a single project, unlike data sources that can be uploaded to multiple projects.

It is recommended that you use a separate workbook for each question or set of interrelated questions that you are trying to answer with a visualisation. This helps you to assign workbooks to the appropriate project.

**NOTE:** *Dashboards can only contain worksheets from a single workbook, so your questions should be answered at the dashboard level.*

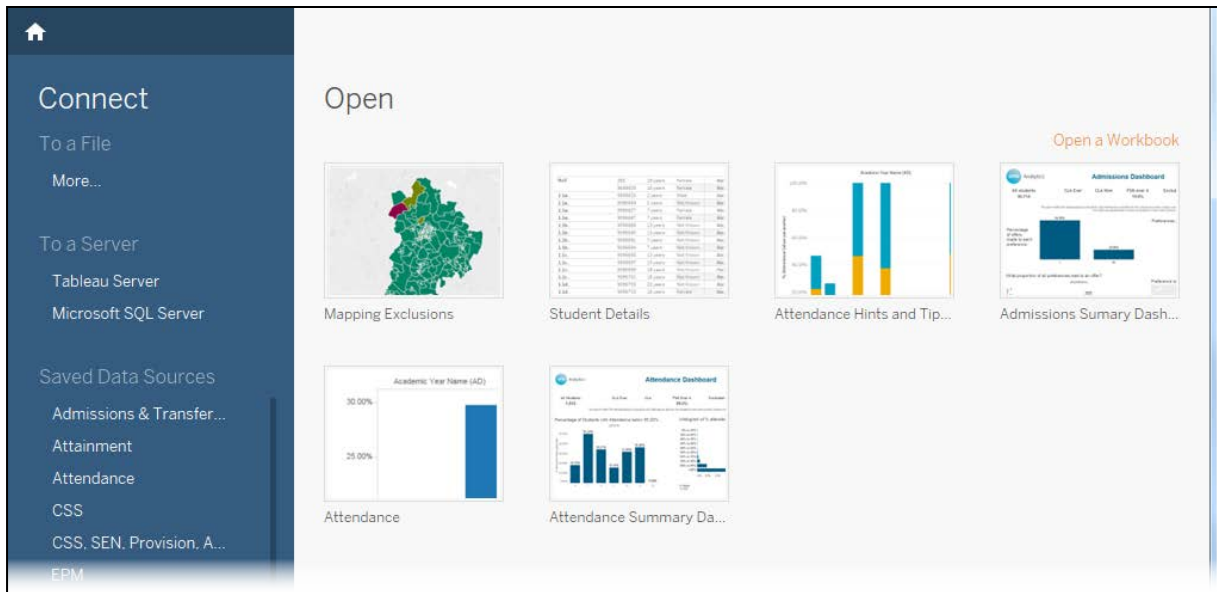
# 03 / Connecting to Data in One Analytics Desktop

## Connecting to Data Sources

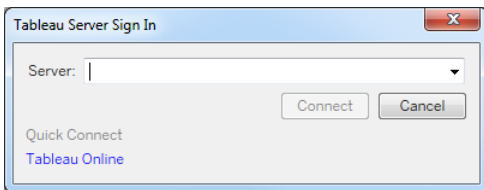
### Connecting to a Data Source on the One Analytics server

To connect to a data source on the One Analytics server:

1. Open One Analytics Desktop to display the home screen.

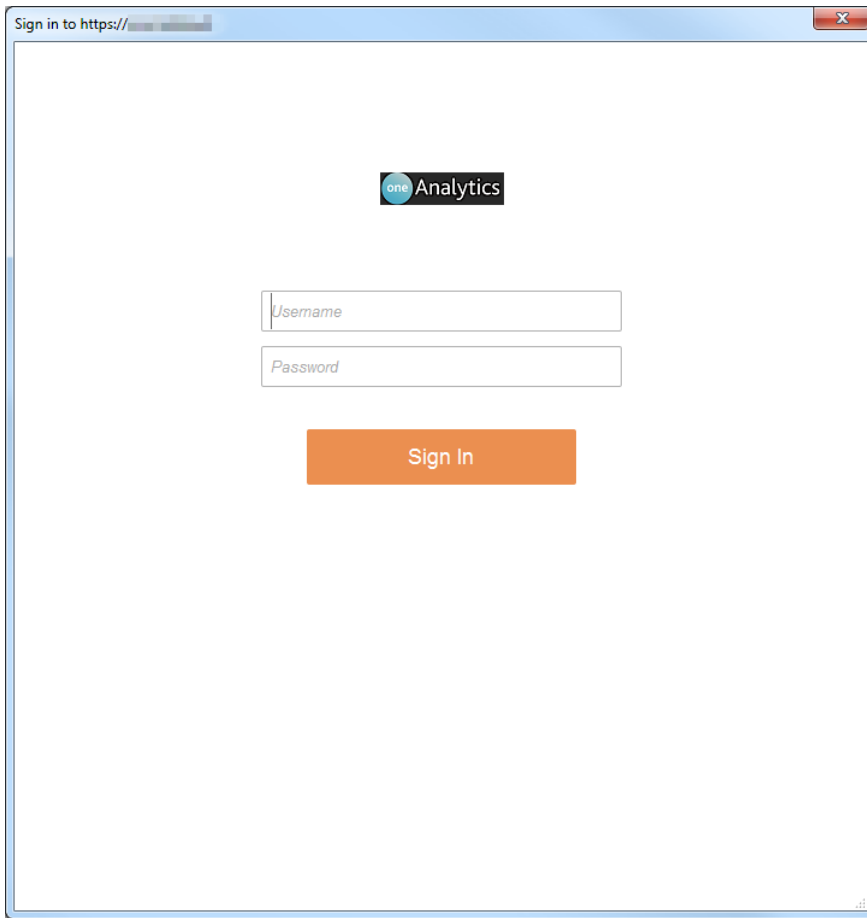


2. Click the **Tableau Server** hyperlink to display the **Tableau Server Sign In** dialog.



3. If this is your first time accessing the One Analytics Server, enter the **Server** address in the **Tableau Server Sign In** dialog.

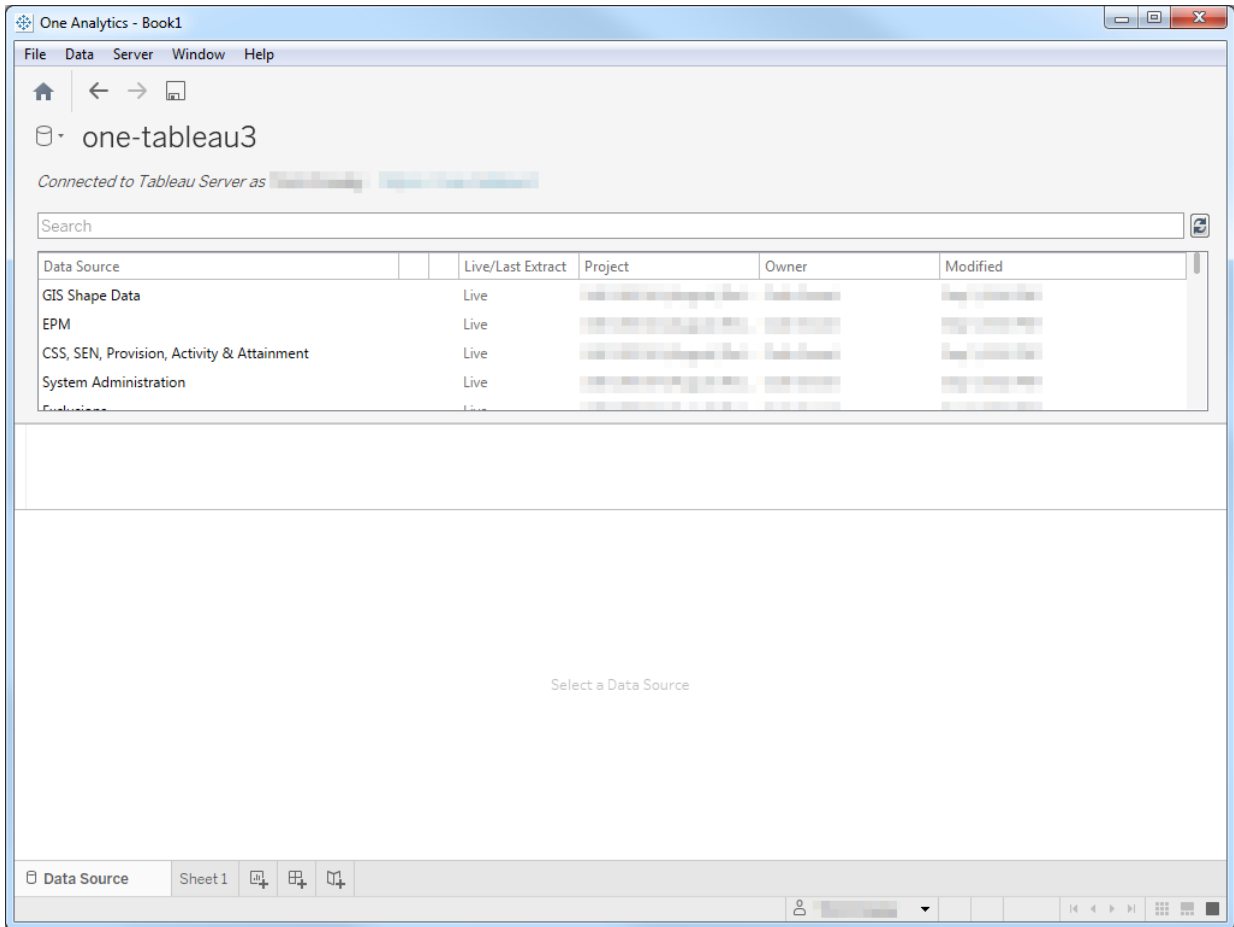
4. Click the **Connect** button to display the sign in dialog.



5. Enter your One Analytics **Username** and **Password**.

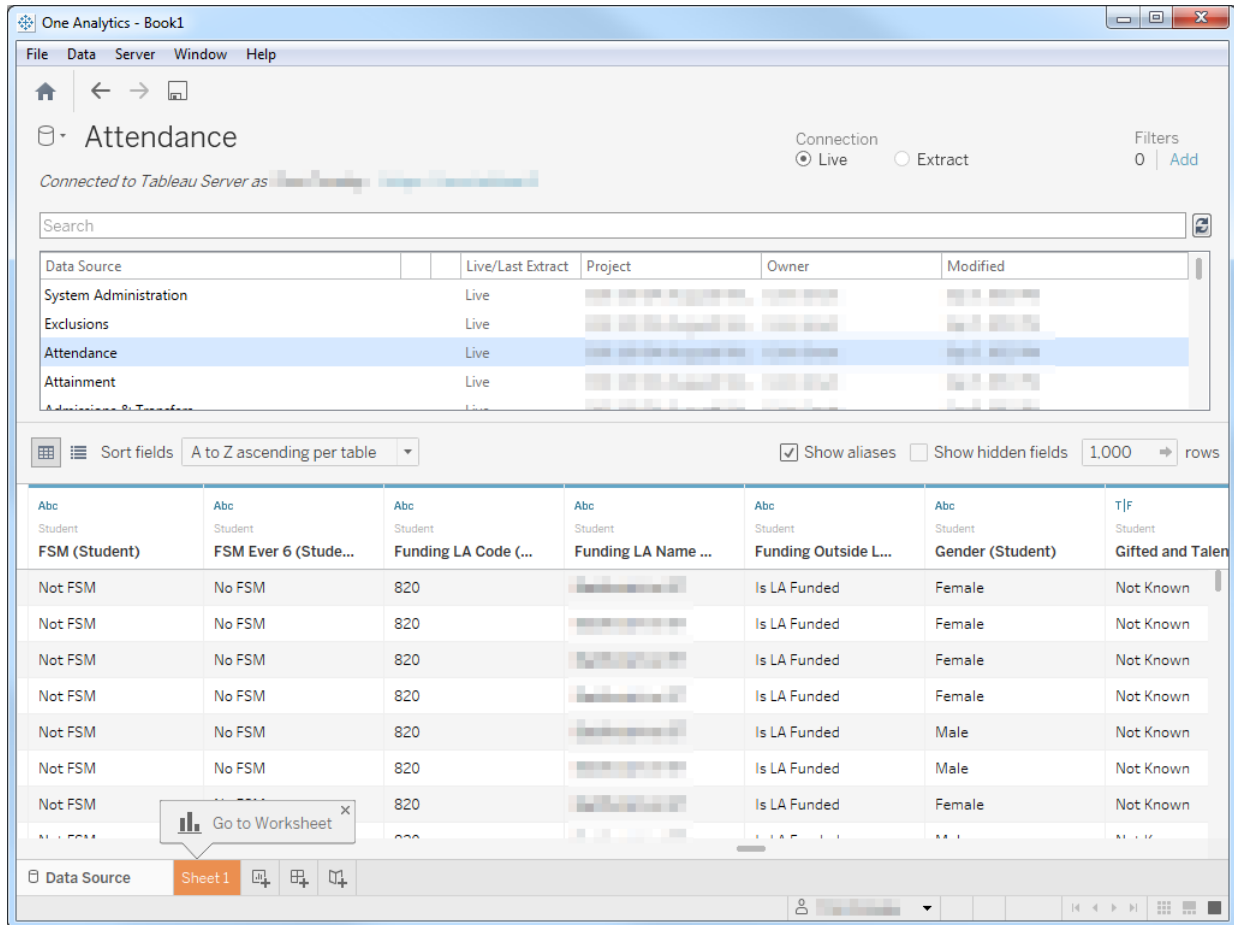
6. Click the **Sign In** button to display the available data sources.

**NOTE:** Only data sources that you have permission to view are displayed.



7. Select the required data source from the list provided to display the data source sheet and an example of the data being returned.

If you are prompted to refresh the data source, click the **Update Now** button to display the data source and example data, or the **Automatically Update** button to force the data source to refresh whenever the data changes.

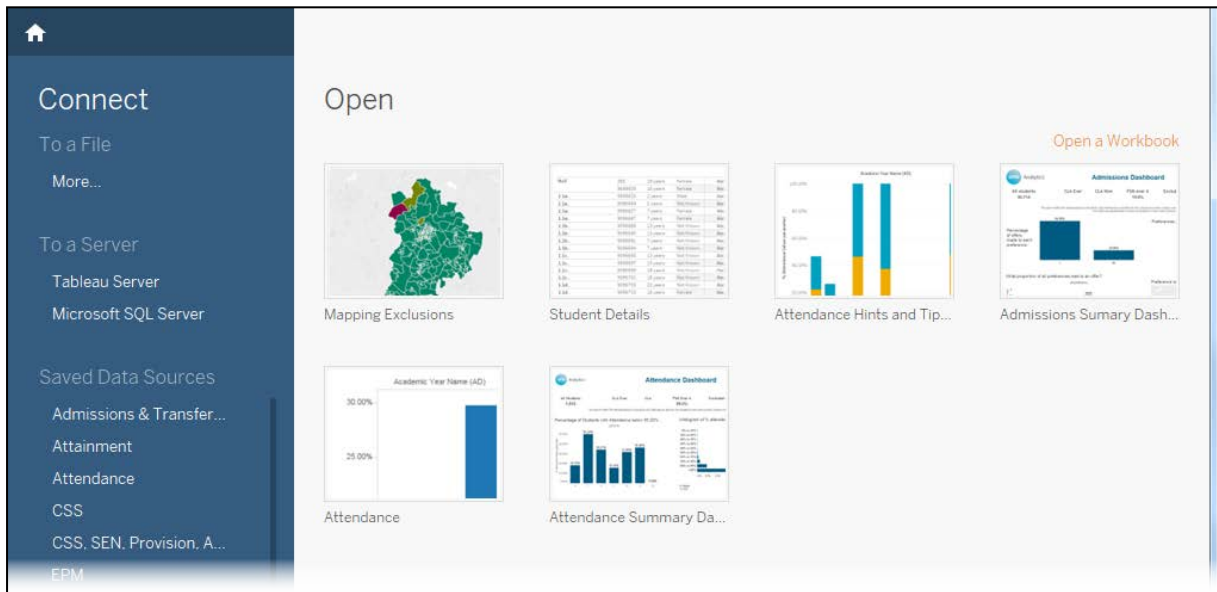


8. If prompted, enter the database **Username** and **Password**.
9. Select the highlighted **Sheet 1** tab to display a new, blank worksheet.

## Connecting to a Saved Data Source

To connect to a data source saved to your local machine:

1. Open One Analytics Desktop to display the home screen.



2. If the required data source is displayed in the **Saved Data Sources** list, click the name to connect to it and open a blank workbook.
3. If the required data source is not displayed in the **Saved Data Sources** list:
  - a. Under the **To a File** heading, click the **More...** hyperlink to display the **Open** dialog.
  - b. Locate the TDS file on your local machine.
  - c. Click the **Open** button to connect to it and open a blank workbook.

## Connecting to GIS Shape Data

To create maps with One Analytics you must connect to the GIS Shape Data data source. This connects to a table that contains all your shape data, including any that has been uploaded through the One Analytics Import Tool.

### MORE INFORMATION:

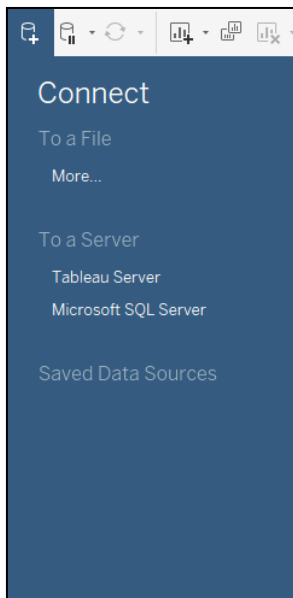
[Using Maps within One Analytics](#), page 38.

To connect to GIS shape data:

1. If you have not opened a new worksheet and are connecting through the home screen:

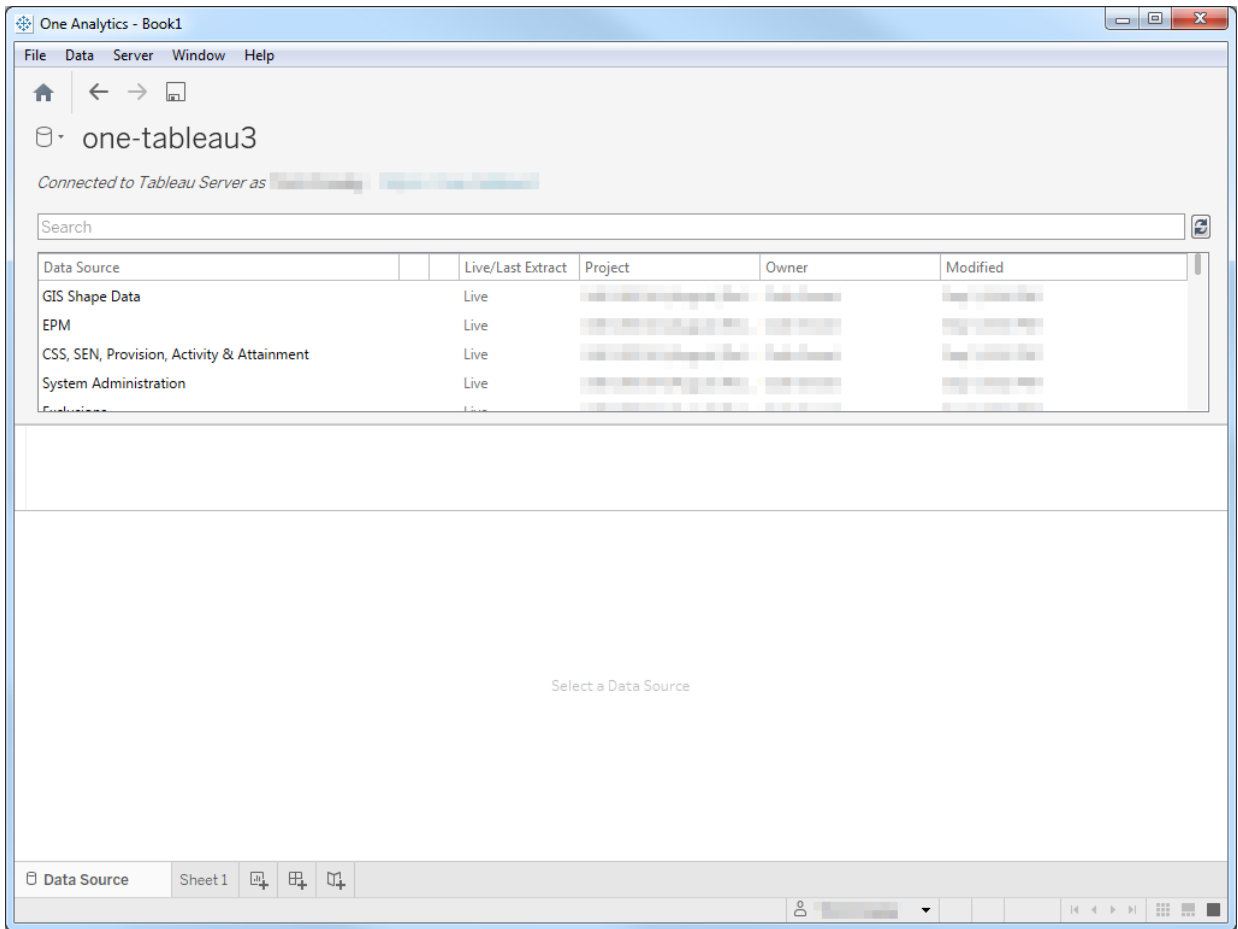


- a. Click the **Tableau Server** hyperlink to display the **Tableau Server Sign In** dialog.
  - b. Enter your **Username** and **Password** and click the **Sign In** button to display the **Data Source** screen.
2. If you are in an open worksheet already:
    - a. Select **Data | New Data Source** or click the **Add New Data Source** icon in the toolbar to display the **Connect** menu.

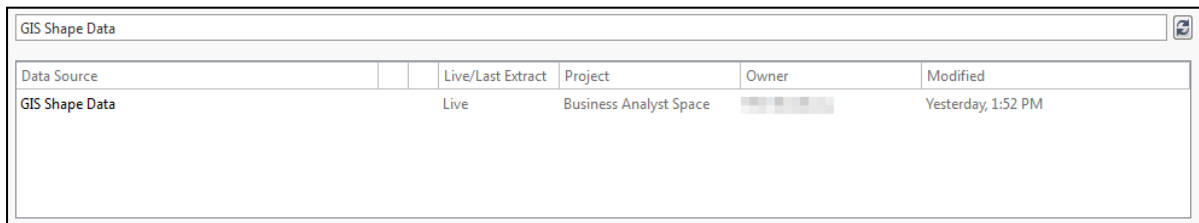




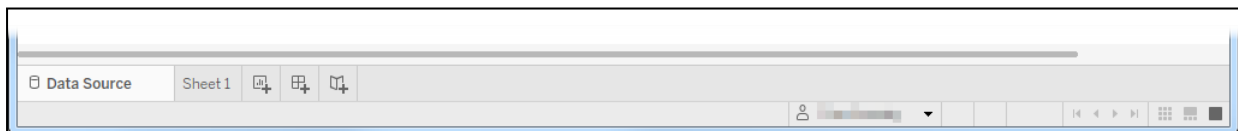
- b. Click the **Tableau Server** hyperlink to display the **Data Source** screen.



3. In the **Search** field, enter 'GIS Shape Data' and press the **Enter** key to filter the available data sources.



4. Click the GIS Shape Data data source to display the **Sign In** dialog.
5. Enter your database **Username** and **Password** and click the **OK** button to connect to the data source.
6. Select or create the required worksheet using the tabs or icons at the bottom of the screen to open the data source.

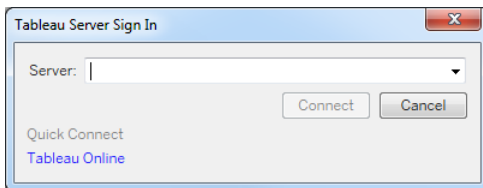


# 04 / Using Workbooks

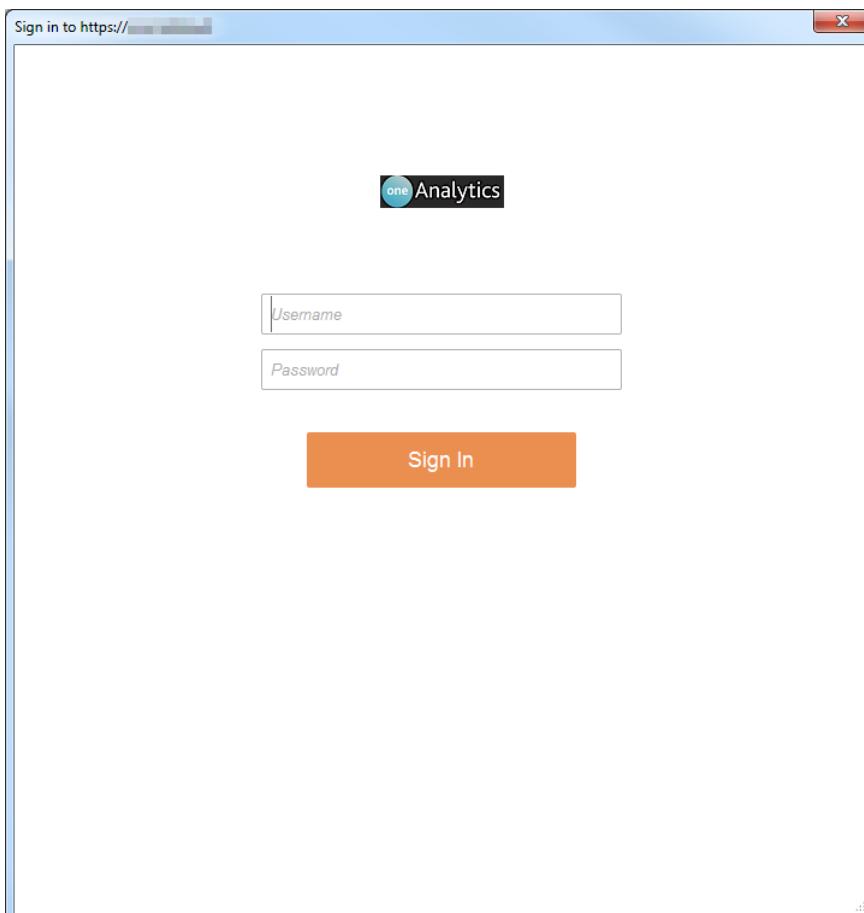
## Connecting to a Workbook

To connect to a workbook:

1. On the **Home** screen, click the **More...** hyperlink to display the **Open** dialog.
2. Locate and select the required workbook.
3. Click the **Open** button to display the **Tableau Server Sign In** dialog.



4. If required, enter the **Server** address.
5. Click the **Continue** button to display the sign in dialog.

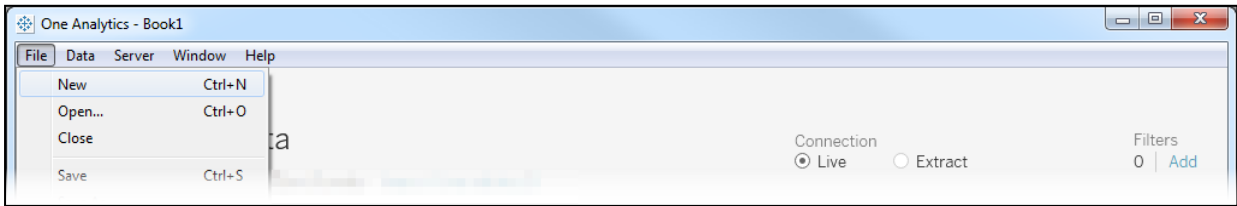


6. Enter your **Username** and **Password**, and click the **Sign In** button to launch the workbook.

## Creating a New Workbook

To create a new workbook in One Analytics Desktop:

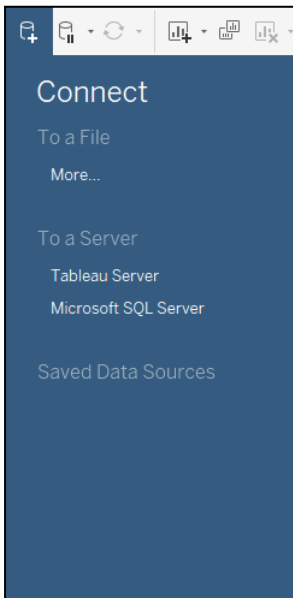
1. Select **File | New** to create a blank workbook.



2. Add a data source to the workbook (see [Adding a Data Source to a Workbook](#) on page 14).

## Adding a Data Source to a Workbook

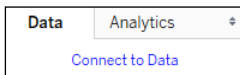
A workbook can contain multiple data sources. You can connect to a data source on the One Analytics server (**Tableau Server**) or that has been downloaded to your local machine. You do this through the **Connect** menu.



You can display the **Connect** menu in the following ways:

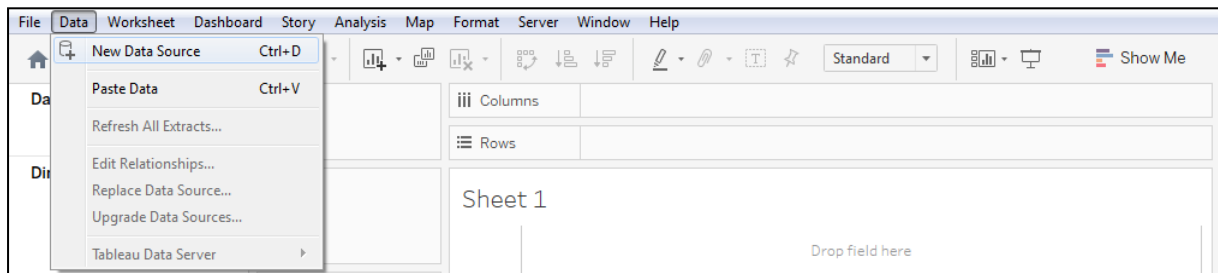
### Data Pane

If the workbook has no existing data source connection, you can display the **Connect** menu through the **Data** pane.



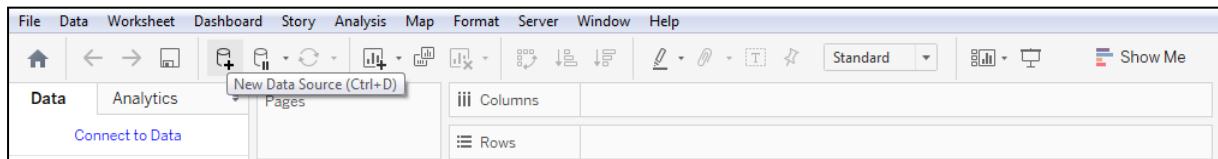
## Menu Bar

You can display the **Connect** menu by selecting **Data | New Data Source** from the menu bar.



## Icon

You can display the **Connect** menu by clicking the **New Data Source** icon.



## Keyboard Shortcut

You can display the **Connect** menu by pressing the **Ctrl** and **D** keys simultaneously.

### MORE INFORMATION:

[Connecting to Data Sources](#), page 6.

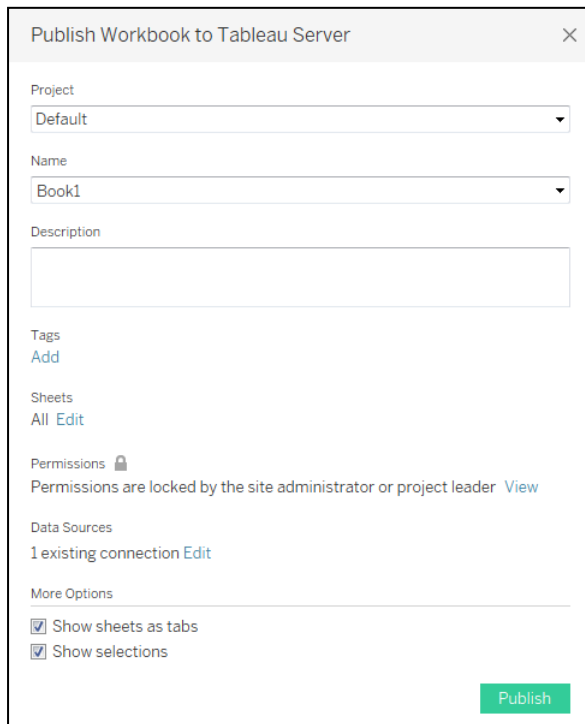
## Publishing Workbooks to the One Analytics Server

To make a workbook available to other users, you can publish it to the server.

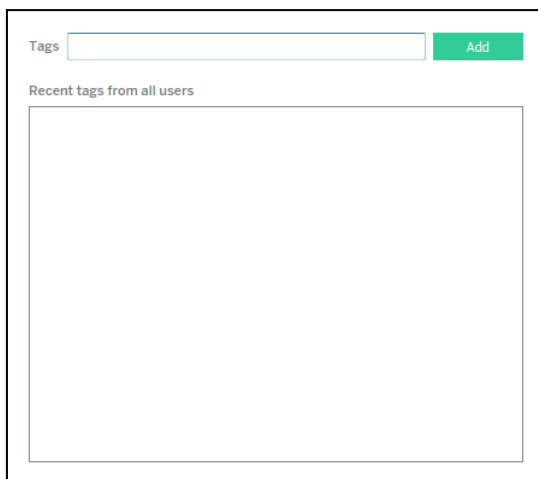
To publish a workbook to the server:

1. In the workbook, select **Server | Publish Workbook** from the menu bar.
2. If prompted, sign in to the One Analytics server.

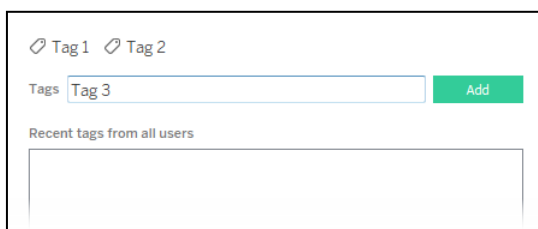
The **Publish Workbook to Tableau Server** is displayed.



3. Select a destination **Project** from the drop-down.
4. Give the workbook a **Name** and, if required, a **Description**.
5. If required, add any **Tags**:
  - a. Click the **Add** button to display the tags dialog.

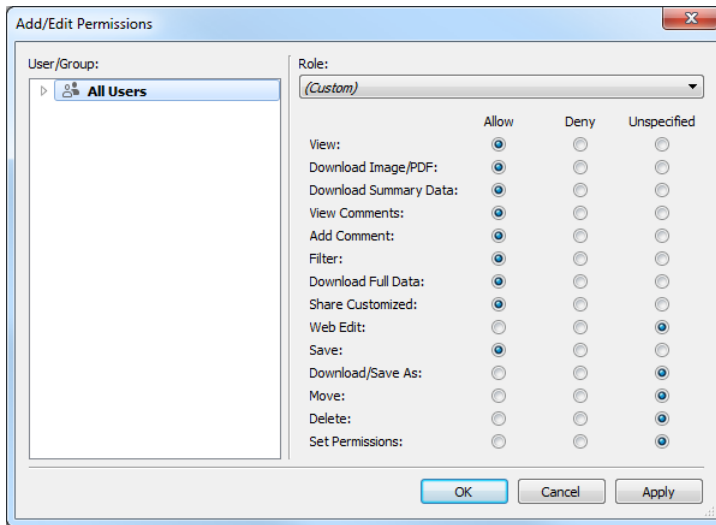


- b. Enter the tags one at a time into the **Tags** field, clicking the **Add** button or pressing the **Return** key after each one.





- ii. Click the **Edit** button to display the **Add/Edit Permissions** dialog.

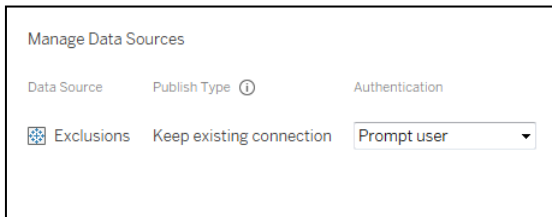


- iii. As required, change or customise the workbook **Role**.
- iv. Click the **OK** button to save the changes and close the dialog.

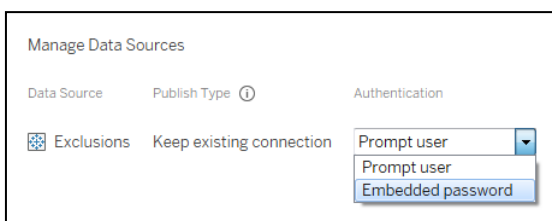
- d. If required, remove users from the group by selecting the user or group and clicking the **Remove** button.

- 8. If required, embed the database password for the **Data Sources** used in the workbook:

- a. Click the **Edit** hyperlink to display the **Manage Data Sources** dialog.



- b. From the **Authentication** drop-down, select **Embedded Password** for each data source used.



- 9. Click the **Publish** button.



# 05 / Editing Data Sources

## Introduction

**IMPORTANT NOTE:** Edited data sources are not supported by Capita One. The Application Support team will attempt to answer queries about data sources edited by Local Authorities, however the solution might require you to revert to the latest release of the Capita One data source and reapply the changes.

There are four steps that must be followed when customising a data source for use within your local authority:

1. Downloading the data source
2. Editing the data source
3. Publishing the data source to the One Analytics server
4. Maintaining the data source when Capita release new versions of One Analytics.

The original Capita-supplied data sources cannot be edited. Any data sources you need to customise must be downloaded from the One Analytics server and edited in One Analytics Desktop. The edited version can then be published back to the One Analytics server for general use. The edited data source should be given a new name to prevent the changes being lost when new versions of the data source are released.

### MORE INFORMATION:

Edit Data Sources: [http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#howto\\_connect.html](http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#howto_connect.html)

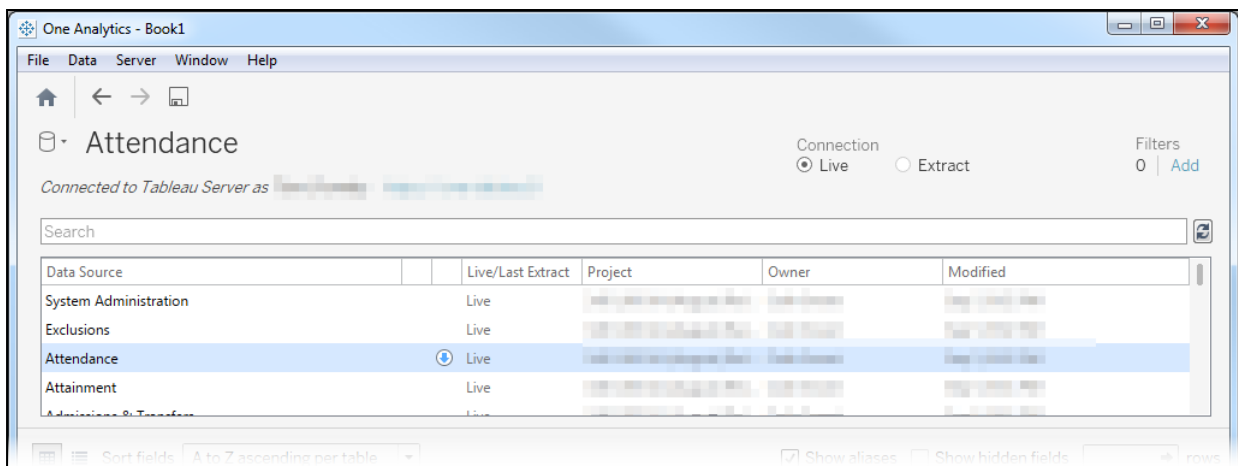
## Downloading a Data Source

To download a data source:

1. Open One Analytics Desktop.
2. In the **Home** screen, click the **Tableau Server** hyperlink to display the available data sources.
3. Hover the cursor over the required data source to display the download icon



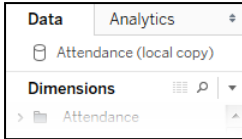
*Download Icon*



4. Click the download icon for the required data source to display the **Create Local Copy** dialog.

## Editing Data Sources

5. If required, select a new location to save the copied data source and enter a new **File name**.
6. Click the **Save** button.
7. A copy of the data source is automatically opened in One Analytics Desktop with '(local copy)' appended to the name.



## Editing the Data source

### Introduction

**IMPORTANT NOTE:** Edited data sources are not supported by Capita One. The Application Support team will attempt to answer queries about data sources edited by Local Authorities, however the solution might require you to revert to the latest release of the Capita One data source and reapply the changes.

To edit a data source in One Analytics Desktop, open the local copy of the data source that was downloaded from the One Analytics server. You can find guidance on creating and maintaining calculated fields and user defined fields in this section.

### Adding and Editing Calculated Fields

The underlying data warehouse structure for One Analytics includes a number of calculated fields that have been created to make it easier to create commonly required visualisations. In addition, some calculated fields have been included in the data source layer. This is typically when the result of the calculation depends on the fields included in the visualisation.

When looking at a data source, calculated fields can be identified by the presence of an equals sign to the left of the data-type symbol that precedes the name:



### Adding Calculated Fields to a Data Source

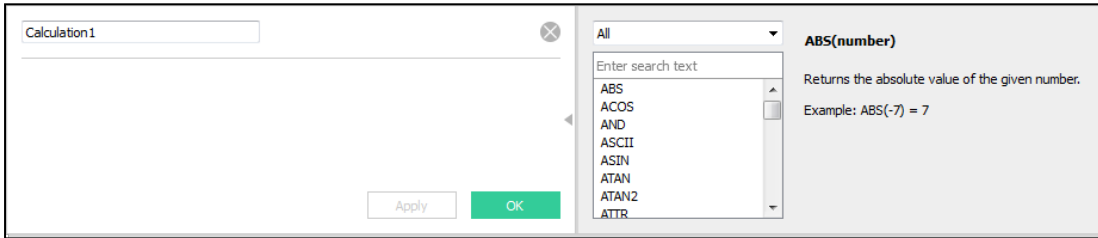
Before adding a calculated field to a data source, you must download a copy of the data source as a TDS file and make the required changes in the copied file.

To add a calculated field to a data source:

1. Download a copy of the required data source from the One Analytics server.
2. Open the downloaded data source (TDS) file in One Analytics Desktop.
3. If prompted, enter your login credentials.
4. From the menu bar, select **Analysis | Create Calculated Field...** to display the calculated field editor.



5. Enter a name for the new field.
6. Enter the calculation. To display a list of functions, click the arrow on the right-hand side of the dialog. You can double-click a function to add it to the calculation.



**MORE INFORMATION:**

Calculated Fields: [http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#calculations\\_calculatedfields.html%3FTocPath%3DAdvanced%2520Analysis%7CCalculated%2520Fields%7C\\_\\_\\_\\_\\_0](http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#calculations_calculatedfields.html%3FTocPath%3DAdvanced%2520Analysis%7CCalculated%2520Fields%7C_____0)

7. Click the **OK** button to save the changes and close the dialog.

**NOTE:** If the calculation is invalid, a warning is displayed at the bottom of the dialog stating that the calculation contains errors. Click the arrow to display the error, and then click the error to locate where it occurs in the formula.

8. To place the new calculated field in an appropriate folder, right-click the field and select either:
  - **Folders | Add to Folder**, to select an existing folder
  - or
  - **Folders | Create Folder**, to create a new folder.

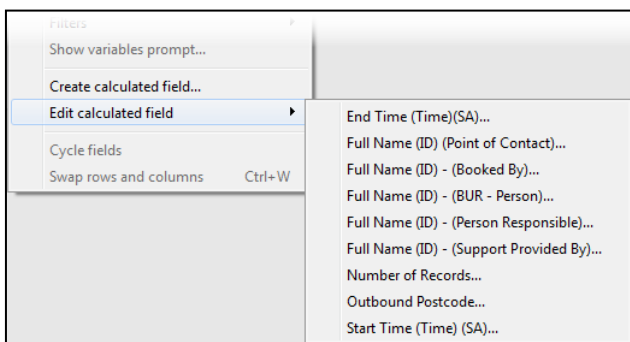
**NOTE:** You should create a folder for new or edited calculated fields to facilitate identification of custom fields. This will help you to keep your data sources up to date when new versions are released.

## Editing Calculated Fields

Before editing a calculated field, you must download a copy of the data source (TDS) file and make the required changes in the copied file.

To edit a calculated field within a data source:

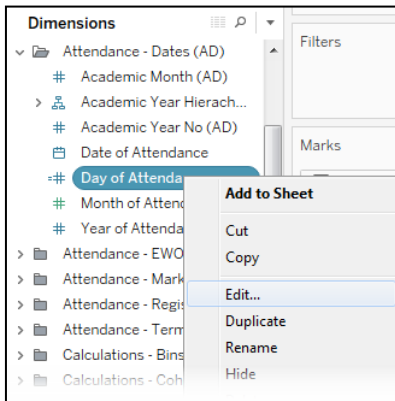
1. Download a copy of the required data source from the One Analytics server.
2. Open the TDS file in One Analytics Desktop.
3. To display the calculated field editor for a specific field, either,
  - From the menu bar, select **Analysis | Edit Calculated Field** to display the calculated fields, and select the required field from the list.



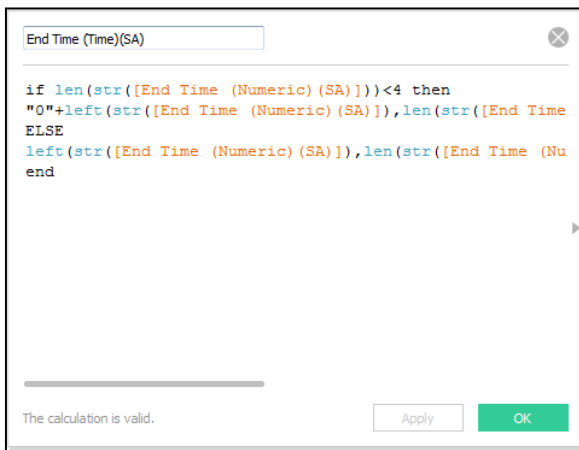
## Editing Data Sources

OR

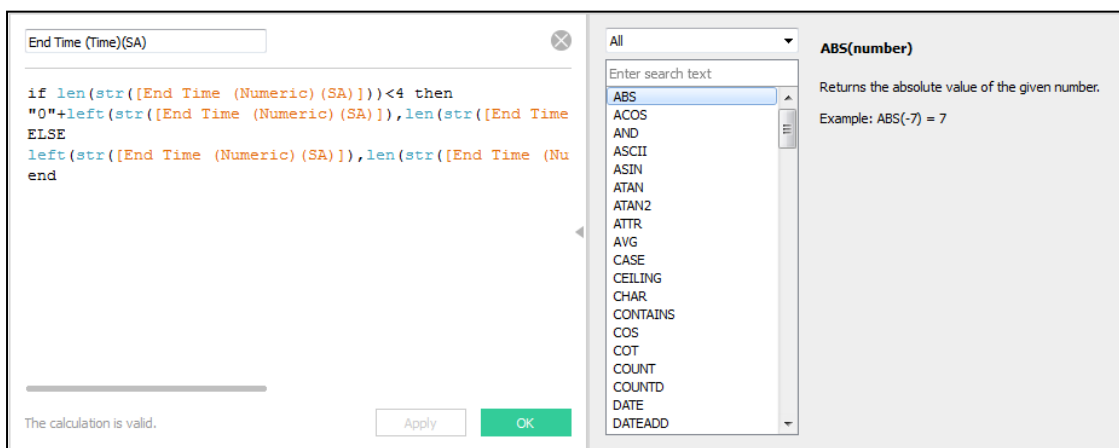
- Right-click the required dimension or measure and select **Edit...**



The calculated field editor is displayed.



4. If required, edit the name of the field.
5. Type the calculation or select the elements from a list of functions. To display a list of functions, click the arrow on the right-hand side of the dialog. You can double-click a function to add it to the calculation.



6. Click the **OK** button to save the changes and close the dialog.

**NOTE:** If the calculation is invalid, a warning is displayed at the bottom of the dialog stating that the calculation contains errors. Click the arrow to display the error, and then click the error to locate where it occurs in the formula.

7. To place the new calculated field in a different folder, right-click the field and select either:
- **Folders | Add to Folder**, to select an existing folder,
- or
- **Folders | Create Folder**, to create a new folder.

**NOTE:** You should create a folder for new or edited calculated fields to facilitate identification of custom fields. This will help you to keep your data sources up to date when new versions are released.

## Adding UDFs to Data Sources

### Introduction

**IMPORTANT NOTE:** Edited data sources are not supported by Capita One. The Application Support team will attempt to answer queries about data sources edited by Local Authorities, however the solution might require you to revert to the latest release of the Capita One data source and reapply the changes. The Capita One Professional Services team offer services supporting local authorities in the setup and maintaining of UDFs within data sources.

The underlying data warehouse structure for One Analytics includes UDF (user defined field) dimensions to enable information based on locally created UDF records to be analysed.

UDFs are available within One Analytics for all modules for which a Capita data source exists. They are reported on in a similar manner as within the Capita One system, however, the following differences must be considered:

- UDFs are not included in data sources by default as they are unique to your LA.
- Involvement UDFs exist in a single data warehouse table, 'UDF\_CSS\_SEN', not the individual dimensions created in Capita One.
- UDF dimension names are not the same as those implemented within Capita One but are named relative to their context (see [Appendix A: UDF Dimensions](#) on page 99).

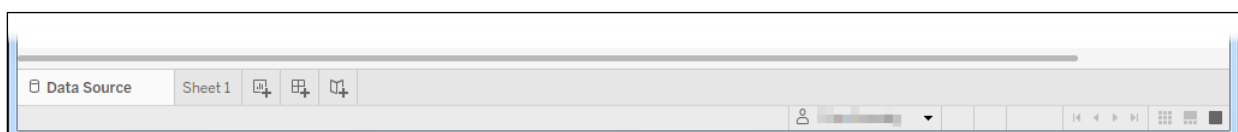
### Adding UDFs to a Data Source

To be able to report on UDFs, you must add them to the appropriate data source. Data sources supplied by Capita One cannot be amended, therefore to add UDFs to a data source, you must download a copy of the data source and make the required changes in the downloaded TDS file.

**NOTE:** The following steps must be repeated each time Capita One releases a new version of the underlying data source.

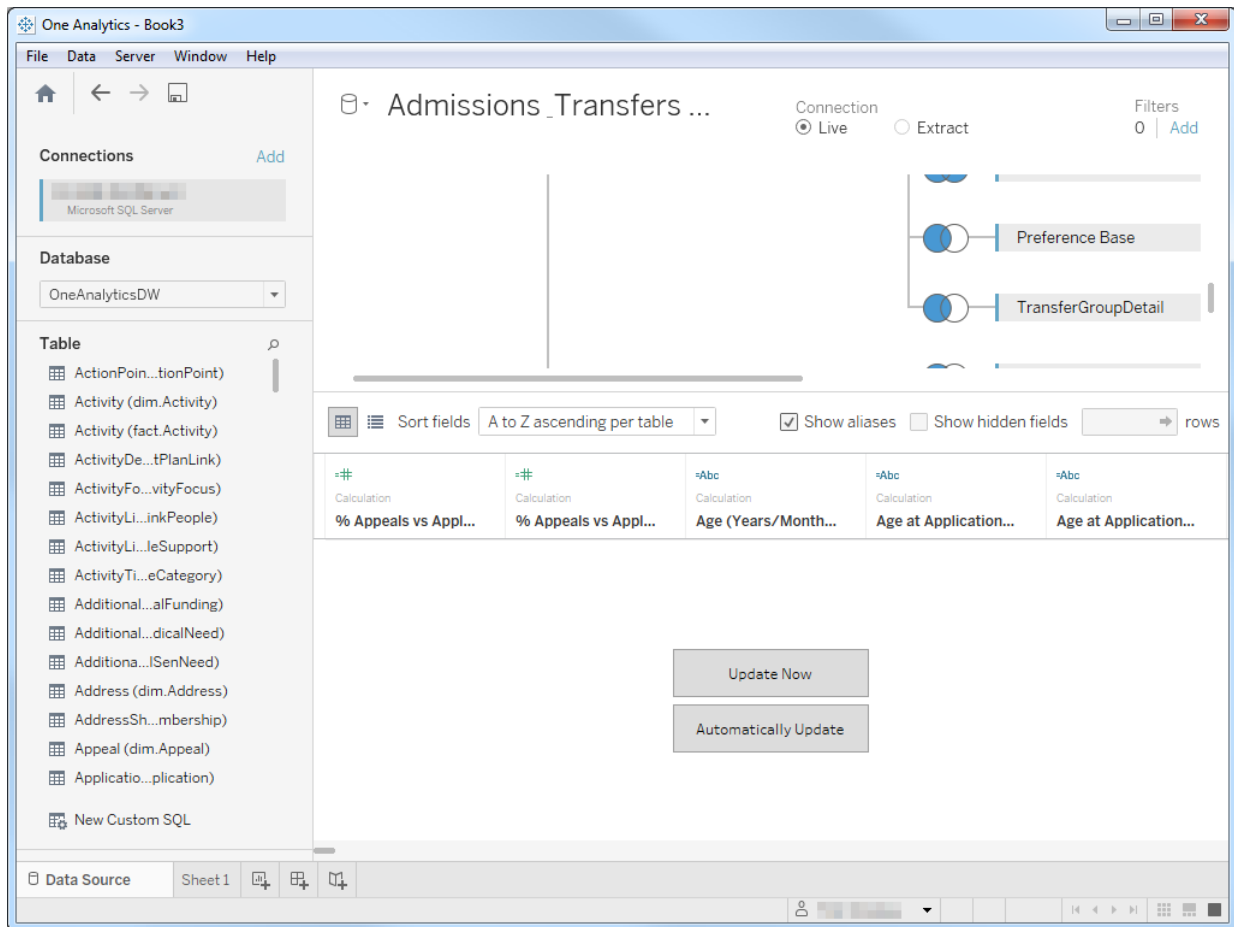
To add UDFs to a data source:

1. Download a copy of the required data source from the One Analytics server.
2. Open the TDS file in One Analytics Desktop.
3. Select the **Data Source** tab.

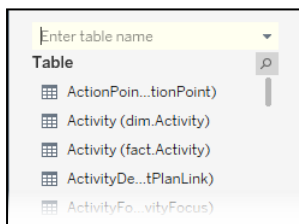


## Editing Data Sources

- If you are prompted to enter your user credentials, do so now to connect to the data warehouse and display the data source.

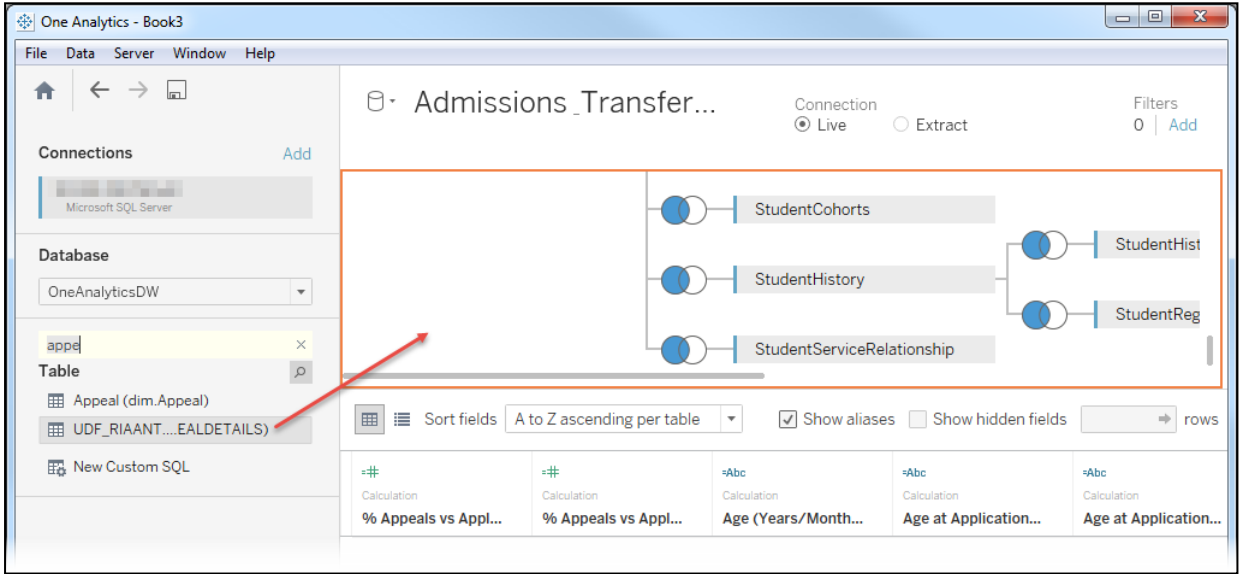


- In the **Table** field in the left-hand column, click the search icon to display the **Enter table name** field.

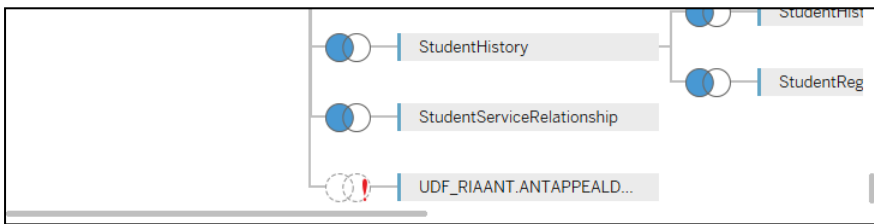


- Enter the name of the required UDF to filter the **Table** list.

7. Drag and drop the dimension into the white panel, which now has an orange border. See the data warehouse table and field information in [Appendix A: UDF Dimensions](#) on page 99 to ensure correct implementation.



The dimension is added to the existing set of connections in the panel.

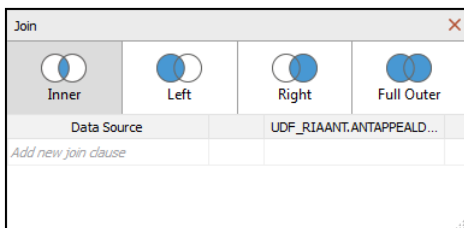


The type of join displayed depends on whether One Analytics can identify a connection or not:

- If a connection between the existing tables and the new table can be identified, One Analytics Desktop automatically assumes the relationship and the join is indicated by a blue circle overlapping a white circle.



Because this might not be the correct connection to the correct table, you must check it and, if necessary, amend it. To check the connection, click the join to display the **Join** dialog.



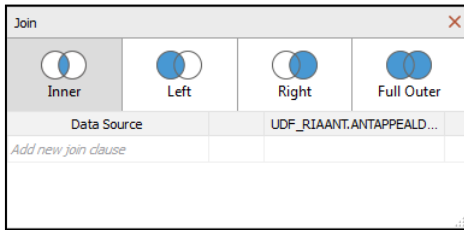
- If a connection between the existing tables and the new table cannot be identified, two intersecting white circles and a red exclamation mark are displayed. You must create a new relationship.





## Editing Data Sources

If there is no relationship, the **Join** dialog is displayed automatically for you to create the connection.

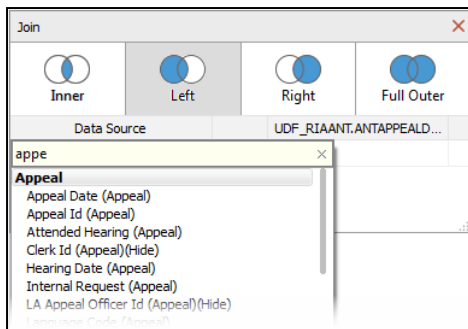


8. Select the **Left** join type to display the **Add new join clause** drop-down in the **Data Source** column.

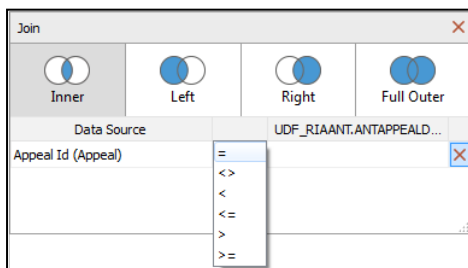
**NOTE:** Dimensions are always linked to UDF dimensions with a **Left** join.

9. Locate the required field in the drop-down or enter the field name in the **Enter search text** field to filter the drop-down list to fields matching the required name.

**NOTE:** Different dimensions might contain similarly named but dimension-specific fields, e.g. the **Person Id** field name might be used in different contexts, such as for **EWO**, or **ED Psych**, etc. and would appear more than once. If this is the case, ensure you select the field below the required dimension heading.



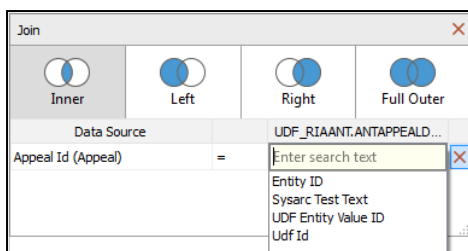
10. Select the required field.
11. Click within the central column title bar to display the join type drop-down.



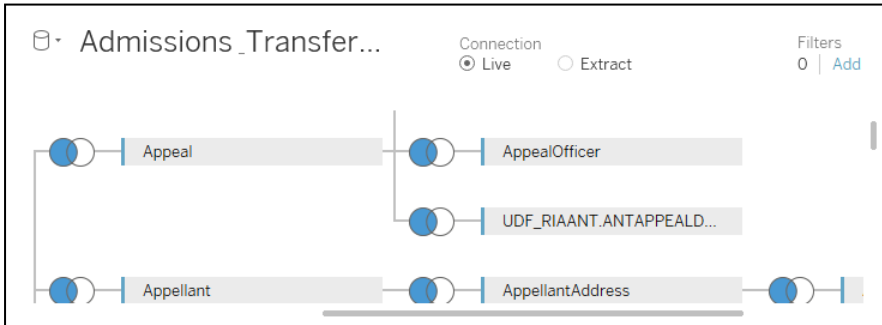
12. Ensure the = join type is selected.

**NOTE:** By default, the relationship between two tables is based on equality. You should not change this.

13. Click the field in the right-hand column to activate the **Enter search text** field and display the available fields for the join.



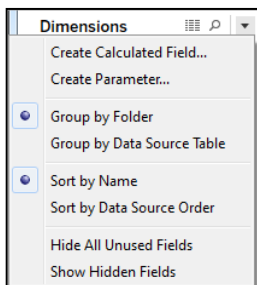
14. Locate the required field in the drop-down or enter the field name in the **Enter search text** field to filter the list.
15. Select the required field.
16. If required, add any additional join clauses by repeating steps 7-14.
17. Click the **X** button to close the dialog.
18. The link is now displayed in the panel.



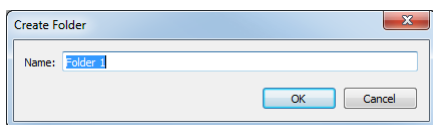
19. Select the **Sheet 1** tab. The new set of fields from within the UDF has been added to the data source and is displayed in either the **Dimensions** or **Measures** pane.
20. You should group these fields into an appropriate folder for ease of use in the future.

To group UDFs:

- a. If required, create a new folder:
  - i. Ensure that the **Dimensions** pane is grouped by folder (click the down-arrow icon in the pane header to display the menu drop-down and select **Group by Folder**).



- ii. Right-click within the pane and select **Folders | Create Folder** to display the **Create Folder** dialog.

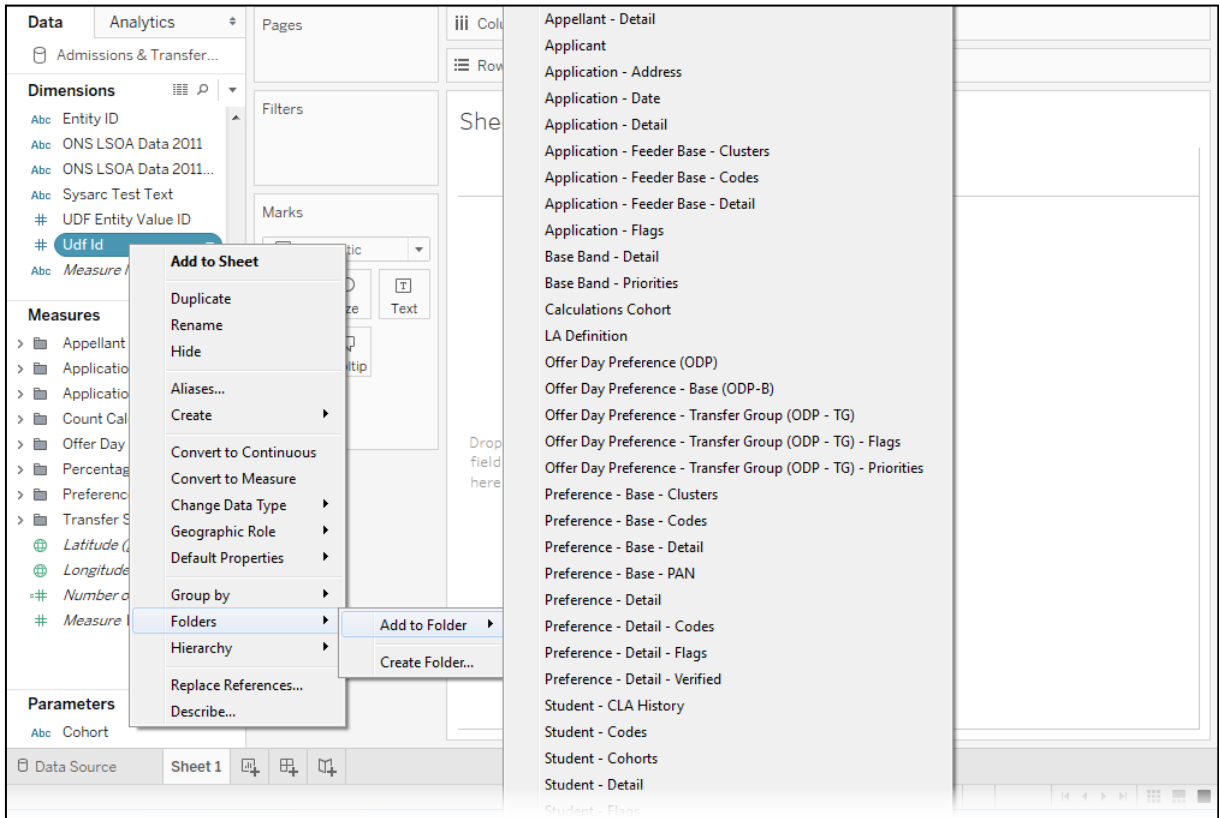


- iii. Enter an appropriate name for the folder and click the **OK** button to add the folder to the **Dimensions** pane.

- b. Select the fields you want to add to the folder.

**TIP:** Hold **Shift** and use the arrow keys or hold the **Ctrl** key and left-click on the required fields to highlight multiple fields at once.

- c. Right-click the highlighted fields and select **Folders | Add to Folder** and then the appropriate folder to add the fields to the folder.



21. If required, hide any inactive UDF fields that are no longer in use by right-clicking the required field and selecting **Hide**.

**NOTE:** To display hidden fields, right-click within the pane and select **Show hidden fields**. This option is not available if there are no hidden fields.

22. To save the new data file, select **Data | [file name] | Add to saved data sources...** The UDF dimension and fields are now available for use within visualisations.

**NOTE:** If required, you can add additional UDFs to a data source if there are multiple contexts available.

23. To enable other users to access the modified data source, you must upload it to the One Analytics server. For more information, see [Publishing the Data Source to the One Analytics Server](#) on page 29.

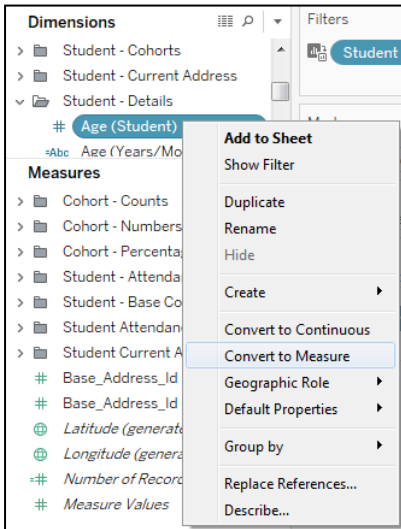
## Converting Data Item Types

Data items have been created as dimensions or measures and assigned to be continuous or discrete based on how each item is expected to be most commonly used. You can convert certain items from dimensions to measures and continuous to discrete, or vice versa according to your needs.

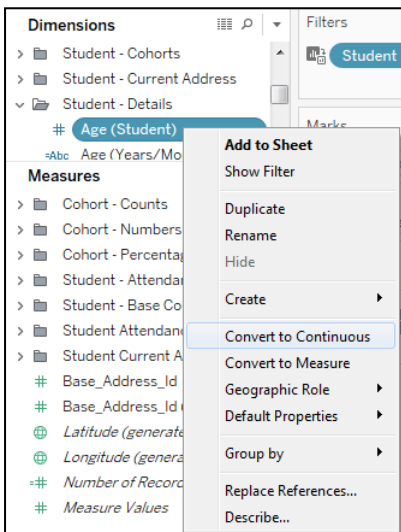
To convert data items:

1. Create a copy of the appropriate data source (see [Downloading a Data Source](#) on page 19), open a previously copied data source or open the data source in a workbook.

- To convert to a measure or dimension, right-click the required data item and select **Convert to measure** or **Convert to dimension** as appropriate.



- To convert to continuous or discrete, right-click the required data item and select **Convert to continuous** or **Convert to discrete** as required.



The change applies to any subsequent uses of the converted data item. It does not affect how the data item has already been used.

**TIP:** You can also right-click data items in the **Rows** and **Columns** shelves to access this functionality. Converting a data type this way only applies the change to that specific use of the data item.

## Publishing the Data Source to the One Analytics Server

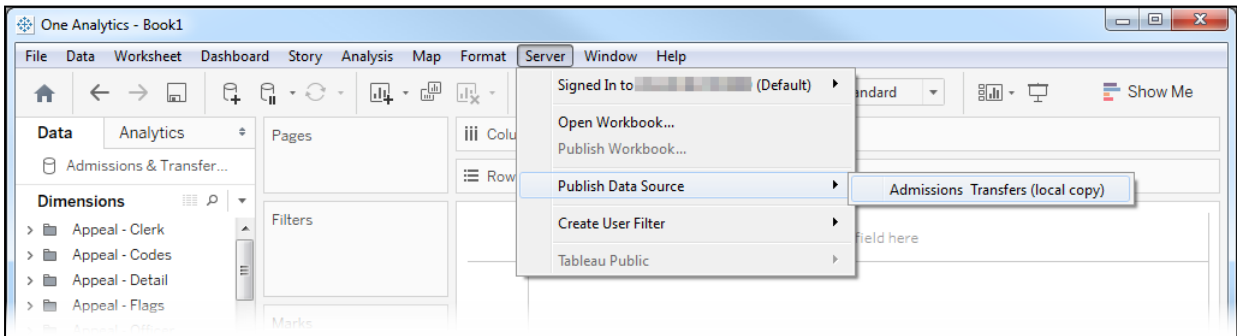
To make a customised data source available for other users, you must publish it to the One Analytics server. If you need to publish it to several different projects, you must repeat the process for each project.

**NOTE:** Any subsequent changes to the data source require it to be republished to all projects affected by the changes.

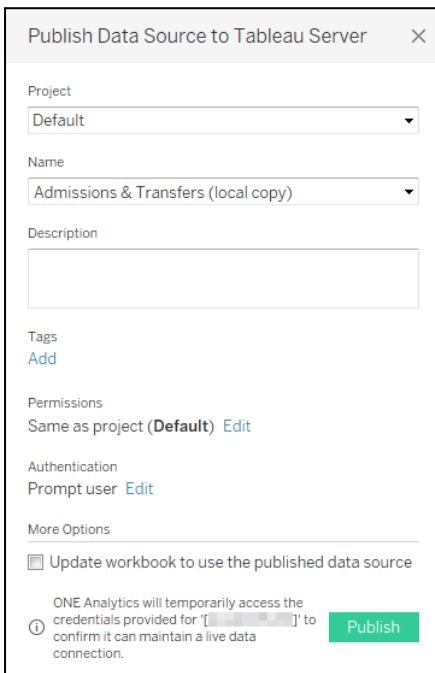
## Editing Data Sources

To publish a data source to the One Analytics server:

1. In the data source, select **Server | Publish** data source to display the open data sources.



2. Select the data source to be published to display the **Publish Data Source to Tableau Server** dialog.

A screenshot of the 'Publish Data Source to Tableau Server' dialog box. It contains several sections: 'Project' with a dropdown set to 'Default'; 'Name' with a dropdown set to 'Admissions & Transfers (local copy)'; 'Description' with an empty text box; 'Tags' with an 'Add' button; 'Permissions' set to 'Same as project (Default)' with an 'Edit' link; 'Authentication' set to 'Prompt user' with an 'Edit' link; and 'More Options' with a checked checkbox for 'Update workbook to use the published data source'. At the bottom, there is a warning icon and text: 'ONE Analytics will temporarily access the credentials provided for [redacted] to confirm it can maintain a live data connection.' followed by a green 'Publish' button.

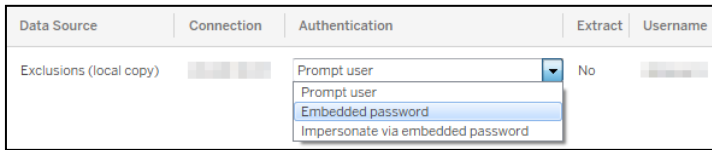
3. If required, choose a new destination **Project** for the data source from the drop-down.
4. Enter a **Name** for the data source.

**WARNING:** If you do not rename or change the name of the data source from the one provided by Capita One, it might be overwritten when a new version of the data source is released, causing you to lose your changes.

5. It is recommended that you note the changes made in the **Description** field for reference.
6. As required, add any appropriate **Tags** and edit the **Permissions** and **Authentication** details.
7. If required, embed the database password within the data source:
  - a. Click the **Edit** hyperlink under the **Authentication** heading to display the authentication details table.

Data Source	Connection	Authentication	Extract	Username
Exclusions (local copy)	[redacted]	Prompt user	No	[redacted]

- b. In the **Authentication** column, select **Embedded password** from the drop-down.



- c. Click inside the **Publish Data Source to Tableau Server** dialog to close the authentication details table.

**NOTE:** Embedding the credentials within the data source means that users do not have to provide the database credentials each time they access the data source through a workbook or visualisation.

- 8. Select the **Update workbook to use the published data source** check box to enable any new fields to be used in the workbook.
- 9. Click the **Publish** button. A confirmation dialog is displayed after the data source is published to the server.

## Manually Replacing Data Sources in Workbooks

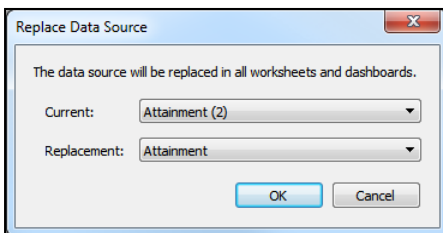
When you publish a data source to projects on the One Analytics server, existing data sources with the same name are overwritten. Workbooks connecting to the data source automatically connect to the new version. If you need to manually replace the data sources in a workbook, you can do so through One Analytics Desktop. If you are replacing multiple data sources in a workbook, complete the following steps for each data source.

To replace a data source in a workbook:

1. Open the workbook in One Analytics Desktop.
2. From the menu bar, select **Data | New data source** to display the **Connect** menu.
3. Locate and select to the required data source to add it to the report.
4. Select a worksheet tab containing the data source you are replacing.



- 5. From the menu bar, select **Data | Replace data source...** to display the **Replace Data Source** dialog.



- 6. Ensure the **Current** and **Replacement** fields contain the correct data source names, and select the appropriate ones if not.
- 7. Click the **OK** button.

# 06 / Hints and Tips

## Bins

Certain data sources include a **Calculations - Bins** folder. These folders contain 'bin' dimensions, which enable you to view certain data, such as attendance, in different measurement bands or bins, e.g. 5%, 10% etc. Many bins have been set up so that the bin size can be changed using a linked parameter. The name of the linked parameter can be identified by hovering the cursor over the bin dimension to display the metadata in a tooltip.

Sorting data into bins enables you to group students into performance-based groups measured against given criteria. For a worked example of creating a bin visualisation, see [Using Bins to Create the % Attendance Steps Visualisation](#) on page 66.

## Customising Colour Schemes

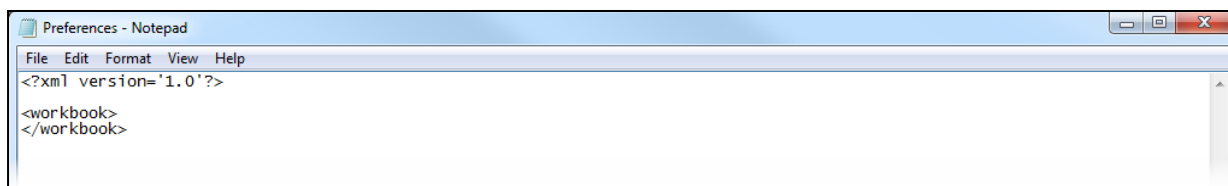
One Analytics contains several predesigned colour palettes for use within the visualisations. A set of Capita-branded colour palettes has been created that you should install onto each machine running One Analytics Desktop. It is also possible to create your own colour schemes.

### Capita Colour Palettes

The Capita-branded colour code set is provided in [Appendix B: Capita-Branded Colour Codes](#) on page 103.

To add the Capita colour palettes:

1. Locate the Preferences.tps file in the **My Tableau Repository** directory.
2. Open the file in a text editor, e.g. Microsoft® Notepad.

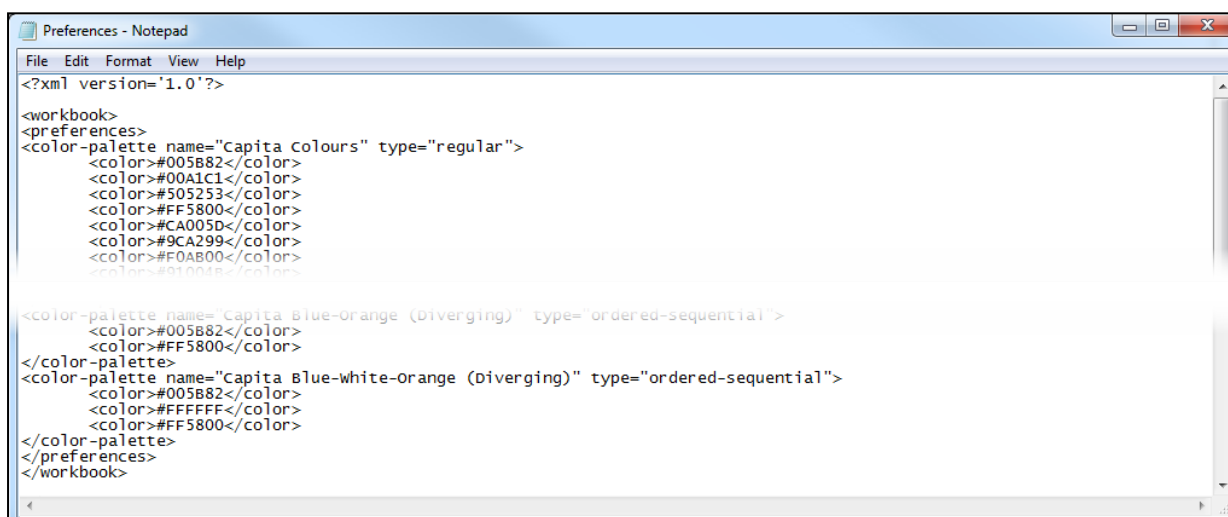


```

Preferences - Notepad
File Edit Format View Help
<?xml version='1.0'?>
<workbook>
</workbook>

```

3. Copy and paste the code from [Appendix B: Capita-Branded Colour Codes](#) on page 103 in between the <workbook> </workbook> tags.



```

Preferences - Notepad
File Edit Format View Help
<?xml version='1.0'?>
<workbook>
<preferences>
<color-palette name="Capita colours" type="regular">
<color>#005882</color>
<color>#00A1C1</color>
<color>#505253</color>
<color>#FF5800</color>
<color>#CA005D</color>
<color>#9CA299</color>
<color>#F0A800</color>
<color>#91001B</color>
</color-palette>
<color-palette name="Capita Blue-orange (Diverging)" type="ordered-sequential">
<color>#005882</color>
<color>#FF5800</color>
</color-palette>
<color-palette name="Capita Blue-white-orange (Diverging)" type="ordered-sequential">
<color>#005882</color>
<color>#FFFFFF</color>
<color>#FF5800</color>
</color-palette>
</preferences>
</workbook>

```

- Save and close the file. The colour schemes are available the next time you open One Analytics Desktop.

**NOTE:** If One Analytics Desktop is currently running, you must close and reopen it for the changes to take effect.

## Adding Additional Colour Palettes

To create additional colour palettes, edit the following templates as required and insert them into the Preferences file between the `<preferences>` `</preferences>` tags as outlined in the previous section. Colour codes can be entered as hexadecimal values or in RGB format.

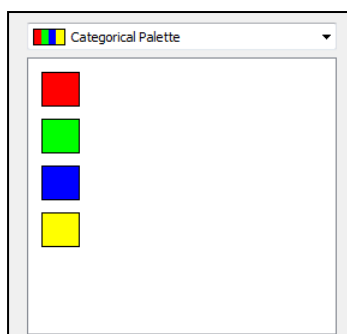
### MORE INFORMATION:

Create Custom Colour Palettes: [https://onlinehelp.tableau.com/current/pro/desktop/en-us/formatting\\_create\\_custom\\_colors.html](https://onlinehelp.tableau.com/current/pro/desktop/en-us/formatting_create_custom_colors.html)

### Categorical Colour Palette

Categorical palettes are used for discrete dimensions, for example:

```
<color-palette name="Categorical Palette" type="regular">
<color>#ff0000</color>
<color>#00ff00</color>
<color>#0000ff</color>
<color>#ffff00</color>
</color-palette>
```



### Sequential Colour Palette

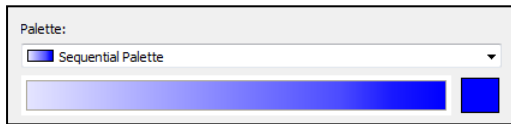
Sequential palettes are used for continuous fields, generally for measures. These often use a single colour, and the strength of the colour indicates the quantity or level of a value. You must define each colour variant in the sequential colour palette, for example:

```
<color-palette name="Sequential Palette" type="ordered-sequential">
<color>#e5e5ff</color>
<color>#ccccff</color>
<color>#b2b2ff</color>
<color>#9999ff</color>
<color>#7f7fff</color>
<color>#6666ff</color>
<color>#4c4cff</color>
<color>#1919ff</color>
<color>#0000ff</color>
```



## Hints and Tips

```
</color-palette>
```



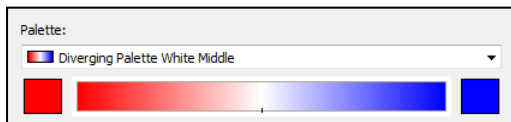
## Diverging Colour Palette

Diverging palettes are used to show two ranges of values, such as negative and positive numbers. The colour indicates the range and the colour intensity or purity (depending whether the colours merge or are separated by a white middle) indicates the magnitude. These palettes can be continuous, where one colour blends into the other, or separated by a different coloured middle, for example:

```
<color-palette name="Diverging Palette" type="ordered-diverging">  
<color>#ff0000</color>  
<color>#0000ff</color>  
</color-palette>
```

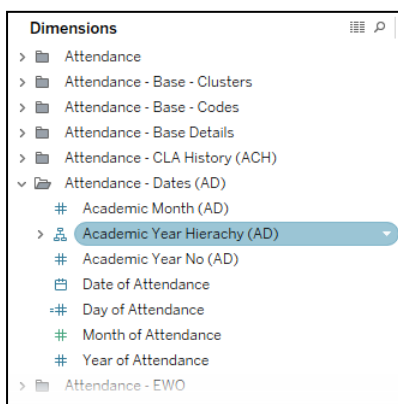


```
<color-palette name="Diverging Palette White Middle" type="ordered-diverging">  
<color>#ff0000</color>  
<color>#ffffff</color>  
<color>#0000ff</color>  
</color-palette>
```



## Hierarchies

One Analytics data sources contain hierarchical dimensions. Hierarchical dimensions can be expanded to enable a deeper analysis into the data. They are denoted by a hierarchy symbol next to the dimension name.



Hierarchical dimensions are dragged onto the **Rows** and **Columns** shelves like other dimensions.

Academic Year Na..	
Null	Abc

To expand the hierarchy, click the **+** icon next to the name of the highest-level item within the hierarchy. This displays the next level of data.

Academic Y..	Term Code (..
Null	Null
	Abc

You can repeat this for as many levels of data as the hierarchy contains.

Academic Y..	Term Code (..	Month Nam..	Day No (AD)	Day Name (..	Session Code
Null	Null	Null	Null	Null	Null
					Abc

You can also expand the hierarchy in the **Dimensions** pane to display all of the levels, enabling you to access a certain level without expanding each previous level manually.

**Dimensions**

- Attendance - Dates (...)
- Academic Month (...)
- Academic Year Hi...
  - Academic Year ...
  - Term Code (AD)
  - Month Name (A...
  - Day No (AD)
  - Day Name (AD)
  - Session Code
- Academic Year No...
- Date of Attendance
- Day of Attendance
- Month of Attendan...
- Year of Attendance

## Pausing Auto Updates: Worksheets

Every time you add a data item or calculation to a worksheet, or update a filter or parameter within it, it is automatically repopulated with all the data you have requested. If you are working with a large amount of data, this can cause One Analytics to experience reduced performance.

You can increase the performance of One Analytics when using large amounts of data by pausing the auto-update function and preventing filters from being automatically applied.

To stop the worksheet automatically updating, click the **Pause Auto Updates** icon.



*Pause Auto Updates Icon*

## Hints and Tips

To refresh the data in the worksheet without resuming the automatic updates, click the **Run Update** icon or press the **F9** key.

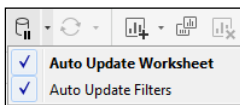


To resume the automatic updates, click the **Resume Auto Updates** icon.



## Pausing Auto Updates: Filters

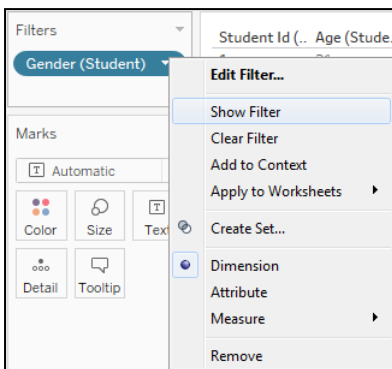
You can pause automatic updates for filters by clicking the drop-down arrow next to the **Pause/Resume Auto Updates** icon and deselecting **Auto Update Filters**.



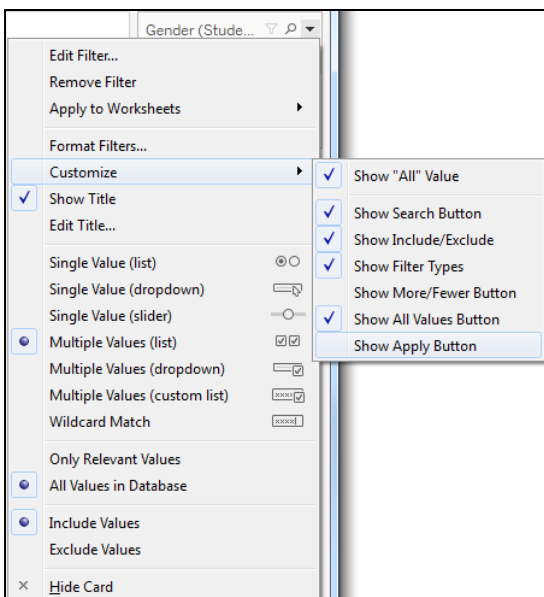
You can also prevent individual filters from updating automatically using the filter card.

To prevent an individual filter from updating automatically:

1. In the **Filters** card, right-click the required filter and select **Show Filter** to display the filter card.



2. In the filter card, click the drop-down arrow and select **Customize | Show Apply Button**.



The filter card now contains a **Cancel** and an **Apply** button.

3. Select or deselect the options as required. The filter is not applied to the data until you click the **Apply** button.

## Reporting on Vulnerable Groups

You can use One Analytics to report on risks that have been recorded against students in One v4. This enables you to identify vulnerable groups and highlight people at risk, according to the risk categories that have been imported into One Analytics.

Risk categories imported from One v4 populate the following dimensions:

### Student - Detail:

- Assessment Date
- Risk End Date

### Student - Codes:

- Risk Category Code
- Risk Category Code Description

Each risk category imported also creates two flags:

- **[Risk Category Code] Now**
- **[Risk Category Code] Ever**

When first imported, these flags are listed in the **Dimensions** pane below the folders, and have values of True, False and Null. Your LA might have placed the flags in a different folder and changed the values to more appropriate terms, e.g. Now, Ever, and Null. You can add the flags to visualisations to indicate whether students currently belong or have ever belonged to a vulnerable group.

Rows	Student Id (S...	DD Ever	DD Now	DP Ever	DP Now	ESS2 Ever
Student Id (Student)	DD Ever	DD Now	DP Ever	DP Now	ESS2 Ever	
1	False	False	False	False	False	Abc
2	False	False	False	False	False	Abc

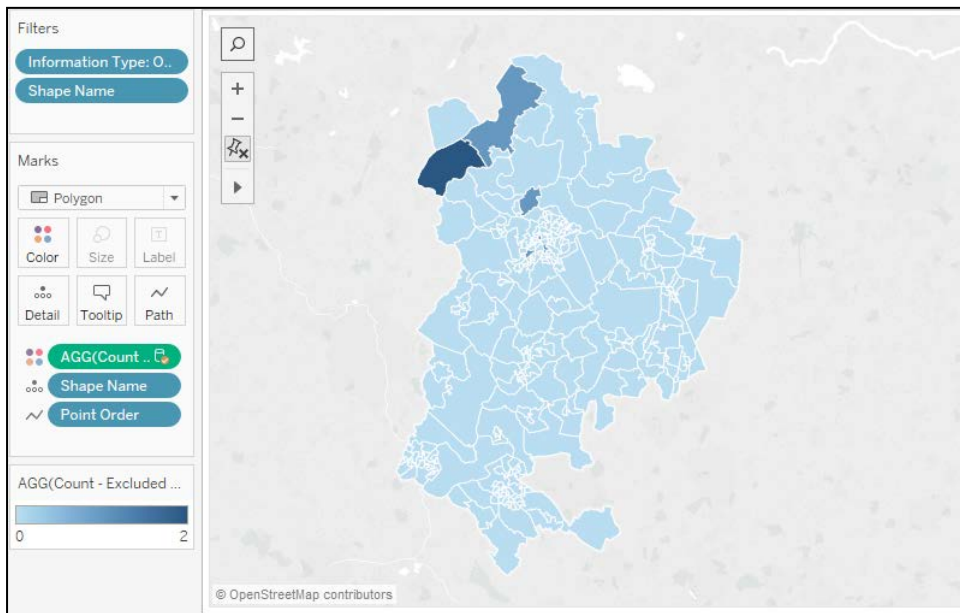
# 07 / Using Maps within One Analytics

## Introduction

One Analytics enables you to use geospatial data held within the data sources to display information in map format. You can create two types of map:

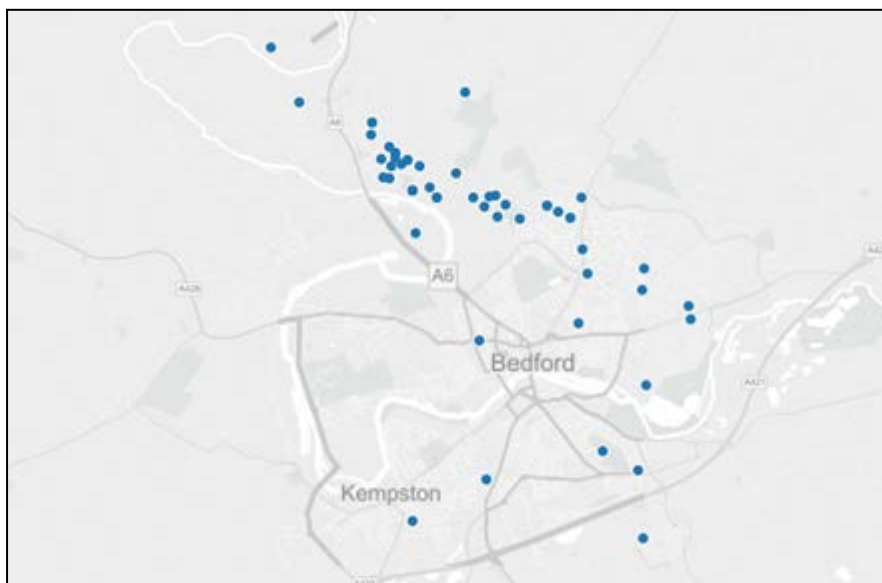
### Polygon Maps

Polygon maps compare information between different areas or polygons on a map. Polygons are formed based on geographical areas, and data is selected and plotted against these areas.



### Point Maps

Point maps are used to identify clusters or patterns within an area. Latitudinal and longitudinal points are plotted on the map, and significance can be given to the different points through colour or size.



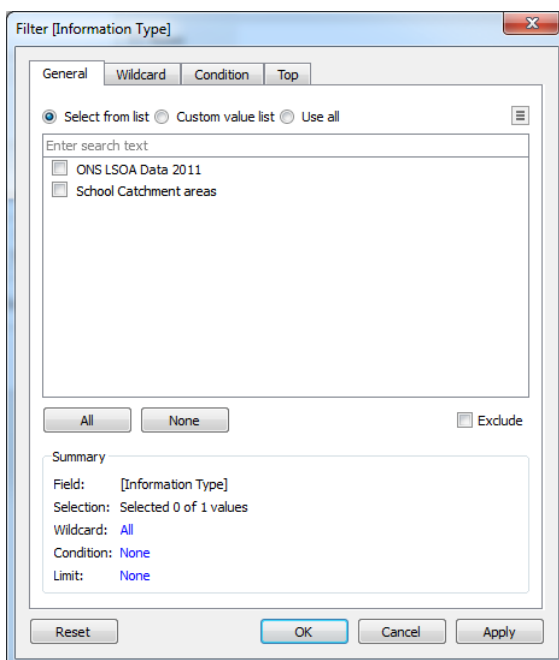
## Plotting Polygons on Maps

You can plot polygons on a map using the GIS Shape Data data source. Entering longitude and latitude details in the **Row** and **Column** shelves in One Analytics automatically produces a map of the specified area, but unless it has data plotted against it, it is unlikely to be of benefit. You can blend the geographic data with other data sources to display information about the geographic area covered by the polygons in a variety of ways, e.g. heat maps.

GIS Shape Data data sources can contain different types of shape data, e.g. Super Output area and school catchment areas. These are identified by the **Information Type** dimension. You should only attempt to plot polygons from one shape set onto a map, unless you are certain that they do not contain overlapping geographical areas, e.g. Super Output and school catchment shape sets are likely to overlap each other, so plotting them on the same map will result in conflict errors. If the data source contains overlapping shape sets or shape sets you do not need, you should filter them out (see *Step 2*) when creating the polygon map to avoid any conflict errors or unnecessary data processing. If you want to plot your data against multiple shape sets, it is recommended that you create a map for each set.

To create a new polygon map:

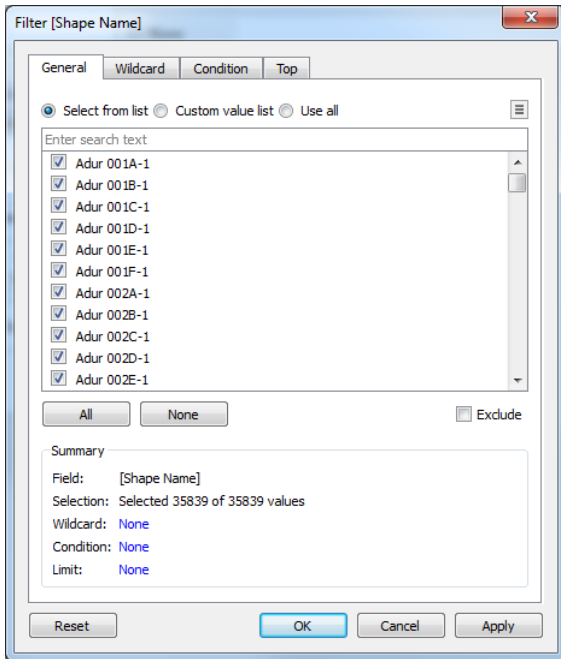
1. Connect to the GIS Shape Data data source.
2. If required, filter out any overlapping or unnecessary shape sets:
  - a. Drag and drop the **Information Type** dimension from the **Dimensions** pane to the **Filters** card to display the **Filter [Information Type]** dialog.



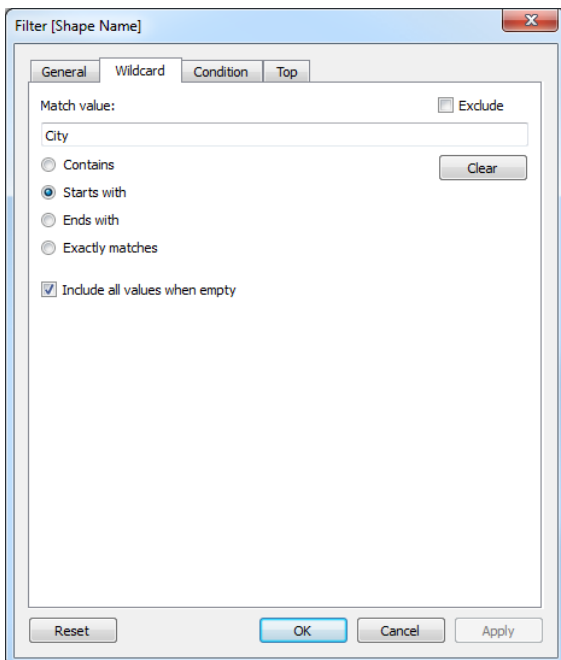
- b. Select the required shape type from the list (in this case **ONS LSOA Data 2011**).
  - c. Click the **OK** button to apply the filter and close the dialog.
3. If you wish to include or exclude certain areas or shapes from the map, e.g. if the **Information Type** shape set contains shapes that are not relevant to you because some shapes fall far outside your LA boundaries, you can apply a shape name filter.

To apply a shape name filter:

- a. Drag and drop the **Shape Name** dimension from the **Dimensions** pane to the **Filters** card to display the **Filter [Shape Name]** dialog.



- b. To manually select the individual shapes, select the **Select from list** radio button and then select the relevant check boxes.
- c. To select all shapes for a certain area, in the **Wildcard** tab, enter the area name in the **Match value** field, and select the appropriate **Contains**, **Starts with**, **Ends with** or **Exactly matches** radio button to create the filter rules.



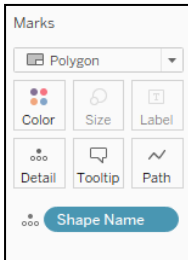
- d. If you want to exclude the area from the map, select the **Exclude** check box.
- e. Click the **OK** button to apply the filter and close the dialog.

- You should pause auto updates at this point to prevent repeated updates during shape plotting. To do so, click the **Pause Auto Updates** icon in the toolbar.



*Pause Auto Updates Icon*

- Drag the **Shape Name** dimension from the **Dimensions** pane to the **Detail** field on the **Marks** card.
- In the drop-down on the **Marks** card (currently displaying the **Automatic** option), select **Polygon** to display the **Path** field.

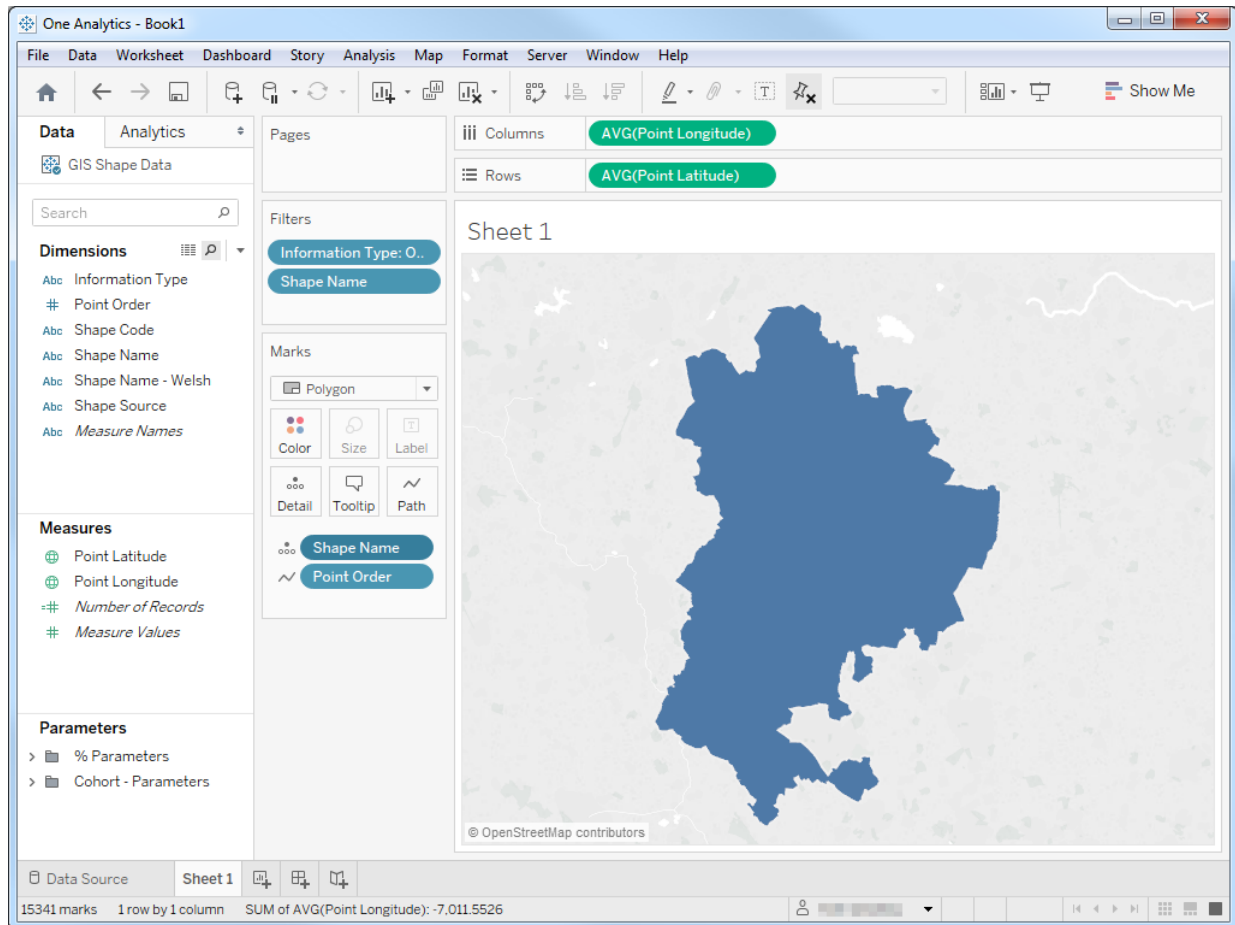


- Drag and drop the **Point Order** dimension from the **Dimensions** pane onto the **Path** field on the Marks card.
- Drag and drop the **Point Latitude** measure from the **Measures** pane to the **Rows** shelf and the **Point Longitude** measure from the **Measures** pane to the **Columns** shelf.

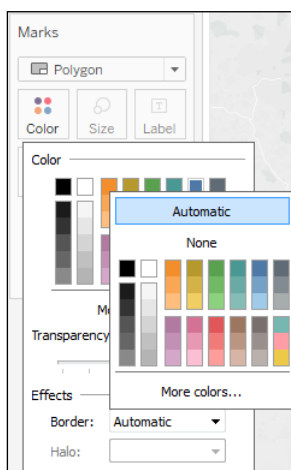


## Using Maps within One Analytics

- If you paused auto updates, click the **Resume Auto Updates** icon to display the shape map.



- If required, change the shape border colours to make them more visible by clicking the **Color** field on the **Marks** card and then selecting an appropriate colour from the **Border** drop-down.



- Select **File | Save** to save the shape map.

## Using Polygon Maps to Create Geographical Heat Maps

After you have created a polygon map, you can plot data against it. In order to plot data against a shape, the GIS Shape Data data source must be blended with a secondary data source that contains the information you want to display.

Data blending combines related data from multiple data source types within a single worksheet using common dimensions. It does not create row-level joins, and should not be used to add new dimensions or rows to your data.

### MORE INFORMATION:

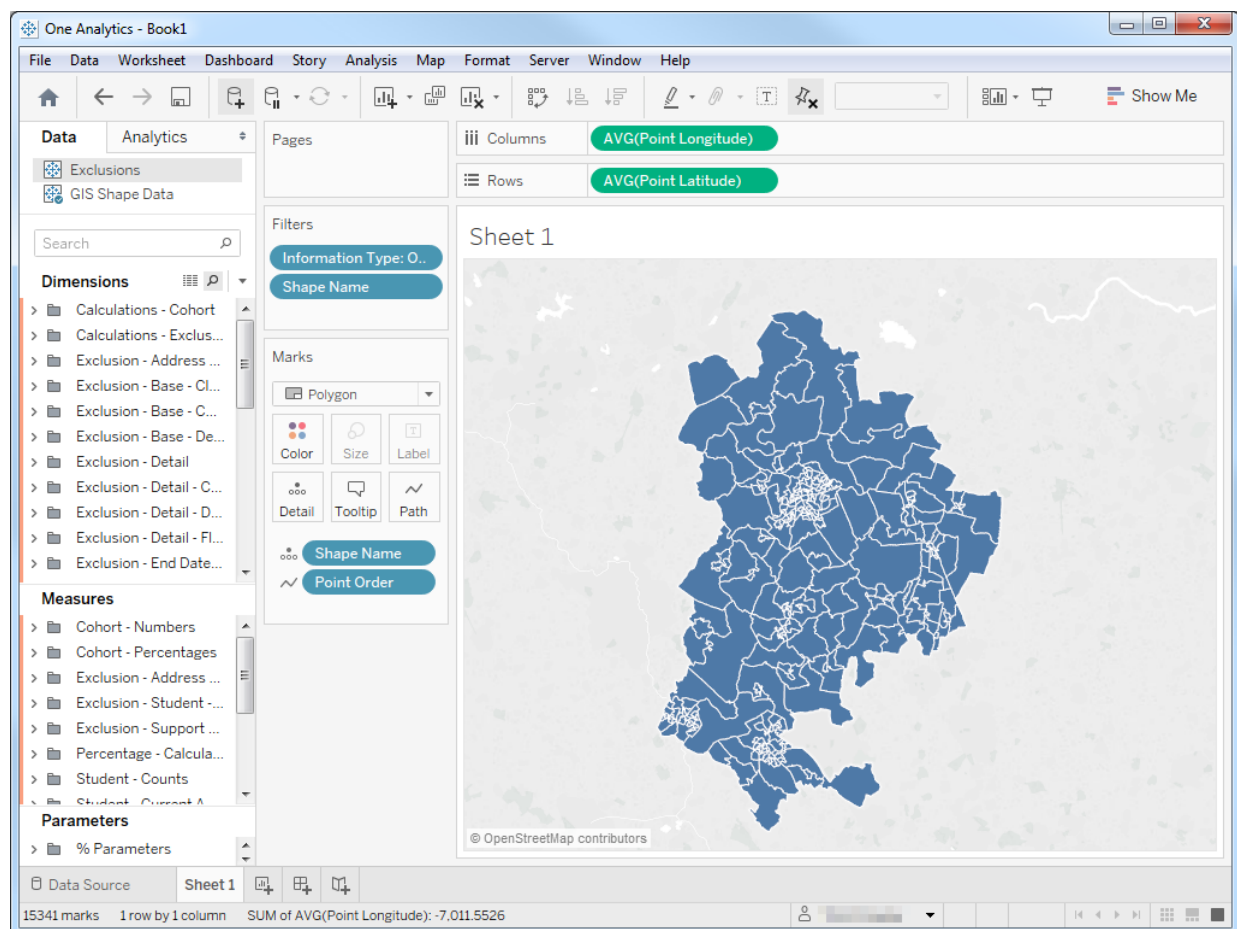
Blending: [http://onlinehelp.tableau.com/current/pro/online/windows/en-us/help.htm#multiple\\_connections.html?](http://onlinehelp.tableau.com/current/pro/online/windows/en-us/help.htm#multiple_connections.html?)

Blending geographic data: [http://onlinehelp.tableau.com/current/pro/online/windows/en-us/help.htm#maps\\_customgeocode\\_datablend.html?](http://onlinehelp.tableau.com/current/pro/online/windows/en-us/help.htm#maps_customgeocode_datablend.html?)

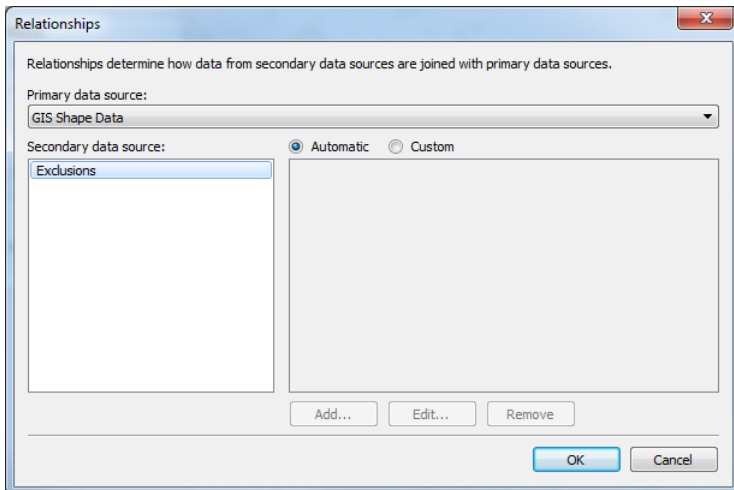
Joining data: [http://onlinehelp.tableau.com/current/pro/online/windows/en-us/help.htm#joining\\_tables.html](http://onlinehelp.tableau.com/current/pro/online/windows/en-us/help.htm#joining_tables.html)

To plot data against a polygon map:

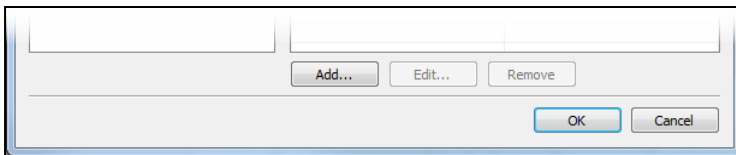
1. Open the workbook containing the polygon map.
2. Select **Data | New Data Source | Tableau Server** to open the data source you want to plot against the polygon map.
3. Click the appropriate worksheet tab at the bottom of the screen to display the polygon map.



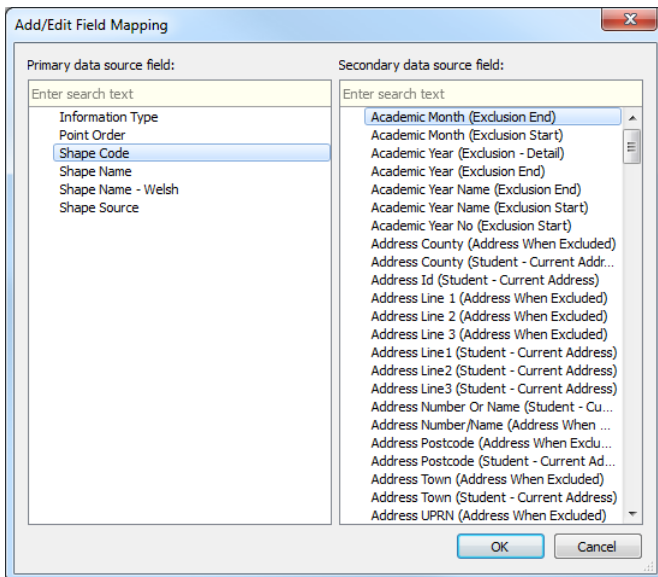
4. Select **Data | Edit Relationships...** to display the **Relationships** dialog.



5. Ensure the **Primary data source** is the one containing the GIS shape data. When the two data sources are linked, One Analytics returns all of the records from the primary data source, and only the relevant ones from the secondary data source.
6. Select the **Custom** radio button to activate the **Add...** button.



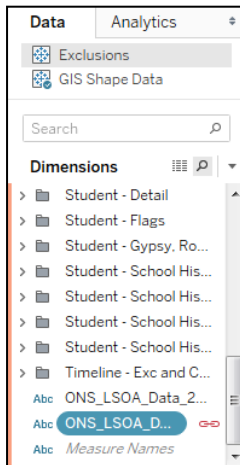
7. Click the **Add...** button to display the **Add/Edit Field Mapping** dialog.



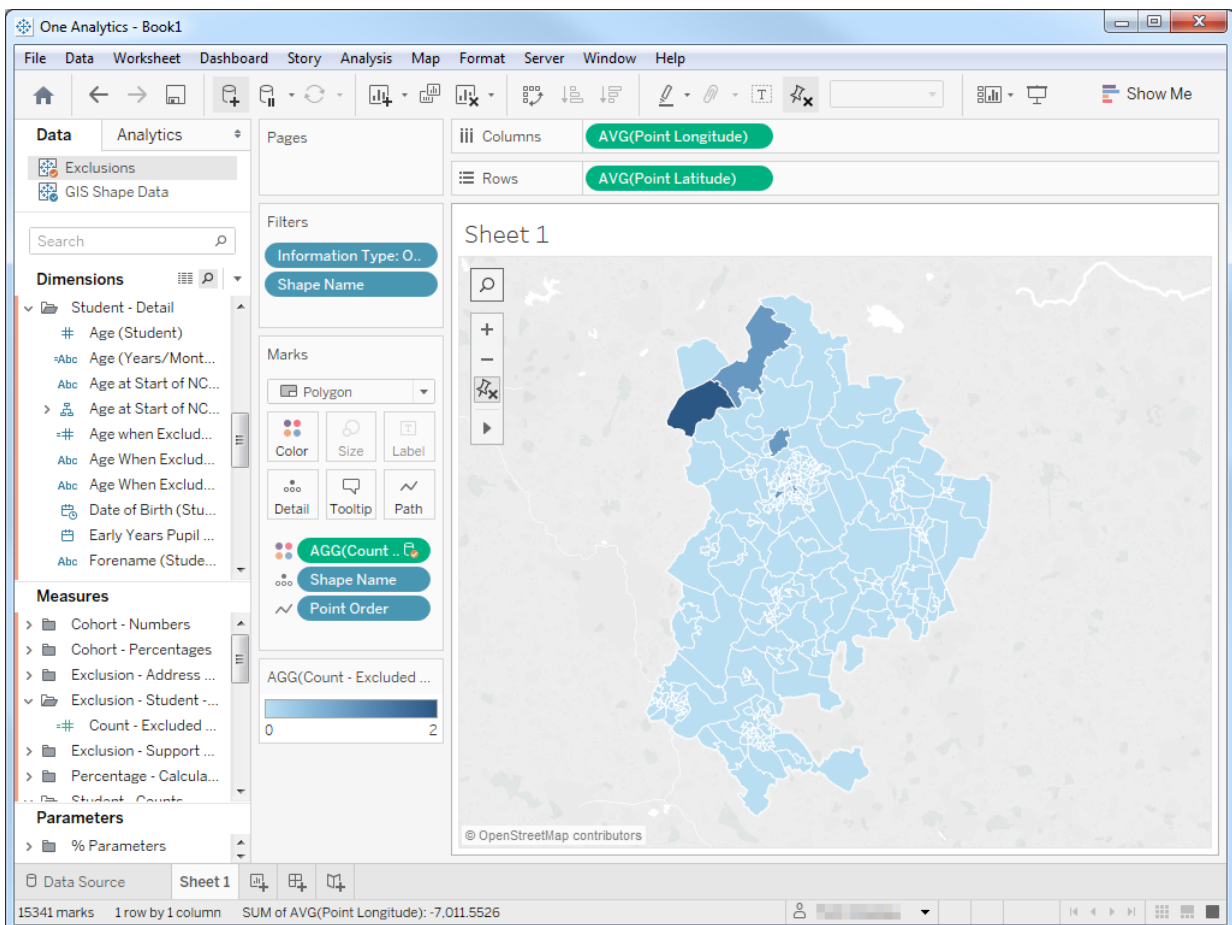
8. In the **Primary data source field** list, select either **Shape Code** or **Shape Name**.
9. In the **Secondary data source field** list, select the field that contains either the shape code or the shape name for the secondary data source.
10. Click the **OK** button to return to the **Relationships** dialog.

- Click the **OK** button to close the **Relationships** dialog and save the relationship. The relationship is indicated by an orange chain link icon next to the linked field in the secondary data source's **Dimensions** pane.

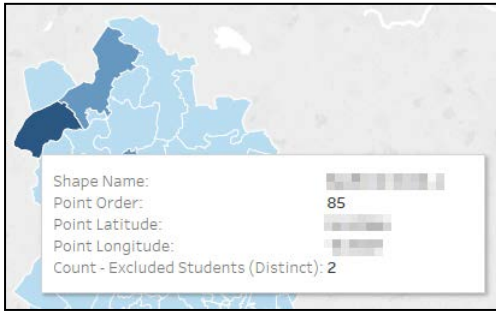
**NOTE:** If the link is broken, i.e. if you click the chain link icon and it becomes a grey broken link icon, the relationship is suspended, and the map only displays information from a single data source. To restore the relationship, click the broken link icon.



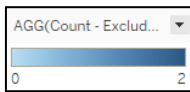
- To display information on the shape map, drag and drop the appropriate numerical measure, e.g. count or percentage, onto the **Color** field on the **Marks** card. The map is updated to display the information via a colour code and the measure is displayed in a new card.



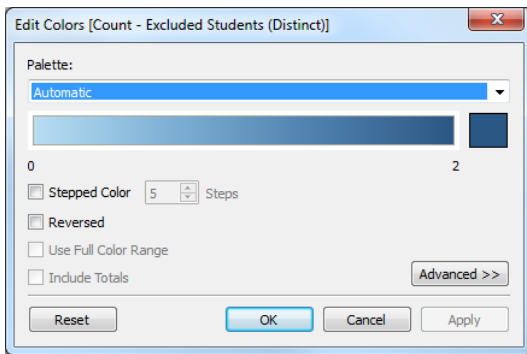
Hovering the cursor over a shape displays all the information used in mapping the shape:



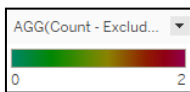
- 13. If required, change the colour scheme for the map:
  - a. Move the cursor over the measure card to display a drop-down arrow in the top right-hand corner of the card.



- b. Click the drop-down arrow to display the configuration menu.
    - c. Select **Edit Colours...** to display the **Edit Colors [measure title]** dialog.

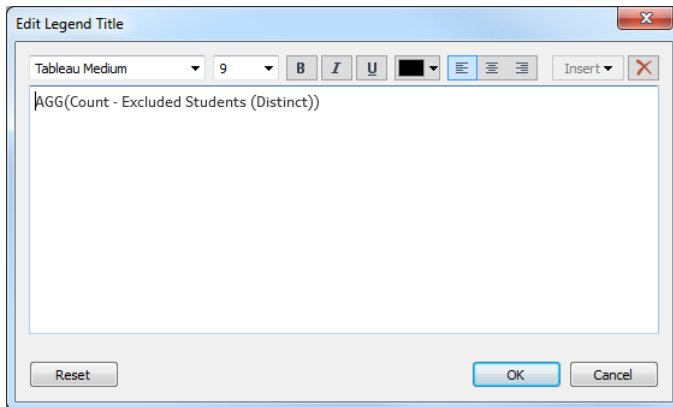


- d. Select the required colour options and click the **Apply** button to preview the changes.
      - e. Click the **OK** button to close the dialog.
- 14. If required, change the legend title:

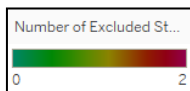


- b. Click the drop-down arrow to display the configuration menu.

- c. Select **Edit Title...** to display the **Edit Legend Title** dialog.



- d. Enter the new title and click the **OK** button to save and close the dialog. The measure card is now updated with the new legend title.



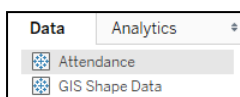
## Point Maps

Entering longitude and latitude details in the **Row** and **Column** shelves in One Analytics automatically produces a map of the specified area, but unless it has data is plotted against it, it is unlikely to be of benefit. You can blend the geographic data with other data sources to plot individual data points on a map.

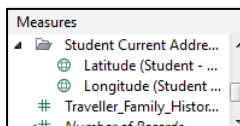
**NOTE:** For this guide, the Attendance data source is used. When following these instructions, replace 'Attendance' with the appropriate data source.

To create a point map:

1. Connect to the required data source and the GIS Shape Data data source.
2. In the **Data** tab, select the **Attendance** data source to display the Attendance **Dimensions**, **Measures** and **Parameters** panes.



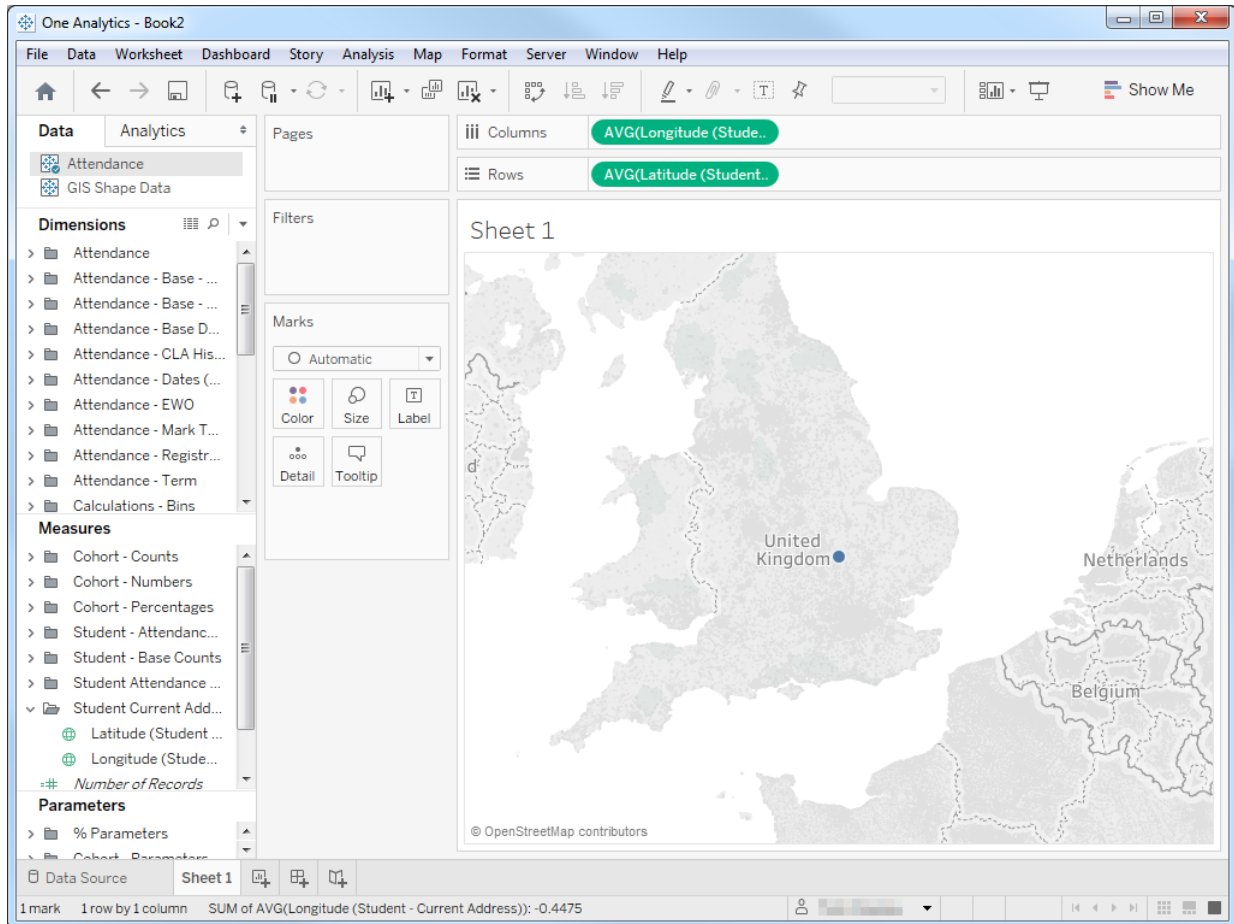
3. In the **Measures** pane, locate the required latitude and longitude measures.



## Using Maps within One Analytics

4. Drag and drop the required latitude measure on to the **Rows** shelf and the longitude measure on to the **Columns** shelf to display a single point on a map of the United Kingdom.

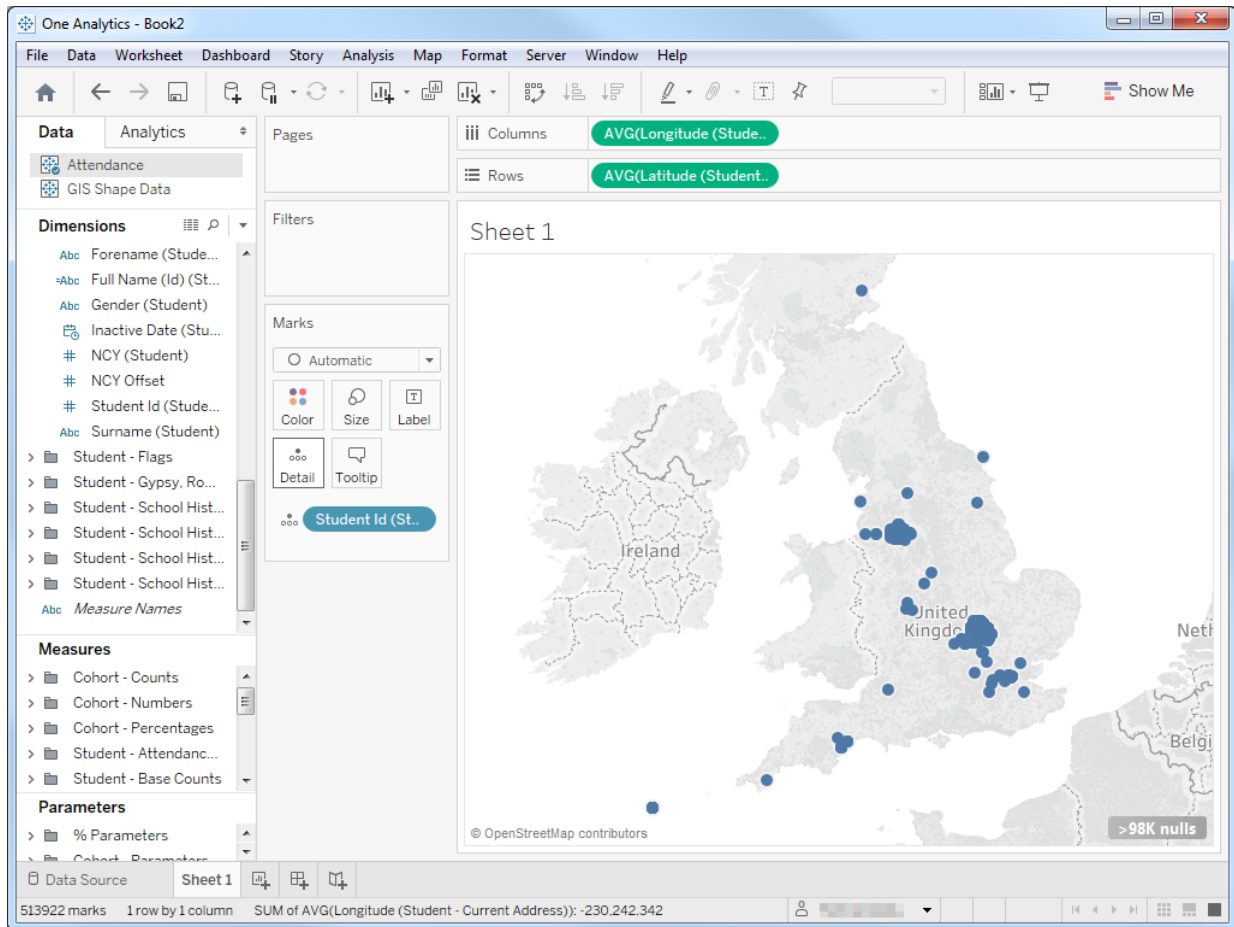
**TIP:** You can also double-click the latitude and longitude measures to automatically populate the appropriate **Rows** and **Columns** shelves.



5. To create the individual points on the map, drag and drop the required **Dimension** on to the **Details** field in the **Marks** card, e.g. **Student ID ("Full name (Id) (Student))"** in the following image).

A point is plotted for each unique data point in the dimension used, meaning that if you want a point for each individual student, the dimension you choose must include a unique identifier for each student, e.g. **Student Id** or **Full name (Id)** both include the unique Student ID reference, enabling distinct points to be plotted.

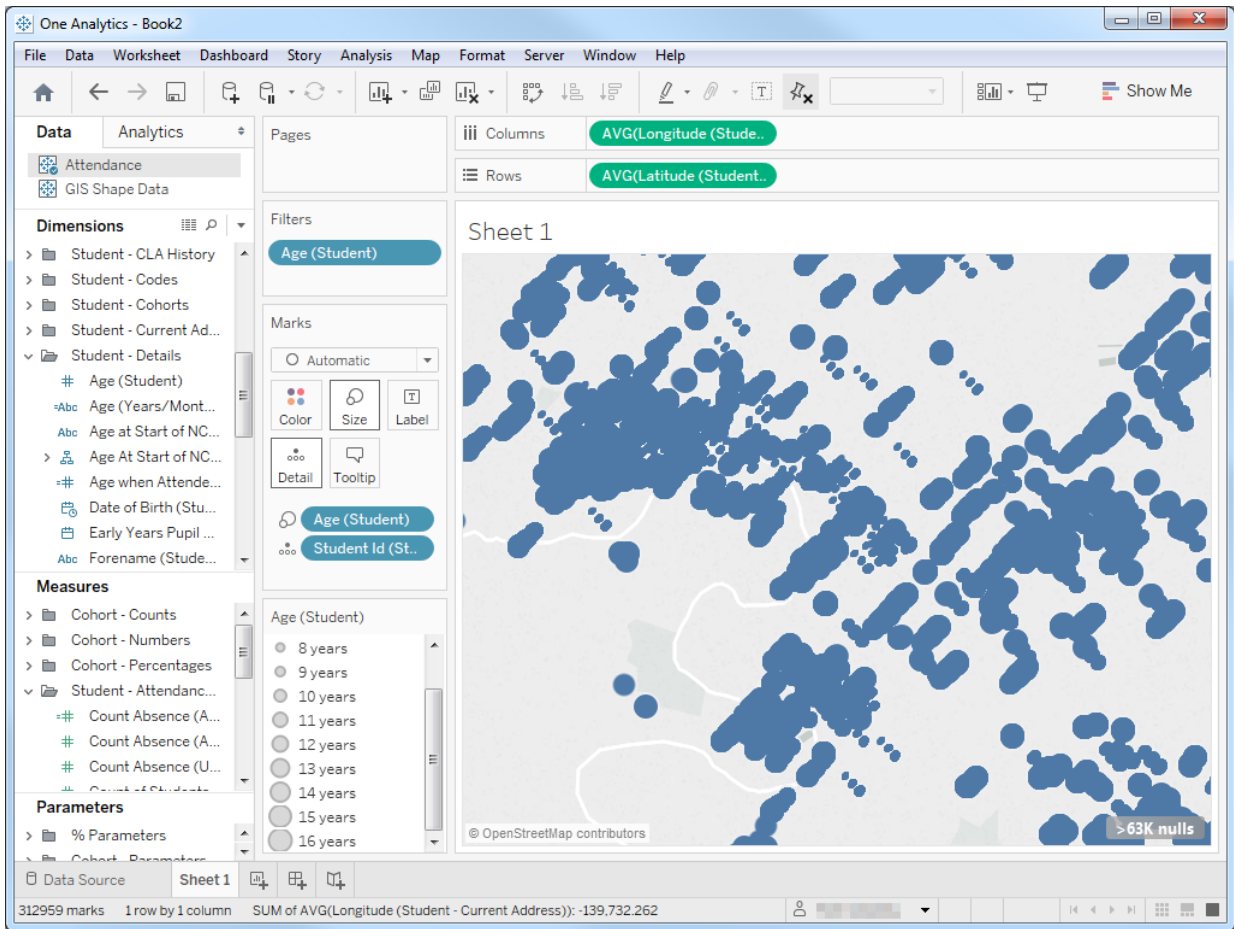
The points are then plotted based on the data provided by the dimension.



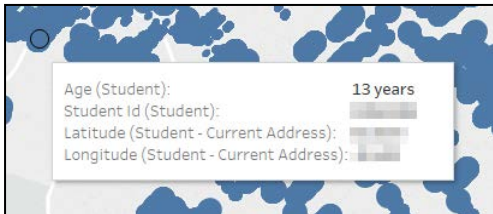
- After you have plotted the **Dimension**, drag and drop the required **Measures** on to the **Color** or **Size** fields in the **Marks** card. The measure key is displayed in a card below the **Marks** card (**AGG(% Any Absence)** in the following examples) and the points on the map are updated accordingly.



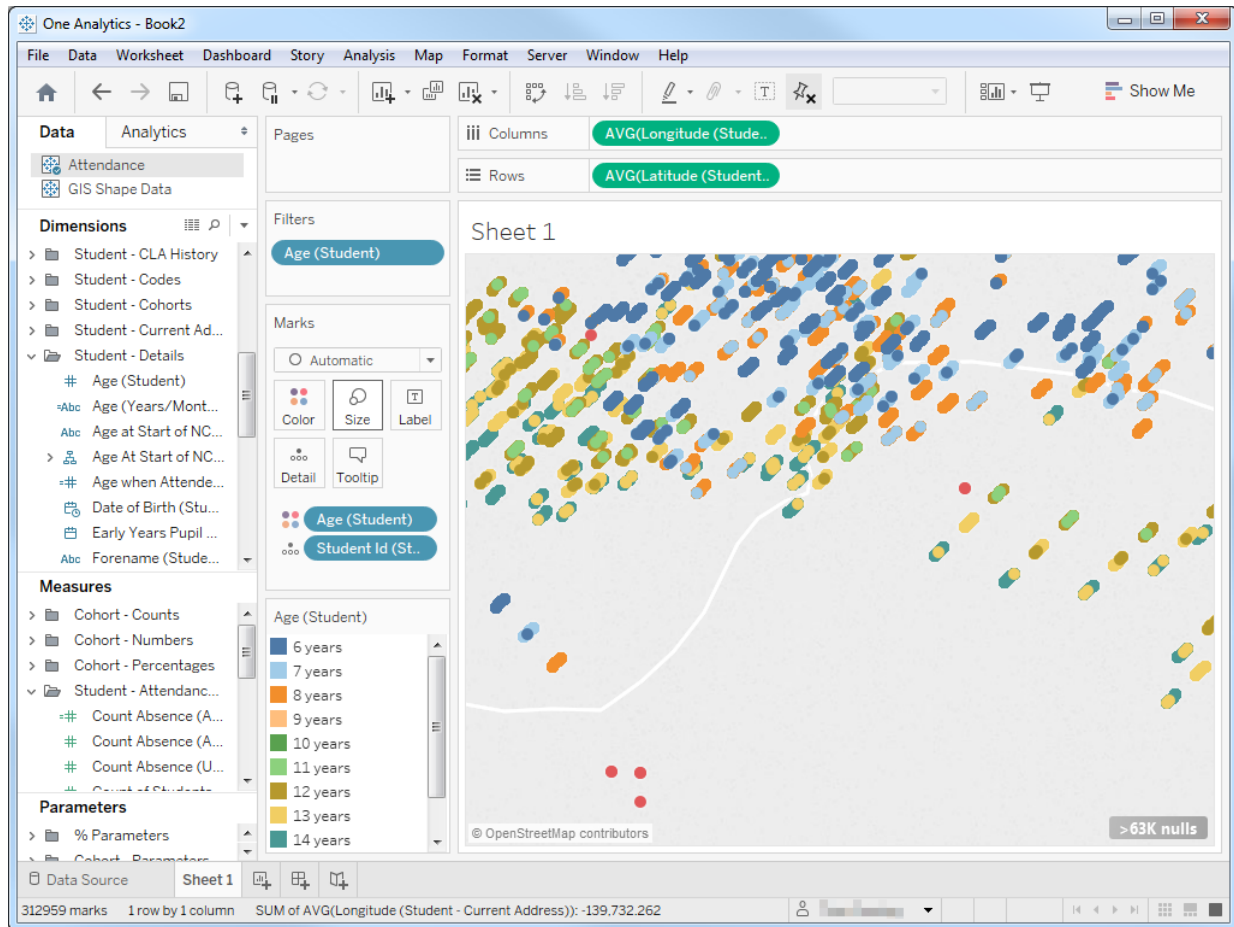
Data displayed by Size:



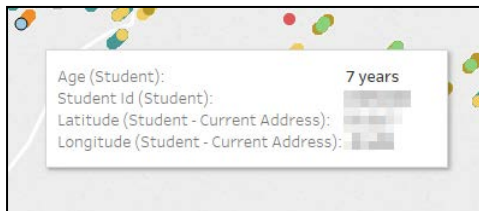
Hovering the cursor over a point displays all data used in mapping the point:



Data displayed by **Color**:



Hovering the cursor over a point displays all data used in mapping the point:



**TIP:** You can change the colours by clicking the **Color** field on the **Marks** card to display a configuration menu, and then clicking the **Edit Colors...** button to display the **Edit Colors** dialog.

## Geographic Roles

You should not assign **Geographic Roles** to cities, towns or full UK postcodes. The current version of Tableau, the software powering One Analytics, does not correctly recognise these fields.

For more information on how the Tableau software deals with **Geographic Roles**, see the link below, however the functionality described within the *Custom Geocode Your Data* section of the Tableau website does not apply to One Analytics. Use the Geographic Roles section of this chapter for instructions on dealing with them in One Analytics.

**MORE INFORMATION:**  
 Prepare your Geographic Field: [http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#maps\\_geographicroles.html#GeoRoles](http://onlinehelp.tableau.com/current/pro/desktop/en-us/help.htm#maps_geographicroles.html#GeoRoles)

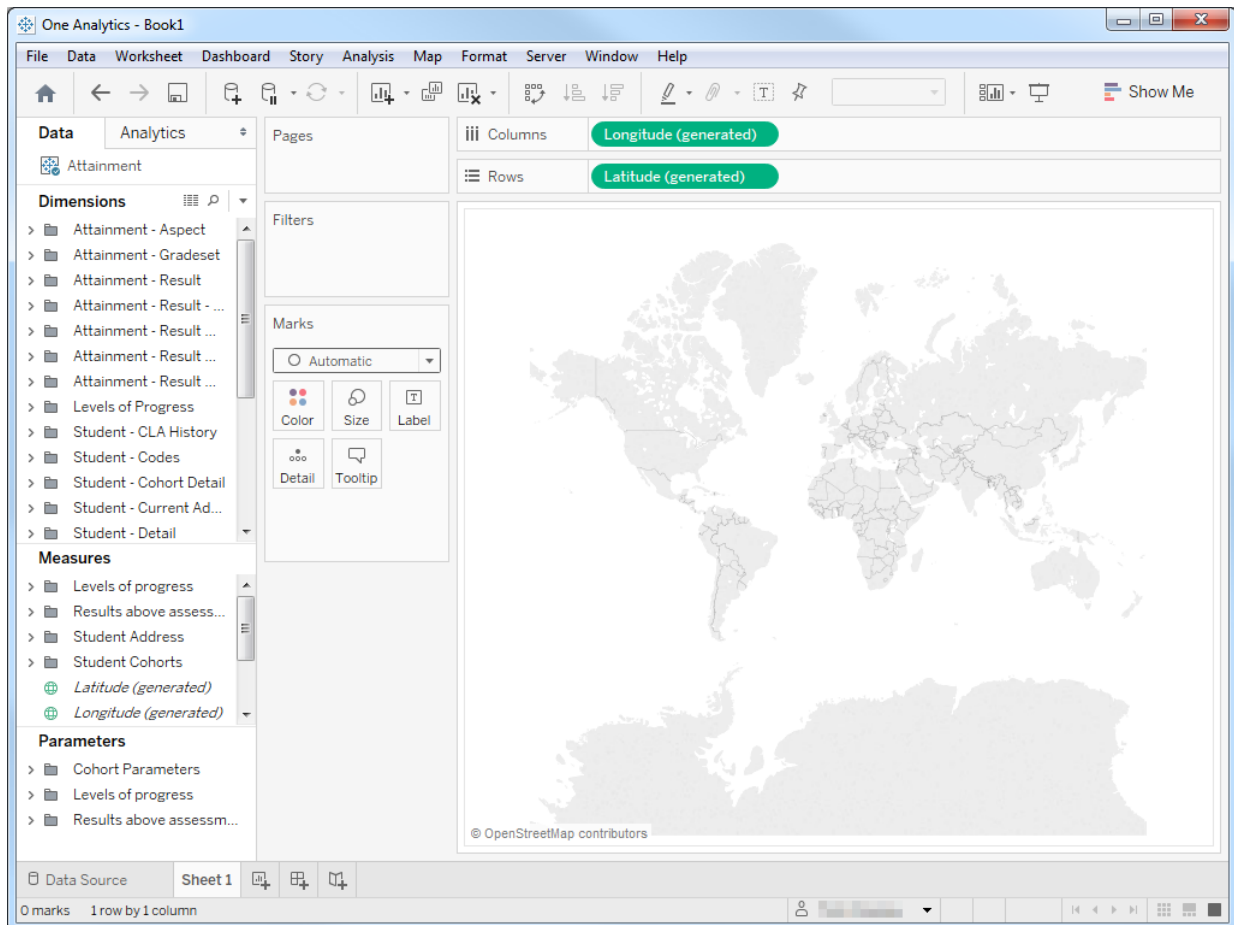
The Tableau software that powers One Analytics does not currently recognise full UK postcodes and might encounter issues with UK counties when assigning geographic roles. If required, you can assign a geographic role to outbound postcodes, i.e. the first half of the postcode.

## Assigning Geographic Roles to outbound postcodes

If you need to assign a geographic role to a postcode:

1. Open the required data source in a workbook.
2. Drag the **Latitude (generated)** measure to the **Rows** shelf and the **Longitude (generated)** measure to the **Columns** shelf to display a blank map of the world.

**NOTE:** Fields that already have geographic roles assigned automatically populate the latitude and longitude data when you add them to the **Marks** card, and plot the data they contain as points on the map. To create a shape map, select **Filled Map** from the **Marks** card drop-down.

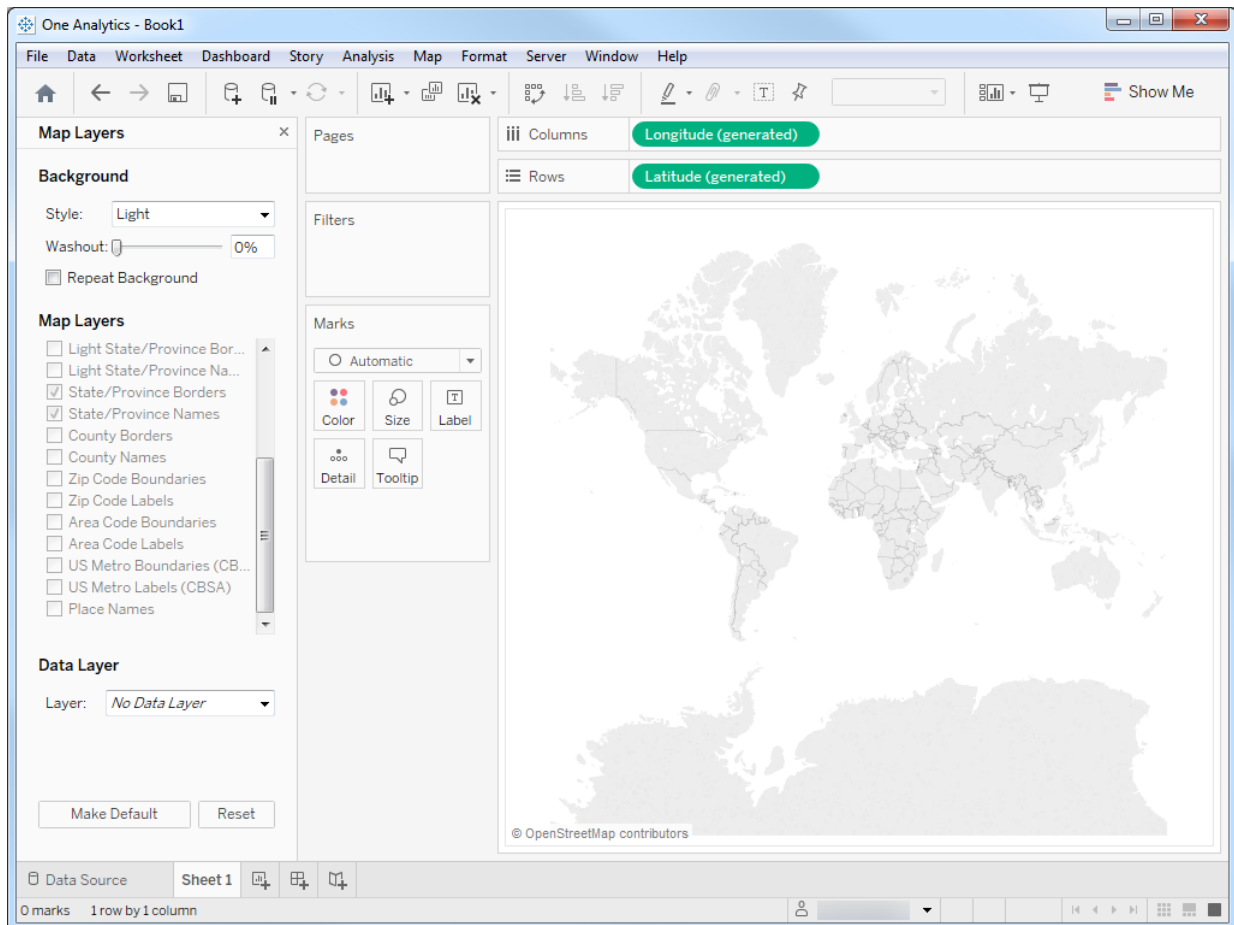


3. Split the postcode by right-clicking the **Address Postcode** dimension (**Dimensions | Student - Current Address**) and selecting **Transform | Split** to create two new calculated fields in the **Dimensions** pane.

Address Postcode - Split 1  
Address Postcode - Split 2

4. Assign a geographic role to the **Address Postcode - Split 1** dimension by right-clicking the dimension and selecting **Geographic Role | ZIP Code/Postcode**.

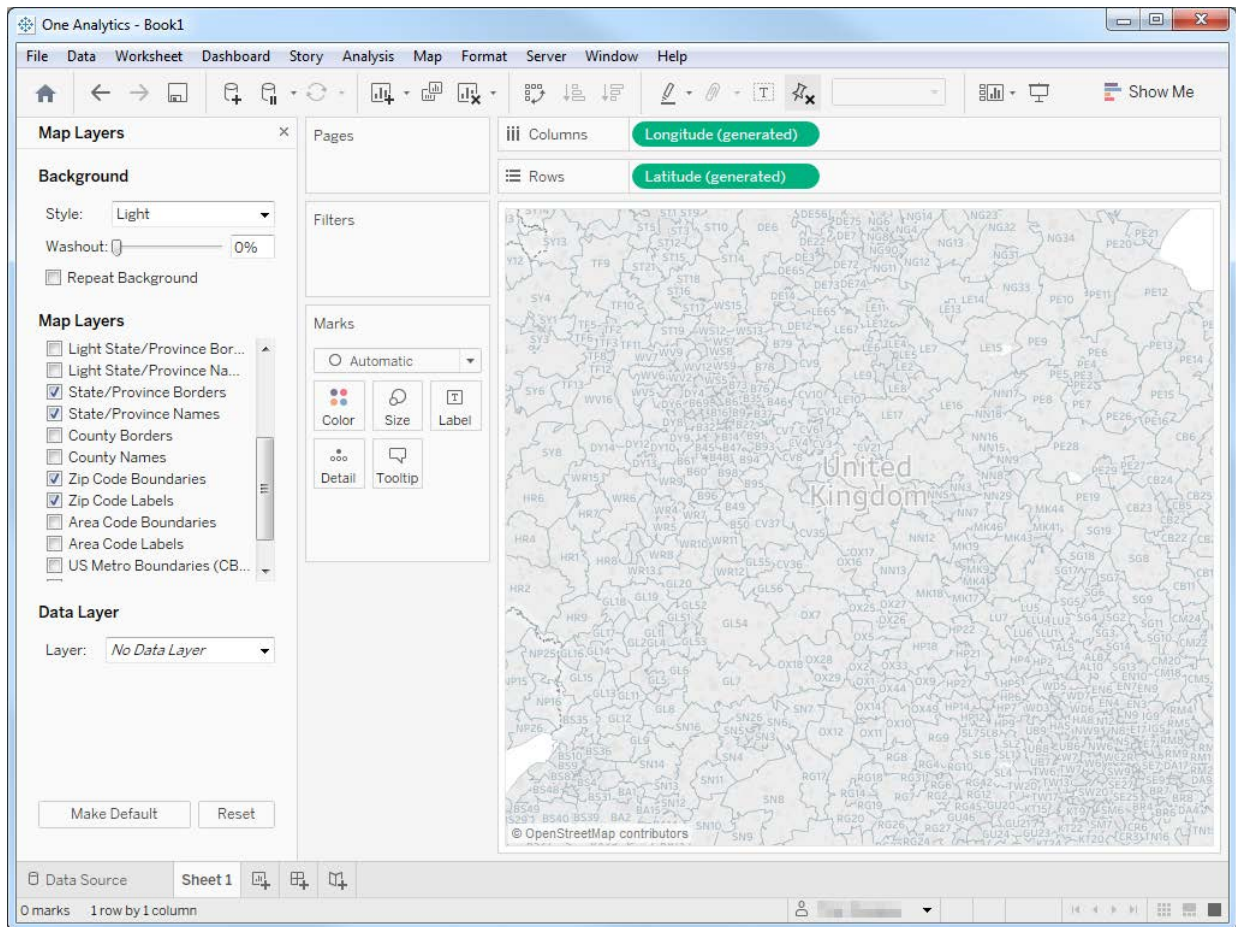
5. In the menu bar at the top of the screen, select **Map | Map Layers...** to display the **Map Layers** pane.



6. Zoom in on the map until the **Zip Code Boundaries** and **Zip Code Labels** check boxes are activated.

**TIP:** You can zoom in and out of the map using the **+** and **-** buttons or your mouse scroll-wheel. Press the **F** key to enable you to pan across the map using the cursor.

7. Select the **ZIP Code Boundaries** check box and, if required, the **Zip Code Labels** check box to display and label the outbound postcode areas.



You can now plot data against the postcodes.

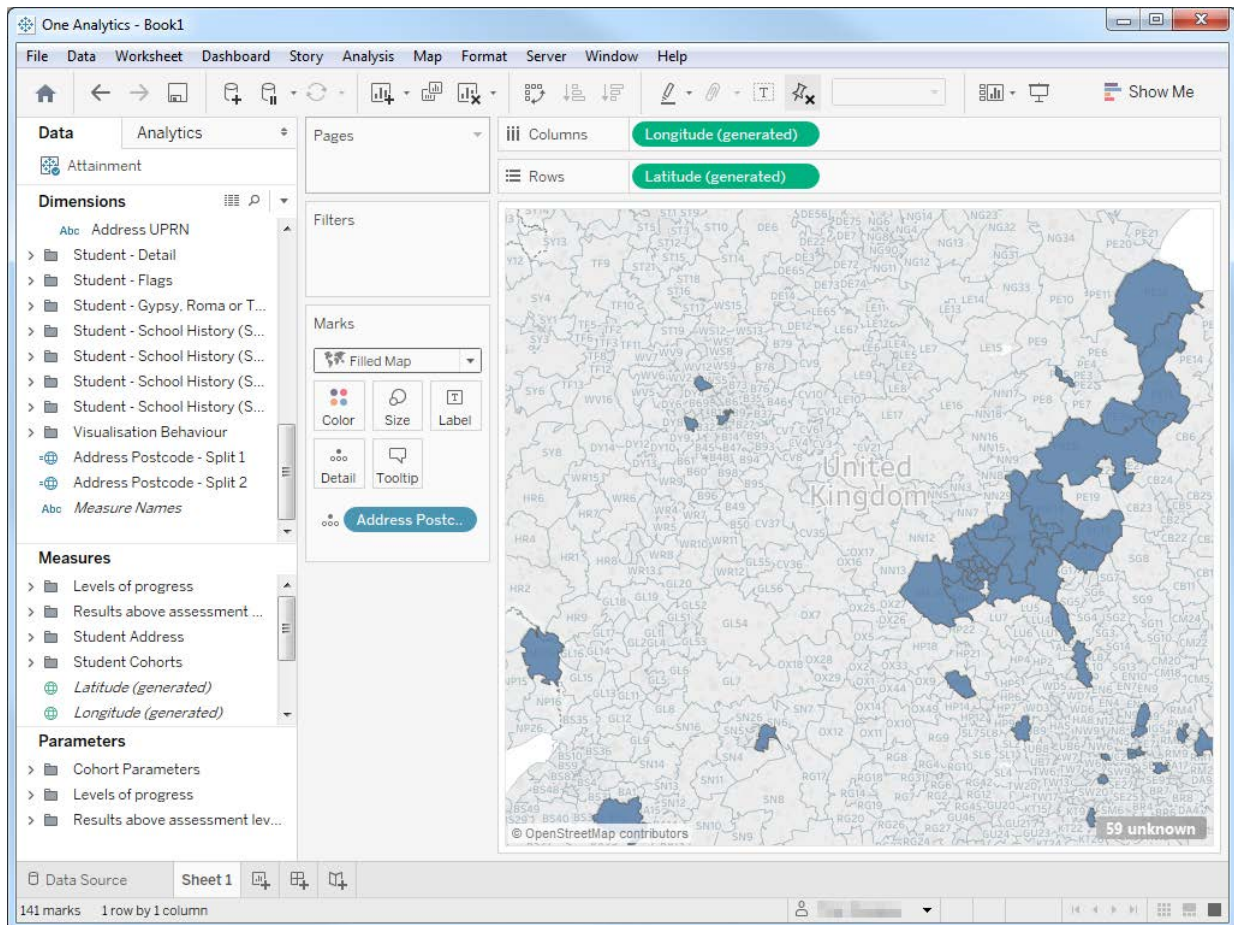
### Example: Displaying the Number of Students in Each Outbound Postcode

This example explains how to display the number of students in each postcode area using colour. This example uses the Attainment data source. Adapt the instructions and data item names to suit your needs and the data source you are using.

1. In the relevant worksheet, drag the **Address Postcode - Split 1** calculated field from the dimensions pane to the **Detail** field on the **Marks** card. This adds the latitude and longitude fields to the appropriate **Columns** and **Rows** shelves if required, and plot data points on the map.



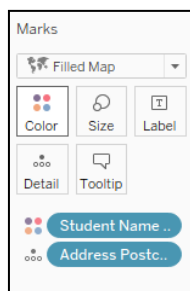
- From the **Marks** card drop-down, select **Filled Map** to create polygons for each postcode area for which you hold student data.



- Add the student count to the map:

**NOTE:** You might want to pause auto updates for this step if you are dealing with a large amount of data. To do so, click the **Pause Auto Updates** icon.

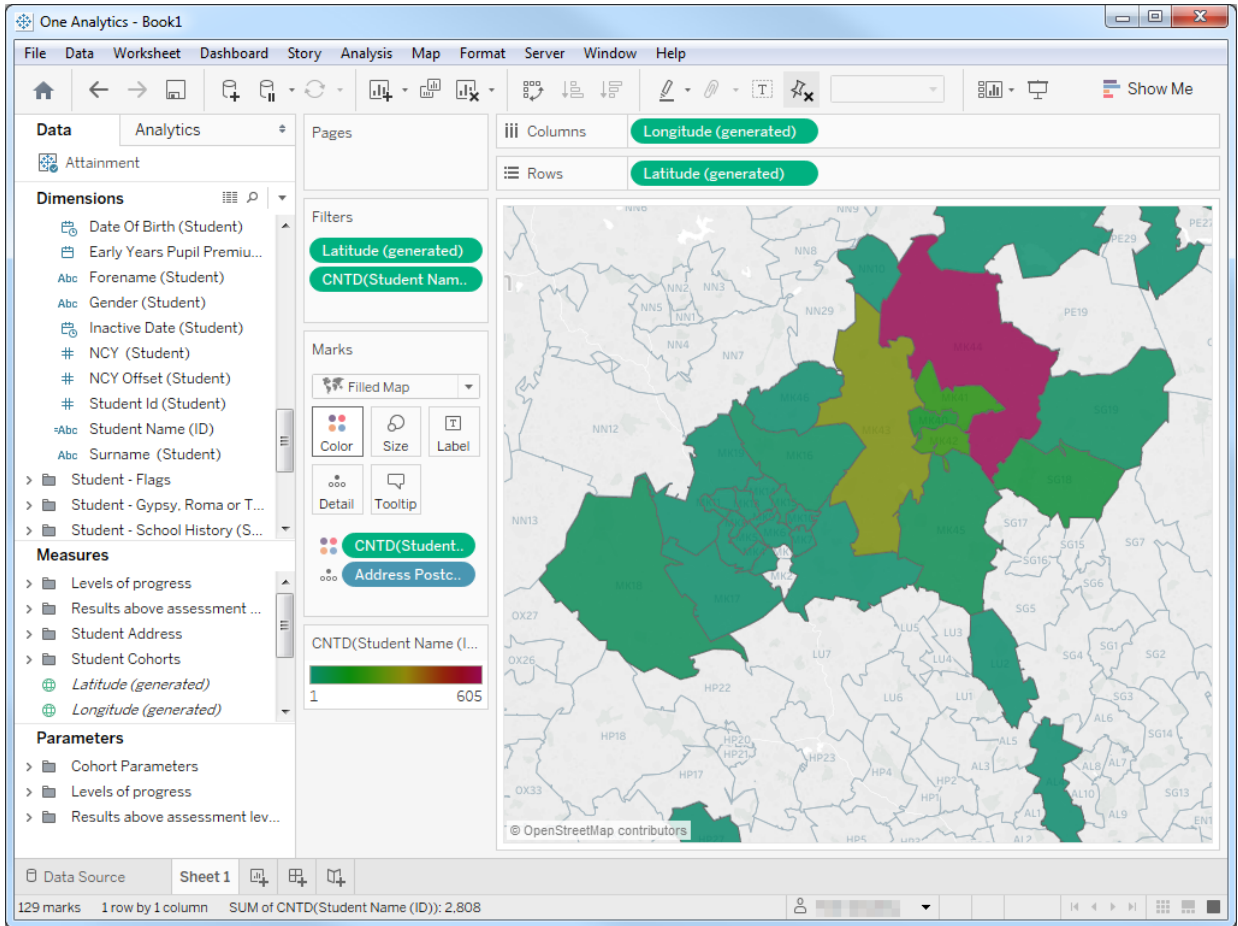
- Drag the **Student Name (ID)** calculated field (**Dimensions | Student Detail**) to the **Color** field on the **Marks** card.



- Right-click the **Student Name (ID)** lozenge on the **Marks** card and select **Measure | Count (Distinct)**.
- If required, add a postcode or student count filter by copying the **CNTD(Student Name (ID))** or **Address Postcode - Split 1** lozenges from the **Marks** card to the **Filters** card.

**TIP:** You can copy data items by holding the **Ctrl** key and clicking and dragging the lozenge to the desired location.

- d. If you paused auto-updates, click the **Resume Auto Updates** icon to resume them and create the shape map.



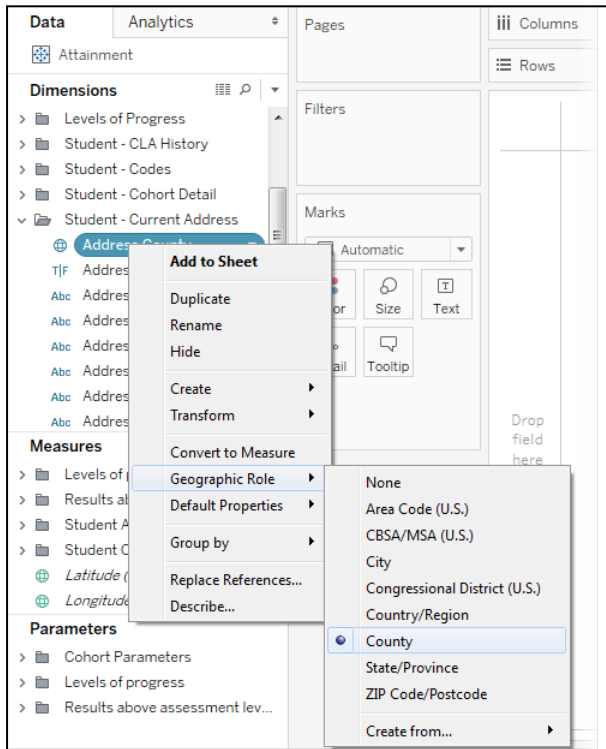
## Plotting Counties

Depending on how the counties are named and abbreviated in your data, they might not match up to the county names in One Analytics.

To plot counties:

1. Open the required data source in a workbook.

2. Ensure the **Address County** dimension (**Dimensions | Student - Current Address**) has a geographic role assigned by right-clicking the dimension and selecting **Geographic Role**. If **County** is not selected, select it.

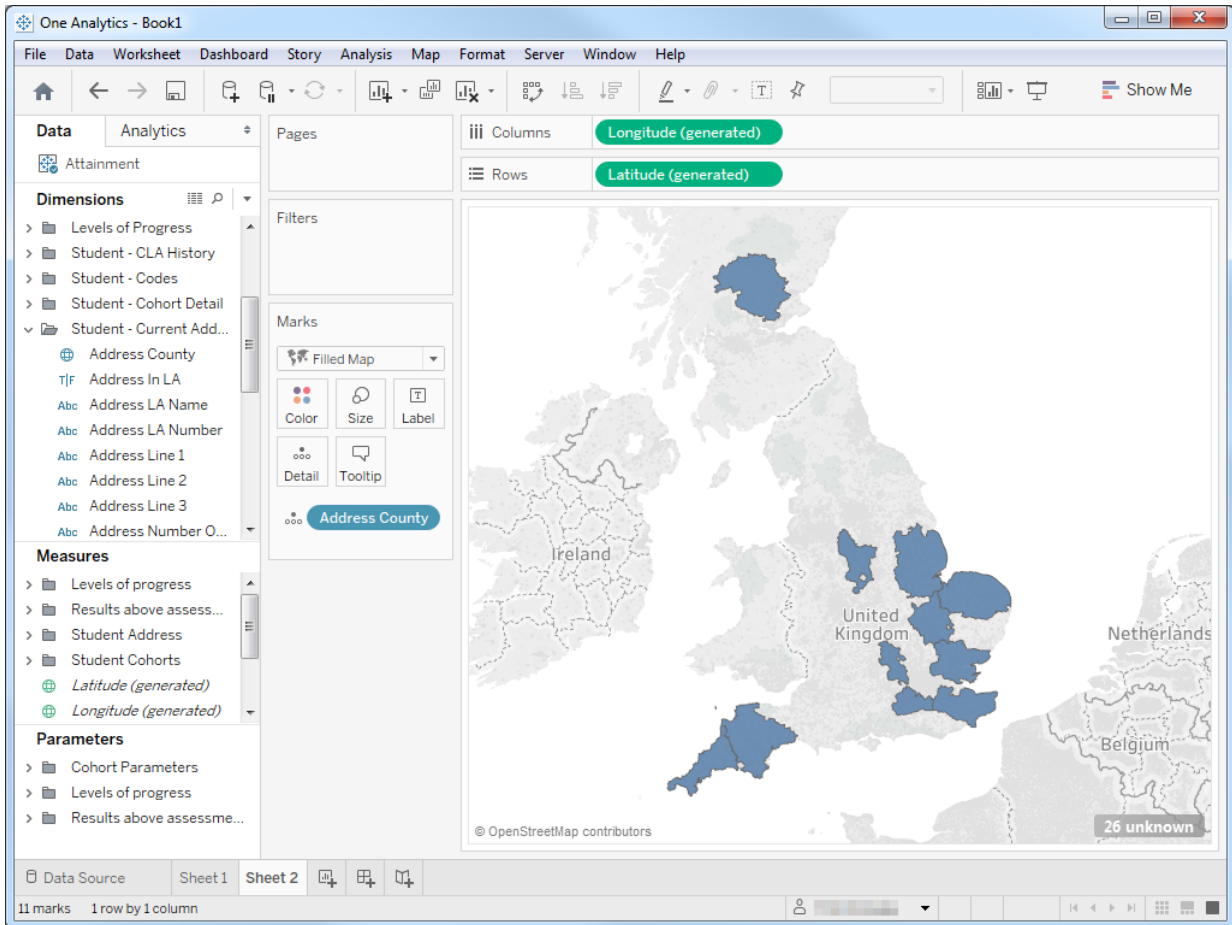


3. Select **Filled Map** from the **Marks** card drop-down.



## Using Maps within One Analytics

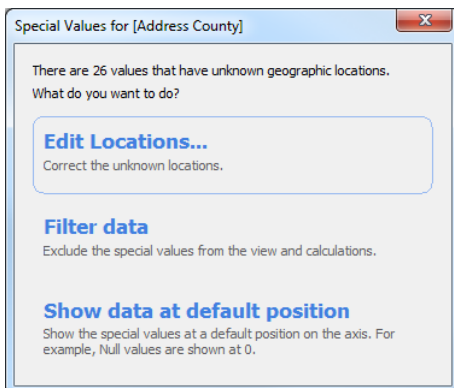
4. Drag the **Address County** dimension to the **Detail** field on the **Marks** card. This adds the latitude and longitude fields to the **Columns** and **Rows** shelves and create polygons for the counties that exist within the data source.



If there are any counties in the data source that did not match the names held within One Analytics, an **[n] unknown** button is displayed in the bottom right-hand corner of the map.



5. If there are any unknown counties,
  - a. Click the button to display the **Special Values for [Address County]** dialog.



- b. Select **Edit locations...** to display the **Edit Locations** dialog.

Geographic roles

Country/Region: United Kingdom

State/Province: None

County: Address County ⚠️ 26 issues

Match values to locations

⚠️ County

Your Data	Matching Location
Bedfordshire	Unrecognized
Beds	Unrecognized
Bedshire	Unrecognized
Bucks	Unrecognized
Cardshire	Unrecognized
Cheshire	Unrecognized
Co Antrim	Unrecognized
Dunshire	Unrecognized
Empshire	Unrecognized

Show only unmatched locations in drop down list

Reset Matches OK Cancel

- c. Ensure the **Country/Region** is set to United Kingdom.
- d. Click the red **Unrecognized** text opposite the county name you want to match and begin typing the name of the county to display a list of matching counties, or click the down arrow to display a drop-down of all county names.

Match values to locations

⚠️ County

Your Data	Matching Location
Lancs	Lan
Merseyside	Enter a Latitude and Longitude...
N Humberside	Highland
Northants	Lancashire
Null	North Lanarkshire
Perfshire	Northumberland
Simshire	Redcar and Cleveland
Sussex	Rutland
W Midlands	Shetland
	South Lanarkshire
	Sunderland

Show only unmatched locations in drop down list

- e. Select the appropriate county to create the match and add it to the **Matching Location** column.

Match values to locations

⚠️ County

Your Data	Matching Location
Bucks	Buckinghamshire
Cheshire	Cheshire East
Herts	Hertfordshire
Lancs	Lancashire
N Yorkshire	North Yorkshire
Buckinghamshire	Buckinghamshire
Cambridgeshire	Cambridgeshire
Cornwall	Cornwall
Derbyshire	Derbyshire

Show only unmatched locations in drop down list

- f. Click the **OK** button to close the dialog and add the matched county polygons to the map. You can now display data at a county level within the map.

# 08 / Attendance Data Source

## Mark Type Hierarchy

You can drag the **Mark Hierarchy** dimension (**Dimensions | Attendance - Mark Type**) to the **Columns** shelf to display the **Statistical Meaning Description**. This displays a high-level breakdown of absence categories.

Statistical Meaning Description							
Approve	Attendance	Authorised	Do Not	Use	No Mark	Present	Unauthorised Absence
Null	Approved Educational Authority	Attendance Not Required	Authorised Absence	Do Not Use	No Mark	Present	Unauthorised Absence
Abc	Abc	Abc	Abc	Abc	Abc	Abc	Abc

You can expand the **Statistical Meaning Description** hierarchy using the + icon to display the **School Meaning Description**, each of the categories is further divided into sub-categories.

Expanding the **School Meaning Description** hierarchy displays the **Attendance Mark**, which displays how each **School Meaning Description** category is recorded, e.g. B, V, Y, etc. The following table provides the breakdown of the hierarchical levels.

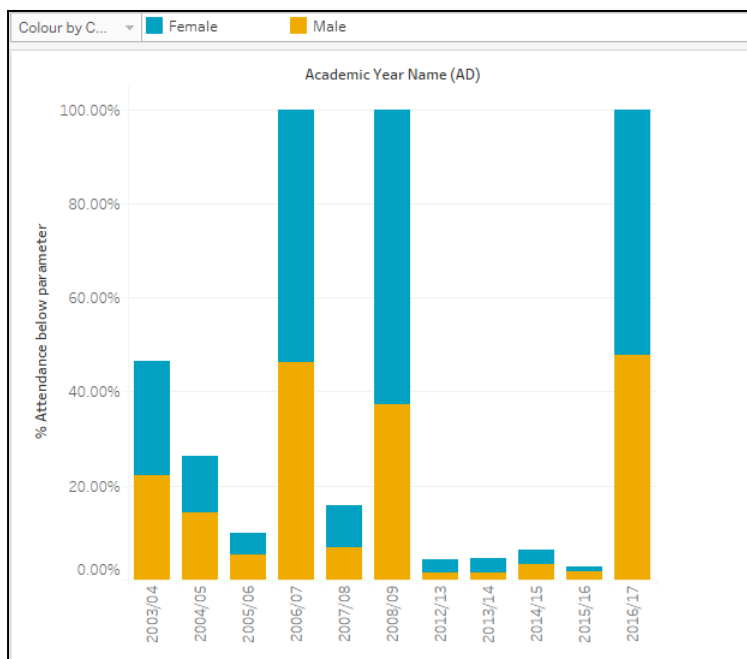
Statistical Meaning Description / School Meaning Description / Attendance Mark										
Null	Approved Educational Authority						Attendance Not Required			Excluded (no alternative)
	Approved Educational Authority	Dual registration	Educated off site	Educational visit	Interview	Work experience	Enforced closure	Non-compulsory school age absence	School closed to pupils and staff	
Null	P	D	B	V	J	W	Y	X	#	E
Abc	Abc	Abc	Abc	Abc	Abc	Abc	Abc	Abc	Abc	Abc

Statistical Meaning Description	School Meaning Description	Attendance Mark
Null	Null	Null
Approved Educational Authority	Educated off site (NOT Dual Registration)	B
	Educational visit or trip	V
Attendance Not Required	Enforced closure	Y
	Non-compulsory school age absence	X
	School closed to pupils and staff	#
Authorised Absence	Excluded (no alternative)	E
	Family holiday (agreed)	H
	Illness (NOT medical or dental etc. appointments)	I
	Medical/Dental appointments	M
	Other authorised circumstances (not covered by another appropriate code/description)	C

Statistical Meaning Description	School Meaning Description	Attendance Mark
	Religious observance	R
No Mark	All should attend / No mark recorded	-
Present	Late (Before registers closed)	L
	Present (AM)	/
	Present (PM)	\
Unauthorised Absence	Family holiday (NOT agreed or days in excess of agreement)	G
	Late (After registers closed)	U
	No reason yet provided	N
	Unauthorised absence (not covered by another appropriate code/description)	O

## Attendance Below Parameter Visualisation

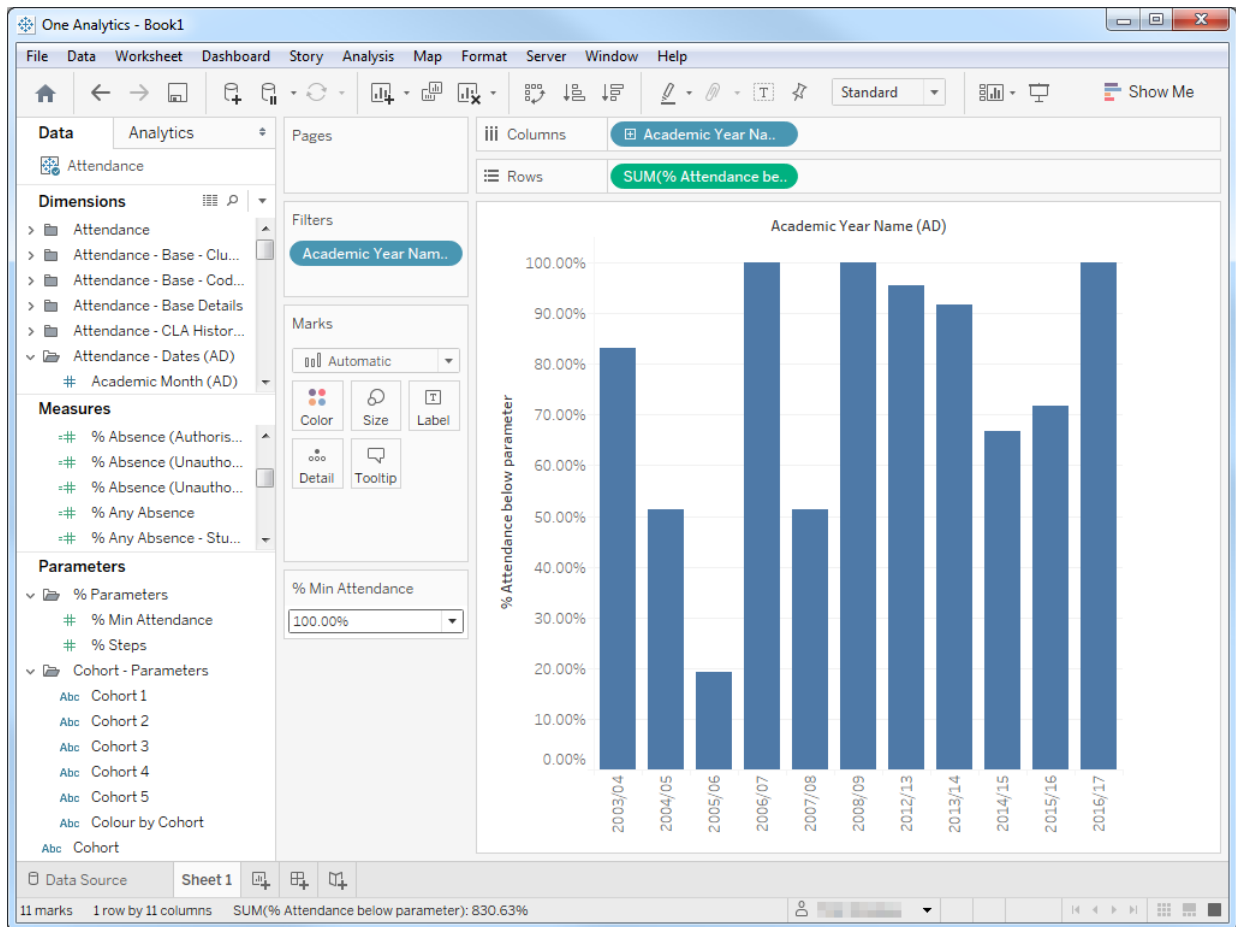
To view the percentage of students with attendance below a user-definable level, you can create the Attendance Below Parameter visualisation.



To create the Attendance Below Parameter visualisation:

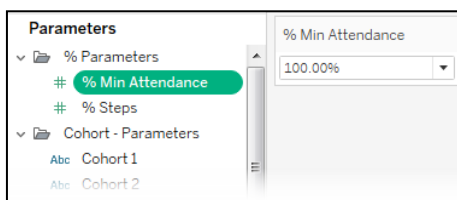
1. Open a blank worksheet connected to the Attendance data source.
2. Drag the **Academic Year Hierarchy (AD)** dimension (**Dimensions | Attendance - Dates (AD)**) to the **Columns** shelf to display the **Academic Year Name (AD)** data.

3. Drag the **% Attendance below parameter** measure (**Measures | Student Attendance Percentages**) to the **Rows** shelf to produce a bar chart displaying the percentage of students with attendance below the parameter value.

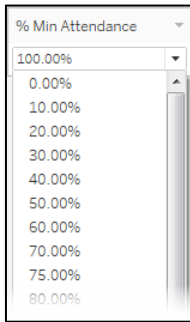


**NOTE:** You can also create this visualisation using the **Count of Students with Attendance below parameter** measure in the **Student - Attendance Counts** folder to display the number of students attending below the parameter level.

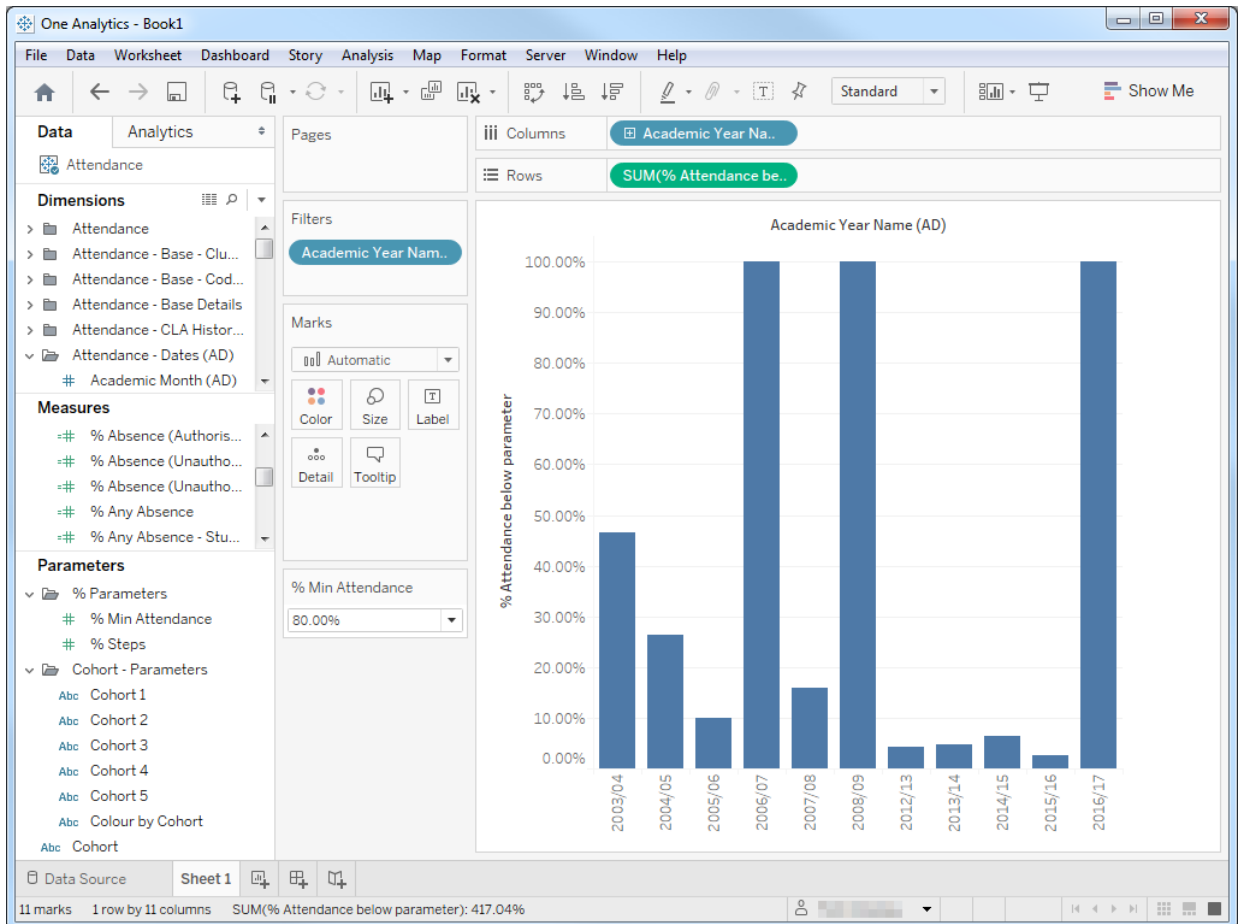
4. To adjust the parameter controlling the 'attendance below' level:
  - a. In the **Parameters** pane, right-click the **% Min Attendance** parameter and select **Show parameter control** to display the **% Min Attendance** card.



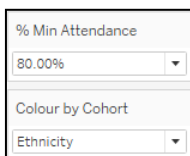
- b. To change the minimum attendance level, click the value to display a drop-down listing percentages.



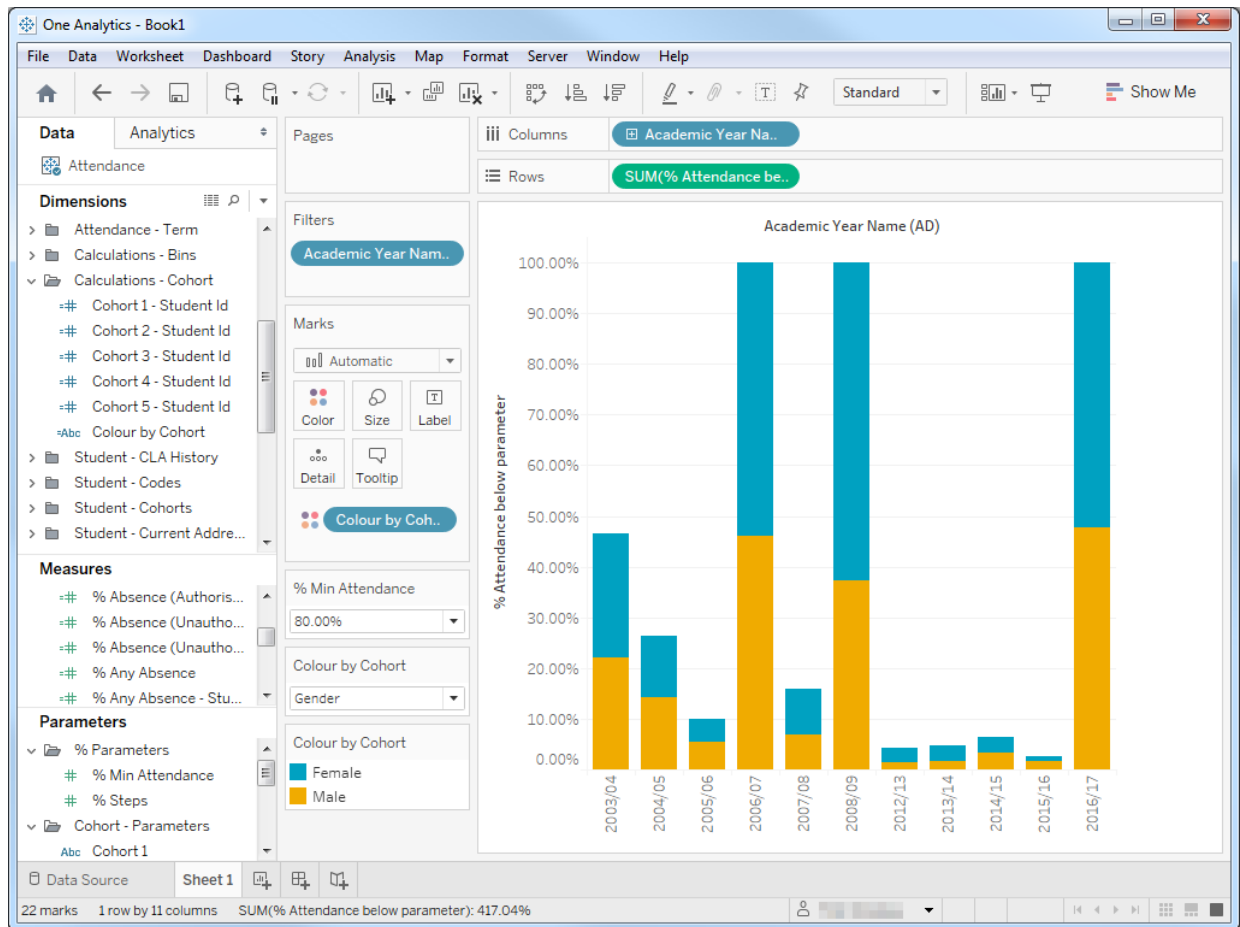
- c. Select the required percentage. The visualisation is updated to reflect the new level.



- 5. To view the absence breakdown by cohort:
  - a. Right-click the **Colour by Cohort** parameter (**Parameters | Cohort - Parameters**) and select **Show parameter control** to display the **Colour by Cohort** parameter control card beneath the **% Min Attendance** parameter control card.



- b. Drag the **Colour by Cohort** dimension (**Dimensions | Calculations - Cohort**) onto the **Color** field on the **Marks** card. The visualisation is recoloured to display the breakdown of absences by the cohort selected in the **Colour by Cohort** parameter control card.

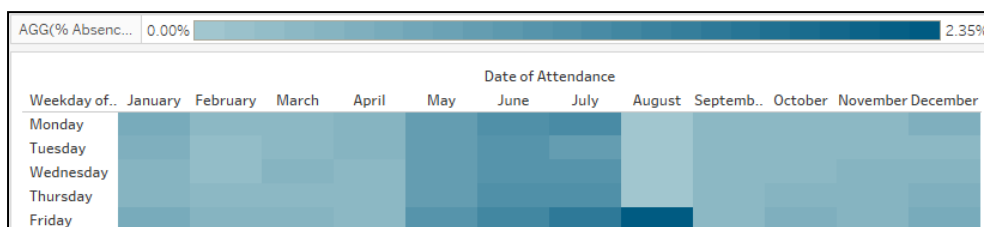


You can change the cohort in the same way that you changed the minimum attendance level by selecting a new option from the parameter control card.

**TIP:** You can change the colours by right-clicking in the **Colour by Cohort** card and selecting **Edit colors...**

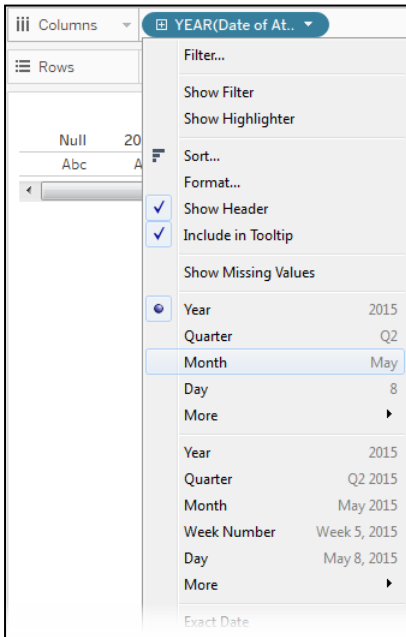
## Unauthorised Absence Heat Map Visualisation

You can use heat maps to identify the days and months that have the highest levels of unauthorised absence.



1. Open a blank worksheet connected to the Attendance data source.
2. Drag the **Date of Attendance** dimension (**Dimensions | Attendance - Dates (AD)**) to the **Columns** shelf.

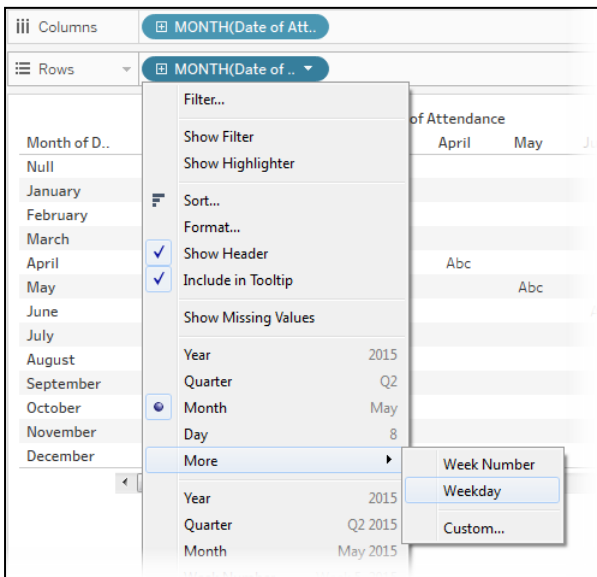
- Right-click the **Date of Attendance** lozenge and select the first **Month** option, i.e. the one that does not have a year beside it.



- Hold the **Ctrl** key and drag the **MONTH(Date of Attendance)** lozenge from the **Columns** shelf to the **Rows** shelf to duplicate it.



- Right-click the **MONTH(Date of Attendance)** lozenge you just added to the **Rows** shelf, and select **More | Weekday**.

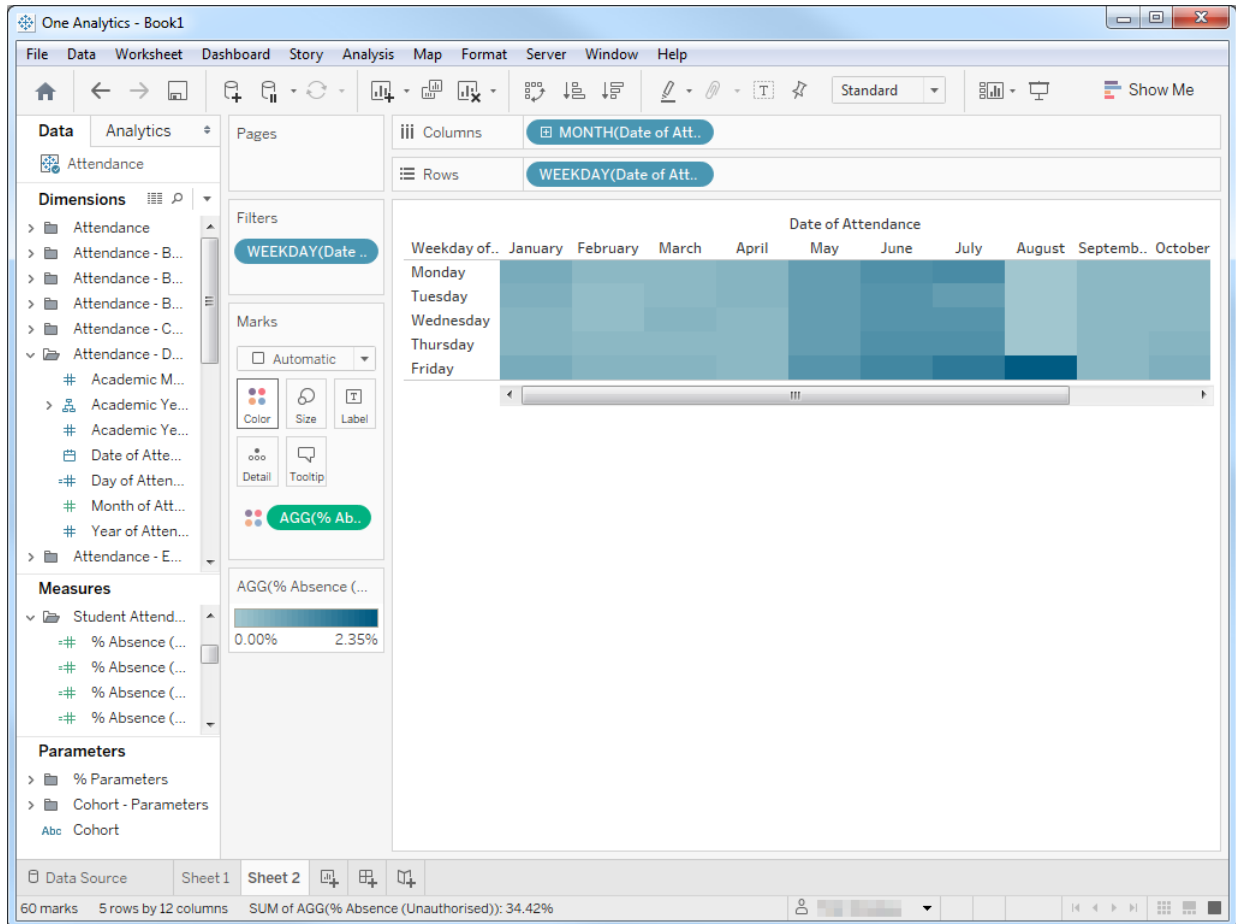


- Exclude the **Null**, **Sunday** and **Saturday** rows by right-clicking the entry in the **Weekday of Date of Attendance** column and selecting **Exclude**.



7. Drag the **% Absence (Unauthorised)** measure (**Measures | Student Attendance Percentages**) onto the **Color** field on the **Marks** card to create the heat map.

**NOTE:** You can edit the colours by right-clicking the colour bar in the **AGG(%Absence (Unauthorised))** card and selecting **Edit colors...**



## Using Bins to Create the % Attendance Steps Visualisation

The % Attendance Steps visualisation enables you to view the distribution of your attendance data, e.g. to investigate student attendance in 10% bins.

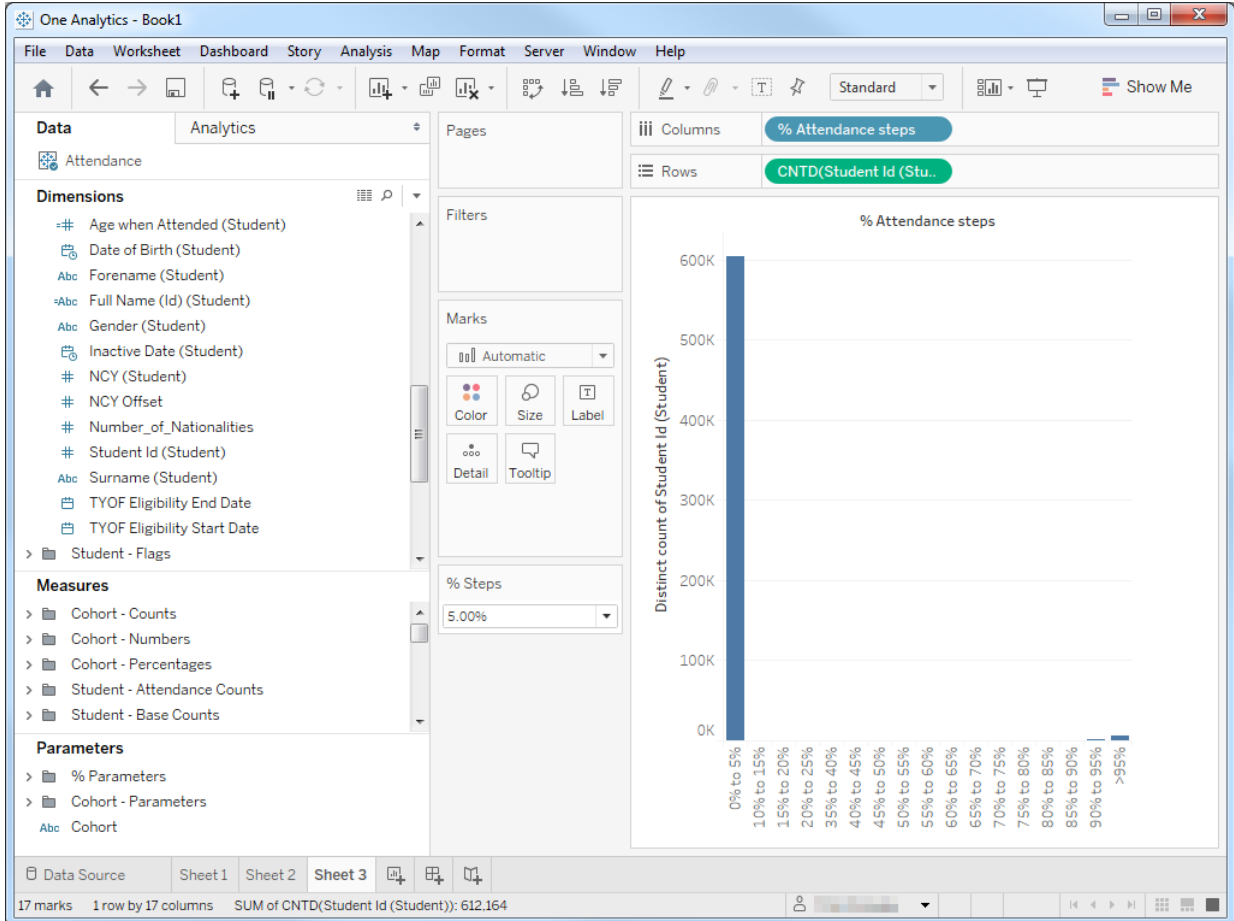


To create the % Attendance Steps visualisation:

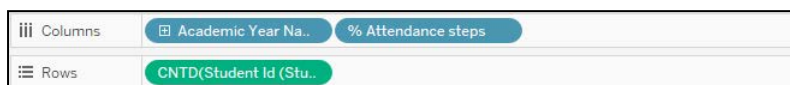
1. Open a new worksheet and connect to the Attendance data source.
2. Drag the **% Attendance steps** dimension (**Dimensions | Calculations - Bins**) to the **Columns** shelf.
3. Drag the **Student Id (Student)** dimension (**Dimensions | Student - Details**) to the **Rows** shelf.
4. If a **Warning** dialog is displayed, click the **Add all members** button to populate the chart and close the dialog.

- Right-click the **Student Id (Student)** lozenge that you just dragged to the **Rows** shelf and select **Measure | Count Distinct** from the options menu to display a histogram indicating the number of students included in each bin.
- Right-click the **% Steps** parameter (**Parameters | % Parameters**) and select **Show parameter control** to display the **% Steps** parameter control card.

If required, you can change the size of the bins using the **% Steps** parameter control card.

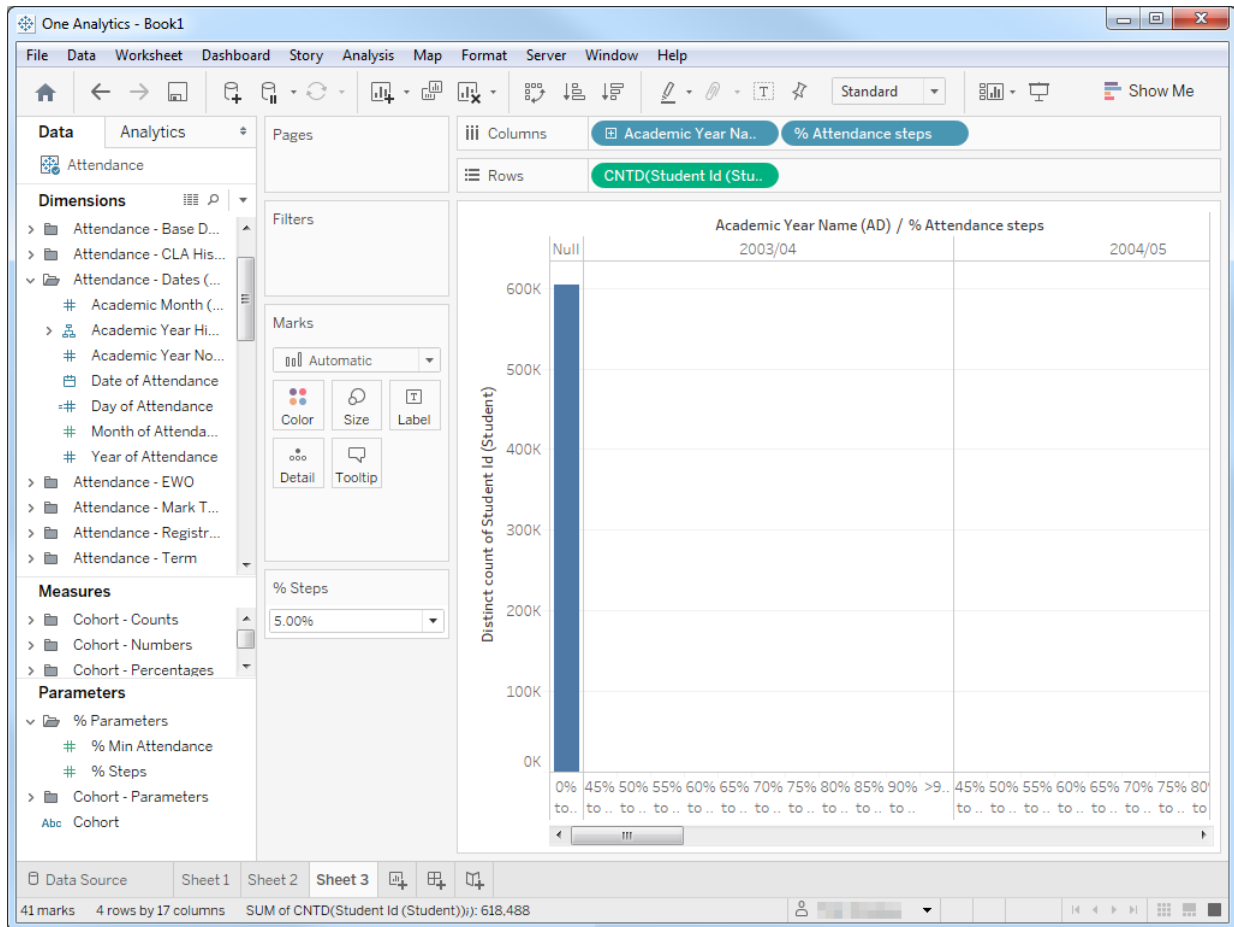


- Split the data by academic year by dragging the **Academic Year Hierarchy** dimension (**Dimensions | Attendance - Dates AD**) to the **Columns** shelf and drop it to the left of the **% Attendance steps** dimension.

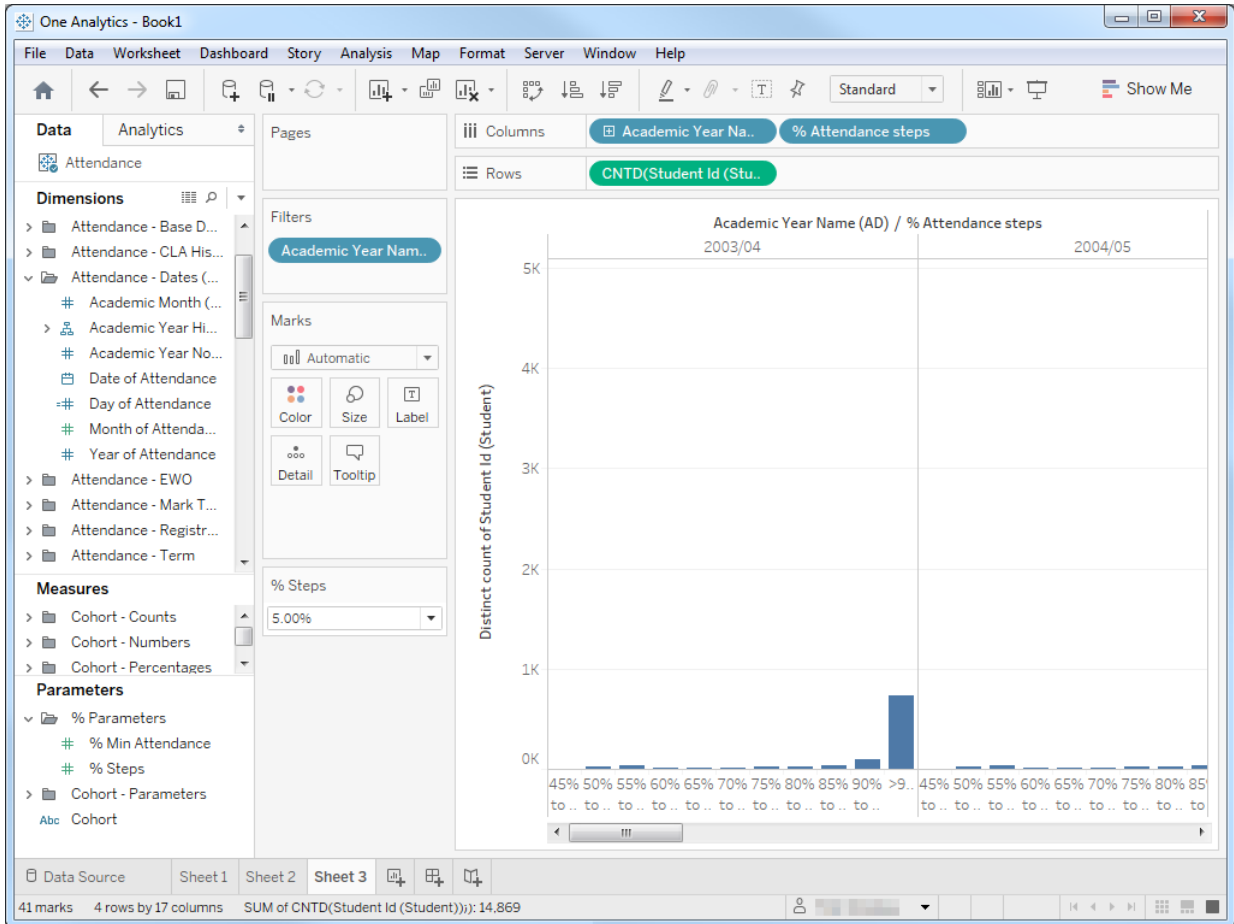


## Attendance Data Source

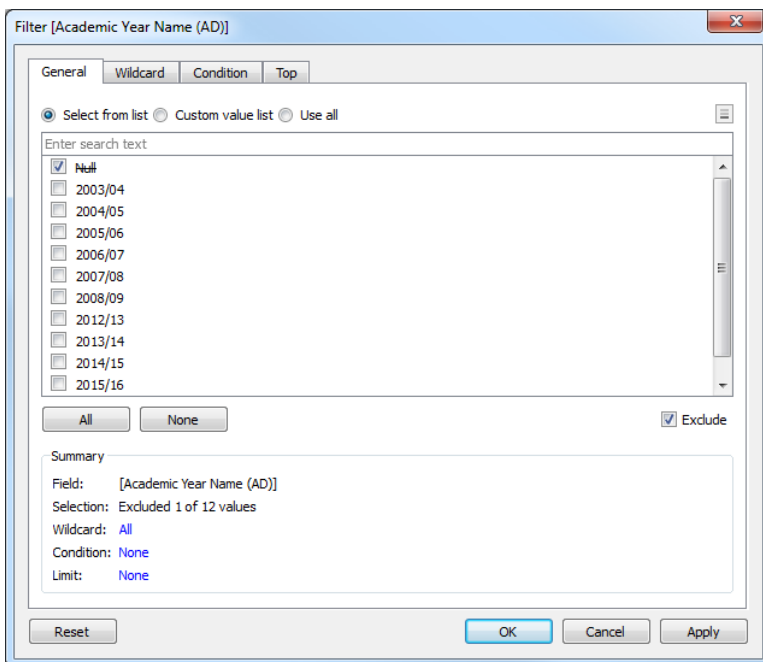
A histogram is created for each academic year.



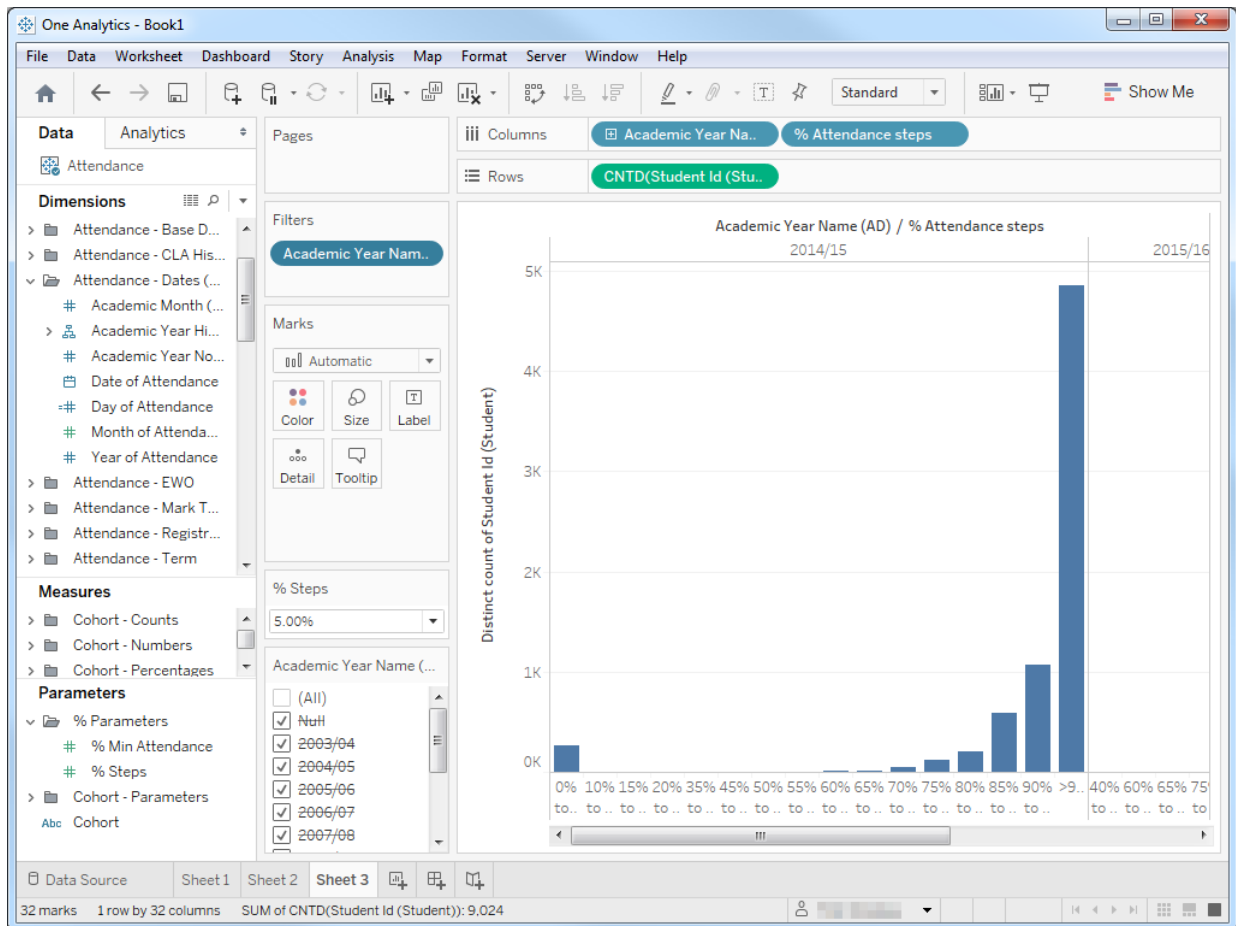
- To remove the null values, right-click the **Null** column header and select **Exclude**. The null values are removed and the y-axis is rescaled.



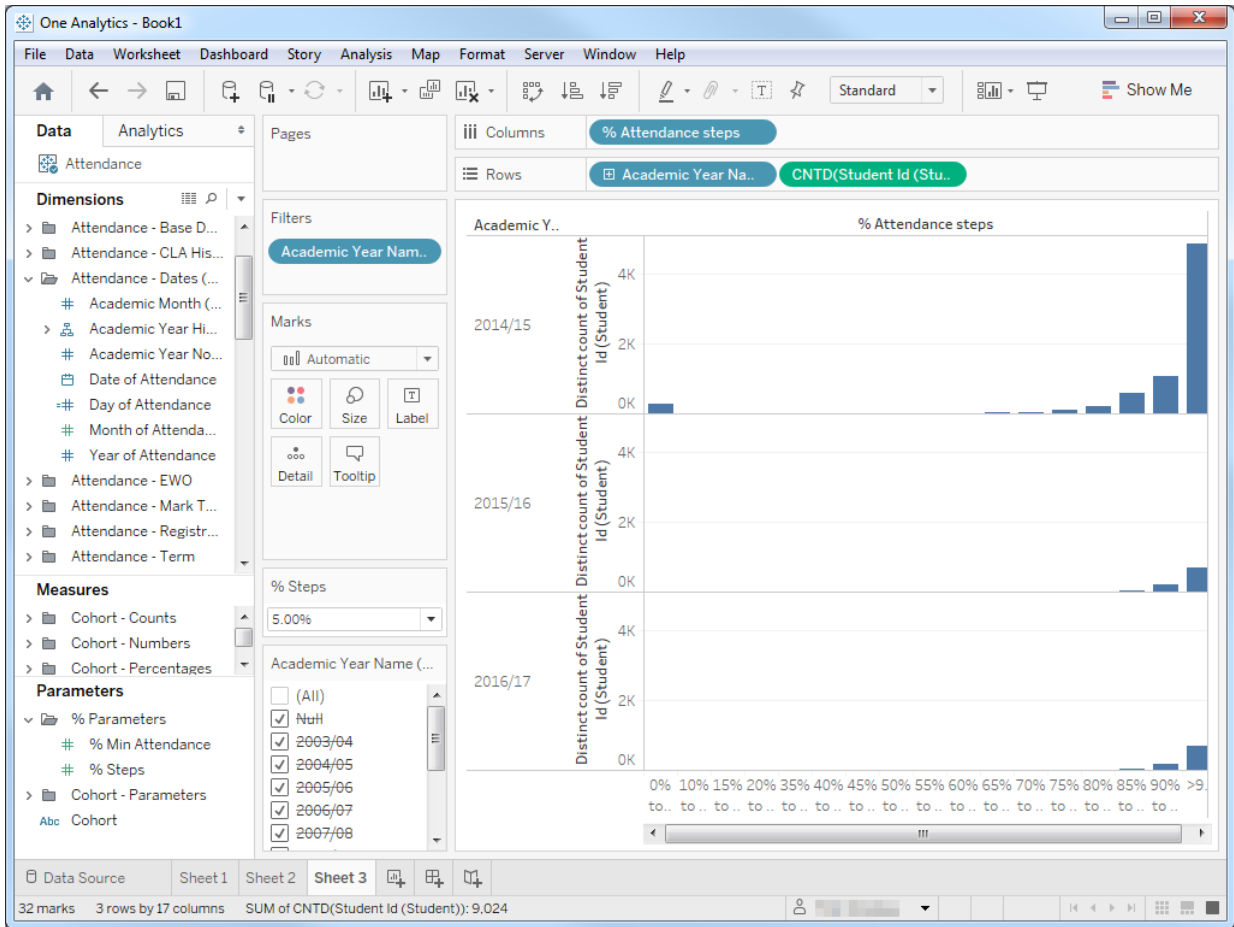
- To filter by academic year, double-click the **Academic Year Name (AD)** lozenge on the **Filters** card that was created when you excluded the null values to display the **Filter [Academic Year Name (AD)]** dialog.



- Select the years you want to exclude and click the **OK** button. Alternatively, you can also right-click the **Academic Year Name (AD)** lozenge on the **Filters** card and select **Show filter** to display the **Academic Year Name (AD)** card and control the years displayed within the worksheet.

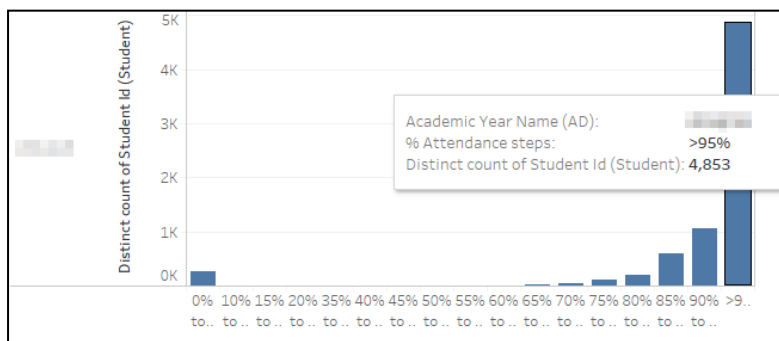


- To stack the histograms vertically for easier comparison, drag the **Academic Year Name (AD)** lozenge from the **Columns** shelf to the **Rows** shelf, placing it to the left of the **CNTD(Student Id (Student))** lozenge.



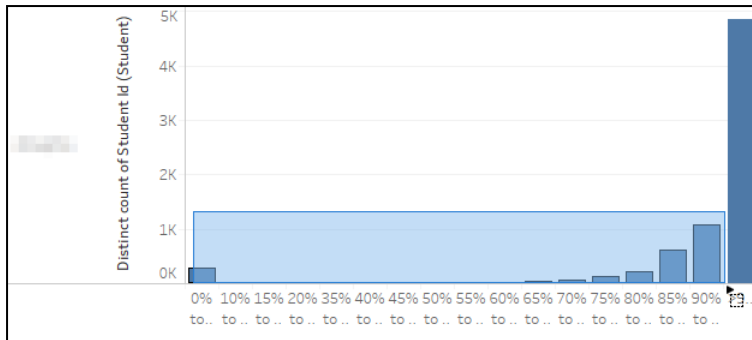
### Using Tooltips to Display Additional Information: Single Bin

Hover the cursor over a single bar to display a tool tip containing the distinct count of students included in that bin.

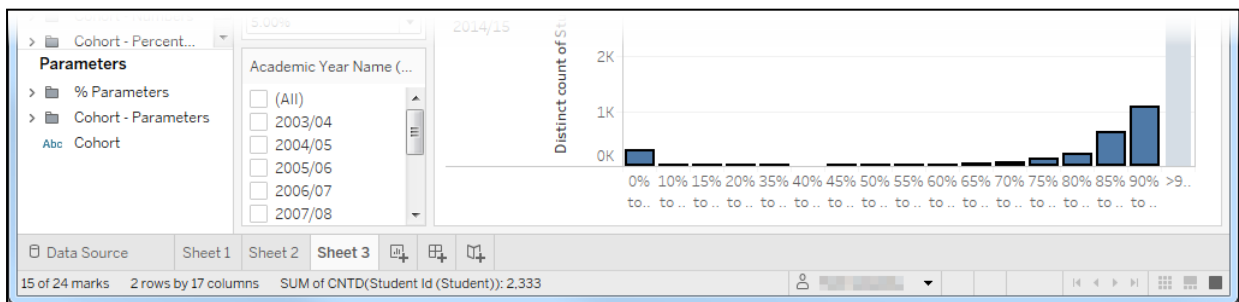


## Using Tooltips to Display Additional Information: Multiple Bins

To view the distinct count of students included in multiple bins, click and drag the cursor to select the required bars.



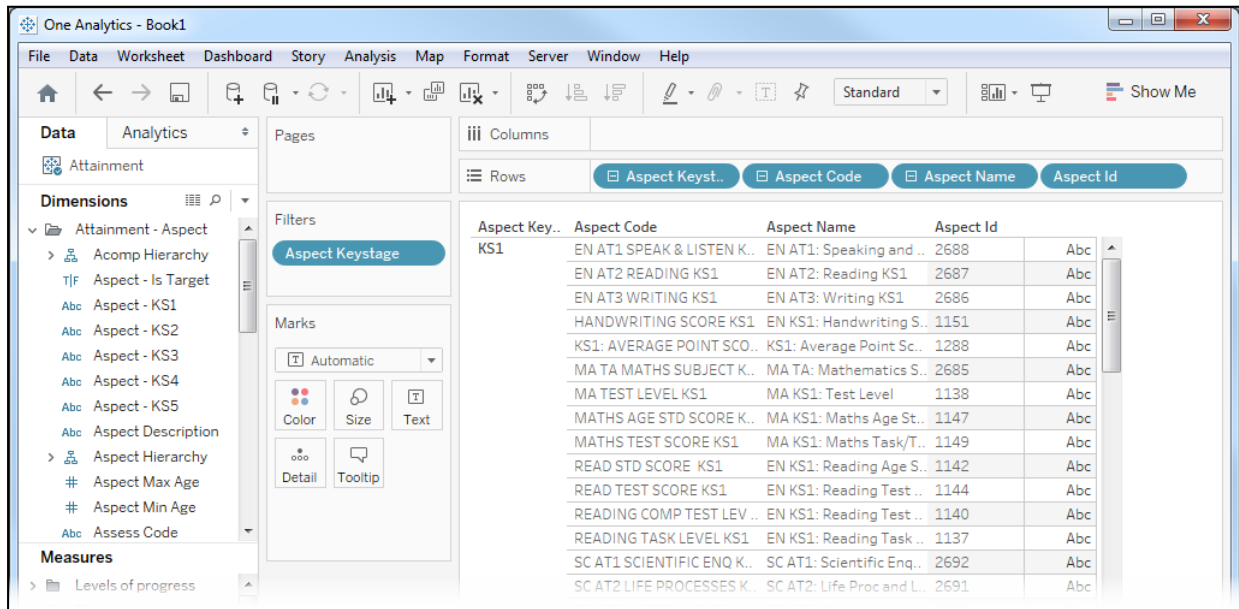
The **SUM of CNTD(Student Id(Student))** value in the footer bar is updated to display the total distinct count for the selected bins.



# 09 / Attainment Data Source

## Aspect Hierarchy

The **Aspect Hierarchy** dimension (**Dimensions | Attainment - Aspect**) enables you to view the different codes, names, and IDs associated with the different aspect key stages.



## Aspect Name Filter

The **Aspect Name** dimension (**Dimensions | Attainment - Aspect | Aspect Hierarchy**) is a useful filter for the Attainment data source.

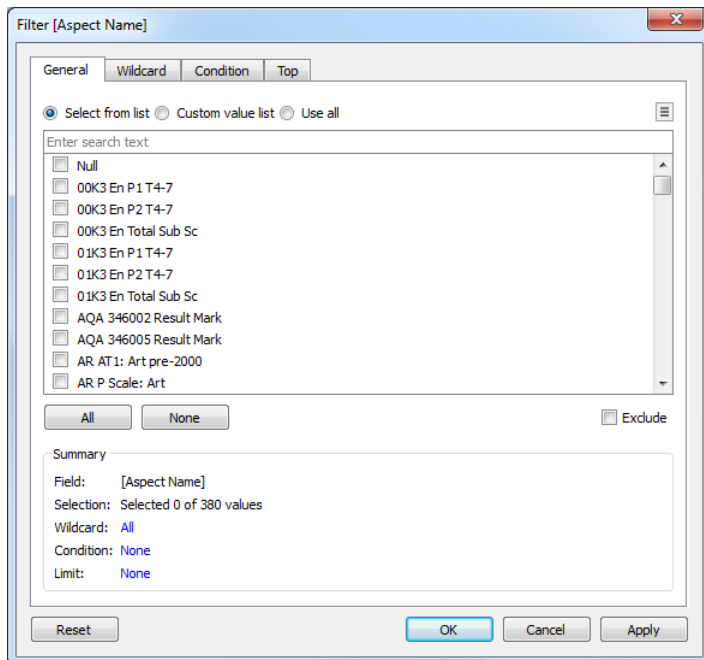
To filter by aspect name:

1. Open a blank worksheet.



## Attainment Data Source

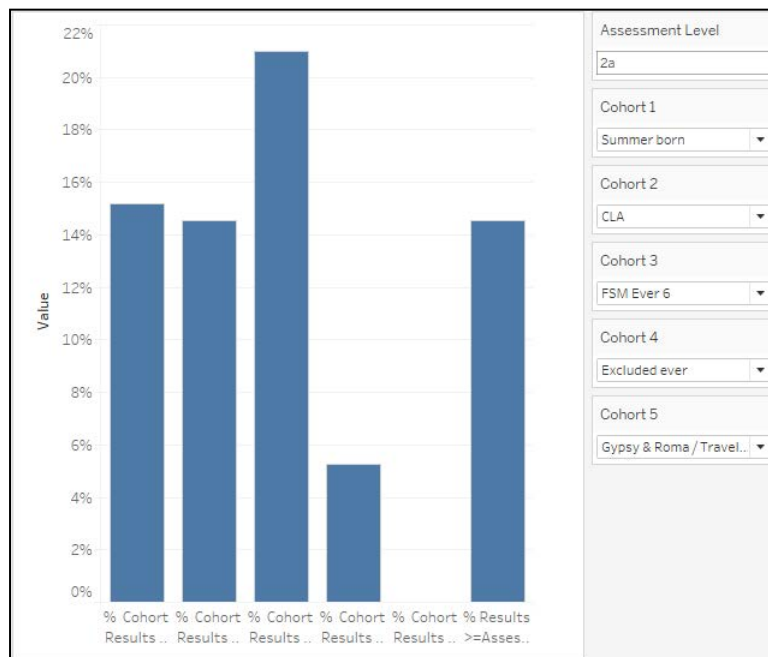
2. Drag the **Aspect Name** dimension (**Dimensions | Attainment Aspect | Aspect Hierarchy**) to the **Filters** card to display the **Filter [Aspect Name]** dialog.



3. Select the aspect for which you want to display the data and click the **OK** button to close the dialog and display the selected aspect in the **Filters** card.

## Comparing the Percentage of Students Achieving Results Above a Parameter for Different Vulnerable Groups

This visualisation can be used to analyse the relative performance of different vulnerable groups.



The following example identifies the percentage of children achieving Level 2a or above in an exam. It contains a bar chart displaying the percentage for all students, and for different vulnerable groups. This is achieved by displaying multiple measures side by side instead of using a filter, meaning that the 'All' value also includes the vulnerable groups.

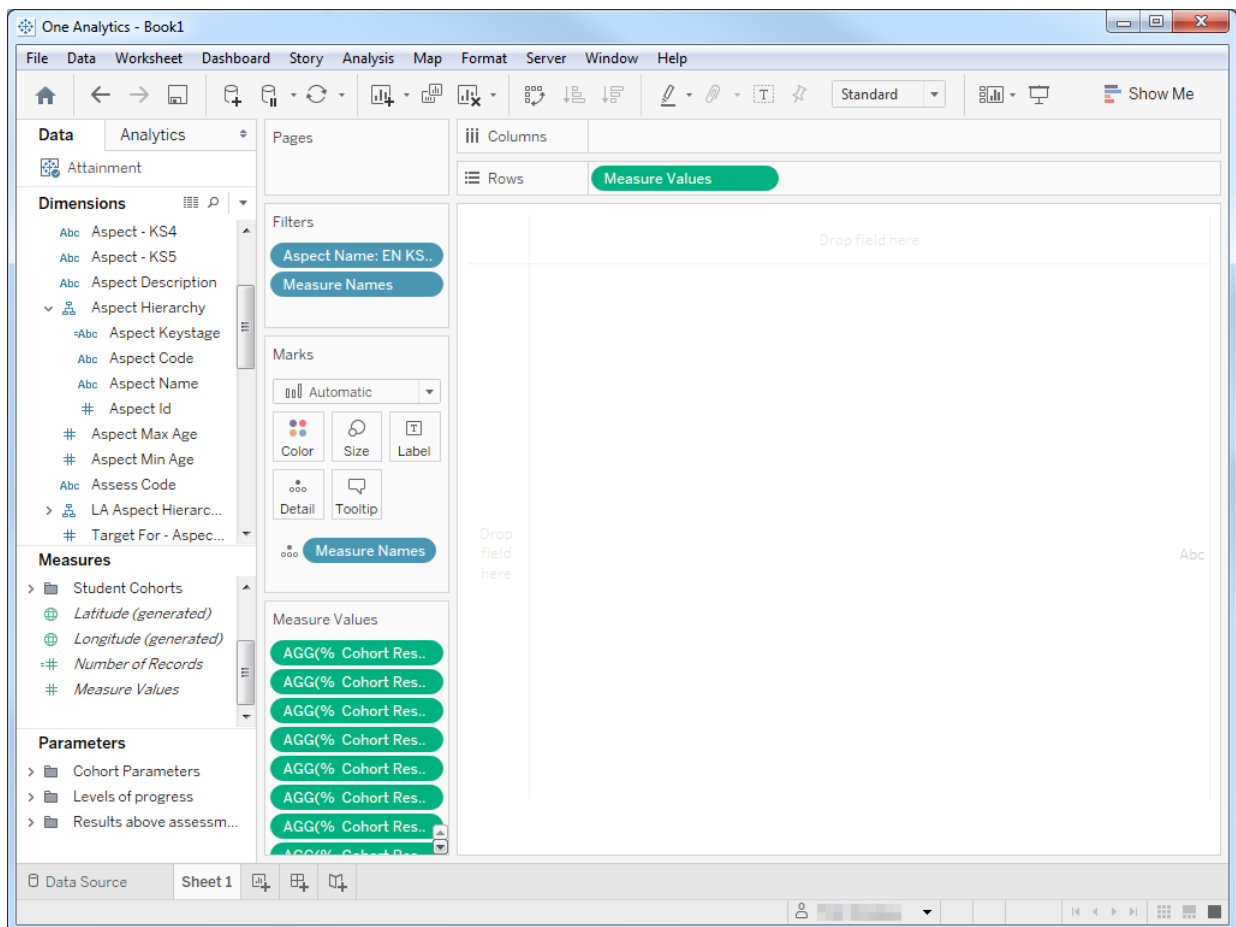
To compare the percentage of students achieving results above a parameter:

1. Create the **Aspect Name** filter as described in the previous section.

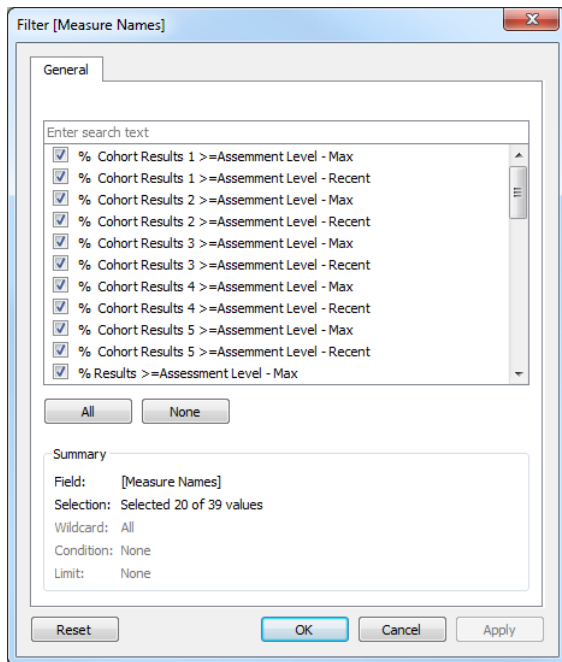
**NOTE:** As bringing out all measures requires a lot of processing power, it is recommended that you pause auto-updates at this point, and resume them when it is complete. Alternatively, you can cancel the **Processing Request** dialog when it runs, as you do not need to display the visualisation until the filter is applied.

2. Drag the **Measure Values** measure (**Measures**) to the **Rows** shelf.

This adds a **Measure Names** filter in the **Filters** card. The **Measure Values** measure is an aggregated measure that includes all the available measures. It automatically creates a **Measure Names** filter to enable you to select the required measures.



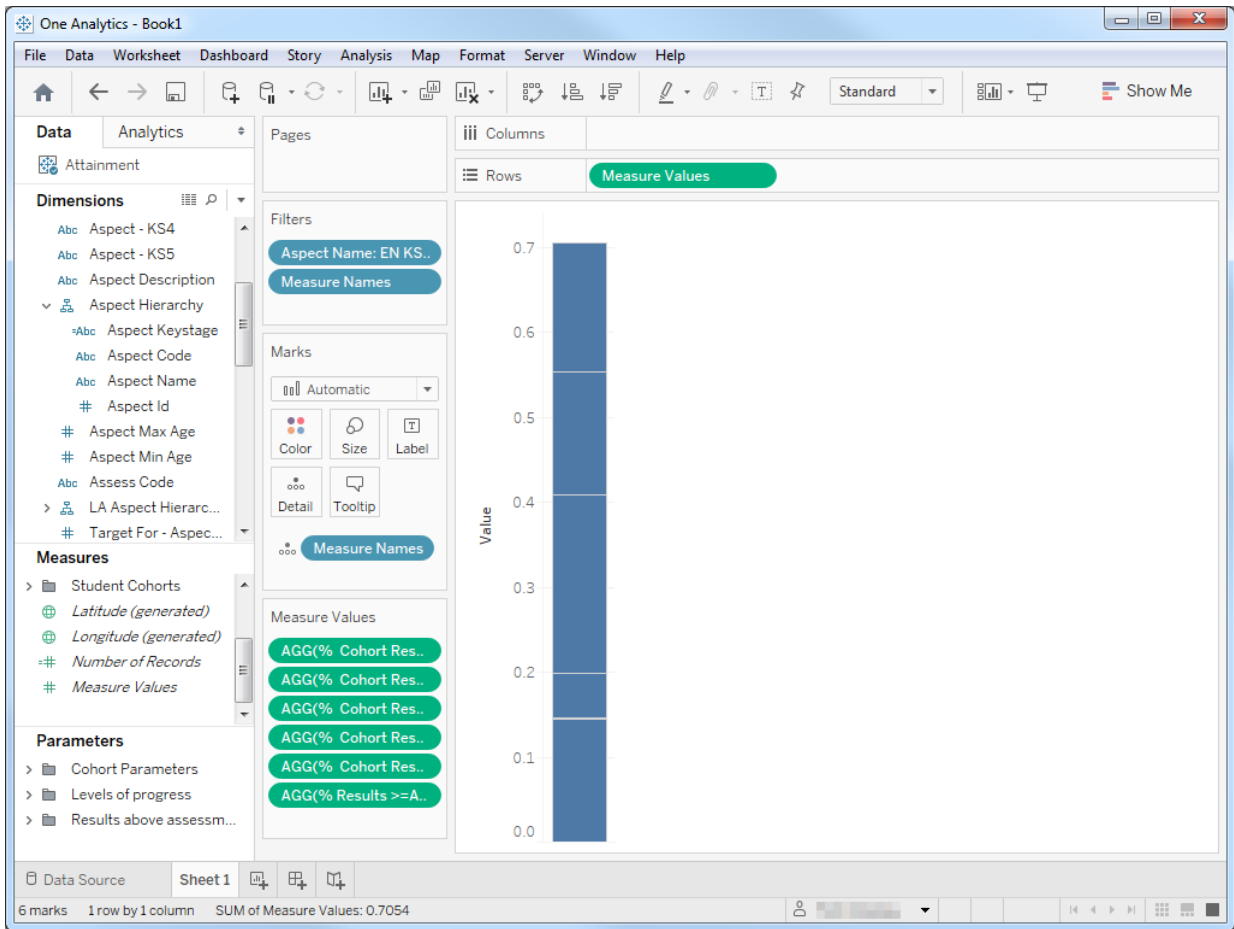
- In the **Filters** card, right-click **Measure Names** and select **Edit filter...** to display the **Filter [Measure Names]** dialog.



- Click the **None** button to deselect all of the measure names.
- Select the following measure names:
  - **% Cohort Results 1 >=Assessment Level - Max**
  - **% Cohort Results 2 >=Assessment Level - Max**
  - **% Cohort Results 3 >=Assessment Level - Max**
  - **% Cohort Results 4 >=Assessment Level - Max**
  - **% Cohort Results 5 >=Assessment Level - Max**
  - **% Results >=Assessment Level - Max.**

**TIP:** The current example uses the maximum result each student achieved for each aspect. You can also report the most recent result by using the **% Cohort Results X >=Assessment Level - Recent** measures.

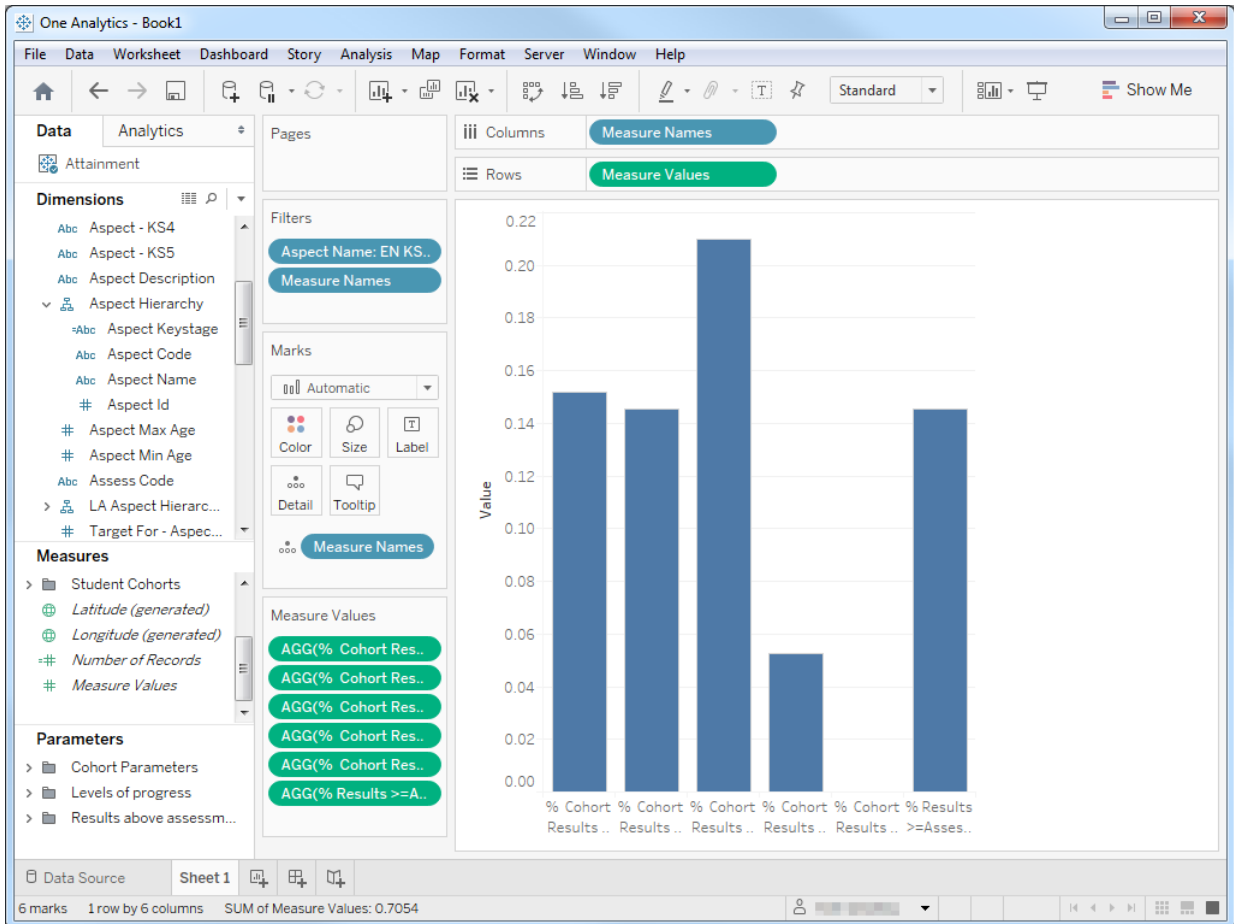
- Click the **OK** button to close the **Filter [Measure Names]** dialog and update the bar chart.



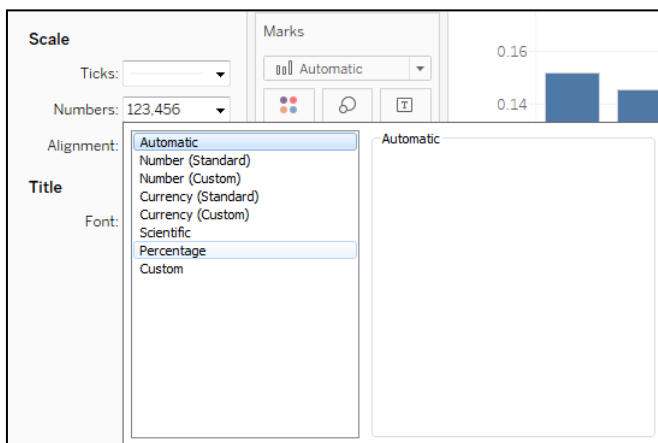
**Attainment Data Source**

7. From the **Marks** card, copy the **Measure Names** lozenge to the **Columns** shelf by holding the **Ctrl** key and dragging the lozenge to the **Columns** shelf to display each cohort results bar side-by-side.

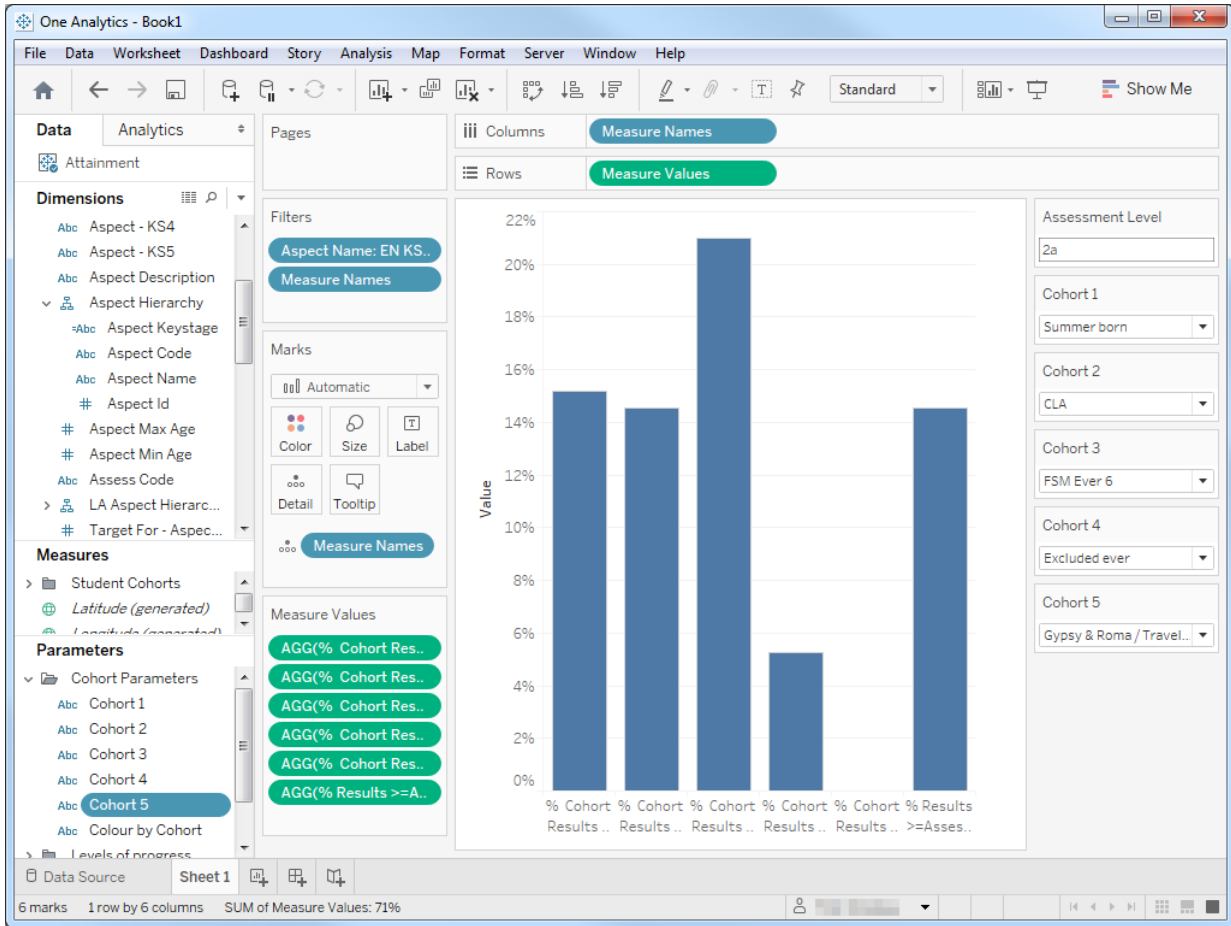
**NOTE:** You can drag the lozenges in the **Measure Values** card to reorder the bars, e.g. to present the **% Results >=Assessment Level - Max** bar first. This bar represents the results for all students.



8. If required, convert the y-axis values to percentages:
  - a. In the **Rows** shelf, right-click **Measure Values** and select **Format...** to display the **Format Measure Values** pane.
  - b. In the **Axis** tab, select **Percentage** from the **Numbers** drop-down.



9. Display the **Assessment Level** parameter control card by right-clicking the **Assessment Level** parameter (**Parameters | Results above assessment level parameter**) and selecting **Show parameter control**.
10. Display the **Cohort** parameter control cards for the cohorts by right-clicking the **Cohort** parameter (**Parameters | Cohort Parameters**) and selecting **Show parameter control**. Do this for each of the cohorts.



You can control the vulnerable group that each bar represents using the **Cohort** parameter controls and adjust the assessment level above which you want to display results by changing the **Assessment Level** parameter.

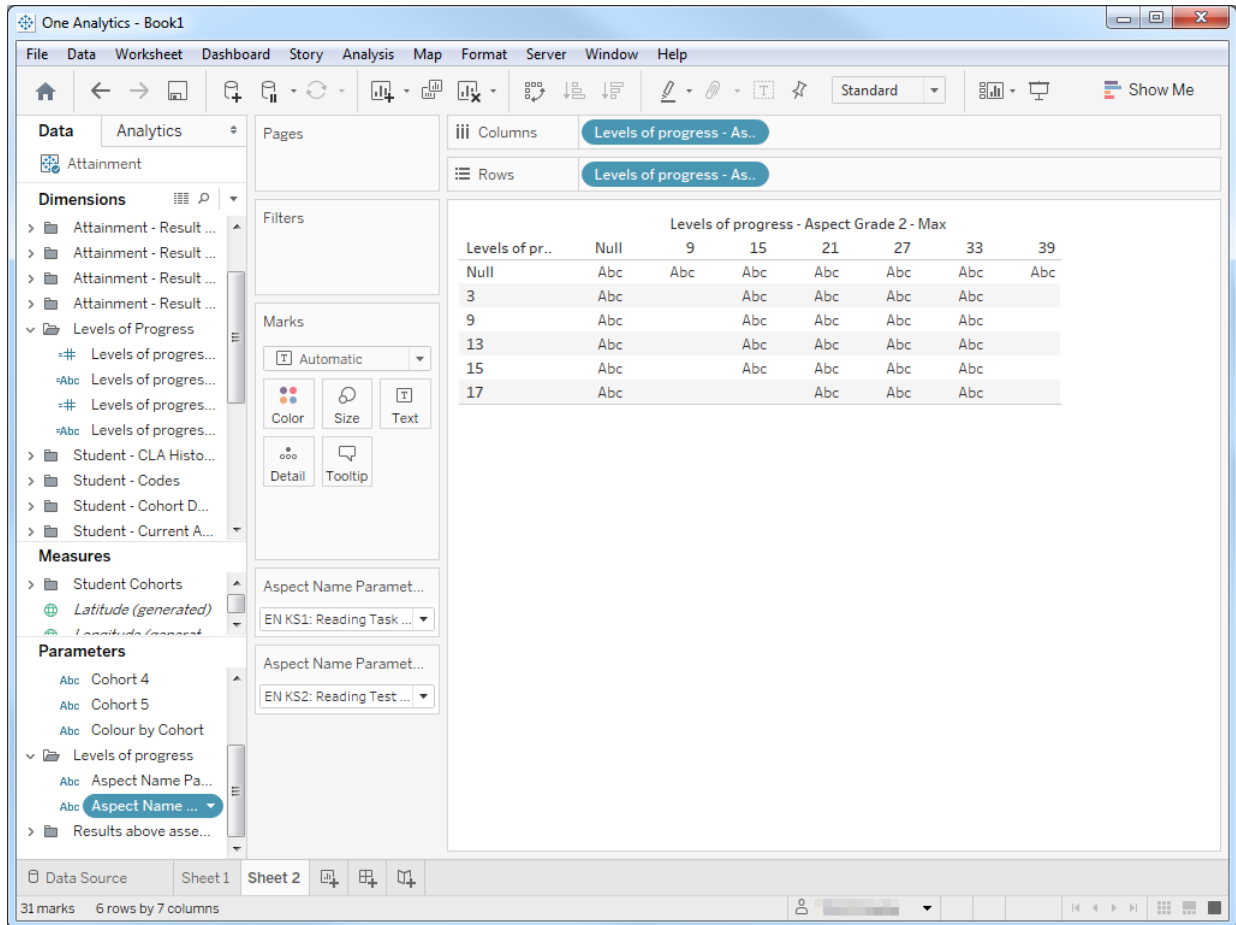
## Levels of Progress Calculation

The Levels of Progress calculation enables you to create a visualisation displaying student progress between two different assessments with associated grade values.

To create the Levels of Progress visualisation:

1. Ensure the aspect parameters are up to date. For more information, see [Updating Aspect Parameters](#) on page 84.
2. Open a blank worksheet that is connected to the Attainment data source.
3. Drag the **Levels of progress - Aspect Result 1 - Max** dimension (**Dimensions | Levels of Progress**) to the **Rows** shelf. This is the maximum result each student achieved in aspect 1.
4. Drag the **Levels of progress - Aspect Result 2 - Max** dimension (**Dimensions | Levels of Progress**) to the **Columns** shelf. This is the maximum result each student achieved in aspect 2.

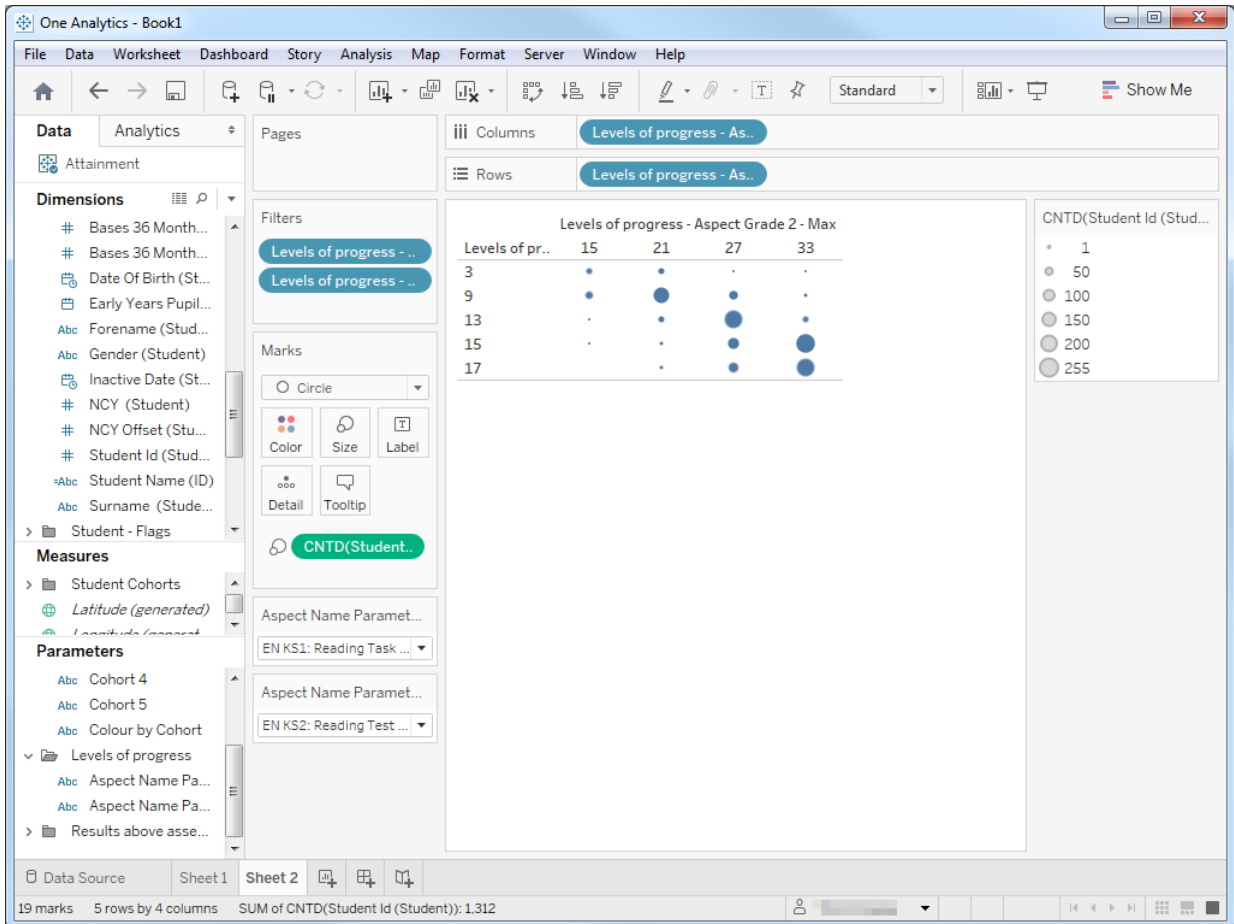
5. Display both **Aspect Name Parameter** parameter control cards (**Parameters | Levels of progress**) by right-clicking each of them and selecting **Show parameter control**. These parameters determine the aspects associated with the results in steps 3 and 4.



6. If required, change the parameters in the parameter control cards. The parameters selected determine the data displayed in the chart.
7. To remove the **Null** values from the chart and filter out students missing results for either of the assessments, right-click **Null** and select **Exclude**.
8. To use bubble sizes to represent the amount of students achieving each combination of Aspect 1 and Aspect 2 results, drag the **Student Id** dimension (**Dimensions | Student - Detail**) onto the **Size** field on the **Marks** card.

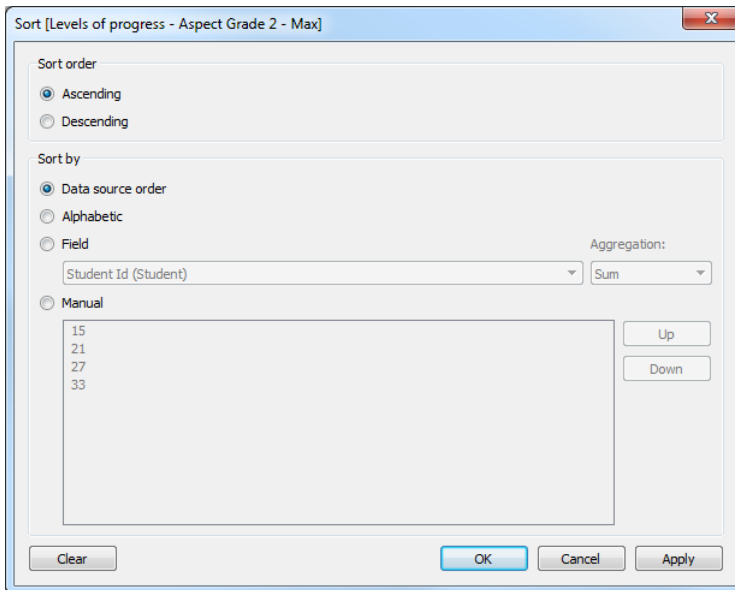
- Right-click the **Student Id** lozenge on the **Marks** card and select **Measure | Count Distinct** to create a single count for each inter-level difference.

**TIP:** You can change the shape from a square to a circle in the **Marks** drop-down. You can also adjust the size by clicking the **Size** field in the **Marks** card.

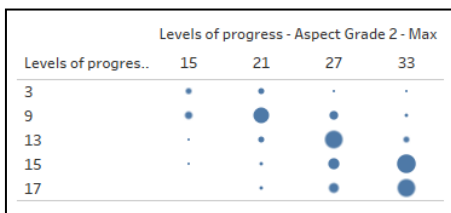




10. Check that the results are displayed in the most appropriate order. If required, sort the results into grade order using the **Result - Grade Value (Result)** dimension:
  - a. In the **Columns** shelf, right-click the **Levels of progress - Aspect Result 2 - Max** lozenge and select **Sort** to display the **Sort [Levels of progress - Aspect Result 2 - Max]** dialog.



- b. In the **Sort by** section, select the **Field** radio button to activate the drop-down (currently displaying **Student Id (Student)**).
- c. From the drop-down, select **Result - Grade Value (Result)**.
- d. From the **Aggregation** drop-down, select **Average**.
- e. Click the **OK** button to sort the data in the chart.
- f. Repeat steps a-e for the **Levels of progress - Aspect Result 1 - Max** lozenge on the **Rows** shelf.

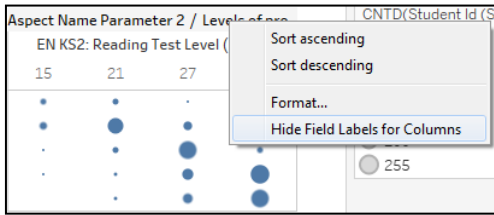


11. Give the chart descriptive headers using the selected parameters:
  - a. Drag the **Aspect Name Parameter 1** parameter (**Parameters | Levels of progress**) to the left of the dimension on the **Rows** shelf.
  - b. Drag the **Aspect Name Parameter 2** parameter (**Parameters | Levels of progress**) to the left of the dimension on the **Columns** shelf.

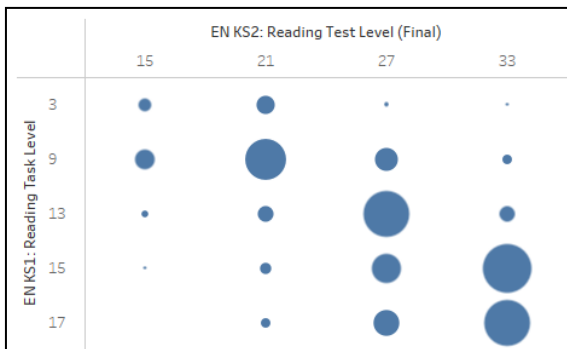
**NOTE:** Ensure that the parameter is placed on the same shelf as the corresponding **Aspect Result** lozenge, i.e. **Aspect Name Parameter 1** with **Levels of progress - Aspect Result 1 - Max**, etc.



- c. In the columns axis, right-click the field label (**Aspect Name Parameter 2 / Levels of Progress - Aspect Result 2 - Max**) and select **Hide field labels for columns**.



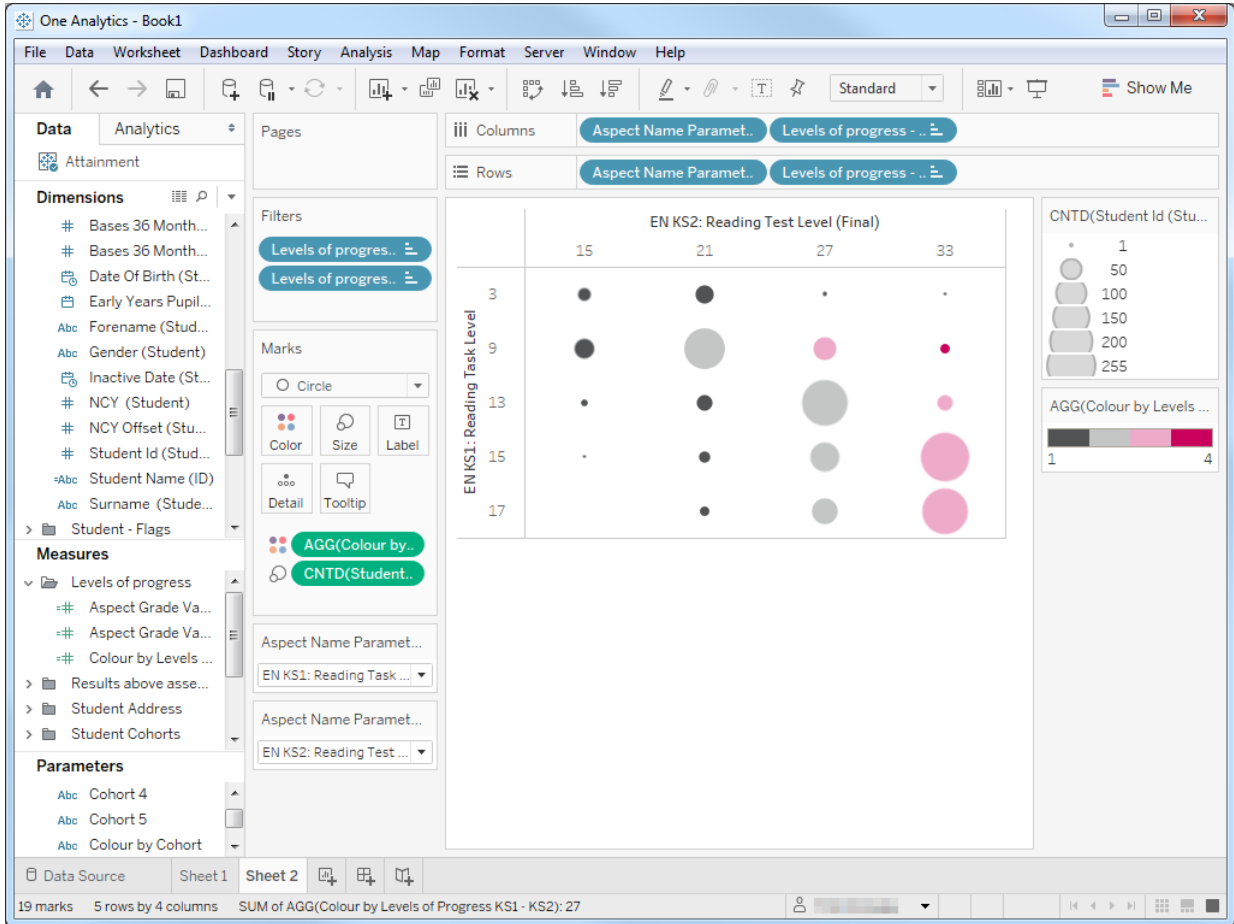
- d. In the rows axis, right-click the field label (**Aspect Name Parameter 1 / Levels of Progress - Aspect Result 1 - Max**) and select **Hide field labels for rows**.
- e. In the rows axis, right-click the label (**EN KS1 Reading Test Level**) and select **Rotate label**.



**TIP:** You can enlarge the chart by clicking and dragging the right-hand and lower edges of the chart area to the required size.

- If required, colour the chart to facilitate identification of the level of progress by dragging the **Colour by Levels of Progress KS1 - KS2** measure (**Measures | Levels of progress**) to the **Color** field on the **Marks** card.

**TIP:** You can change the colour scheme by right-clicking the colour spectrum in the **AGG(Colour by Levels of Progress KS1 - KS2)** card and selecting **Edit colors...**



The larger the circle, the greater the number of students it represents (see the key in the **CNTD(Student Id (Student))** card). The colour indicates the number of levels of progress the students made (see the key in the **AGG(Colour by Levels of Progress)** card).

## Updating Aspect Parameters

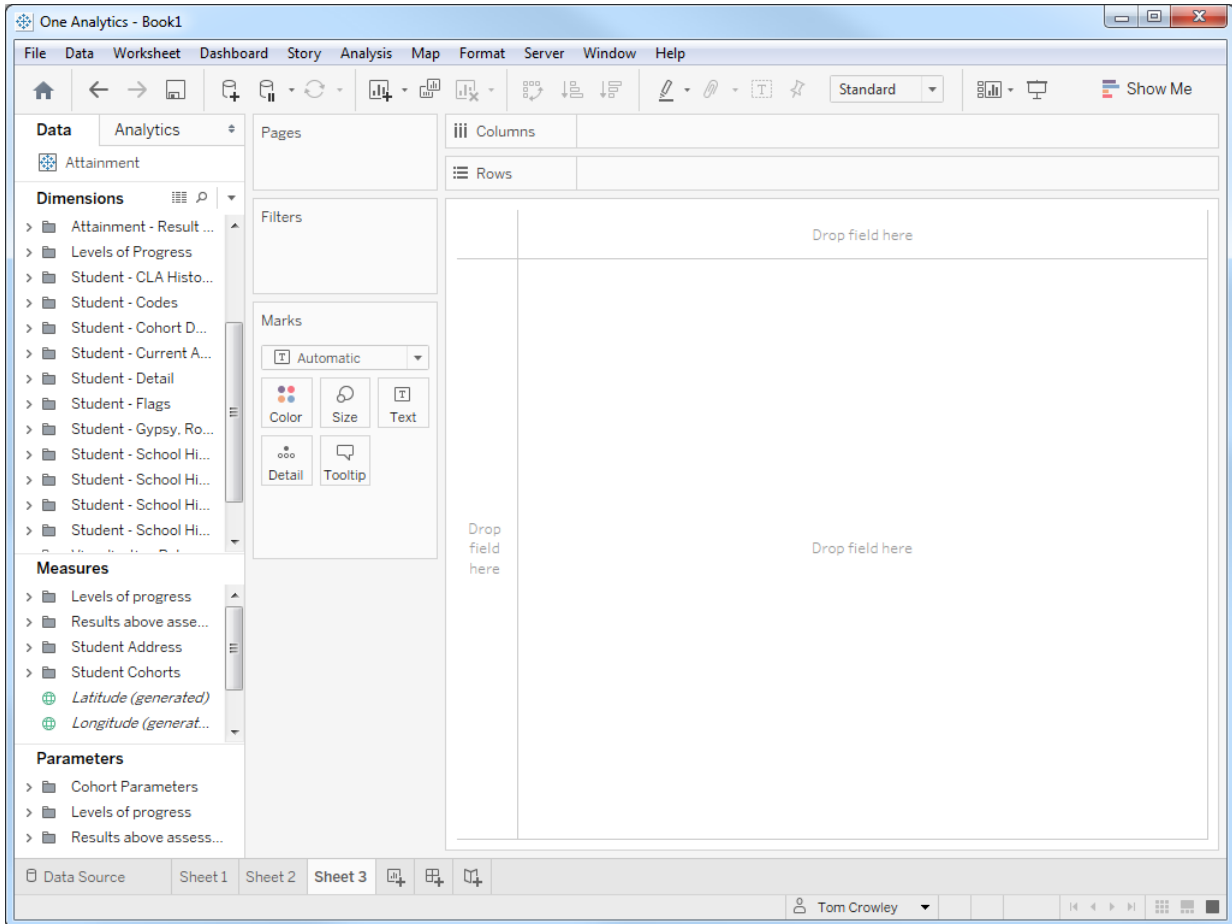
Aspect parameters contain a list of all aspects within your data warehouse. They are used in the Levels of Progress calculations. Before you can use them, you must update them so they are populated with the aspects currently in your database; this is not done automatically.

**NOTE:** These steps must be repeated each time you add a new aspect to the One system.

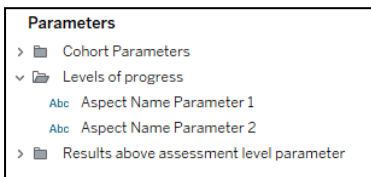
To update the aspect parameters:

- Connect to any worksheet that uses the required data source.

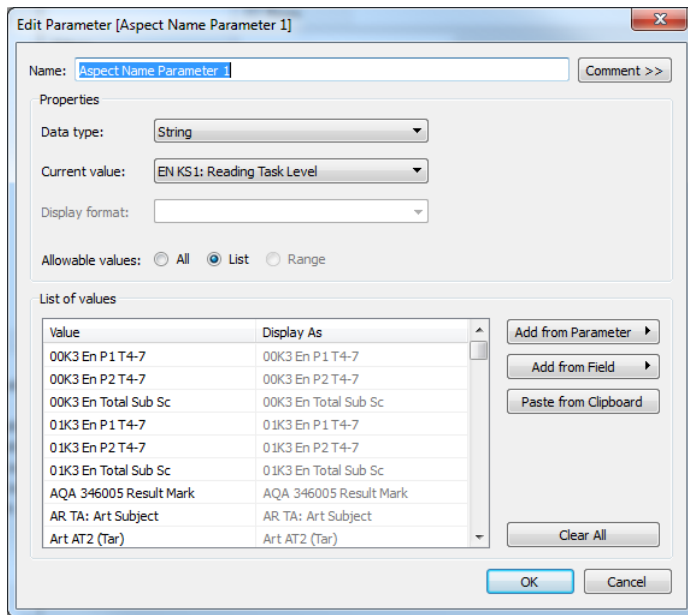
- Open the worksheet to display the **Dimensions**, **Measures** and **Parameters** panes under the **Data** tab.



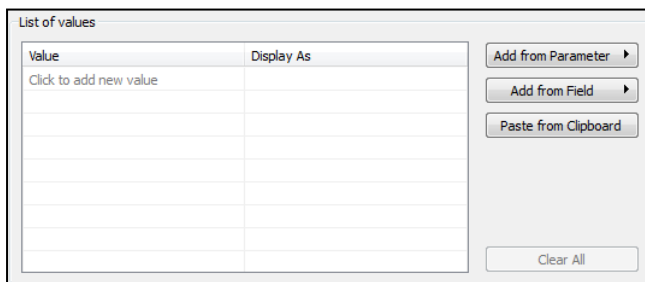
- Ensure the required data source is selected in the **Data** tab.
- In the **Parameters** pane, expand the **Levels of progress** directory to display the two **Aspect Name Parameters**.



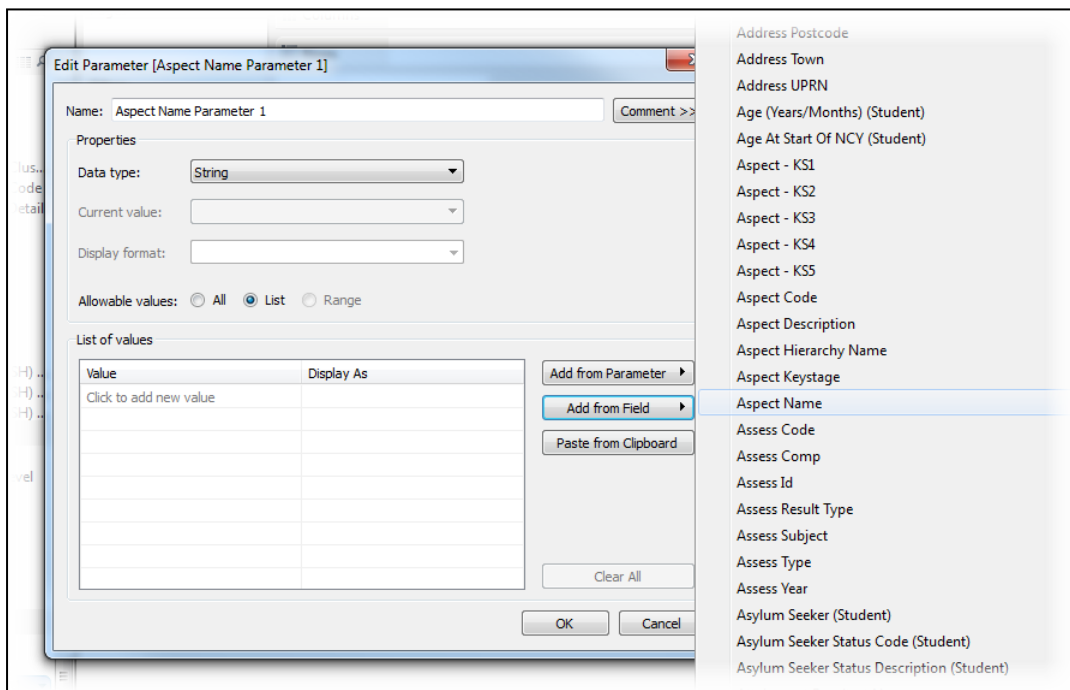
- Right-click **Aspect Name Parameter 1** and select **Edit...** from the menu to display the **Edit Parameter [Aspect Name Parameter 1]** dialog.



- If the **List of values** table is already populated, click the **Clear All** button to depopulate it.

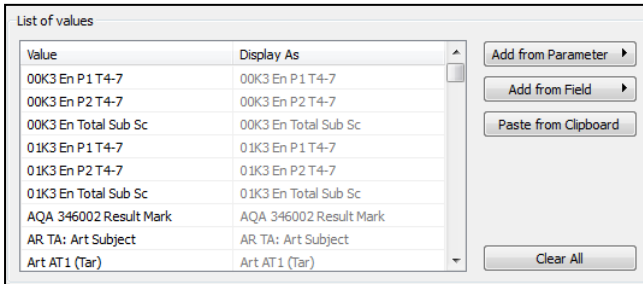


- Click the **Add from field** button to display a list of dimensions.



- Select **Aspect Name** to populate the **List of values** table with the aspects in the data source.

**NOTE:** If **Aspect Name** is not displayed in the list, set the parameter's **Data Type** to String.



- Click the **OK** button to close the dialog.
- Repeat steps 5-9 for **Aspect Name Parameter 2**.

# 10 / Creating an Interactive Student Summary Dashboard using URL Actions

## URL Actions

URL actions enable you to interact with online content from dashboards and workbooks using the item's URL. This can be used to:

- Create links to a frequently used dashboard from any One Analytics worksheet. For more information, see [Interactive Student Summary Dashboard](#) on page 88.
- Embed and interact with webpages in a dashboard.
- Insert one dashboard into another dashboard.
- Embed a workbook into a dashboard.
- Create interactive dashboards where the data links to external information.
- Receive parameters from worksheets hosted on the One Analytics server.
- Send emails containing workbook data.

This enables you to expand the amount of information displayed in a dashboard by including third-party or external information about your data or linking to content held in different projects. Online content embedded in dashboards acts the same as it does in a web browser. You can also filter visualisations using URL parameters for publication to blogs, wikis or other web destinations. For more information on the various URL actions, see the following links:

### **MORE INFORMATION:**

Actions and Dashboards: [http://onlinehelp.tableau.com/current/pro/desktop/en-us/actions\\_dashboards.html](http://onlinehelp.tableau.com/current/pro/desktop/en-us/actions_dashboards.html)

Filtering Views using URL Parameters: <http://kb.tableau.com/articles/knowledgebase/view-filters-url>

Linking to external information about your data: [http://onlinehelp.tableau.com/current/pro/desktop/en-us/actions\\_url.html](http://onlinehelp.tableau.com/current/pro/desktop/en-us/actions_url.html)

Creating a URL Action to Send Email: <http://kb.tableau.com/articles/knowledgebase/using-url-action-to-create-email>

## Interactive Student Summary Dashboards

One Analytics enables you to create summary dashboards that display information about a single student from several data sources. You can link to this student summary dashboard from any other dashboard using an URL.

This enables users to click a student's name in a worksheet to access a dashboard contained within a separate workbook.

**NOTE:** You can modify the following steps to create interactive summary dashboards for any other individual entity, e.g. schools.

In order to add hotlinks to a workbook, you must:

1. Create a workbook that contains all the worksheets required for the dashboard:
2. Configure the student summary workbook by:
  - a. Creating the parameter.

- b. Creating the filter.
- c. Applying the filter to all appropriate worksheets within the workbook.
3. Create the dashboard.

**MORE INFORMATION:**

Creating Dashboards: [https://onlinehelp.tableau.com/current/server/en-us/help.htm#web\\_author.htm%3FTocPath%3DUser%2520Guide%7CCreate%2520and%2520Interact%2520with%2520Published%2520Views%7CCreate%2520Views%2520and%2520Dashboards%7C\\_\\_\\_\\_\\_0](https://onlinehelp.tableau.com/current/server/en-us/help.htm#web_author.htm%3FTocPath%3DUser%2520Guide%7CCreate%2520and%2520Interact%2520with%2520Published%2520Views%7CCreate%2520Views%2520and%2520Dashboards%7C_____0)

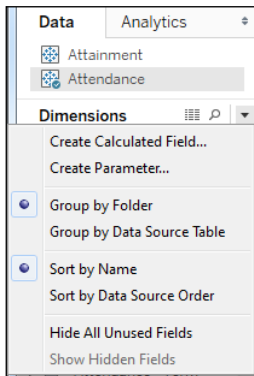
4. Publish the student summary dashboard to the One Analytics server.
5. Create the hotlinks in the workbooks and worksheets that you want to link to this dashboard.

Refer to the following steps for detailed information on linking worksheets to frequently used summary dashboards using the Selected\_Student parameter.

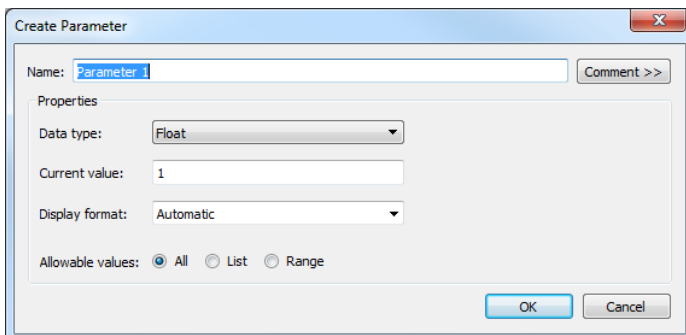
## Configuring the Student Summary Workbook

To configure the student summary workbook:

1. In One Analytics Desktop, open the workbook containing the worksheets used in the student summary dashboard.
2. Create the Selected\_Student parameter:
  - a. In the **Data** tab, click the arrow icon in the **Dimensions** pane header to display an options drop-down.



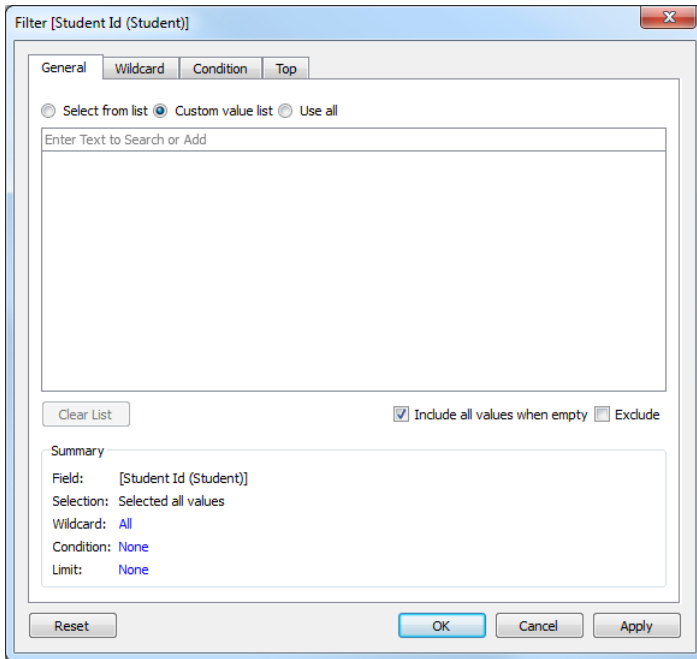
- b. Select **Create parameter...** to display the **Create Parameter** dialog.



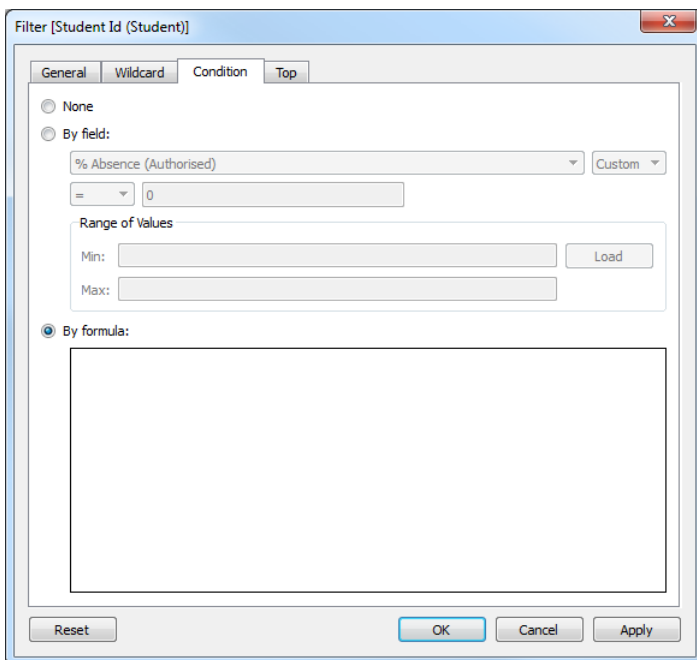
- c. Name the parameter Selected\_Student.
- d. From the **Data type** menu, select **Integer**.
- e. Click the **OK** button to save the parameter and close the dialog.



3. Create a Student ID filter for the worksheets:
  - a. From the **Student - Details** folder in the **Dimensions** pane, drag the **Student Id (Student)** dimension to the **Filters** card to display the **Filter [Student Id (Student)]** dialog.

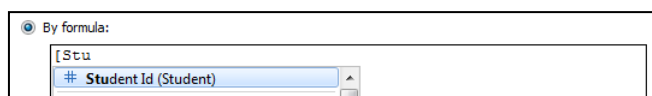


- b. In the **Condition** tab, select the **By formula** radio button to activate the **By formula** free text field.

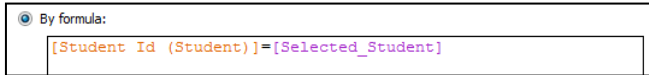


- c. In the **By formula** field, enter `[Student Id (Student)]=[Selected_Student]`.

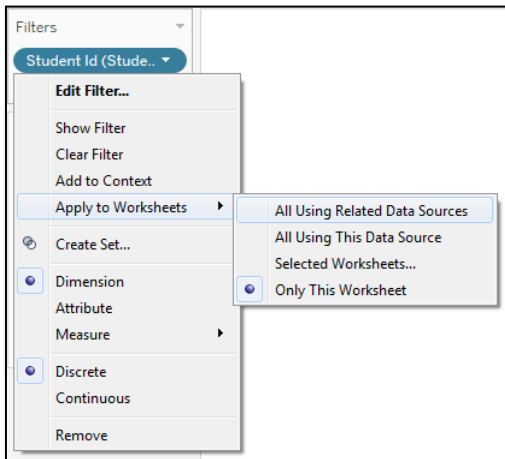
**NOTE:** Matching data items are automatically displayed when you begin typing the name.



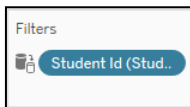
If the formula has been entered correctly, the dimension is displayed in orange and the parameter in purple.



- d. Click the **OK** button to close the dialog.
4. Apply the filter to all appropriate worksheets:
    - To apply the filter to all worksheets, right-click the filter and select **Apply to Worksheets | All Using Related Data Sources**.

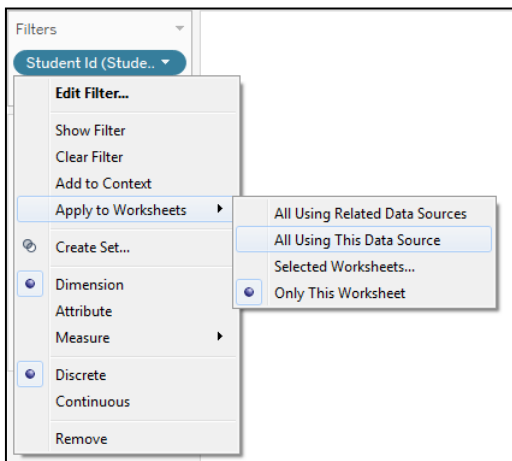


An icon is displayed next to the filter indicating that it has been applied to all related data sources.



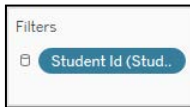
**NOTE:** You should check the worksheets connected to other data sources to ensure that the filter has been applied. If not, see the following step to apply it to any data sources still needing the filter.

- To apply to all worksheets using the current data source, right-click the filter and select **Apply to worksheets | All using this data source**.

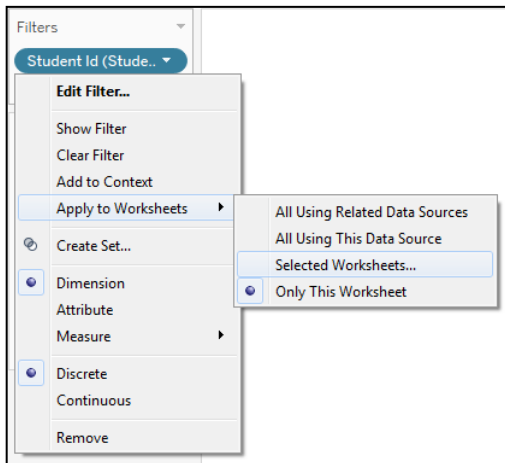


## Creating an Interactive Student Summary Dashboard using URL Actions

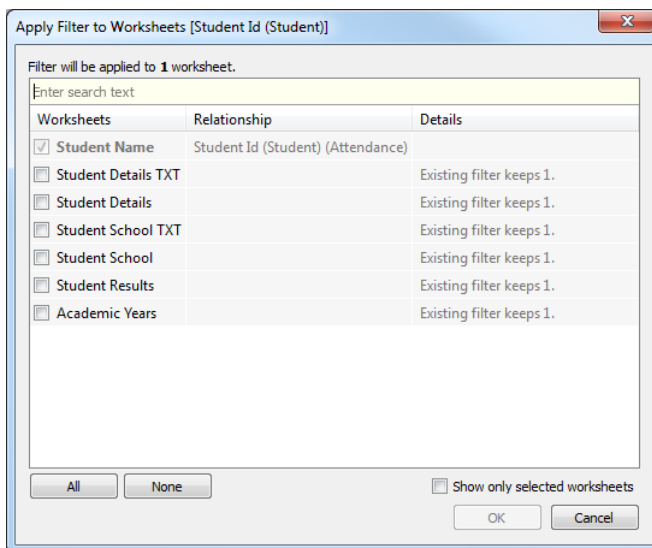
A data source icon is displayed next to the filter indicating that it has been applied to all worksheets using the current data source.



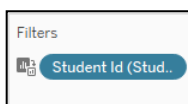
- To apply the filter to selected worksheets using the current data source:
  - i. Right-click the filter and select **Apply to worksheets | Selected worksheets...** to display the **Apply Filter to Worksheets [Student Id (Student)]** dialog.



- ii. In the **Apply Filter to Worksheets [Student Id (Student)]** dialog, select the worksheets to which the filter applies.



- iii. Click the **OK** button to close the dialog. A worksheet icon is displayed next to the filter indicating it has been applied to multiple worksheets.

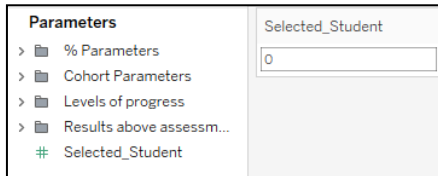


- 5. If required, create the dashboard.

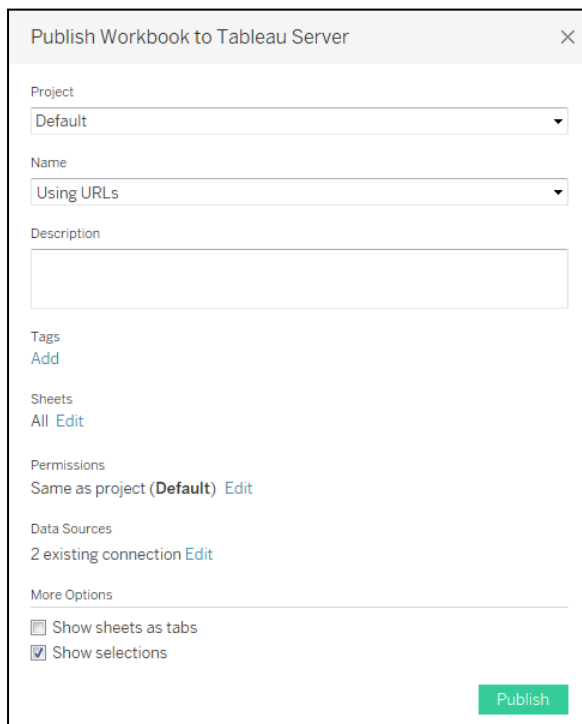
## Publishing the Student Summary Dashboard

To publish the dashboard:

1. Ensure there is no student selected in the dashboard:
  - a. In any worksheet, right-click the **Selected\_Student** parameter and select **Show parameter control** to display the **Selected\_Student** card.



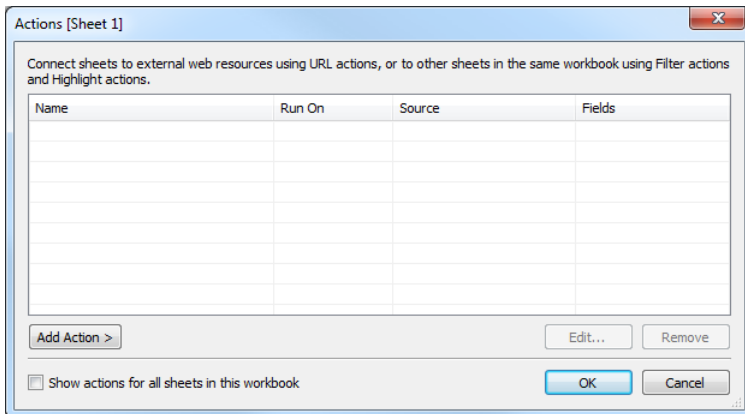
- b. Set the value to 0.
2. In the menu bar, select **Server | Publish Workbook...** to display the **Publish Workbook to Tableau Server** dialog.



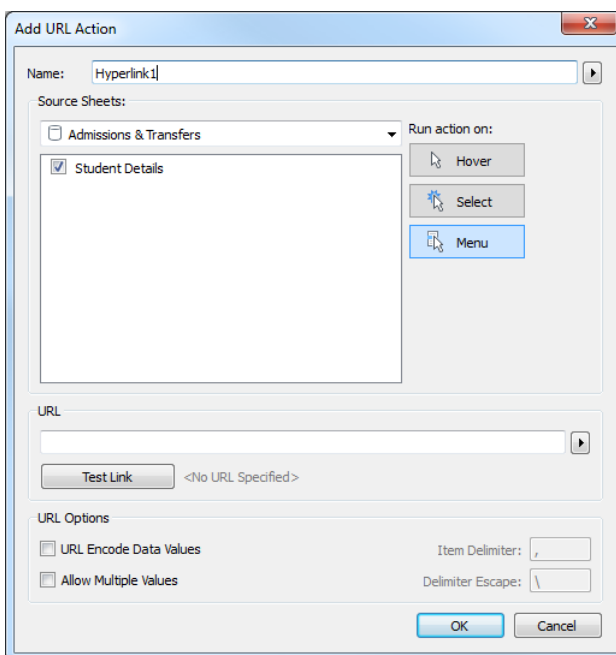
3. As required, select a **Project** and complete the **Name** and **Description** fields and add any **Tags**.



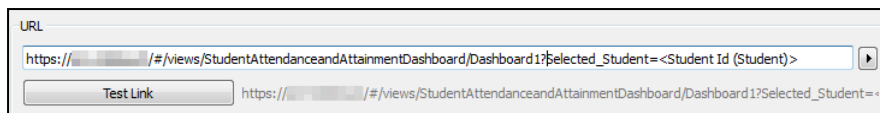
- From the menu bar, select **Worksheet | Actions...** to display the **Actions** dialog.



- Click the **Add Action** button and select **URL** to display the **Add URL Action** dialog.



- Click the **Select** button to highlight it.
- In the **URL** field, paste the dashboard URL you copied after publishing the dashboard.
- At the end of the URL, enter `Selected_Student=<Student Id (Student)>`



**NOTES:**

*The URL is case-sensitive.*

*You should check the URL by clicking the **Test Link** button. If the URL has been entered accurately, the dashboard opens in One Analytics Server populated for a Student ID value of 1. If the dashboard is not displayed correctly, you must check the URL, the parameter name (Selected\_Student) and the filter field (Student Id (Student)) to ensure they match the values used when configuring and publishing the dashboard.*

- Click the **OK** button to close the open dialogs and save the new action.
- Select **File | Save** to save the workbook.

9. To make the modified worksheet available to other users, select **Server | Publish workbook...** to upload the workbook to the One Analytics server.

You can now click anywhere within a row of student data in that worksheet in One Analytics Server and One Analytics Desktop to launch the dashboard in One Analytics Server, populated with the data for that student.

## Creating a Single Interactive Dashboard

You can embed the published dashboard and a worksheet containing a list of students side-by-side in a new dashboard enabling you to locate a student from the list and display their data in a single dashboard.

**NOTE:** The following steps are guidelines only. Create the dashboard to suit your needs, changing or omitting steps where necessary.

To create a single dashboard:

1. Log in to One Analytics Desktop.
2. Open or create the workbook where the dashboard is to reside.
3. If required, connect to the data source containing the list of students you want to use.
4. Drag the **Student Name (ID)** dimension (**Dimensions | Student - Detail**) to the **Rows** shelf.

**NOTE:** The dimension might have a slightly different name depending on the data source you are using, e.g. **Full name Id**.

5. Right-click the **Student ID (Student)** dimension (**Dimensions | Student - Details**) and select **Duplicate** to create a copy of the dimension in the **Dimensions** pane.
6. Right-click the new **Student ID (Student) (Copy)** dimension and select **Change data type | String**.
7. In the menu bar, select **Analysis | Create calculated field...** to display the calculated field creation dialog.



8. Give the calculation a name.
9. In the calculation field, paste the One Analytics Server URL of the dashboard in quotation marks up to and including `Selected_Student=`, followed by `+`, and then the name of the new **Student ID (Student) (Copy)** dimension in square brackets.

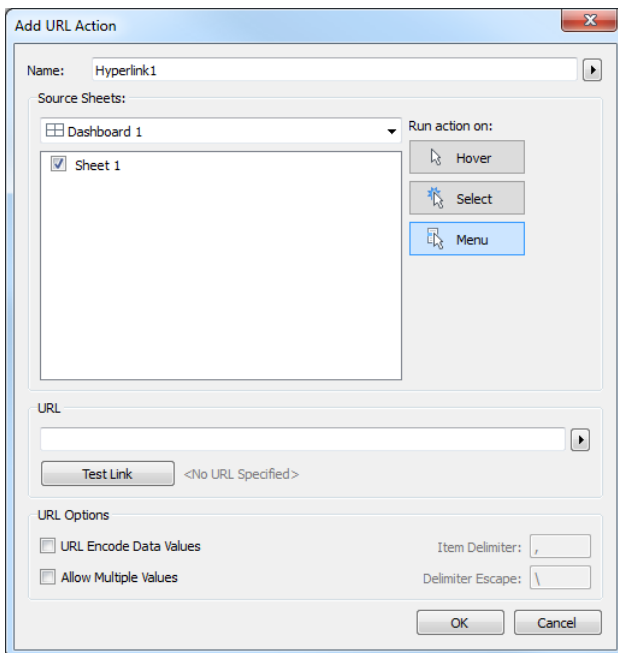
```
"http://[redacted]/#/views/UsingURLs/Dashboard1?Selected_Student="+[Student Id (Student) (copy)]
```

10. Click the **OK** button to close the dialog and add the new calculated field to the **Dimensions** pane.

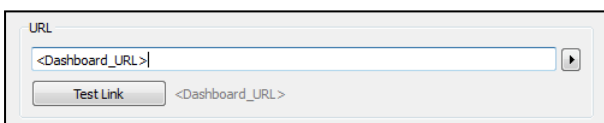
- Drag the new calculated field dimension to the **Rows** shelf to create a personalised dashboard link for each student.

Full Name (Id) (Student)	Dashboard_URL
Morales, [blurred]	/#/views/UsingURLs/Dashboard1?Selected_Student=75
Morales, [blurred]	/#/views/UsingURLs/Dashboard1?Selected_Student=02
Morales, [blurred]	/#/views/UsingURLs/Dashboard1?Selected_Student=22
Morales, [blurred]	/#/views/UsingURLs/Dashboard1?Selected_Student=40
Morales, [blurred]	/#/views/UsingURLs/Dashboard1?Selected_Student=65
Morales, [blurred]	/#/views/UsingURLs/Dashboard1?Selected_Student=41
Morales, [blurred]	/#/views/UsingURLs/Dashboard1?Selected_Student=70
Morales, [blurred]	/#/views/UsingURLs/Dashboard1?Selected_Student=60

- As required, add filters to the worksheet.
- If you added filters to the worksheet, right click each filter and select **Show filter**.
- Click the **New Dashboard** icon or select **Dashboard | New dashboard** to create a blank dashboard.
- Drag the sheet containing the student list from the **Dashboard** pane to the dashboard. If you added filters, they are displayed on the right-hand side of the dashboard.
- Drag the **Web Page** object to the right-hand side of the dashboard to display the **Edit URL** dialog.
- Leave the dialog blank and click the **OK** button to create a blank area in the dashboard.
- As required, arrange and resize the items in the dashboard.
- In the menu bar, select **Dashboard | Actions | Add Action | URL** to display the **Add URL Action** dialog.



- Click the **Select** button to highlight it.
- Click the arrow button next to the **URL** field and select the calculated field you created.



- Click the **OK** button to close each dialog and return to the dashboard.



### ***Creating an Interactive Student Summary Dashboard using URL Actions***

You can now click a name in the list to display the personalised dashboard for the student in the blank dashboard area. This opens the linked dashboard within One Analytics Server inside the current dashboard. The first time you access it you will need to log in to One Analytics and to the database when prompted.

# 11 / Appendix A: UDF Dimensions

The following table provides the names and context of the UDF dimensions, along with their links and an indication of whether or not they can be used in the current One Analytics release:

UDF Context	UDF Dimension Name	Links	Can be used ?
<b>Bases - Base Area detail</b>	UDF_BASEAREA_DEFINITION	Base.Base_id = UDF_BASEDEFINITION.ENTITY_ID	Yes
<b>Bases - Base classification</b>	UDF_BASECLASSIFICATION	Base.Base_id = UDF_BASEDEFINITION.ENTITY_ID	Yes
<b>Bases - Base detail</b>	UDF_BASEDEFINITION	Base.Base_id = UDF_BASEDEFINITION.ENTITY_ID	Yes
<b>Bases - Base Ofsted detail</b>	UDF_BASEOFSTEDDETAILS	Base.Base_id = UDF_BASEDEFINITION.ENTITY_ID	Yes
<b>CE – Employment detail</b>	UDF_BASICEMPLOYMENTDETAILS	N/A	No
<b>CIE – Entertainment detail</b>	UDF_BASICENTERTAINMENTDETAILS	N/A	No
<b>CIE – Chaperon detail</b>	UDF_CHAPERONEAPPLICATIONDETAILS	N/A	No
<b>G&amp;B – Claim detail</b>	UDF_CLAIMDETAILS	N/A	No
<b>TM – Course detail</b>	UDF_COURSEADDITIONALDETAILS	N/A	No
<b>TM – Course Template detail</b>	UDF_COURSETEMPLATEADDITIONALDETAILS	N/A	No
<b>CSS – Court order detail</b>	UDF_COURTORDERDEFINITION	N/A	No
<b>TM- Application detail</b>	UDF_CREATEAPPLICATION	N/A	No

Appendix A: UDF Dimensions

UDF Context	UDF Dimension Name	Links	Can be used ?
Case management	UDF_CSS_SEN	CssSenInvolvement.Involvement_Id = UDF_CSS_SEN.ENTITY_ID  And CssSenInvolvement.Involvement_Form_Id = UDF_CSS_SEN.ENTITYSub_Type_ID	Yes
CSS – Prosecution disposal detail	UDF_DISPOSALDETAILS	N/A	No
EY – Provider detail	UDF_EARLYYEARS.BASICPROVIDERDEFINITION	Provider.Provider_Id = UDF_EARLYYEARS.BASICPROVIDERDEFINITION.ENTITY_ID	Yes
EY – Provider capacity & times	UDF_EARLYYEARS.CAPACITYANDTIMES	la_service_provider_Detail.la_service_provider_Detail_Id = UDF_EARLYYEARS.CAPACITYANDTIMES.ENTITY_ID	Yes
EY – Complaint detail	UDF_EARLYYEARS.COMPLAINTSUMMARY	la_service_provider_complaints.record_id = UDF_EARLYYEARS.COMPLAINTSUMMARY.ENTITY_ID	No
EY – Staff detail	UDF_EARLYYEARS.EARLYYEARSSTAFF	people.person_Id = UDF_EARLYYEARS.EARLYYEARSSTAFF.ENTITY_ID	No
EY – Monitoring detail	UDF_EARLYYEARS.MONITORINGRECORDDETAILS	LA_Serv_Prov_Monitoring.La_Serv_Prov_Monitoring_Id = UDF_EARLYYEARS.MONITORINGRECORDDETAILS.ENTITY_ID	No
EY – Service number detail	UDF_EARLYYEARS.SERVICENUMBERSDETAILS	LA_SERVICE_PROVIDER.la_service_provider_id = UDF_EARLYYEARS.SERVICENUMBERSDETAILS.ENTITY_ID	No
EY – Service detail	UDF_EARLYYEARS.SERVICEPROVISIONDEFINITION	la_service_provider_Detail.la_service_provider_Detail_Id = UDF_EARLYYEARS.SERVICEPROVISIONDEFINITION.ENTITY_ID	Yes
CE – Employer detail	UDF_EMPLOYERDETAILS	N/A	No
CIE – Entertainment employer visit detail	UDF_ENTERTAINMENTEMPLOYERVISITDETAILS	N/A	No

UDF Context	UDF Dimension Name	Links	Can be used ?
CSS - Equipment detail	UDF_EQUIPEMENTDETAILS	N/A	No
CSS - Equipment Loan detail	UDF_EQUIPEMENTLOANDETAILS	N/A	No
Exclusion detail	UDF_EXCLUSIONDETAIL	ExclusionDetail.Exclusion_Id = UDF_EXCLUSIONDETAIL.ENTITY_ID	Yes
Early Years Enquiries	UDF_EYE.ENQUIRYDEFINITION	N/A	No
Governing Body Composition detail	UDF_GOVERNORS.GOVERNINGBODYCOMPOSITION	N/A	No
Governing Body Detail	UDF_GOVERNORS.GOVERNINGBODYDEFINITION	N/A	No
Governor clearance check	UDF_GOVERNORS.GOVERNORCLEARANCECHECK	N/A	No
CSS - Hearing Impairment	UDF_HEARINGIMPAIRMENTDETAILS	N/A	No
CE - Employment employer visit details	UDF_INSPECTIONDETAILS	N/A	No
CIEE Performance Detail	UDF_PERFORMANCEDETAILS	N/A	No
Person Detail	UDF_PERSONDEFINITION	Person.Person_Id = UDF_PERSONDEFINITION.ENTITY_ID	Yes
SEND \ EHCP - Provision	UDF_PROVISIONALALLOCATIONDETAILS	Provision.Provision_Id= UDF_PROVISIONALALLOCATIONDETAILS.ENTITY_ID	Yes
A&T Appeal Detail	UDF_RIAANT.ANTAPPEALSDETAILS	Application.Appeal_Id = UDF_RIAANT.ANTAPPEALSDETAILS.ENTITY_ID	Yes
A&T Application Detail	UDF_RIAANT.ANTRIAAPPLICATION	Application.Application_Id = UDF_RIAANT.ANTRIAAPPLICATION.ENTITY_ID	Yes
A&T Application Preference Details	UDF_RIAANT.ANTRIAAPPLICATIONPREFERENCE	Application.Preference_Id = UDF_RIAANT.ANTRIAAPPLICATIONPREFERENCE.ENTITY_ID	Yes

**Appendix A: UDF Dimensions**

UDF Context	UDF Dimension Name	Links	Can be used ?
<b>School History</b>	UDF_SCHOOLHISTORY	BaseStudent.Base_Student_Id = UDF_SCHOOLHISTORY.ENTITY_ID	Yes
<b>Site Detail</b>	UDF_SITEDEFINITION	Site.Site_Id = UDF_SITEDEFINITION.ENTITY_ID	Yes
<b>Staff Detail</b>	UDF_STAFFDEFINITION	Person.Person_Id = UDF_STAFFDEFINITION.ENTITY_ID	Yes
<b>Student Detail</b>	UDF_STUDENT	Student.Student_Id = UDF_STUDENT.ENTITY_ID	Yes
<b>Carer Detail</b>	UDF_STUDENTCARERLINKDEFINITION	N/A	No
<b>Visual Impairment</b>	UDF_VISUALIMPAIRMENTDETAILS	N/A	No

# 12 / Appendix B: Capita-Branded Colour Codes

## Introduction

The XML code containing the Capita colour scheme palettes is in the following section. This can be copied and pasted in between the `<workbook>` `</workbook>` tags in the Preferences file. The colour schemes are included for reference in the [Colour Schemes: Discrete](#) and [Colour Schemes: Ordered](#) sections on page 105.

## Colour Code

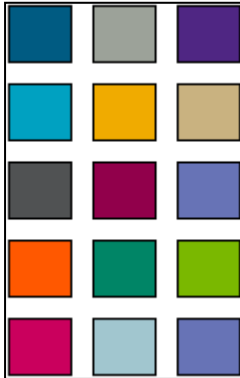
```
<preferences>
<color-palette name="Capita Colours" type="regular">
  <color>#005B82</color>
  <color>#00A1C1</color>
  <color>#505253</color>
  <color>#FF5800</color>
  <color>#CA005D</color>
  <color>#9CA299</color>
  <color>#F0AB00</color>
  <color>#91004B</color>
  <color>#008566</color>
  <color>#A1C6CF</color>
  <color>#4F2683</color>
  <color>#C9B280</color>
  <color>#6773B6</color>
  <color>#7AB800</color>
  <color>#6773B6</color>
</color-palette>
<color-palette name="Capita Blue (Gradient)" type="ordered-sequential">
  <color>#005B82</color>
  <color>#11668A</color>
  <color>#237293</color>
  <color>#357E9B</color>
  <color>#478AA4</color>
  <color>#5996AC</color>
  <color>#6BA2B5</color>
  <color>#7DAEBD</color>
  <color>#8FBAC6</color>
  <color>#A1C6CF</color>
```

## Appendix B: Capita-Branded Colour Codes

```
</color-palette>
<color-palette name="Capita Temperature (Gradient)" type="ordered-sequential">
  <color>#91004B</color>
  <color>#8F0015</color>
  <color>#8E1E00</color>
  <color>#8D5100</color>
  <color>#8B8300</color>
  <color>#5F8A00</color>
  <color>#2C8900</color>
  <color>#008705</color>
  <color>#008636</color>
  <color>#008566</color>
</color-palette>
<color-palette name="Capita Gray-White-Orange (Diverging)" type="ordered-sequential">
  <color>#505253</color>
  <color>#FFFFFF</color>
  <color>#FF5800</color>
</color-palette>
<color-palette name="Capita Gray-White-Purple (Diverging)" type="ordered-sequential">
  <color>#505253</color>
  <color>#FFFFFF</color>
  <color>#CA005D</color>
</color-palette>
<color-palette name="Capita Blue-Orange (Diverging)" type="ordered-sequential">
  <color>#005B82</color>
  <color>#FF5800</color>
</color-palette>
<color-palette name="Capita Blue-White-Orange (Diverging)" type="ordered-sequential">
  <color>#005B82</color>
  <color>#FFFFFF</color>
  <color>#FF5800</color>
</color-palette>
</preferences>
```

## Colour Schemes: Discrete

### Capita Colours



## Colour Schemes: Ordered

Colour Palette Name	Colour Scheme
Capita Blue (Gradient)	
Capita Temperature (Gradient)	
Capita Grey-White-Orange (Diverging)	
Capita Grey-White-Purple (Diverging)	
Capita Blue-Orange (Diverging)	
Capita Blue-White-Orange (Diverging)	



# Index

Bins	32
% Attendance Steps	66
Blending	43
Calculated Fields	20
Colour	32
Colour Palettes	
Categorical	33
Diverging	34
Sequential	33
Dashboards	
Emailing from	88
Embedding webpages in	88
External Information	88
Frequently used	88
URL Actions	88
URL Parameters	88
Data Sources	2
Downloading	19
Editing	19, 20
Embedding passwords in	30
Publishing	29
Dimensions	2, 3
Hierarchies	34
Filters	
Aspect Name	73
Hierarchies	34
Aspect	73
Mark Type	60
Levels of Progress	79
Measures	2, 3
Parameters	2, 3
Aspect	84
Attendance Below	61
Selected_Student	88
Projects	
Publishing data sources to	30
UDFs (User-Defined Fields)	23
URL Actions	88
Vulnerable Groups	37
Workbooks	
Embedding passwords in	18
Publishing to the server	15