REPORT BUILDER USER GUIDE

ENABLE. EMPOWER. ELEVATE.

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1 ABOUT THIS DOCUMENT

This User Guide is an easy to follow step by step guide to enable you to learn the features of Report Builder.

You will find symbols to instruct you through this document, these symbols are as follows:

ACTION: INSTRUCTION FOR THE USER

NOTE: IMPORTANT INFORMATION TO THE USER

2 INTRODUCTION

The Vivantio Report Builder solution provides a full featured reporting tool, allowing you to design, build and publish your own reports as well as the ability to edit existing reports.

This guide provides a quick introduction to installing Report Builder and building your own custom reports. It is assumed that you have some prior knowledge of designing and building reports, using a tool such as Crystal Reports or similar. If you have no experience in this area, you may wish to contact your Vivantio Account Manager for further support and to discuss training services they can offer.
We are also able to provide professional services where you can commission Vivantio to build a report to your specifications or provide training.

If you already have Report Builder installed on your Local PC then please uninstall this from your Add/Remove Programs prior to installing a newer version of Report Builder.

3 GETTING STARTED

3.1 INSTALLING REPORT BUILDER

To install the Report Builder from the **Reports** Menu on the left of the screen and click Report Builder.

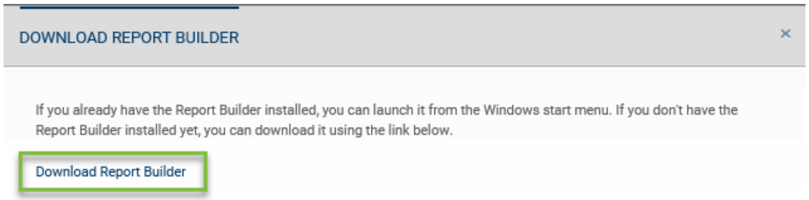
TECHNICIAN AREA > REPORTS > REPORT BUILDER

Note: If you do not see this option then you will need to speak to an Admin User of your system to grant you access through the Roles and Permissions.

ADMIN AREA > REPORTING > REPORTS > ACCESS CONTROL

The Admin User will then need to make sure that the Role you are in has the ability to Run Reports, Use Report Builder and if required View the Report Catalogue

The following window will appear.



Select **Download Report Builder**

After the installation has finished, the Report Builder will start automatically and ask you to log in.

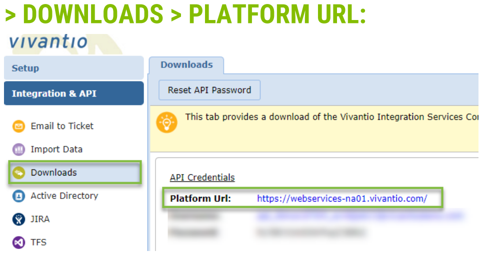
Note: Once the Report Builder has been installed you will be able to launch this from your local machine.

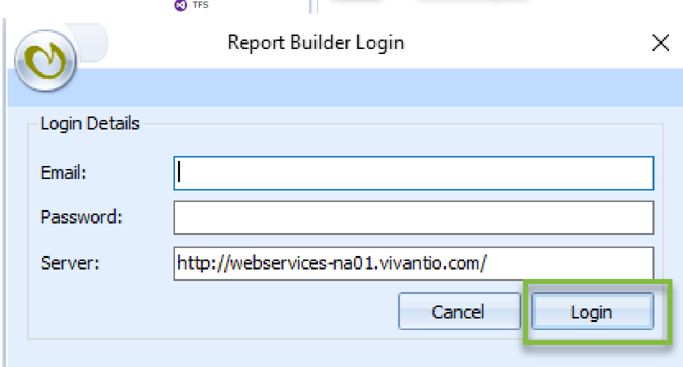
3.2 LOGGING IN

The first step in using the Report Builder is to log in to your Vivantio database. Your username and password are the same as your username and password for Vivantio.

Enter the email address and password you use to access your main Vivantio Instance. Click Login.

The **Server:** address can also be found within the **ADMIN AREA > INTEGRATION & API > DOWNLOADS > PLATFORM URL:**





4 CREATING YOUR FIRST REPORT

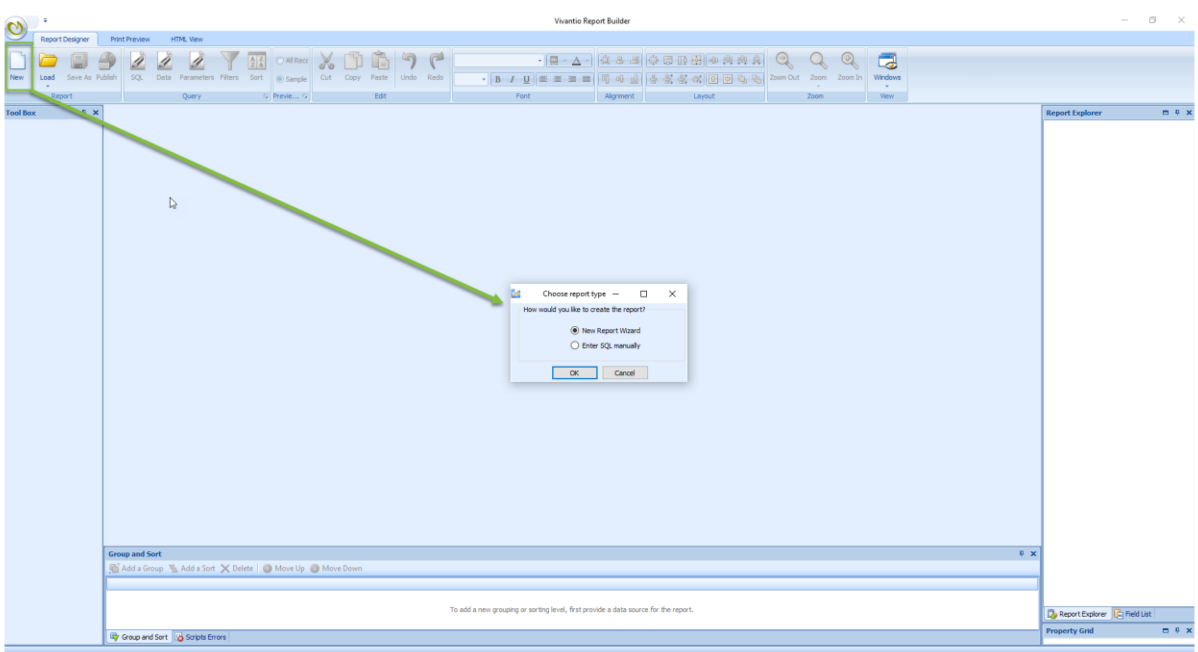
4.1 REPORT WIZARD & SQL REPORTING

To make creating reports as simple as possible, the Report Builder includes an easy to use wizard, which will help you set up the data you want to appear, any filtering or parameters you want to add, and the order in which the data will appear in the report.

Click **New** to open the Report Builder Wizard

Note: SQL creation must be enabled per user by Vivantio. Please contact the Vivantio Support Team if you would like this feature enabled for your login. ***Previous SQL knowledge is essential for this to be enabled.***

Select the radio button **New Report Wizard** and Click **OK** then Select **Next**



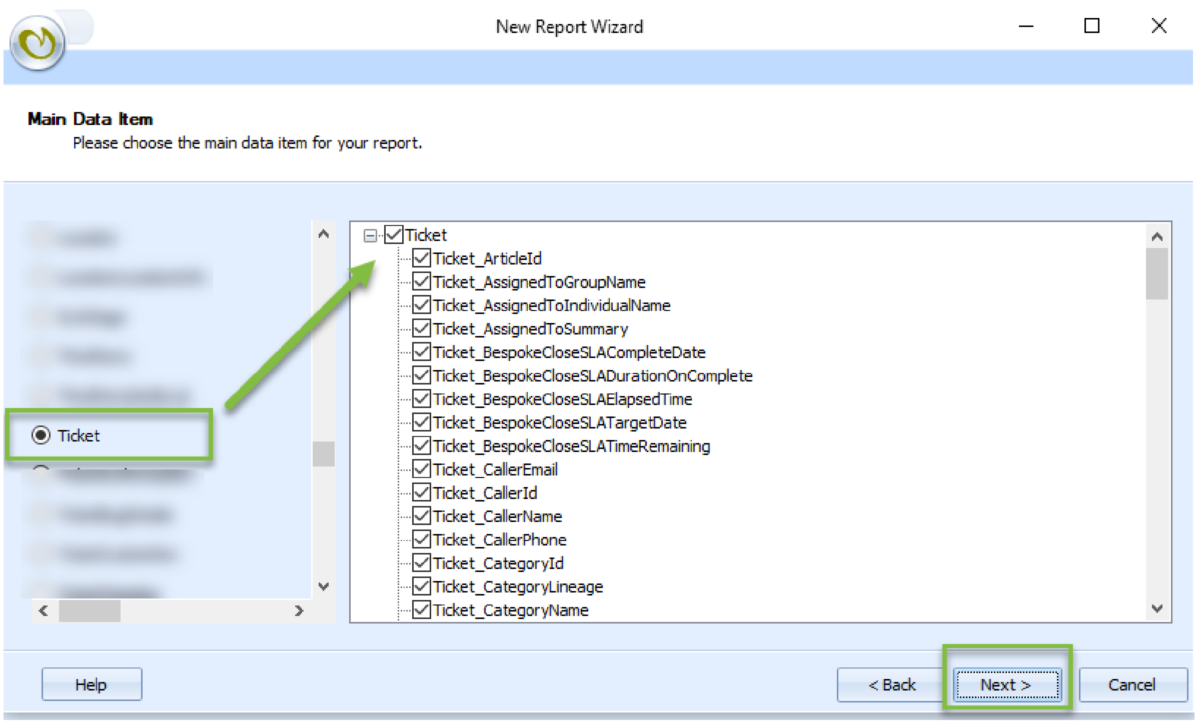
4.2 CHOOSING YOUR REPORT DATA

MAIN DATA ITEM

The first step of the wizard allows you to select what the main data in the report should be; your selection depends on your system configuration and the system areas you have enabled.

Tick the boxes of the fields you wish to move into the report

Click **Next**



To the right of the screen, you can select the items from the list you would like to include in your report.

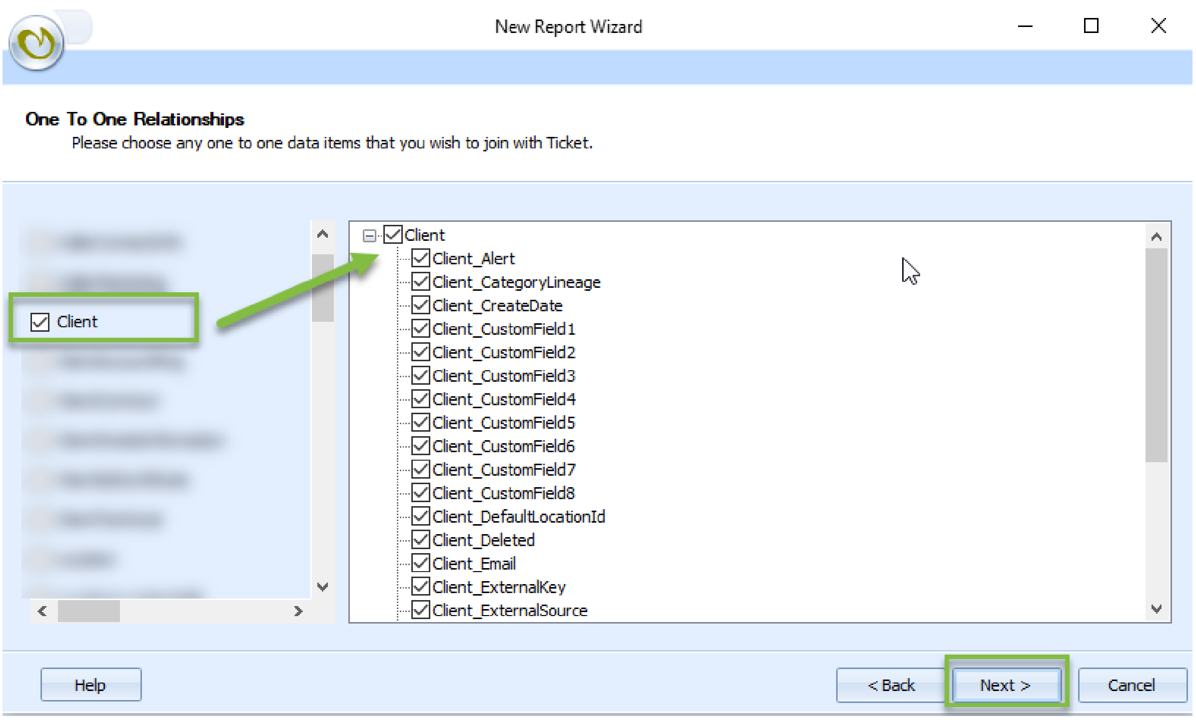
ONE TO ONE RELATIONSHIPS

Next you can choose which related information you would like included. These are items with a one-to-one relation to the main data in your report – for example, the Client or Caller related to each Ticket. A One to One Relationship means there can only be one Client or Caller for each Ticket.

To the right of the screen, you can select the items from the list you would like to include in your report.

Tick the boxes of the fields you wish to move into the report

Click **Next**



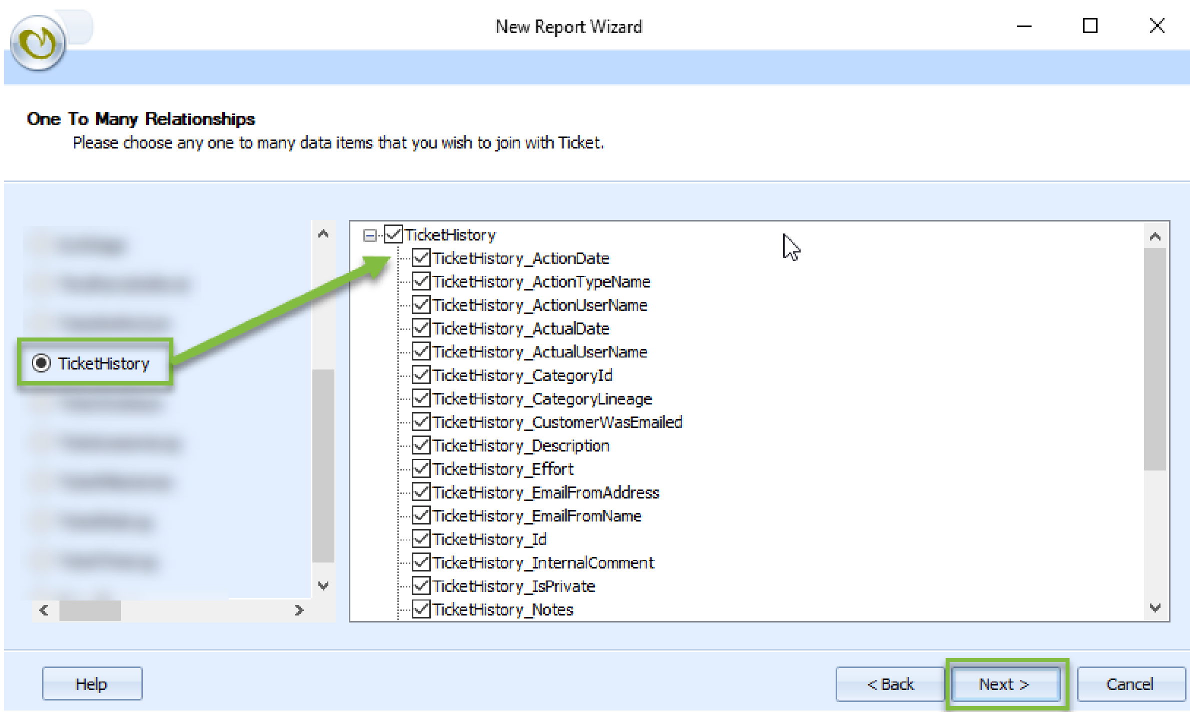
ONE TO MANY RELATIONSHIPS

In the final step of choosing your data, you can add data with a one-to-many relationship to the main data – for example, each Ticket will have many lines in the Ticket History all related to that one Ticket.

To the right of the screen, you can select the items from the list you would like to include in your report.

Tick the boxes of the fields you wish to move into the report

Click **Next**



4.3 PARAMETERS AND FILTERS

Now that you have set up the data items to be included in your report, you will be prompted to add in Parameters and filter conditions. The Parameters and Filters restrict the records that will be included when you run the report.

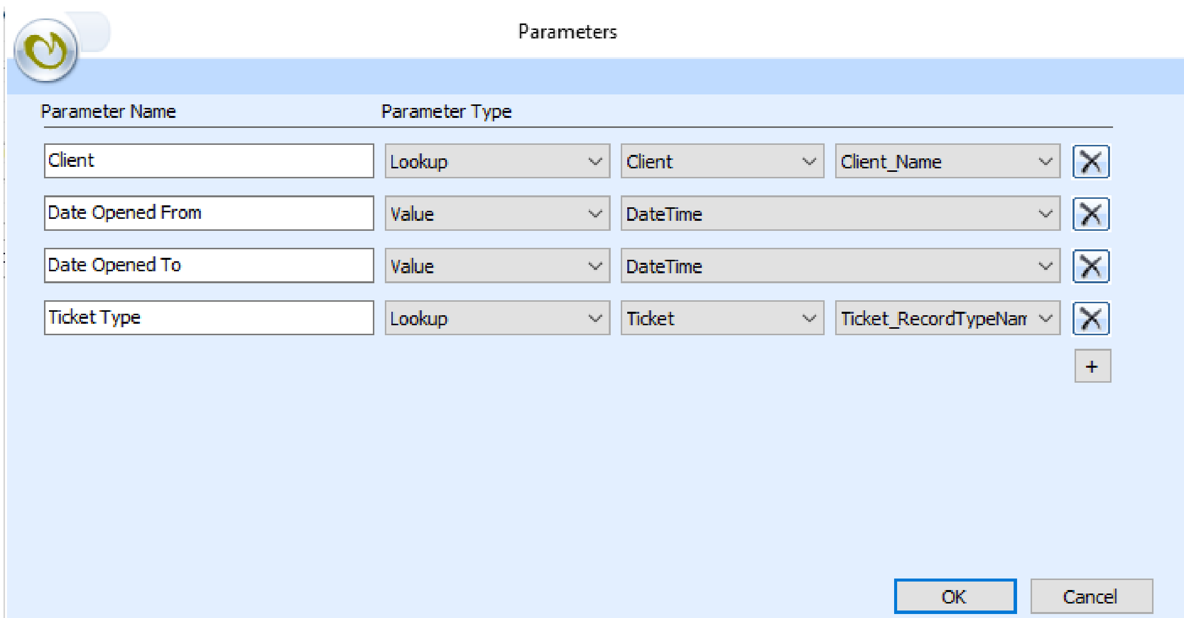
PARAMETERS

The **Parameters** screen allows you to add parameters which can configured to be Value or Look Up from the system data fields. The information added here allows for filters to be applied on the data defined by the technician.

EXAMPLE PARAMETERS

Enter your **Parameter Name(s)** and **Parameter Type(s)**

Click **Next**



Parameter Name	Parameter Type	Lookup Table	Field
Date Opened From	Value		DateTime
Date Opened To	Value		DateTime
Client	Lookup	Client	Client_Name
Ticket Type	Lookup	Ticket	Ticket_Recordtypenamesingular

PARAMETER NAME

The Parameter Name is Free Text so you can name the Parameter to show what the technician will be prompted to enter when running the report.

PARAMETER TYPE

VALUE

This allows you to choose between

- **String** – Allows for Free Text to be entered in the Field when running the Report
- **DateTime** – Give a Date and Time Picker.
- **Decimal** – Allows for a number with decimal places to be entered.
- **Integer** – Allows for a 1 or 0 Integer to be entered.

The 2 most used in the **Values** are **String** or **DateTime** where you wish to Filter the data on a Date Range or on some free text you enter.

LOOKUP

When you select the Parameter to be a **Look Up** Parameter Type you will be prompted to select the Database **Table** you wish to select. Followed by the available **Fields within that Table**.

e.g – **Ticket – Ticket_RecordTypeNameSingular** (This field will display the different Ticket Types you have available in your system.)

LOOKUP TABLE

This is the Main Data Table you want to get the Fields from.

- Ticket
- **Client**
- Caller
- Asset, etc.

FIELD

These are the Fields contained within the Table you have selected.

- **Client_Name**
- Client_Reference
- Client_Email
- Client_CategoryLineage, etc.

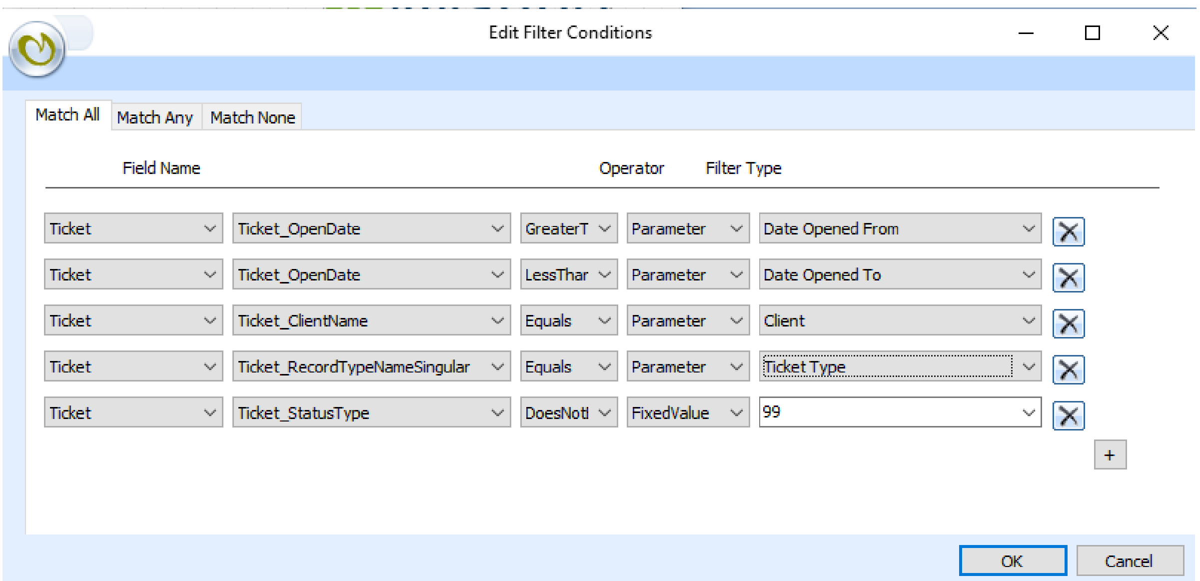
FILTERS

The report data can be filtered on the Parameters the technician has entered and you are able to hard code filters to the report data.

Enter your **Filter Name(s)** and whether they link back to the **Parameter(s).** This is also used to apply the parameters created to the data returned within the data. **Additional Fixed Filters** can be added which are static.

Click **Next**

EXAMPLE FILTERS



Data Table	Data Field	Operator	Based On	Selection
Ticket	Ticket_OpenDate	GreaterThanOrEqualTO	Parameter	Date Opened From
Ticket	Ticket_OpenDate	LessThanOrEqualTO	Parameter	Date Opened To
Ticket	Ticket_ClientName	Equals	Parameter	Client
Ticket	Ticket_RecordTypeNameSingular	Equals	Parameter	Ticket Type
Ticket	Ticket_StatusType	DoesNotEqual	FixedValue	99 (Deleted)

DATA TABLE

Shows the different Tables you have selected when you applied the Main Data Table, One to One and One to Many Relationships.

- Client
- **Ticket**
- TicketHistory

DATA FIELD

This shows the available **Fields** that are in the **Data Table** you have selected.

- **Ticket_ClientName**
- Ticket_OpenedDate
- Ticket_Title
- Ticket_RecordTypeNameSingular

OPERATOR

This allows you to select how you want the **Filter** to be applied.

- **Equals**
- DoesNotEqual
- GreaterThan
- GreaterThanOrEqualTo
- LessThan
- LessThanOrEqualTo
- Like

BASED ON

This is whether the data is going to be based on a fixed value or the parameter selected.

- Fixed Value
- **Parameter**

SELECTION

If you select **Fixed Value** the list of options from the selected **Field** will be displayed to choose from and the same **filter** will always apply to this report. Whereas selecting **Parameter** will ask you for the Parameter you want to link to this filter.

- Date Opened From
- Date Opened To
- **Client**
- Free Text
- Ticket Type

EXAMPLE

Based on the above the bold options we've highlighted the Filter would be built as –
Ticket – Ticket_ClientName – Equals – Parameter – Client

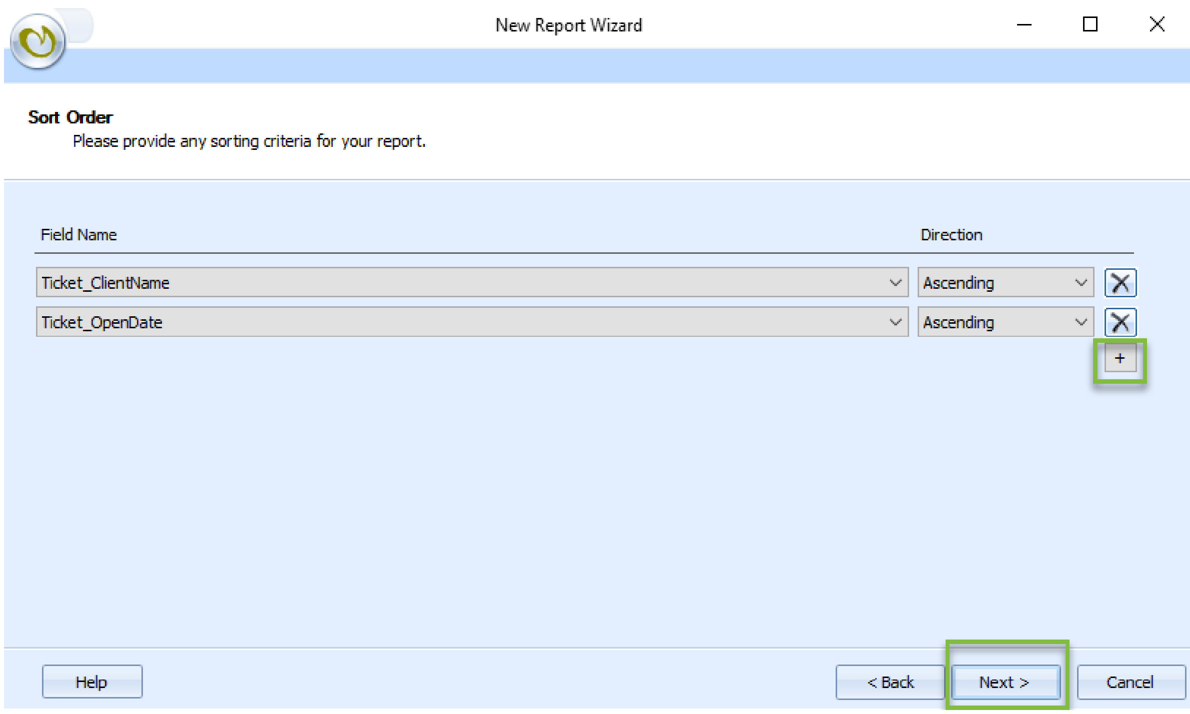
SORT ORDER

The final step in the wizard is to sort the data in your report. Simply choose the field(s) you want to sort by, and the direction you want to sort the data in.

- Ascending – The earliest Date First.
- Descending – The most recent Date first.

To create a Sort Order, select the + button.
Enter your **Field Name(s)** and **Direction(s)**

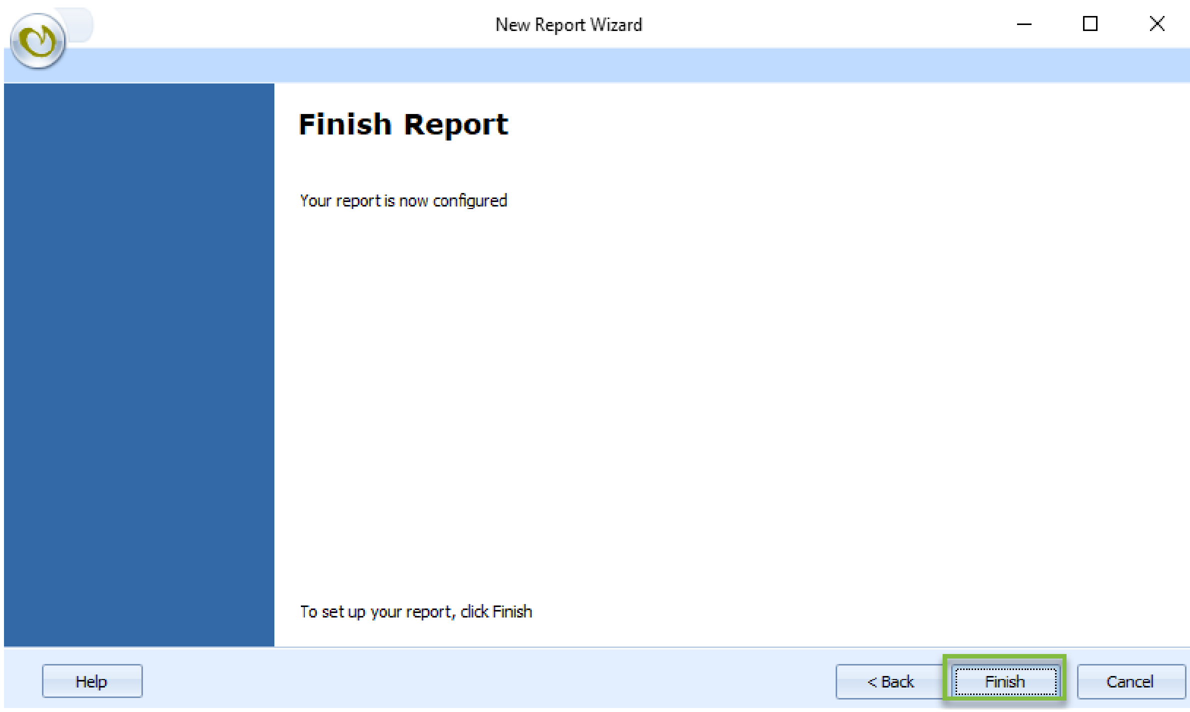
Click **Next**



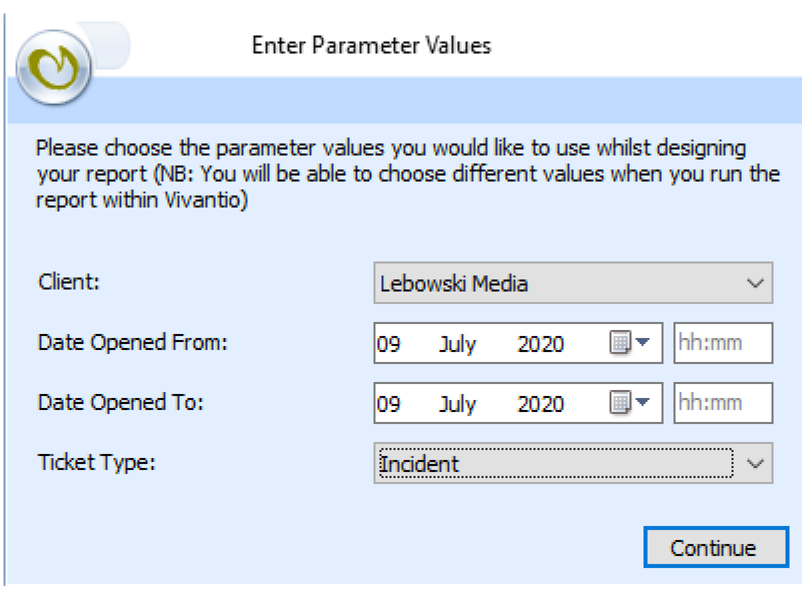
FINISH CHOOSING DATA AND APPLYING PARAMETERS & FILTERS

The final screen in the Report Wizard confirms the Report Wizard is finished

Click **Finish**



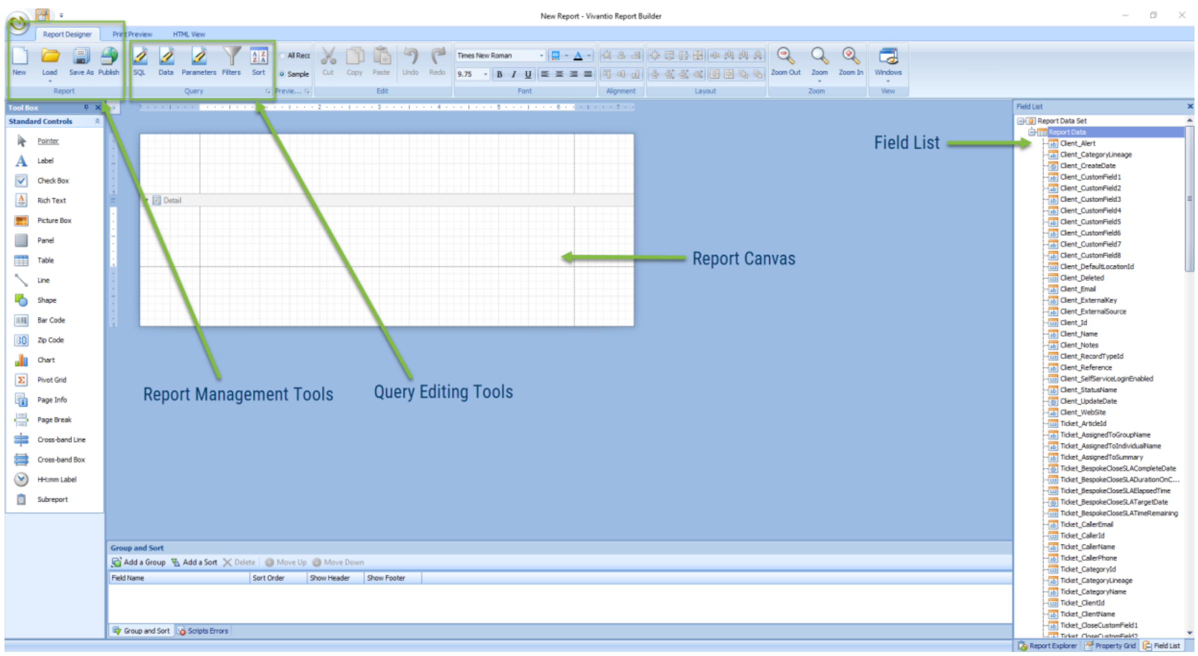
The Parameter Box will appear.
Set your Parameters and click **Continue**
You have now defined the data set to be used within the Report.



5 THE REPORT BUILDER

5.1 REPORT LAYOUT

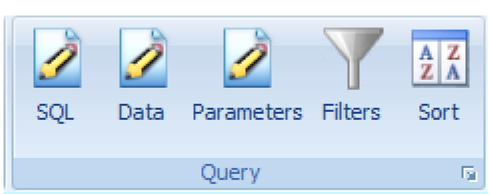
Once you have completed the New Report Wizard, you will be presented with the Report Builder screen:



REPORT MANAGEMENT TOOLS

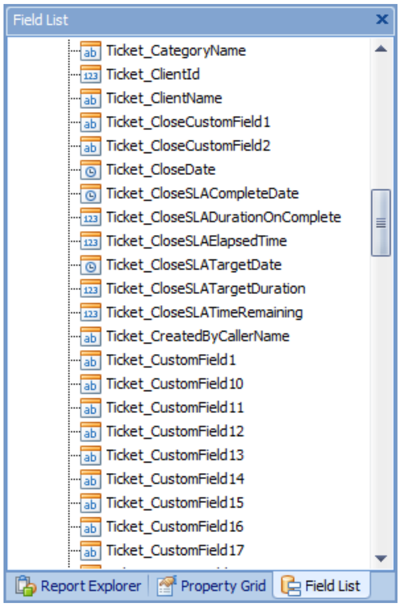
The buttons in this toolbar allow you to launch the New Report Wizard, Save your reports to your local computer, Publish reports to your Vivantio database for running on the web, and load existing reports for editing – whether they are saved locally, or published to the Vivantio database.

QUERY EDITING TOOLS



From this toolbar, you can edit the list of fields available in your report, add or change filter conditions and edit the order your report data is sorted in. You are also able to see how the SQL statement is built up. The SQL cannot be edited.

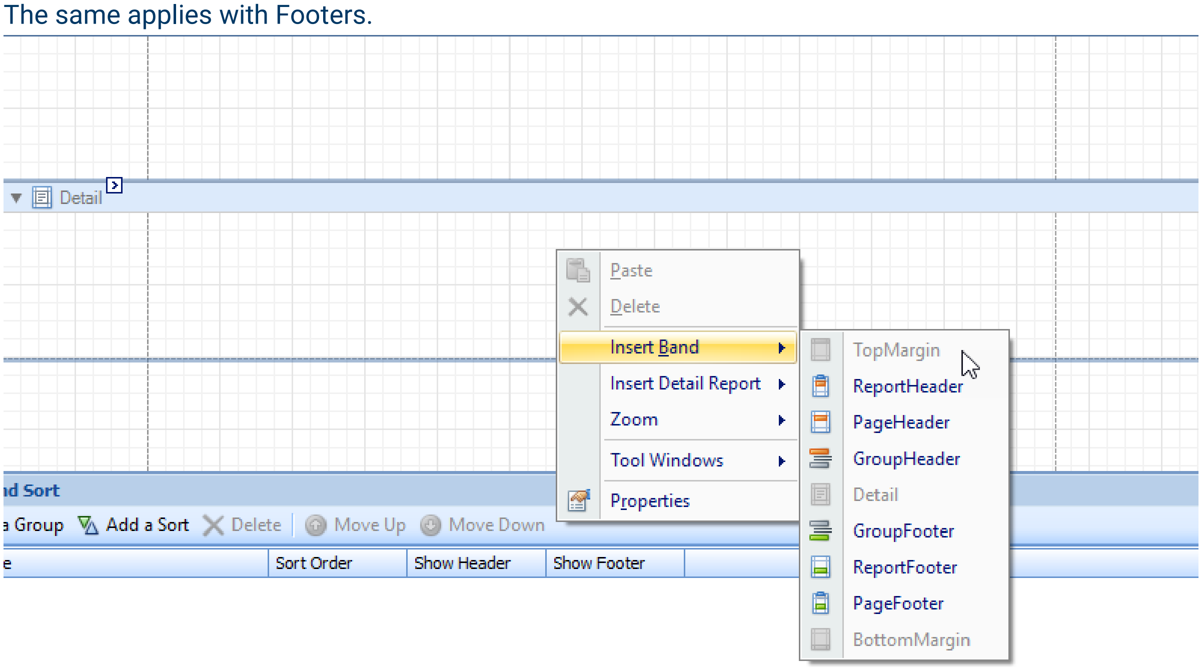
FIELD LIST



The system normally defaults to showing the Report Explorer and Property Grid, Clicking on the Field List Tab will display the list of Fields available to use in the report designer.

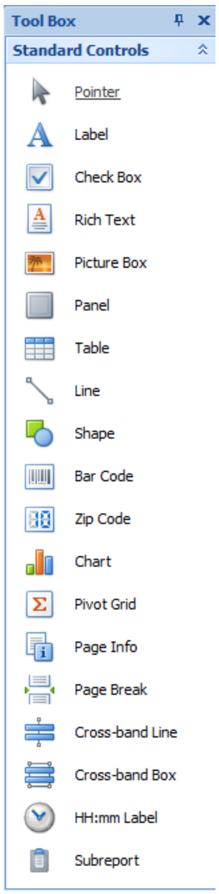
REPORT CANVAS

The Report Canvas is where you add Headings, Graphs, Data and other elements you wish to see within the report.
If you 'right click' on the Canvas you can insert additional bands, for example:
Report Header – 1 per Report. (Such as Company Logo, Report Title, Parameter Details)
Page Header – 1 per Page. (Such as Page details, Page number etc.)
Group Header – 1 per Group. (Such as the Client Name, and Column Headings etc.)
The same applies with Footers.



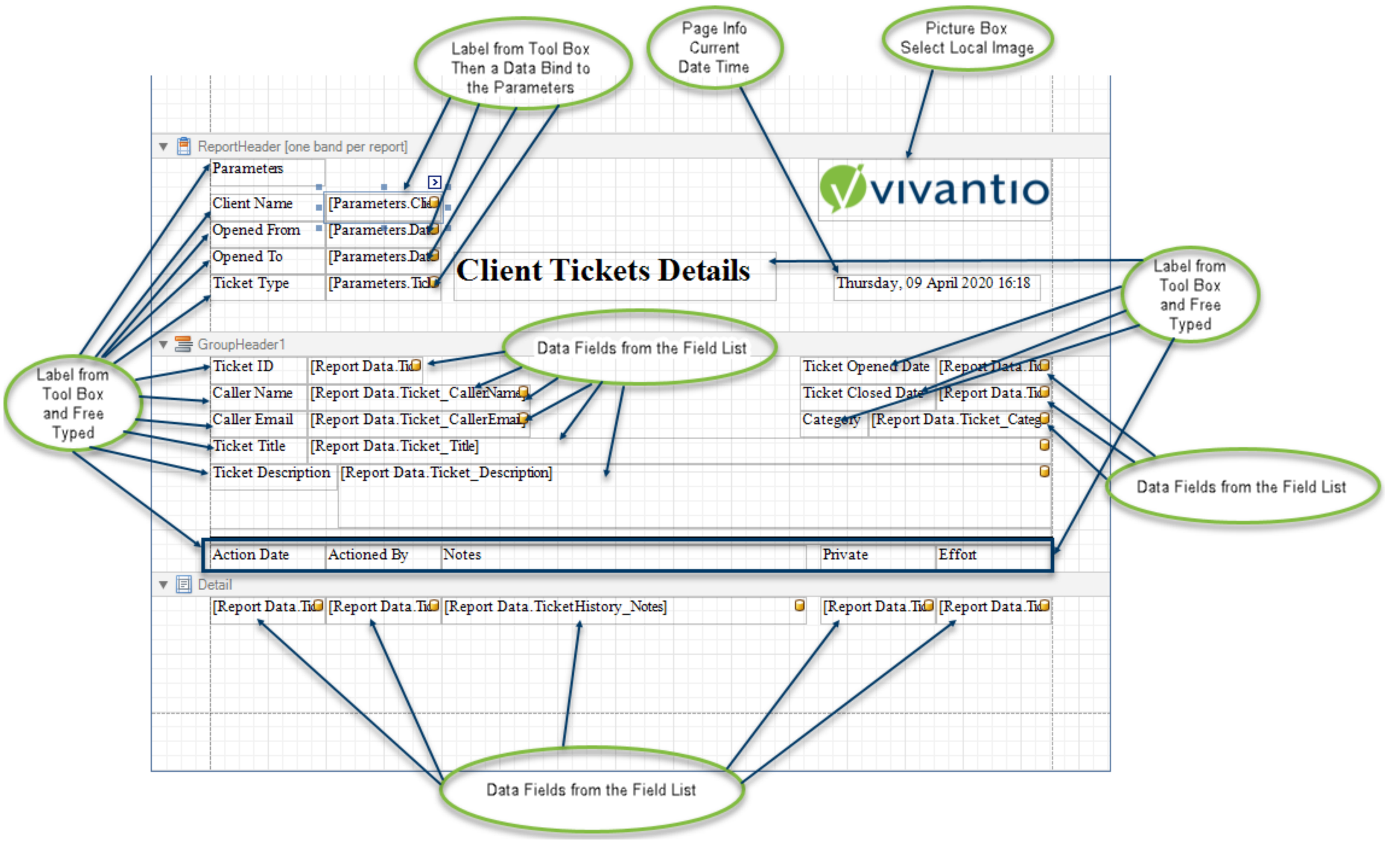
TOOL BOX

A variety of different controls are available from the Tool Box to the left of the Canvas, such as Picture Boxes, Lines/Shapes, and Tables.



Allows you to navigate around the canvas.
Drag a label on to the report, for free text or data binding.
Add a check box that has data binding.
Text Box with additional formatting.
Insert a picture into your report.
Add a Panel to keep controls together.
Insert a Table to allow for alignment.
Add a line to the layout design.
Insert a shape on to the report.
Add a barcode to the report.
Add a Zip Code.
Add a Chart.
Add a Pivot Grid.
Add Page Info.
Page Break.
Add a Line that can span across different bands within the report.
Add a Box that can span across different bands within the report.
Time Label, this converts a time number field into time formatted.
Allows you to put the Details of another report into this report.

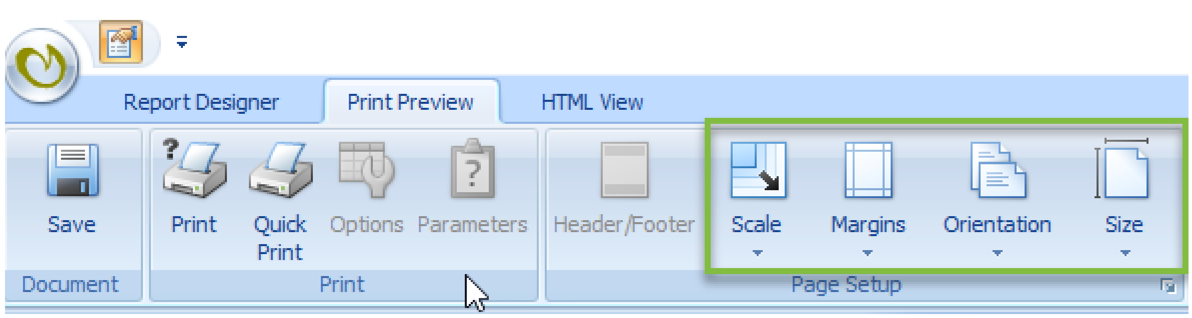
EXAMPLE



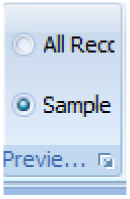
The above shows a typical layout of a report and how the different fields have been populated. This is created by dragging and dropping **Labels, Picture Boxes & Page Info** from the **Tools Menu**. Some of which have **Data Binding** others are **free text**.
Other fields are **Data Fields** dragged from the Right Hand Side '**Field List**'

PRINT PREVIEW

When you are designing your report, it is often useful to preview it so you can see what it is going to look like when it is run. You can do this using the Print Preview option:



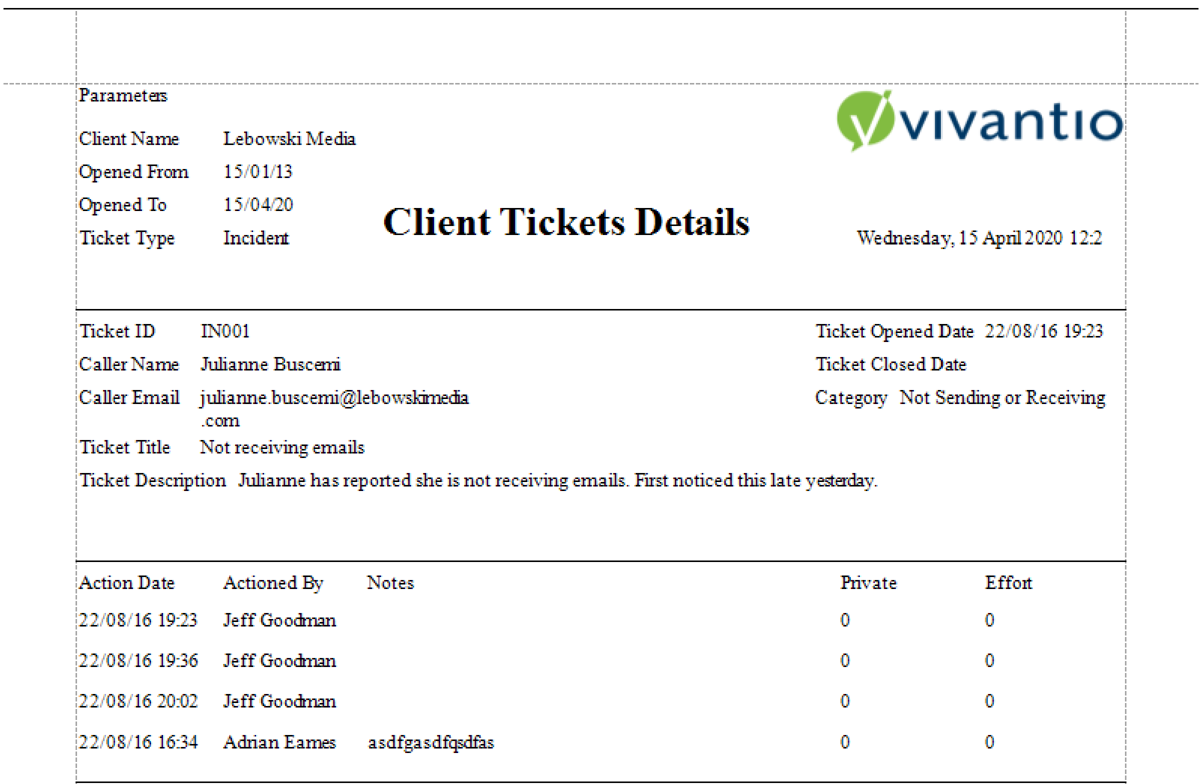
You can **Scale,** Adjust the **Margins,** Change the **Orientation** and **Page Size** within the Print Preview.



The Report Print Preview defaults to only show a Sample of Data (100 records) You can change this to show all records.

The Print Preview also shows the fields you have entered on the report in any sort order and grouped as per the design.

EXAMPLE



Parameters

Client Name	Lebowski Media
Opened From	15/01/13
Opened To	15/04/20
Ticket Type	Incident

vivantio

Client Tickets Details

Wednesday, 15 April 2020 12:2

Ticket ID	IN001	Ticket Opened Date	22/08/16 19:23
Caller Name	Julianne Buscemi	Ticket Closed Date	
Caller Email	julianne.buscemi@lebowskimedia .com	Category	Not Sending or Receiving
Ticket Title	Not receiving emails		

Ticket Description Julianne has reported she is not receiving emails. First noticed this late yesterday.

Action Date	Actioned By	Notes	Private	Effort
22/08/16 19:23	Jeff Goodman		0	0
22/08/16 19:36	Jeff Goodman		0	0
22/08/16 20:02	Jeff Goodman		0	0
22/08/16 16:34	Adrian Eames	asdfgasdfqsdfas	0	0

PUBLISHING YOUR REPORT

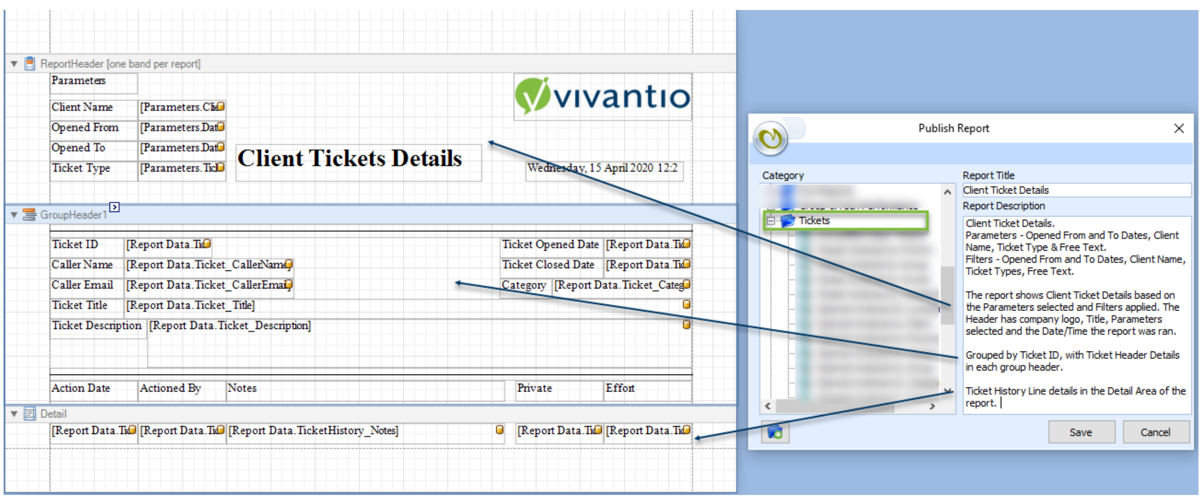
When you're happy with your report, you can publish it to your Vivantio database, so that you can run it online from within Vivantio whenever it is convenient for you.

Click **Publish** in the Report Management Tools section.

The Publish Report Box Appears.

Select the **Folder,** you wish to save the Report in. Give the report a **Title** and the **Description** of what is contained within the report.
Click **Save**

EXAMPLE

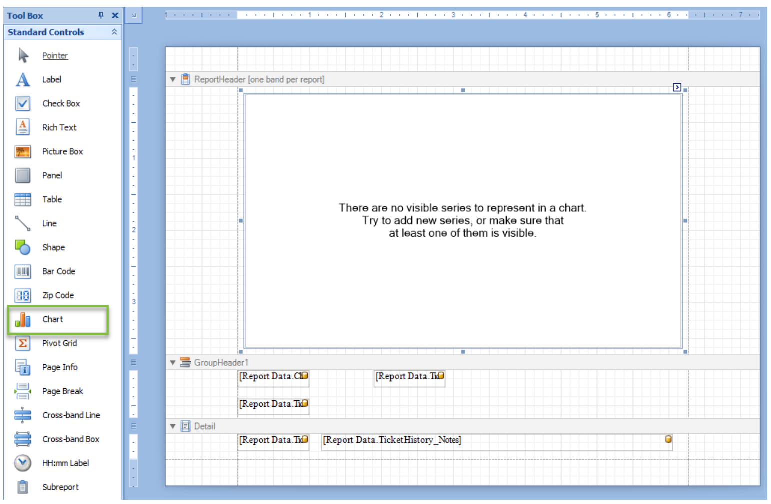


5.2 CHARTS

ADDING THE CHART

Charts can be created to summarize the data held within the report. To create a Chart insert into the appropriate band, the screen shot below examples the Chart being added into the Report Header.

Drag and Drop the **Chart Tool** into the Blank Report Header.
The Chart Wizard automatically opens, the landing screen is **Chart Type.**



Click on the required Chart Type.
Click **Next**

CHART TYPE

APPEARANCE

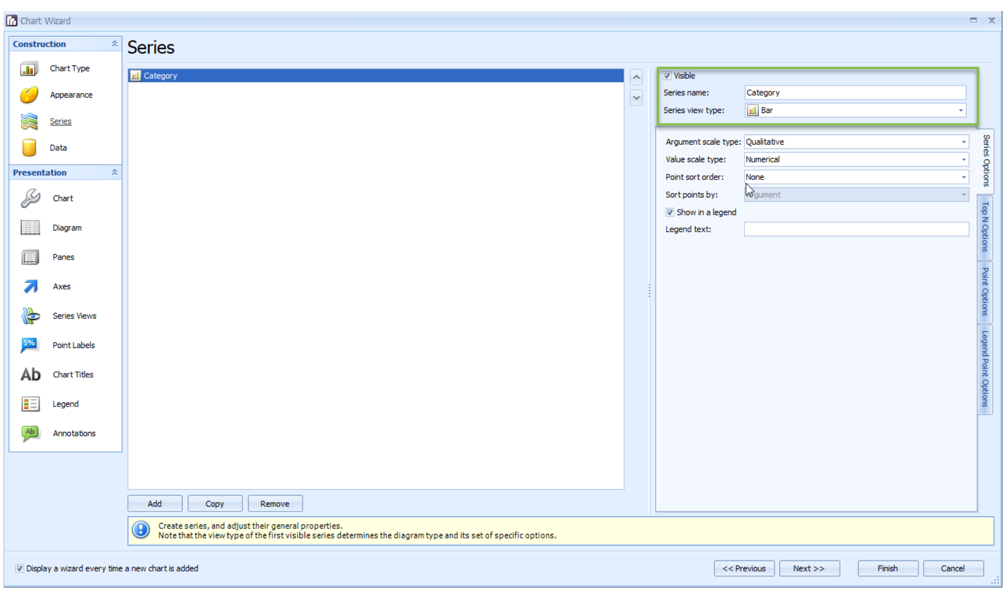
Change the colour scheme of the Chart to suit your business brand colours.

Select a colour palette for your chart from the drop down list.
Click **Next**

SERIES

Edit the **Series Data** according to your chart requirements.

Enter the **Series Name** e.g Category, As we want the Chart to show the number of Tickets raised against each Category.
Select **Next**



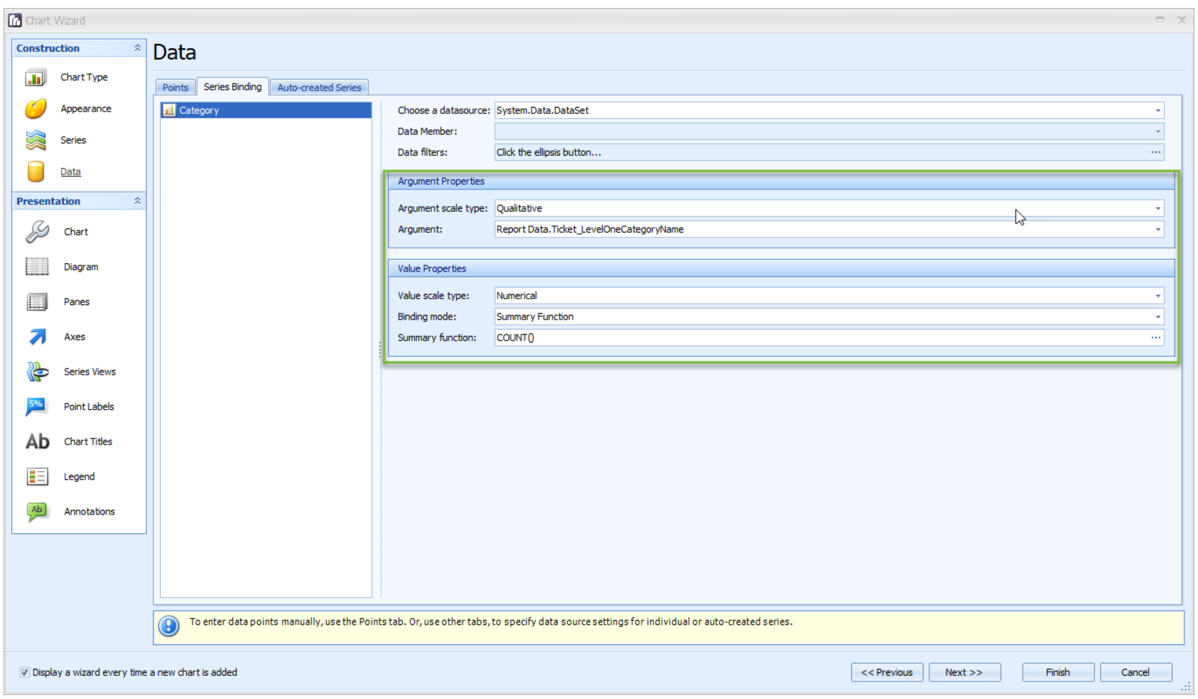
DATA SERIES BINDING

Bind the data to the chart by selecting your Series and applying the Argument and Value.

Enter the **Argument & Value** Data.
Select **Next**

Argument Type – Qualitative (Relating to), Numerical or Date/Time.
Argument – The Field you want to use.
Value Scale Type – Numerical or Date/Time
Binding Mode – Values or Summary Function
Summary Function – Min, Max, Sum, Average or Count

The example shows us using the **Qualitative Argument Type** with an **Argument** of the **Level One Ticket Category** field. Then using a **Count Numerical Summary Function**.



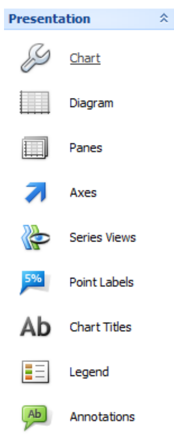
PRESENTATION

The remaining configuration items are based around the look and feel of the Chart.

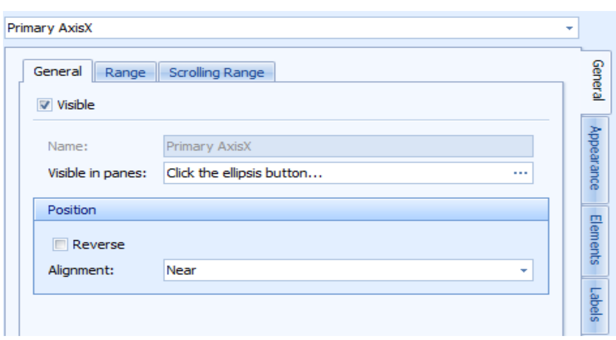
The presentation of the Chart, including labels, titles, angles of the text etc is very comprehensive and as such we recommend looking through all the options.

When the wizard is complete, click **Finish**
The **Chart** will then appear in the canvas

Each option has additional **Tabs** where you can specify different design elements of the section.
These vary depending on the option selected.



For example, the Axes has the options General, Appearance, Elements, Labels, Strips, Constant Lines, Scale Breaks. These are further broken down by Axis and additional Sub Tabs.



Click **Print Preview** in the Toolbar to View the **Chart** in your Report.

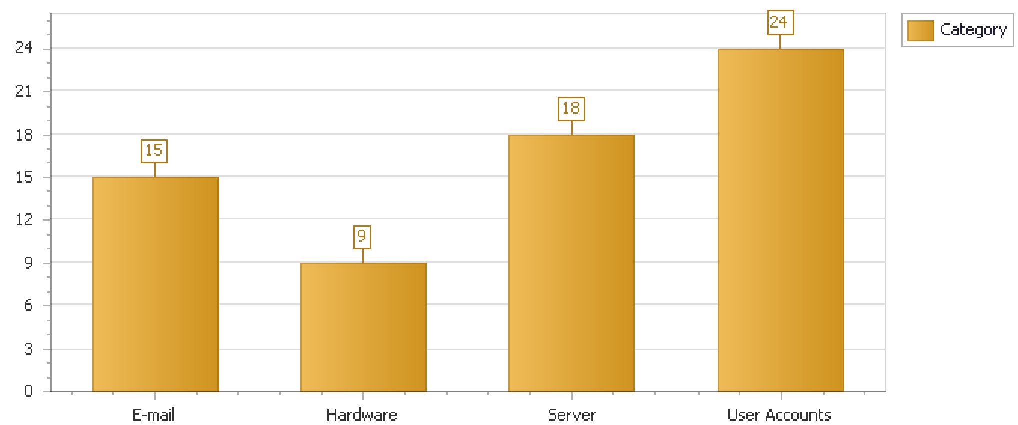
EXAMPLE

Parameters

Client Name	Lebowski Media
Opened From	15/01/13
Opened To	15/04/20
Ticket Type	Incident

Client Tickets Details

Wednesday, 15 April 2020 14:1



Ticket ID	IN001	Ticket Opened Date	22/08/16 19:23
Caller Name	Julianne Buscemi	Ticket Closed Date	
Caller Email	julianne.buscemi@lebowskimedia .com	Category	Not Sending or Receiving
Ticket Title	Not receiving emails		

Ticket Description Julianne has reported she is not receiving emails. First noticed this late yesterday.

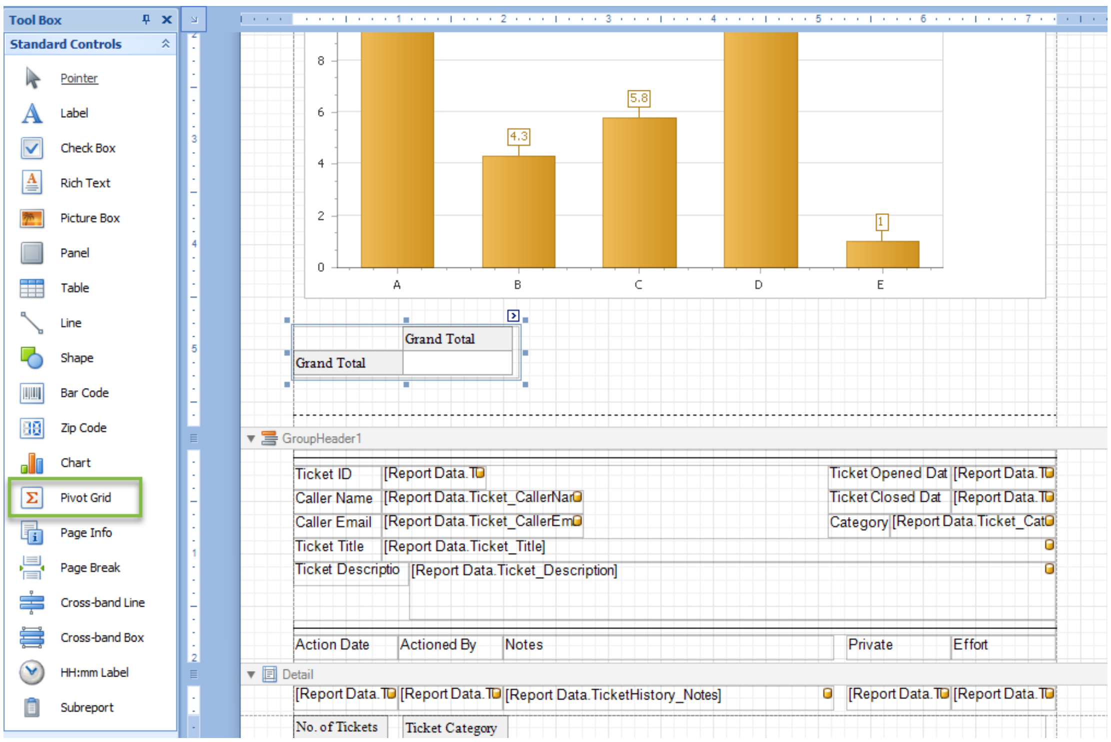
Action Date	Actioned By	Notes	Private	Effort
22/08/16 19:23	Jeff Goodman		0	0
22/08/16 19:36	Jeff Goodman		0	0
22/08/16 20:02	Jeff Goodman		0	0
22/08/16 16:34	Adrian Eames	asdfgasdfqsdfas	0	0

5.3 PIVOT GRIDS

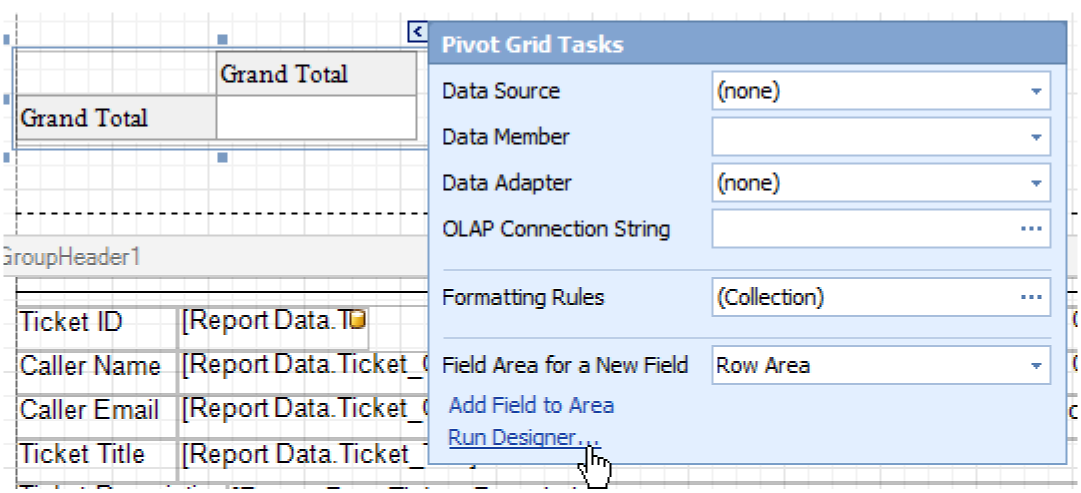
ADDING A PIVOT GRID

Pivot Grids can be added into the Report Canvas to summarise specified data and count the totals. To add a Pivot Grid into your report you start by dragging the Pivot Grid from the Left Hand Tool Box into the required band within your report.

Drag and Drop the Pivot Grid into the Report Canvas. In this example we are adding this into the **Report Header.**



Click on the > and select **Run Designer**

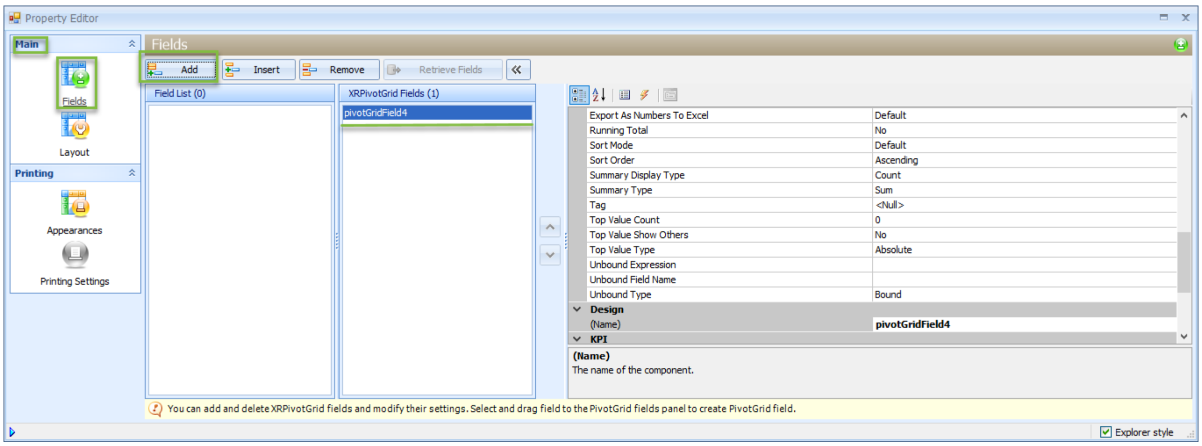


PROPERTY EDITOR

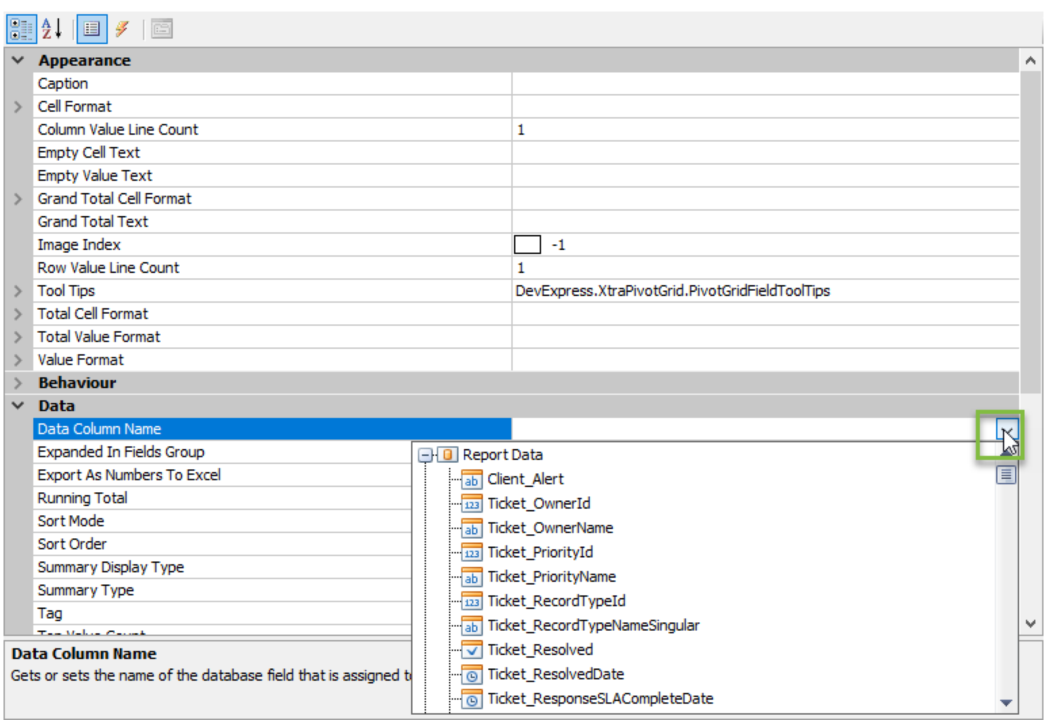
The Pivot Grid Property Editor allows you to add the Fields you require in the Pivot Grid, how they are summarised, the display name etc and the Layout of the Pivot Grid.

FIELDS

From the Main Section select **Fields** and then **Add.** This will show a field that can then be configured. **Add** as many fields as you require to be on the Pivot Grid.



To Link the Fields to a Data Field from the Report Data under the Data Section – Data Column Name – Click the field and from the Drop Down Select the Field you want. Repeat this for all the fields you require in the grid.



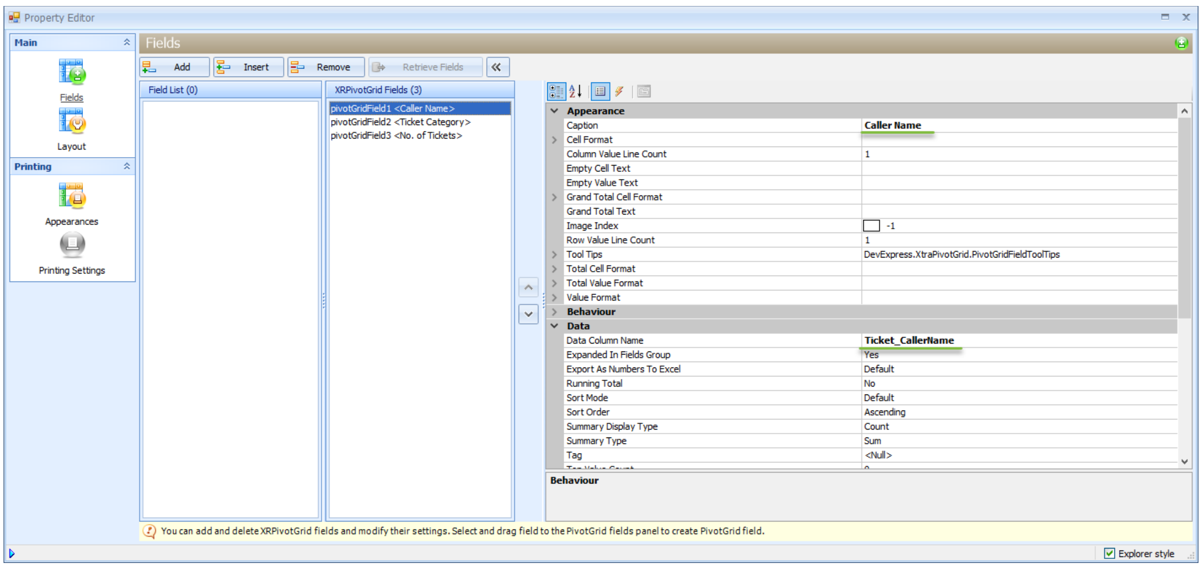
EXAMPLE

The below example shows that for this purpose we have added three fields,

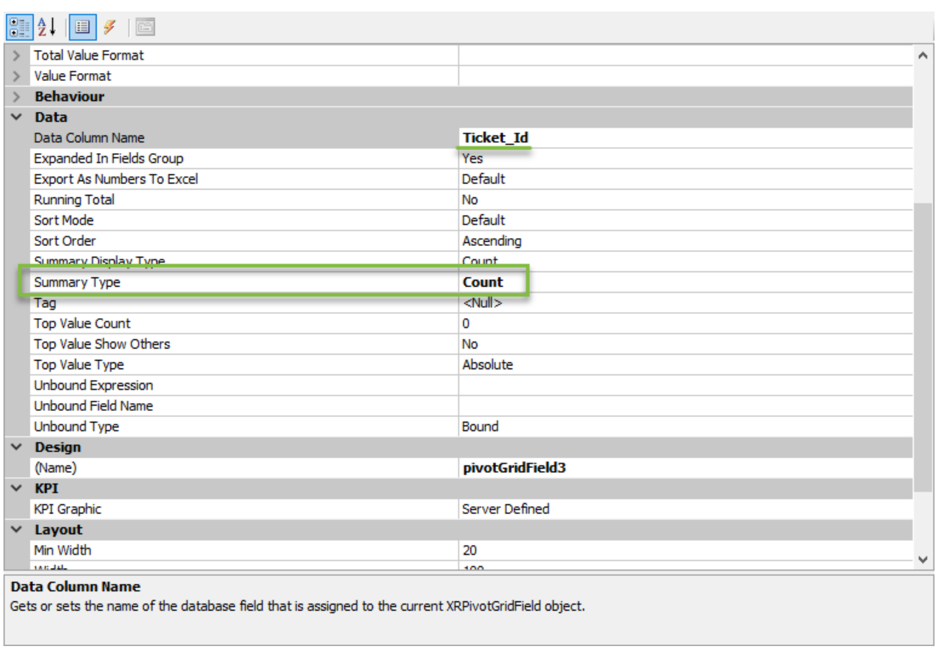
1. Ticket_CallerName
2. Ticket_LevelOneCatagoryName
3. Ticket_Id

We have given each Field a **Caption** which is a more friendly name that will appear in the Pivot Grid.

1. Ticket_CallerName = Caller Name
2. Ticket_LevelOneCatagoryName = Ticket Category
3. Ticket_Id = No. of Tickets (As this is going to be used to count the numbers in the Pivot Grid)

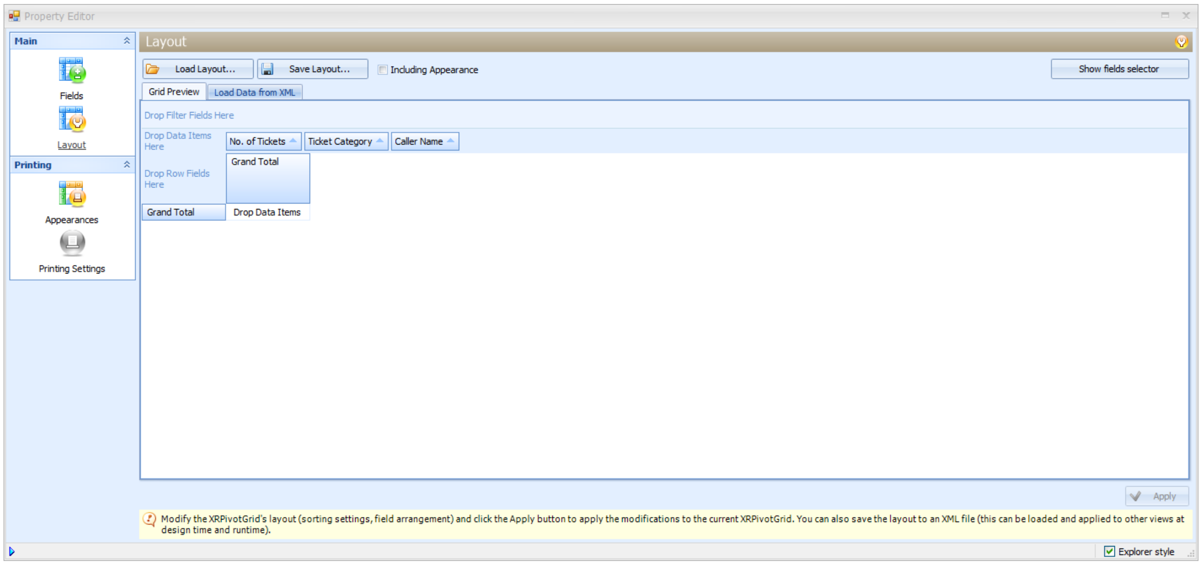


For this example, we are setting the Summary Type on the Ticket_Id Field to be a Count. As we want to Count the number of Tickets and not Sum the Ticket References.



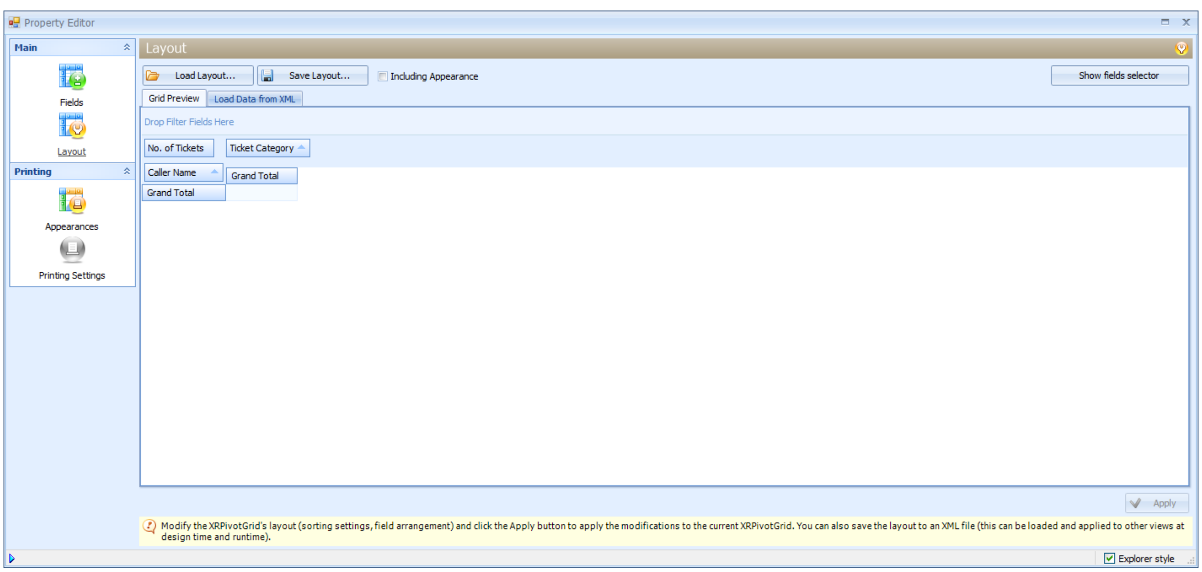
LAYOUT

The Layout allows you to Drag and Drop the Fields into the different areas of the Pivot Grid and depending on where you place them, they will act differently. All the fields will start by being in the Columns Area.



EXAMPLE

We have Dragged the **No. of Tickets** into the **Data Item**. The **Caller Name** has been dragged into the **Row Fields.** Left the **Ticket Category** as a **Column.**



Once you have placed the Fields click **Apply** in the bottom right and close the Window.

Now when you go to the Report Print Preview you will see the Pivot Grid with the Rows (**Caller Name)** and Columns (**Ticket Category**) and the **Count of Tickets** by each Caller in each Category as well as the **Grand Totals**

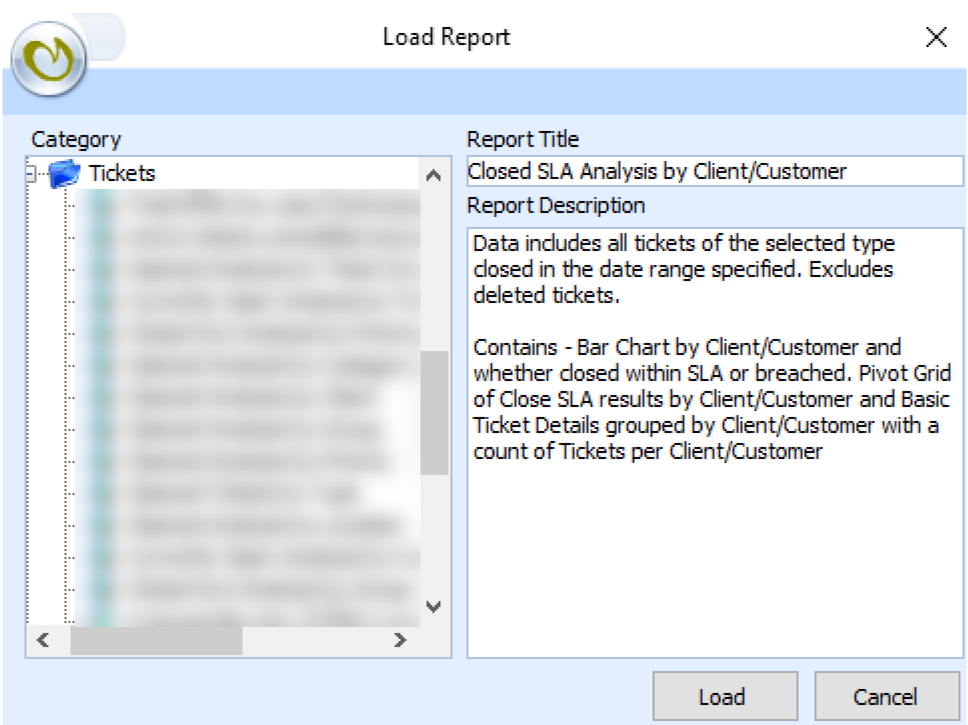
No. of Tickets	Ticket Category					
Caller Name		E-mail	Hardware	Server	User Accounts	Grand Total
Daniel Smith	9				3	12
Helen Richards	7					7
Julianne Buscemi		4	3	10	6	23
Steve Moore		11	6	9	15	41
Grand Total	16	15	9	19	24	83

5.4 SUB REPORTS

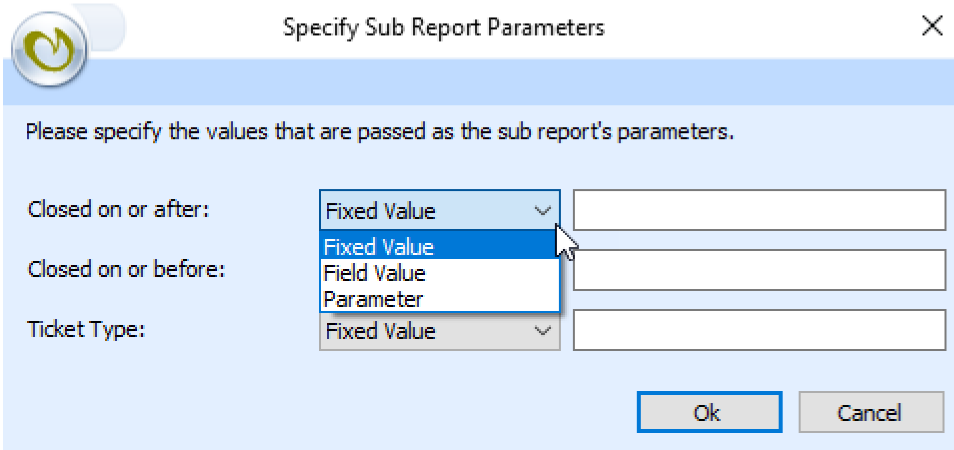
Sub Reports allow you to pull data from another existing Report into the current report you are building that may collect different data from different system tables.
The Sub Report needs to already exist and needs to be published to your Vivantio Instance.

INSERTING A SUB REPORT

From the **Tool Box** Left Hand Menu Drag and Drop the Subreport icon into the Report Canvas. This will then open the Report Selection to chose which report you wish to include in this Report.



Once you select the Report you wish to include you will need to populate how you want the Fields on the Sub Report to be completed. You will be presented with the following screen.

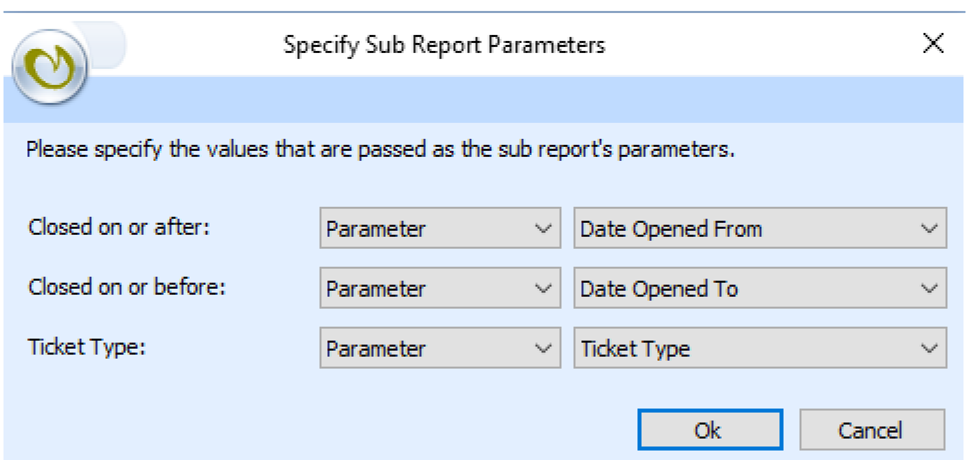


The options are:

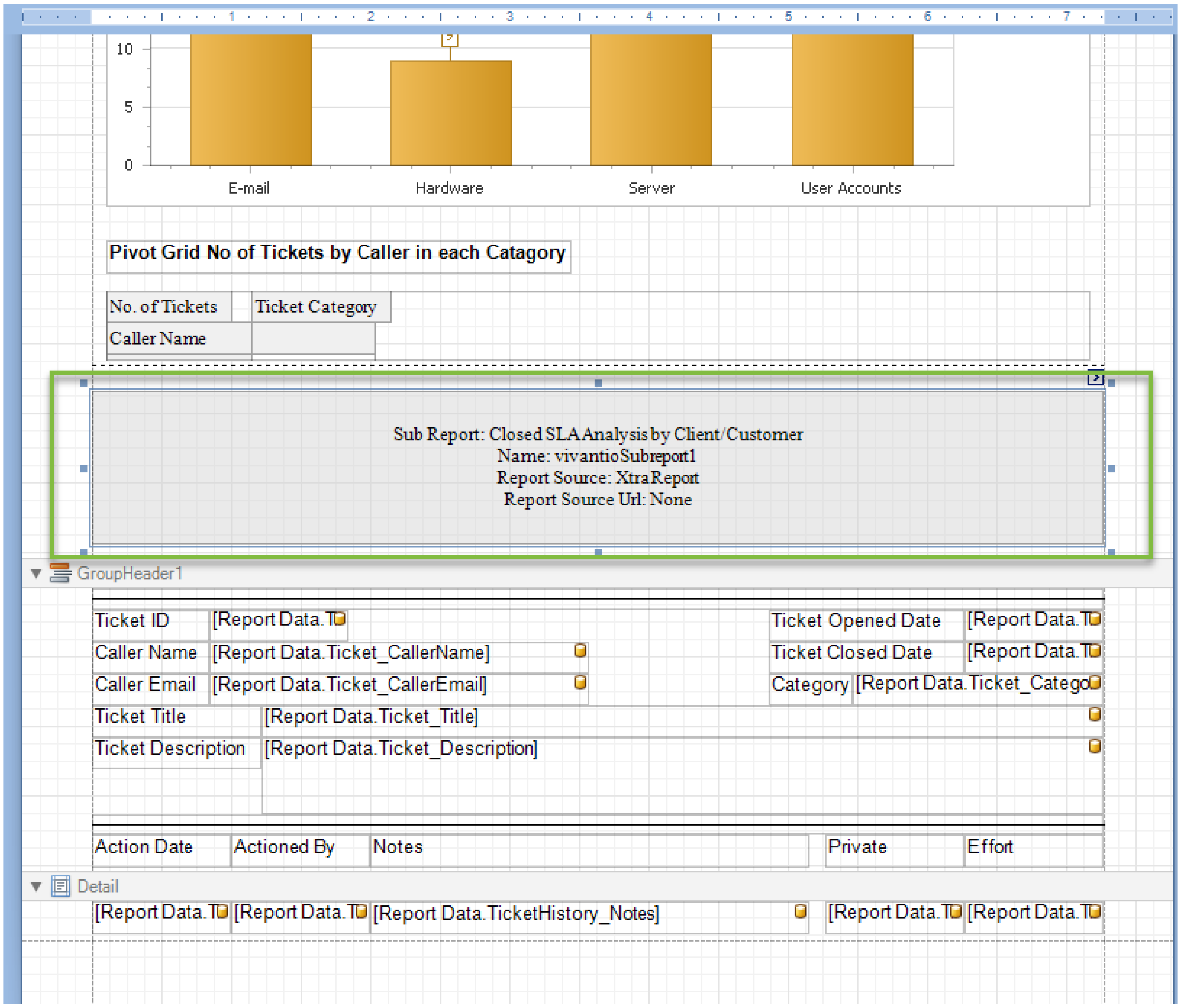
1. **Fixed Value**. The Value will always be the Same.
2. **Field Value**. You can select a Field within the Main Report to populate the Value in the Sub Report Parameter.
3. **Parameter**. Link the Parameters you enter on the Main Report to Populate the Parameters on the Sub Report.

EXAMPLE

This example shows that we have used the **Parameter** option to use the Parameter Selection on the Main Report to populate the Sub Report Parameters.



You can then resize the box containing the Sub Report Data.



The Page Layout of the Sub Report will be retained in the Main Report so ensure that you are using the same margins and orientation on both reports.

The Example Report (excluding the Sub Report) can be imported into your system via the Report Catalogue.
Reports > Report Catalogue > Tickets >
Report Builder Guide Example – Client Ticket Details

6 COMMON FIELDS

Ticket_CallerName	Caller Name currently assigned to a Ticket
Ticket_CategoryLineage	The current, full category of a Ticket
Ticket_ClientName	If Client area is turned on returns the Client's name
Ticket_CloseDate	The date and time that the ticket was closed (UTC)
Ticket_CloseSLATimeRemaining	The amount of time (in minutes) left before the closure SLA breaches. Please note that this value will become negative if the target time has been exceeded
Ticket_DisplayId	Unique identify for each Ticket
Ticket_GroupName	The Group currently assigned to a Ticket
Ticket_ImpactName	The impact name
Ticket_LevelOneCategoryName	The top level of a category
Ticket_LevelTwoCategoryName	The second level of a category
Ticket_LocationName	The Location currently assigned to a Ticket
Ticket_OpenDate	The date and time that the Call was opened (UTC)
Ticket_OwnerName	The current Service Desk User who is assigned to the Ticket
Ticket_PriorityName	The current Priority
Ticket_RecordTypeNameSingular	The singular name of the ticket type
Ticket_StatusName	The current Status name
Ticket_StatusType	The current status behaviour: 1 - open, 2 - hold, 4 - pending, 5 - closed, 99 - deleted
Ticket_TakenByName	The Service Desk User who recorded the Ticket (please note the value of this field can equal EMail Service and Self Service)
Ticket_Title	Ticket title
Ticket_WithinCloseSLA	Was ticket closed within SLA: True or False
Ticket_WithinResponseSLA	Was ticket responded to within the SLA: True or False

7 CONTACT INFORMATION

If you would like to discuss any aspect of this document in more detail or if you have any other questions, please contact us:

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