

Copilot Business Intelligence and Reporting Tool

Getting Started

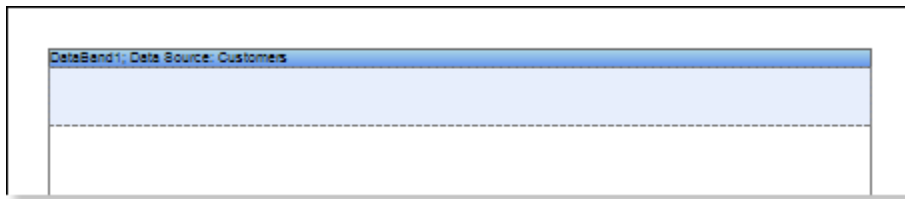
1 Getting Started

This section discusses basic steps for creating various reports and showing them in a viewer. These examples demonstrate basic functionality of the reporting tool, and provide you with step-by-step instructions on how to create reports. We suggest that you review the following tutorials first.

1.1 Simple List Report

Do the following steps to create a simple list report:

1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Put a **DataBand** on a page of a report template.

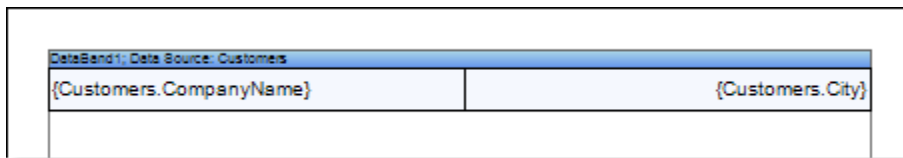


4. Edit **DataBand**:
 - 4.1. Align the **DataBand** by height;
 - 4.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
 - 4.3. Change the **DataBand** background;
 - 4.4. Enable **Borders** for the **DataBand**, if required;
 - 4.5. Change the border color.
5. Define the data source for the **DataBand** using the **Data Source** property:



6. Put text components with expressions in the **DataBand**. Where expression is a reference to the data field. For example, put two text components with expressions: **{Customers.CompanyName}** and **{Customers.City}**;
7. Edit **Text** and **TextBox** component:
 - 7.1. Drag and drop the text component in the **DataBand**;
 - 7.2. Change parameters of the text font: size, type, color;
 - 7.3. Align the text component by width and height;
 - 7.4. Change the background of the text component;
 - 7.5. Align text in the text component;
 - 7.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
 - 7.7. Enable **Borders** for the text component, if required.
 - 7.8. Change the border color.

The picture below shows a report template with the list:



DataBand1: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}

8. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of a simple list report:

Alfreds Futterkiste	Berlin
Ana Trujillo Emparedados y helados	México D.F.
Antonio Moreno Taquería	México D.F.
Around the Horn	London
Berglunds snabbköp	Luleå
Blauer See Delikatessen	Mannheim
Blondesddsl père et fils	Strasbourg
Bóldo Comidas preparadas	Madrid
Bon app'	Marseille
Bottom-Dollar Markets	Tsawassen

9. Go back to the report template;

10. If needed, add other bands to the report template, for example, **ReportTitleBand** and **ReportSummaryBand**;

11. Edit these bands:

- 11.1. Align them by height;
- 11.2. Change values of properties, if required;
- 11.3. Change the background of bands;
- 11.4. Enable **Borders**, if required;
- 11.5. Set the border color.

The picture below shows a simple list report template with **ReportTitleBand** and **ReportSummaryBand**:

ReportTitleBand1	
DataBand1: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}
ReportSummaryBand1	

12. Put text components with expressions in the these bands. The expression in the text component is a title in the **ReportTitleBand**, and a summary in the **ReportSummaryBand**.

13. Edit text and textcomponents:

- 13.1. Drag and drop the text component in the band;
- 13.2. Change font options: size, type, color;

- 13.3. Align text component by height and width;
- 13.4. Change the background of the text component;
- 13.5. Align text in the text component;
- 13.6. Change values of text component properties, if required;
- 13.7. Enable **Borders** of the text component, if required;
- 13.8. Set the border color.

The picture below shows a sample of the simple list report template:

ReportTitleBand1	
DataBand1: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}
ReportSummaryBand1	
Count:{Count()}	

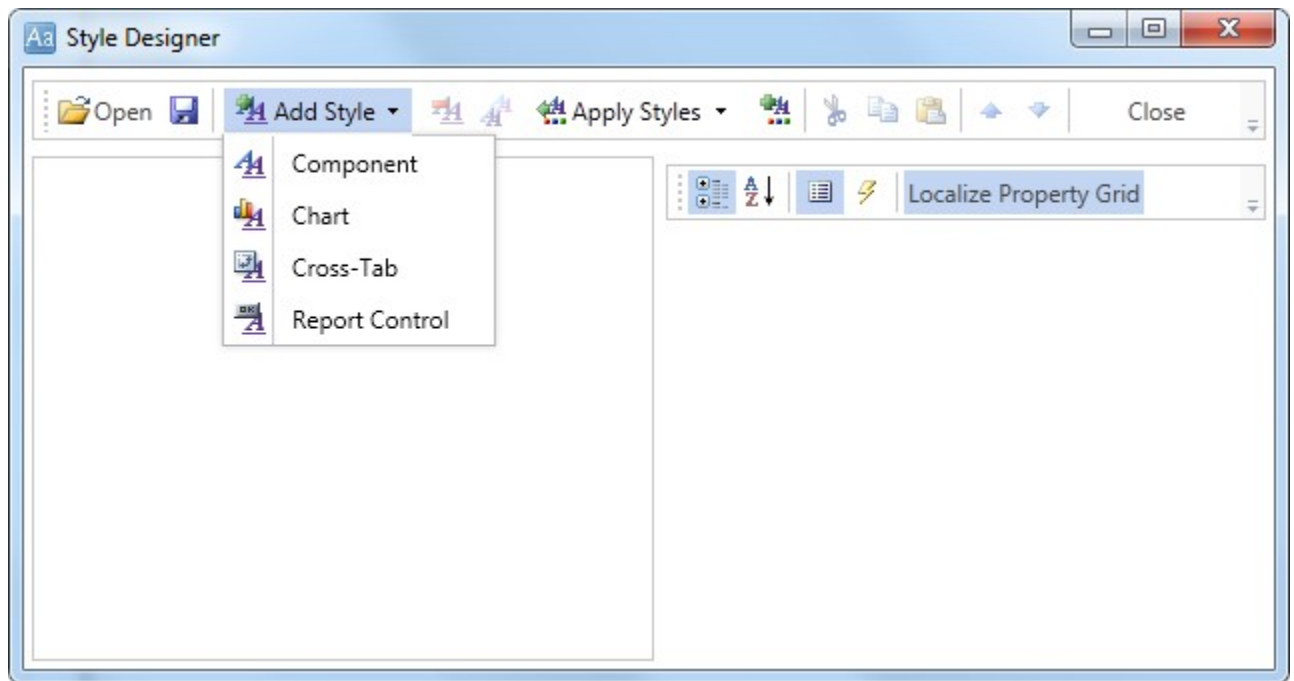
14. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of a simple list report with the title and summary:

Alfreds Futterkiste	Berlin
Ana Trujillo Emparedados y helados	México D.F.
Antonio Moreno Taquería	México D.F.
Around the Horn	London
Berglunds snabbköp	Luleå
Blauer See Delikatessen	Mannheim
Blondesddsl père et fils	Strasbourg
Bóldo Comidas preparadas	Madrid
Bon app'	Marseille
Bottom-Dollar Markets	Tsawassen
B's Beverages	London
Cactus Comidas para llevar	Buenos Aires
Centro comercial Moctezuma	México D.F.
Chop-suey Chinese	Bern
Tradição Hipermercados	Sao Paulo
Trail's Head Gourmet Provisioners	Kirkland
Vaffeljernet	Århus
Victuailles en stock	Lyon
Vins et alcools Chevalier	Reims
Die Wandernde Kuh	Stuttgart
Wartian Herkku	Oulu
Wellington Importadora	Resende
White Clover Markets	Seattle
Wilman Kala	Helsinki
Wolski Zajazd	Warszawa

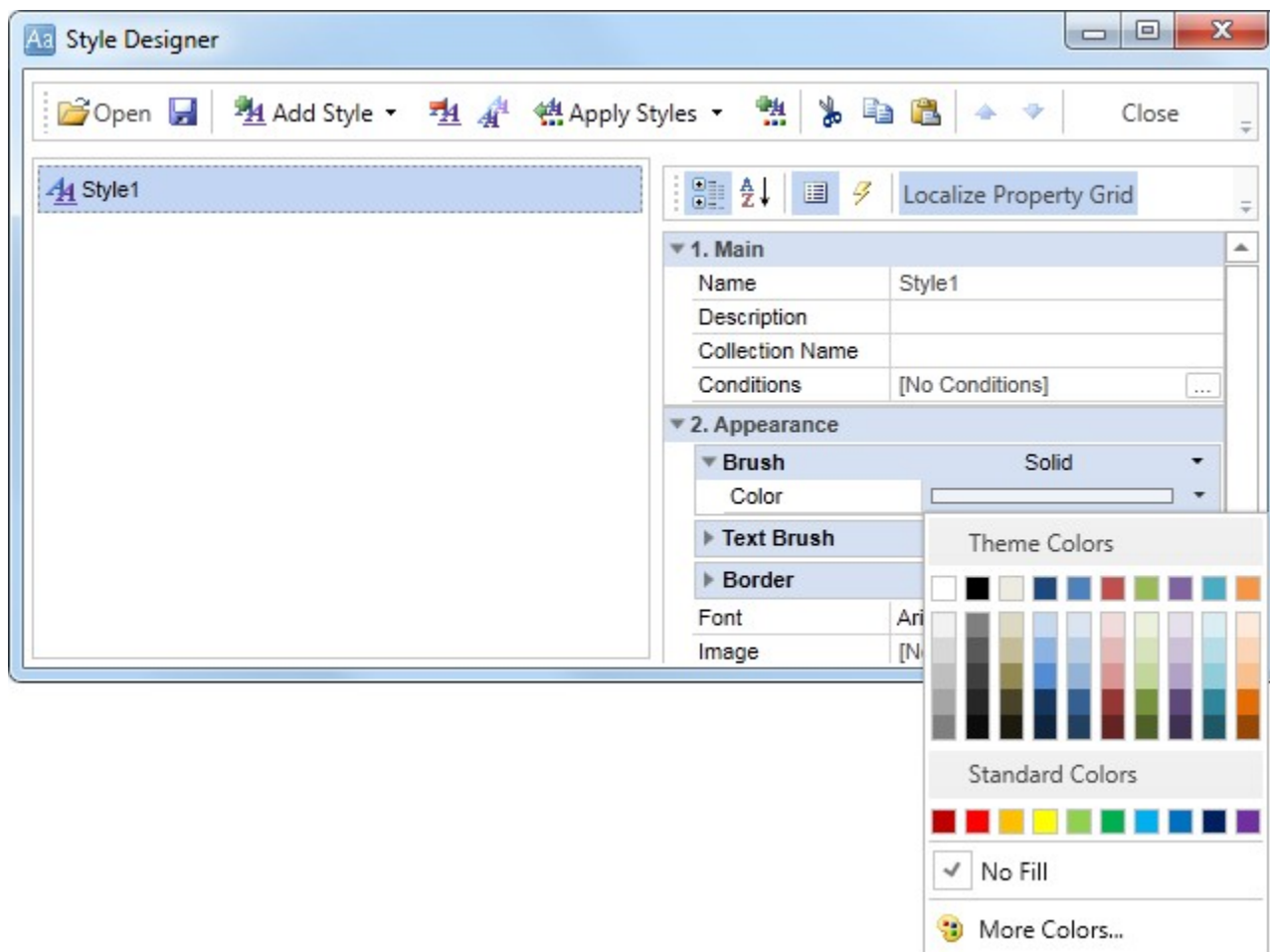
Count:91

Adding styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style**

Designer:

Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered simple list report with alternative color of rows:

Alfreds Futterkiste	Berlin
Ana Trujillo Emparedados y helados	México D.F.
Antonio Moreno Taquería	México D.F.
Around the Horn	London
Berglunds snabbköp	Luleå
Blauer See Delikatessen	Mannheim
Biondesdél père et fils	Strasbourg
Bólido Comidas preparadas	Madrid
Bon app'	Marseille
Bottom-Dollar Markets	Tsawassen
B's Beverages	London
Cactus Comidas para llevar	Buenos Aires
Centro comercial Mactezuma	México D.F.
Chop-suey Chinese	Bern
Comércio Mineiro	Sao Paulo
Consolidated Holdings	London
Drachenblut Delikatessen	Aachen
Du monde entier	Nantes
Eastern Connection	London
Ernst Handel	Graz
Tradição Hipermercados	Sao Paulo
Trail's Head Gourmet Provisioners	Kirkland
Vaffeljernet	Århus
Victualies en stock	Lyon
Vins et alcools Chevalier	Reims
Die Wandernde Kuh	Stuttgart
Wartian Herkku	Oulu
Wellington Importadora	Resende
White Clover Markets	Seattle
Wilman Kala	Helsinki
Wolski Zajazd	Warszawa

Count:91

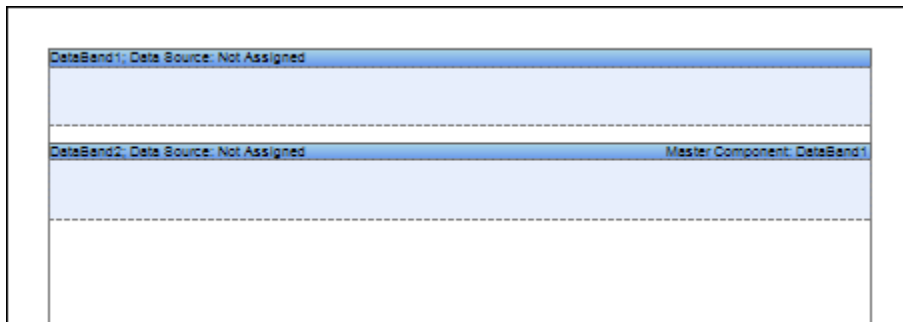
1.2 Master-Detail Report

Do the following steps to create a master-detail report:

1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Create **Relation** between data sources. If the relation will not be created and/or the **Relation** property of the **Detail** data source will not be filled, then, for **Master** entry,

all **Detail** entries will be output;

4. Put two **DataBands** on a page of a report template.



5. Edit **DataBand1** and **DataBand2**:

- 5.1. Align them by height;
- 5.2. Change values of required properties. For example, if to set the **PrintIfDetailEmpty** property of the **DataBand1** that is the **Master** component in the **Master-Detail** report to **true**, if it is necessary all **Master** entries be printed in any case, even if **Detail** entries not present. And set the **CanShrink** property of the **DataBand2** that is the **Detail** component in the **Master-Detail** report to **true**, if it is necessary to shrink this band;
- 5.3. Change the background color of the **DataBand**;
- 5.4. Enable **Borders** of the band, if required;

6. Define data sources for **DataBands**, and define the **Master** component. In our tutorial, the **Master** component is the **DataBand1**. This means that in the **Data Setup** window of the lower **DataBand2**, the **DataBand1** will be specified as the Master component in the **Master Component** tab;
7. Fill the **Data Relation** property of the **DataBand**, that is the **Detail** components. In our case this **DataBand2**:



8. Put text components with expressions on **DataBands**. Where expression is a reference to the data field. For example, put a text component with the expression **{Customers.CompanyName}** on the **DataBand1**. Put a text component with **{Products.ProductName}** and **{Products.UnitPrice}** expressions in the **DataBand2**;
9. Edit **Text** and **TextBox** component:
 - 9.1. Drag and drop the text component in **DataBands**;
 - 9.2. Change parameters of the text font: size, type, color;

- 9.3. Align the text component by width and height;
- 9.4. Change the background of the text component;
- 9.5. Align text in the text component;
- 9.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
- 9.7. Enable **Borders** for the text component, if required.
- 9.8. Change the border color.

The picture below shows the master-detail report template.

DataBand1: Data Source: Categories	
{Categories.CategoryName}	

DataBand2: Data Source: Products	Master Component: DataBand1
{Products.ProductName}	{Products.UnitPrice}

10. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of the master-detail report:

Beverages	
Chai	18
Chang	19
Guaraná Fantástica	4,5
Sasquatch Ale	14
Steeleye Stout	18
Côte de Blaye	263,5
Chartreuse verte	18
Ipoh Coffee	46
Laughing Lumberjack Lager	14
Outback Lager	15
Rhönbräu Klosterbier	7,75
Lakkaikööri	18

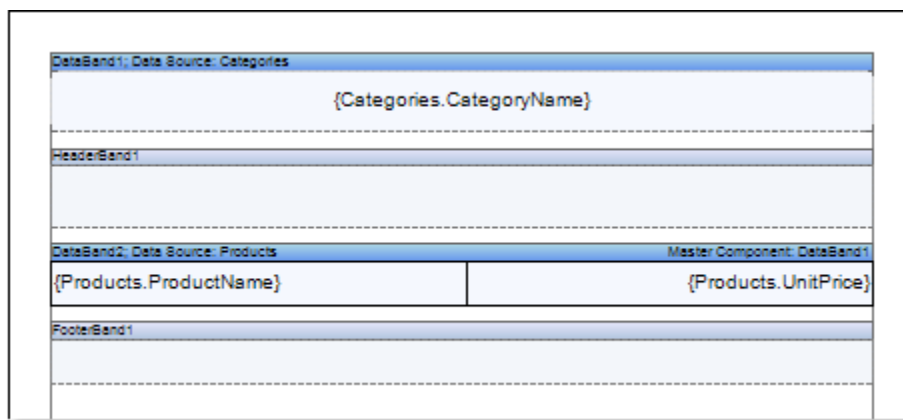
11. Go back to the report template;

12. If needed, add other bands to the report template, for example, **HeaderBand** and **FooterBand**;

13. Edit these bands:

- 13.1. Align them by height;
- 13.2. Change values of properties, if required;
- 13.3. Change the background of bands;
- 13.4. Enable **Borders**, if required;
- 13.5. Set the border color.

The picture below shows a simple list report template with **HeaderBand** and **FooterBand**:



14. Put text components with expressions in the these bands. The expression in the text component is a header in the **HeaderBand**, and a footer in the **FooterBand**.

15. Edit text and textcomponents:

- 15.1. Drag and drop the text component in the band;
- 15.2. Change font options: size, type, color;
- 15.3. Align text component by height and width;
- 15.4. Change the background of the text component;
- 15.5. Align text in the textcomponent;
- 15.6. Change values of text component properties, if required;
- 15.7. Enable **Borders** of the text component, if required;
- 15.8. Set the border color.

The picture below shows a sample of the master-detail report template:

DataBand1: Data Source: Categories	
{Categories.CategoryName}	
HeaderBand1	
ProductName	UnitPrice
DataBand2: Data Source: Products	
Master Component: DataBand1	
{Products.ProductName}	{Products.UnitPrice}
FooterBand1	
Count:{Count()}	

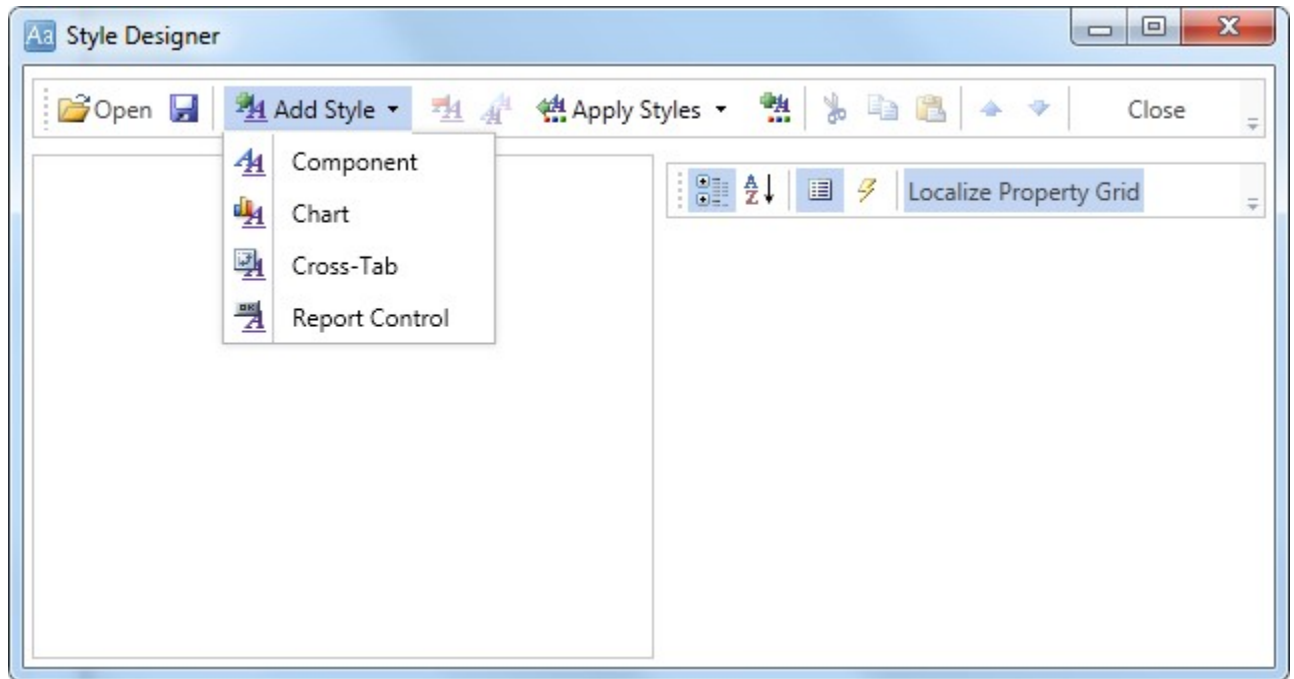
16. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of the master-detail report with header and footer:

Beverages	
ProductName	UnitPrice
Chai	18
Chang	19
Guaraná Fantástica	4,5
Sasquatch Ale	14
Steeleye Stout	18
Côte de Blaye	263,5
Chartreuse verte	18
Ipoh Coffee	46
Laughing Lumberjack Lager	14
Outback Lager	15
Rhönbräu Klosterbier	7,75
Lakkaikööri	18
Count:12	

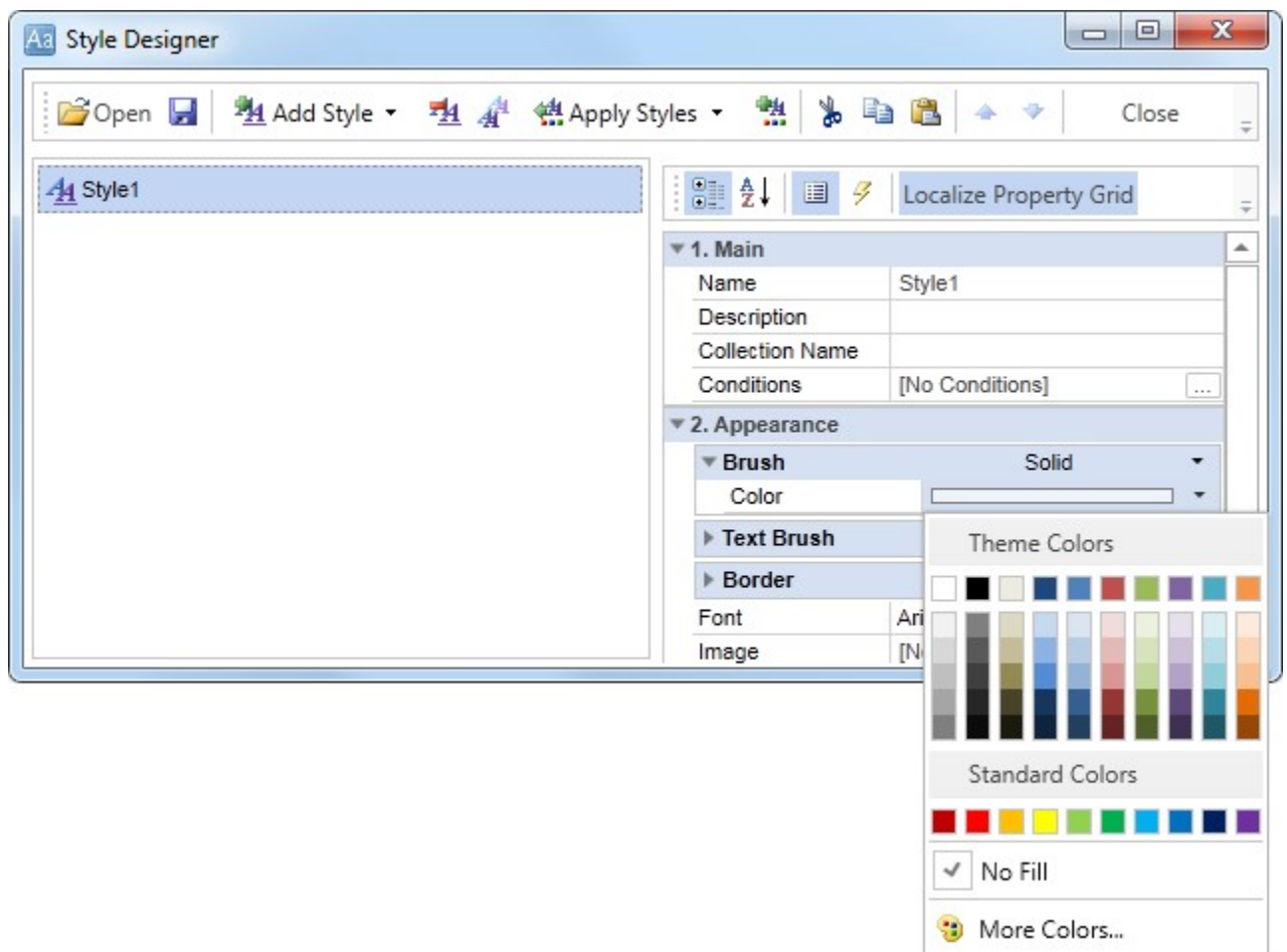
Adding styles

1. Go back to the report template;

2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then in the list of **Even style** and **Odd style** properties a new value (a style of a list of odd and even rows).

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered master-detail report with alternative color of rows:

Beverages	
ProductName	UnitPrice
Chai	18
Chang	19
Guaraná Fantástica	4,5
Sasquatch Ale	14
Steeleye Stout	18
Côte de Blaye	263,5
Chartreuse verte	18
Ipoh Coffee	46
Laughing Lumberjack Lager	14
Outback Lager	15
Rhönbräu Klosterbier	7,75
Lakkalikööri	18
Count:12	

If to select the **DataBand1**, that is the **Master** component in the **Master-Detail** report, then it is possible to change values of **Even style** and **Odd style** properties. In such a case, alternative row color will be applied only for **Master** entries.

1.3 Report with Groups

Do the following steps to create a report with grouping:

1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Create a report or open already created one. For example, we can take a simple list report created in the chapter "Simple List Report".

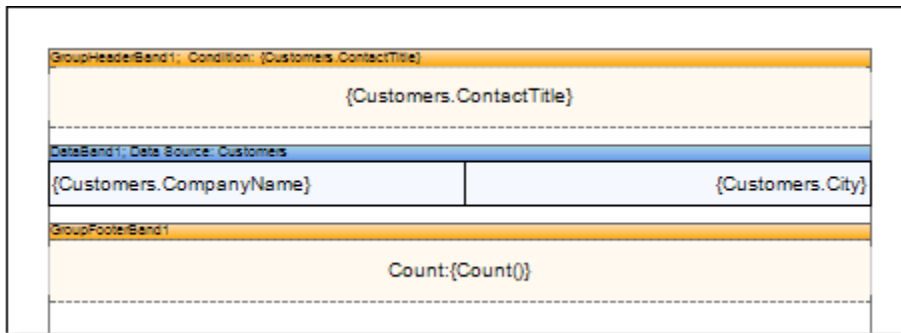
DataBand1: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}

4. Add **GroupHeaderBand** and **GroupFooterBand** to the report template. The **GroupHeaderBand** should be placed higher than the **DataBand** to what it is related to. The **GroupFooterBand** is placed under the **Data** to what **GroupHeader** is related. Each **GroupFooter** corresponds to a specified **GroupHeader**. The **GroupFooter** band will not output without **GroupHeader**. The picture below shows a report template with added **GroupHeaderBand** and **GroupFooterBand**.

GroupHeaderBand1: Condition:	
DataBand1: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}
GroupFooterBand1	

5. Edit **GroupHeaderBand** and **GroupFooterBand**:
- 5.1. Align them by height;
 - 5.2. Change values of properties according to requirements. For example, set the **KeepGroupHeaderTogether** property for the **GroupHeaderBand** to **true**, it is necessary to keep the group header with the group. And for the **GroupFooterBand** set the **KeepFooterTogether** to **true**, if it is required to keep the footer with the group;
 - 5.3. Set the background of the **GroupHeaderBand**;
 - 5.4. Enable **Borders** of the **DataBand**, if required;
6. Set the condition data grouping in the report using the **Condition** property of the **GroupHeader** band. Condition of grouping can be set by setting the expression or by selecting the data column from the data source. In our tutorial, define the **{Customers.ContactTitle}** expression in the condition of grouping.
7. Put a text component in the **GroupHeaderBand** and put the expression **{Customers.ContactTitle}** into this text component. Put a text component in the **GroupFooterBand** and put the expression **{Count()}** into this text component. The **{Count()}** function will count summary by the amount of entries in each group. The picture below shows a report template with the condition of grouping set, and text

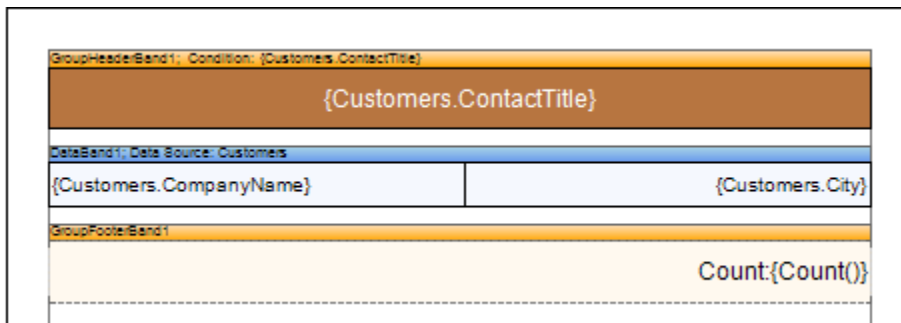
components placed in **GroupHeaderBand** and **GroupFooterBand**:



8. Edit expressions and text components:

- 8.1. Drag and drop the text component in **GroupHeaderBand** and **GroupFooterBand**;
- 8.2. Change parameters of the text font: size, type, color;
- 8.3.. Align the text component by width and height;
- 8.4. Change the background of the text component;
- 8.5. Align text in the text component;
- 8.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
- 8.7. Enable **Borders** for the text component, if required.
- 8.8. Change the border color.

The picture below shows a sample of the edited report template with grouping:

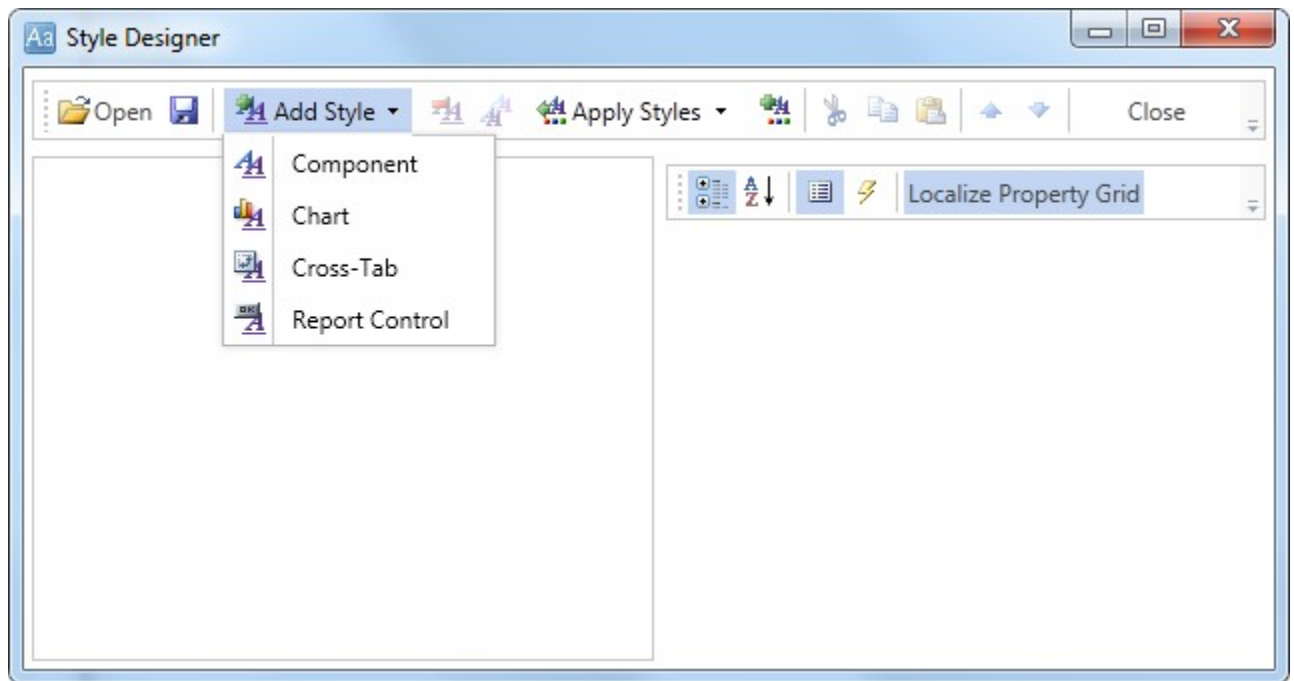


9. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of the report with grouping:

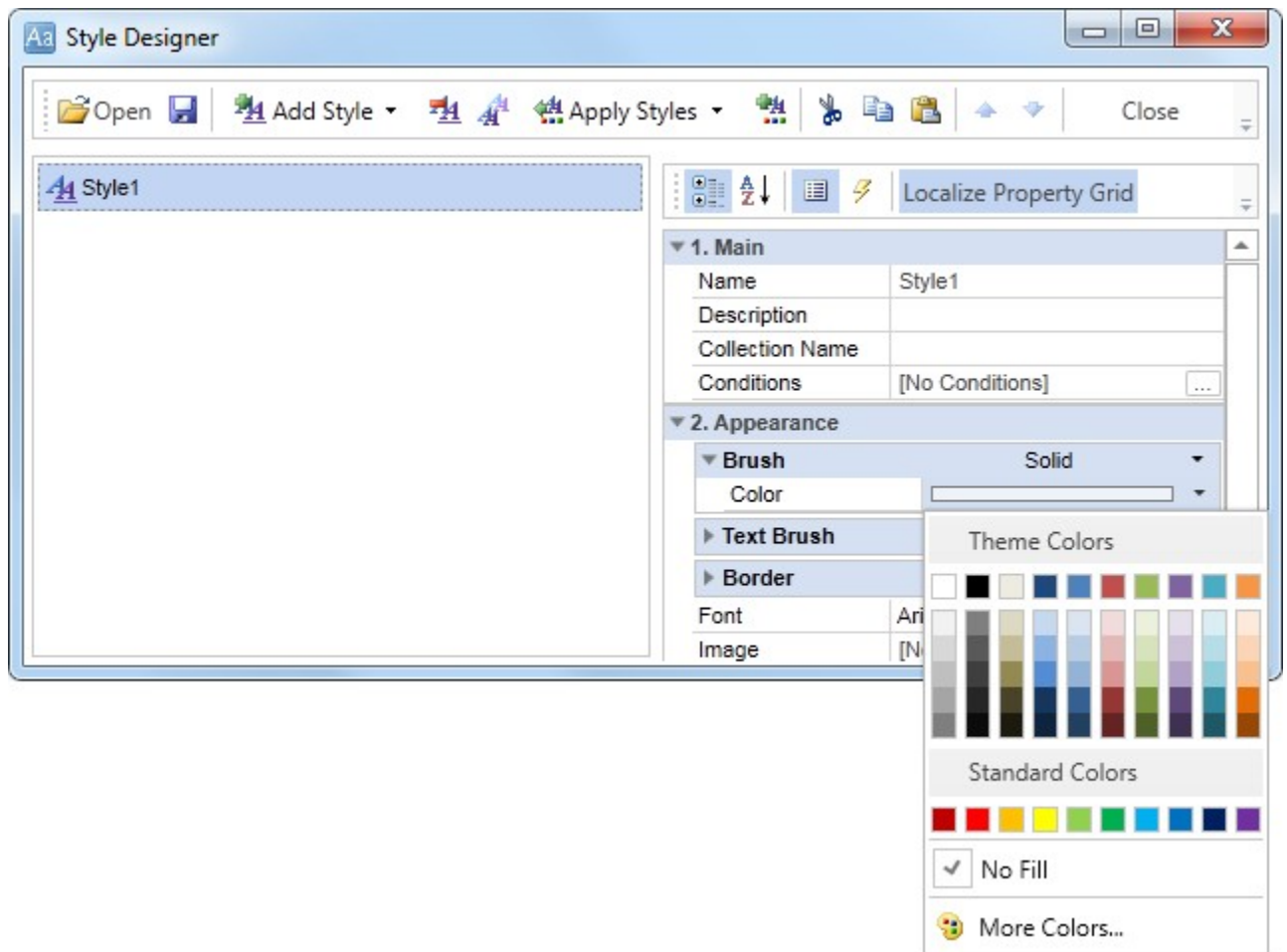
Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delícia	Rio de Janeiro
FISSA Fabrica Inter. Salchichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Cames	Rio de Janeiro
Vins et alcools Chevalier	Reims
Count:10	

Adding styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then in the list of **Even style** and **Odd style** properties a new value (a style of a list of odd and even rows).

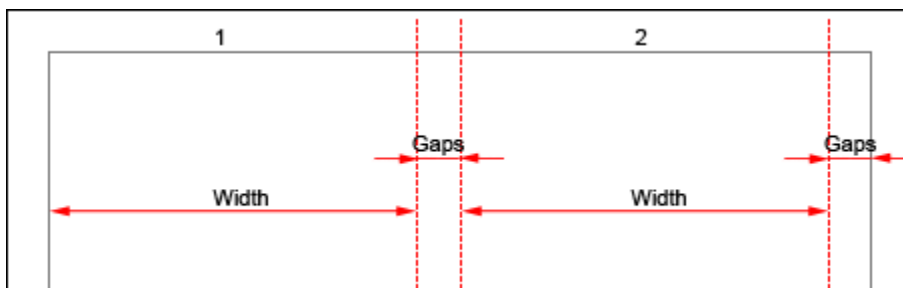
4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered report with grouping and alternative color of rows:

Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delícia	Rio de Janeiro
FISSA Fabrica Inter. Salchichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevalier	Reims
Count:10	

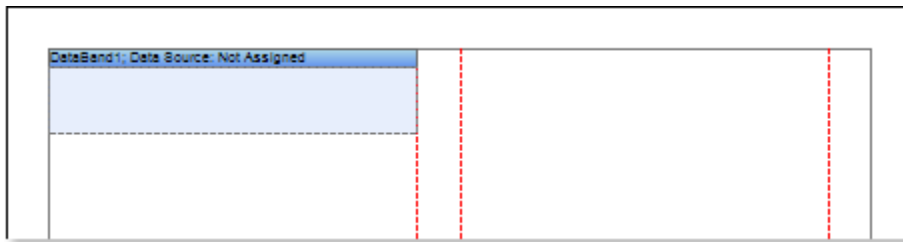
1.4 Report with Columns on Page

Do the following steps to create a report with columns on a page:

1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Set column options: the number of columns, column width, and column gap. For example, set the number of columns equal to **2**, with the gap equal to **1**. The column width is created automatically. The picture below shows a sample of the report template with two columns:



4. Put **DataBand** on a page.



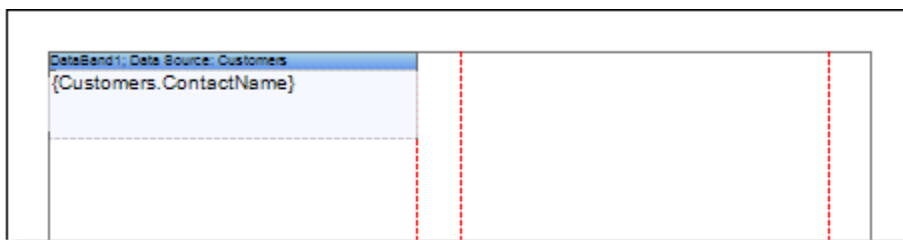
5. Edit **DataBand**:

- 5.1. Align the **DataBand** by height;
- 5.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
- 5.3. Change the **DataBand** background;
- 5.4. Enable **Borders** for the **DataBand**, if required;
- 5.5. Change the border color.

6. Define the data source for the **DataBand** using the **Data Source** property:



7. Put text components with expressions on the **DataBand**. Where expression is a reference to the data field. For example, put two text components with expressions: **{Customers.ContactName}**.



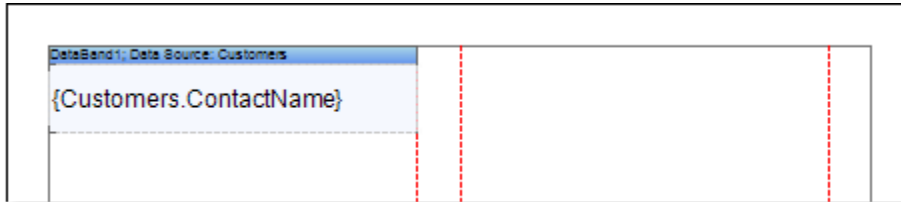
8. Edit expressions and textcomponents:

- 8.1. Drag and drop the text component in **DataBand**;
- 8.2. Change parameters of the text font: size, type, color;
- 8.3. Align the text component by width and height;
- 8.4. Change the background of the text component;
- 8.5. Align text in the textcomponent;
- 8.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;

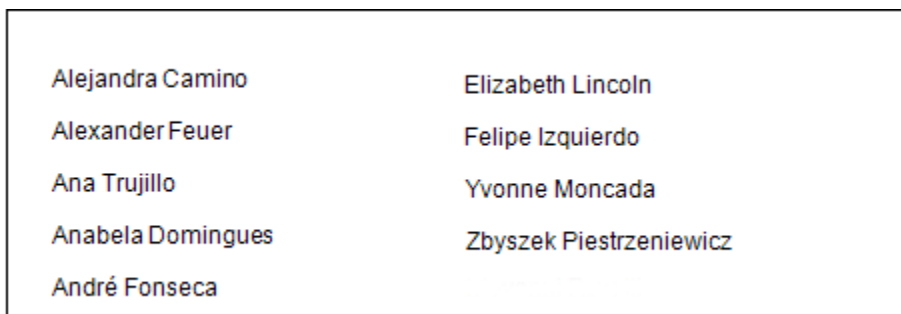
8.7. Enable **Borders** for the text component, if required.

8.8. Change the border color.

The picture below shows a report template with edited text component:



9. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of the report with two columns on a page:

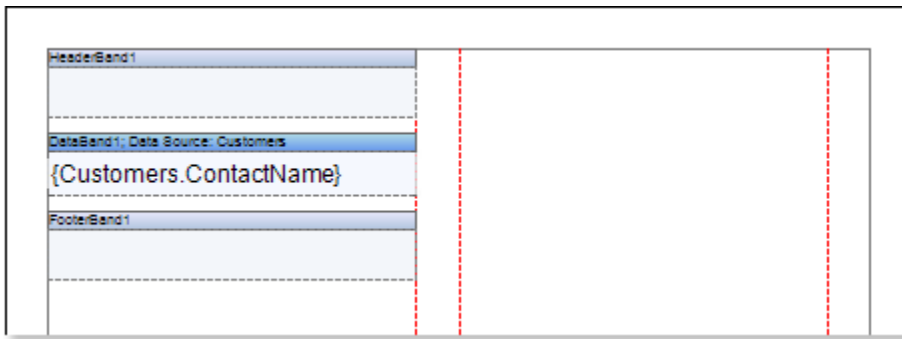
A screenshot of a rendered report showing two columns of customer names. The names are listed in two columns, with the first column on the left and the second column on the right. The names are: Alejandra Camino, Alexander Feuer, Ana Trujillo, Anabela Domingues, André Fonseca, Elizabeth Lincoln, Felipe Izquierdo, Yvonne Moncada, and Zbyszek Piestrzeniewicz.

Alejandra Camino	Elizabeth Lincoln
Alexander Feuer	Felipe Izquierdo
Ana Trujillo	Yvonne Moncada
Anabela Domingues	Zbyszek Piestrzeniewicz
André Fonseca	

Step **3** and **4** can be changed in sequence of doing. So you may put **DataBand** first and then set the column options on page.

10. Go back to the report template;

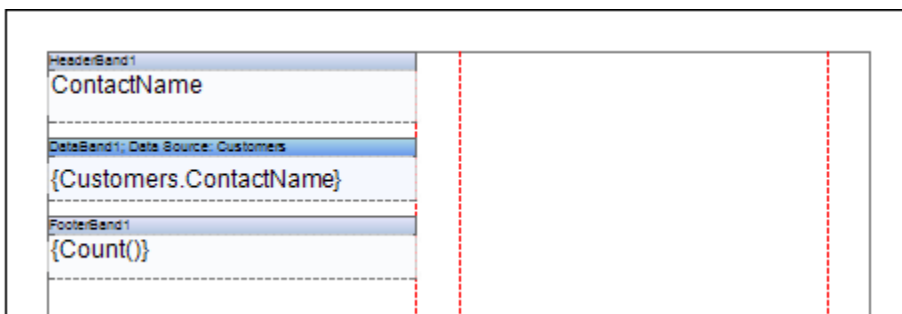
11. If needed, add other bands to the report template, for example, **HeaderBand** and **FooterBand**;



12. Edit these bands:

- 12.1. Align them by height;
- 12.2. Change values of properties, if required;
- 12.3. Change the background of bands;
- 12.4. Enable **Borders**, if required;
- 12.5. Set the border color.

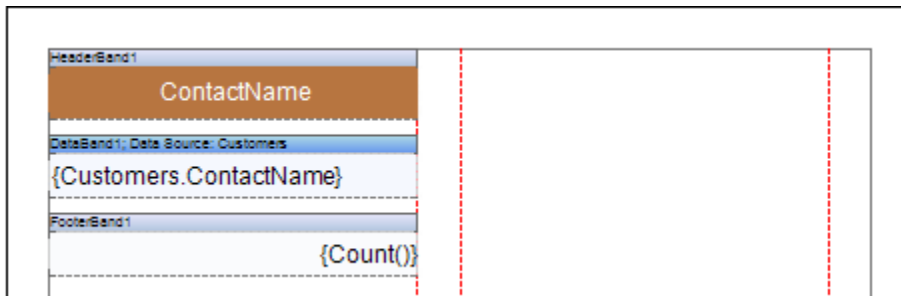
13. Put text components with expressions in the these bands. The expression in the text component is a header in the **HeaderBand**, and a footer in the **FooterBand**.



14. Edit text and textcomponents:

- 14.1. Drag and drop the text component in the band;
- 14.2. Change font options: size, type, color;
- 14.3. Align text component by height and width;
- 14.4. Change the background of the text component;
- 14.5. Align text in the textcomponent;
- 14.6. Change values of text component properties, if required;
- 14.7. Enable **Borders** of the text component, if required;
- 14.8. Set the border color.

The picture below shows a sample of the report with two columns on a page:

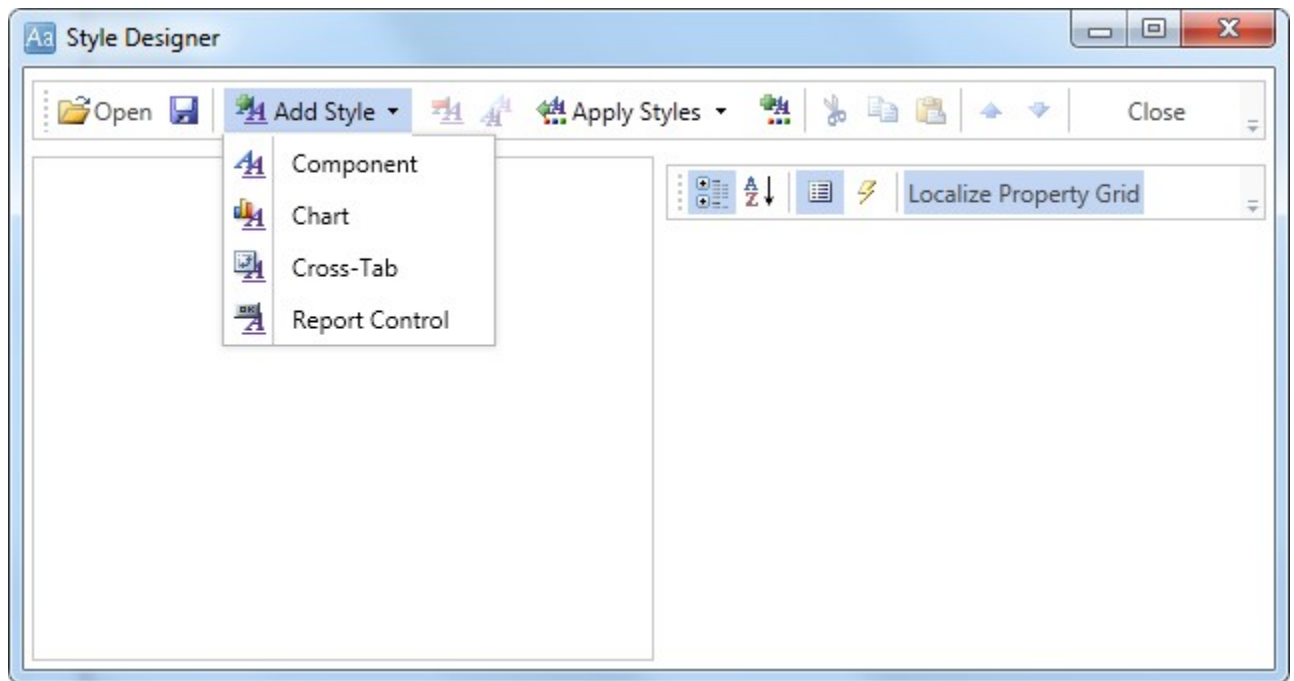


15. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of the report with a header and a footer:

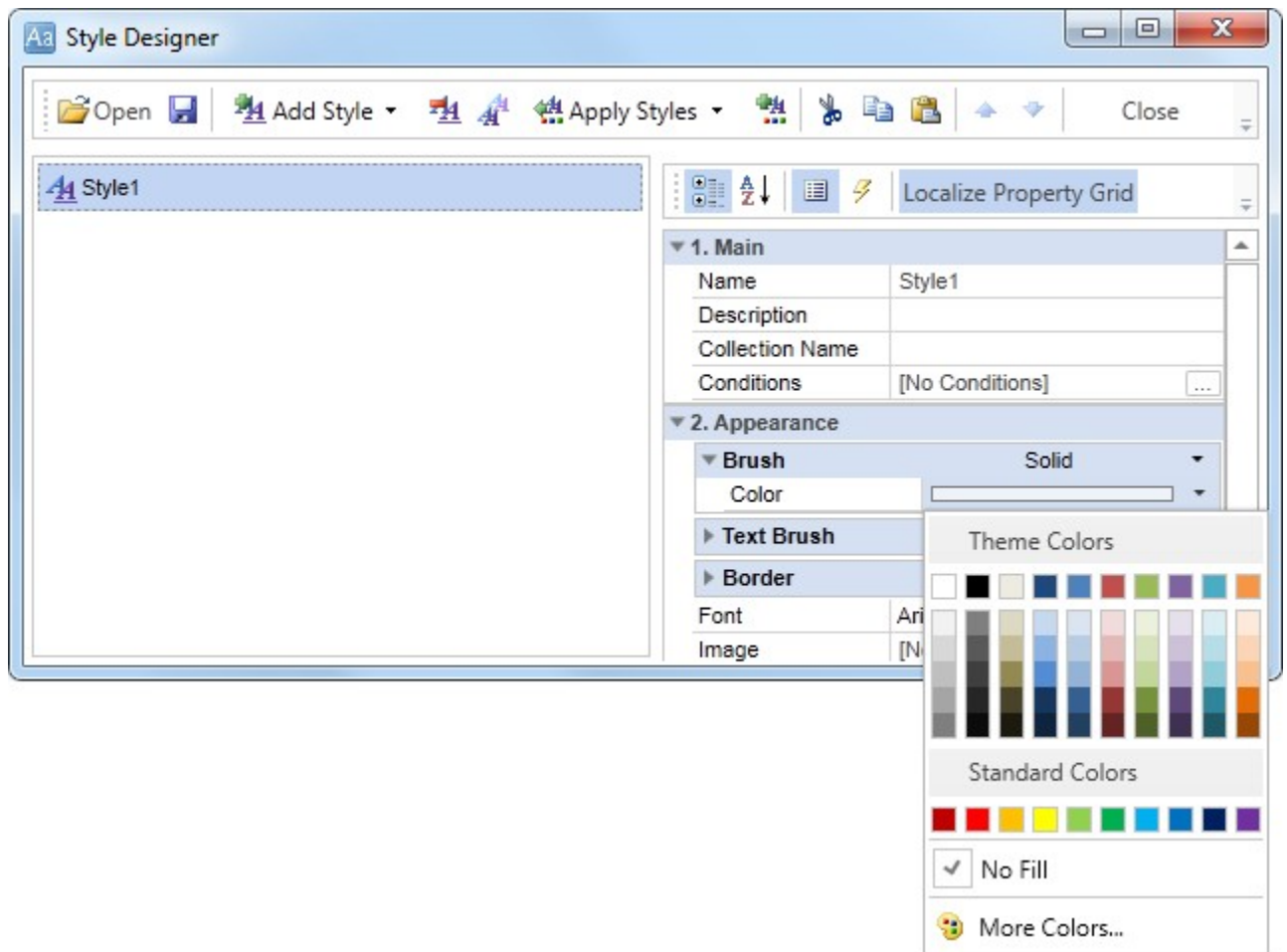
ContactName	ContactName
Alejandra Camino	Elizabeth Lincoln
Alexander Feuer	Felipe Izquierdo
Ana Trujillo	Yvonne Moncada
Anabela Domingues	Zbyszek Piestrzeniewicz
André Fonseca	Count:91

Adding styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then in the list of **Even style** and **Odd style** properties a new value (a style of a list of odd and even rows).

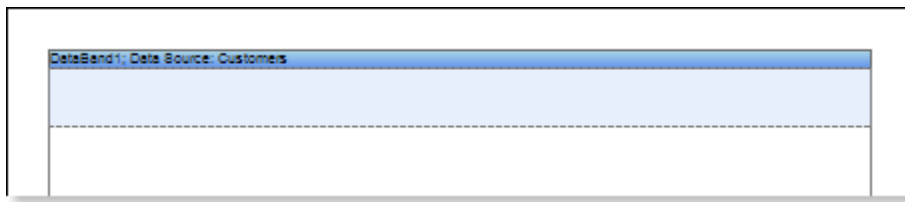
4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered report with columns on a page and alternative color of rows:

ContactName	ContactName
Alejandra Camino	Elizabeth Lincoln
Alexander Feuer	Felipe Izquierdo
Ana Trujillo	Yvonne Moncada
Anabela Domingues	Zbyszek Piestrzeniewicz
André Fonseca	Count:91

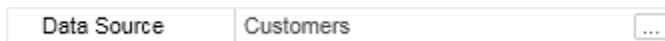
1.5 Report with Columns in Data Band

Do the following steps to create a report with columns in DataBand:

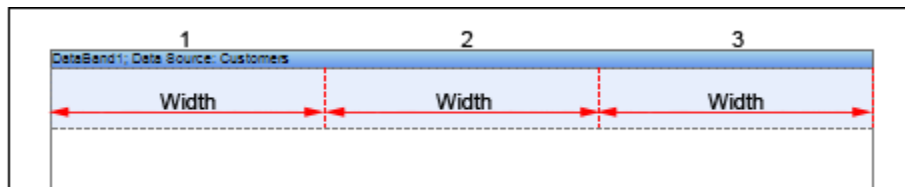
1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Put a **DataBand** on a page of a report template.



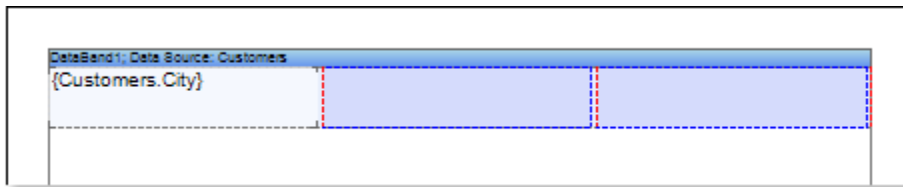
4. Define the data source for the **DataBand** using, for example, the **Data Source** property:



5. Set column options: the number of columns, column width, and column gap. For example, set the number of columns equal to **3**, with the gap equal to **0**. The column width is created automatically. The picture below shows a sample of the report template with two columns, placed in the **DataBand**:

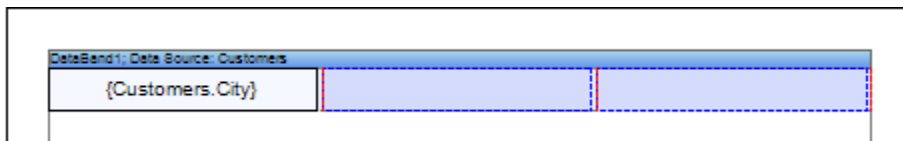


6. Put a text component with expressions on the **DataBand**. Where expression is a reference to the data field. For example, put one text component with the **{Customers.City}** expression.



7. Edit expressions and textcomponents:

- 7.1. Drag and drop the text component in **DataBand**;
- 7.2. Change parameters of the text font: size, type, color;
- 7.3. Align the text component by width and height;
- 7.4. Change the background of the text component;
- 7.5. Align text in the textcomponent;
- 7.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
- 7.7. Enable **Borders** for the text component, if required.
- 7.8. Change the border color.



8. Set the columns direction of data output using the **Column Direction** property. Read about this property in section Report Internals -> Columns.
9. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows samples of reports with columns rendered using different values of the **Column Direction** property.

Down Then Across

1.Aachen	24.Elgin	47.Madrid
2.Albuquerque	25.Eugene	48.Madrid
3.Anchorage	26.Frankfurt a.M.	49.Madrid
4.Århus	27.Genève	50.Mannheim
5.Barcelona	28.Graz	51.Marseille
6.Barquisimeto	29.Helsinki	52.México D.F.
7.Bergamo	30.I. de Margarita	53.México D.F.
8.Berlin	31.Kirkland	54.México D.F.
9.Bern	32.København	55.México D.F.
10.Boise	33.Köln	56.México D.F.
11.Brücke	34.Lander	57.Montréal
12.Brandenburg	35.Leipzig	58.München
13.Bruxelles	36.Lille	59.Münster
14.Buenos Aires	37.Lisboa	60.Nantes
15.Buenos Aires	38.Lisboa	61.Nantes
16.Buenos Aires	39.London	62.Oulu
17.Butte	40.London	63.Paris
18.Campinas	41.London	64.Paris
19.Caracas	42.London	65.Portland
20.Charleroi	43.London	66.Portland
21.Cork	44.London	67.Reggio Emilia
22.Cowes	45.Luleå	68.Relms
23.Cunewalde	46.Lyon	69.Resende

Across Then Down

1.Aachen	2.Albuquerque	3.Anchorage
4.Århus	5.Barcelona	6.Barquisimeto
7.Bergamo	8.Berlin	9.Bern
10.Boise	11.Bräcke	12.Brandenburg
13.Bruxelles	14.Buenos Aires	15.Buenos Aires
16.Buenos Aires	17.Butte	18.Camplinas
19.Caracas	20.Charleroi	21.Cork
22.Cowes	23.Cunewalde	24.Eglin
25.Eugene	26.Frankfurt a.M.	27.Genève
28.Graz	29.Helsinki	30.I. de Margarita
31.Kirkland	32.Kobenhavn	33.Köln
34.Lander	35.Leipzig	36.Lille
37.Lisboa	38.Lisboa	39.London
40.London	41.London	42.London
43.London	44.London	45.Luleå
46.Lyon	47.Madrid	48.Madrid
49.Madrid	50.Mannheim	51.Marseille
52.México D.F.	53.México D.F.	54.México D.F.
55.México D.F.	56.México D.F.	57.Montréal
58.München	59.Münster	60.Nantes
61.Nantes	62.Oulu	63.Paris
64.Paris	65.Portland	66.Portland
67.Reggio Emilia	68.Reims	69.Resende

10. Go back to the report template;

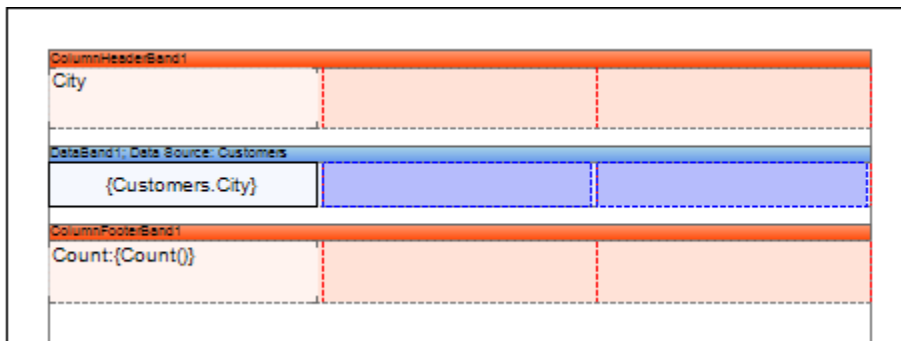
11. If needed, add other bands to the report template, for example, **ColumnHeaderBand** and **ColumnFooterBand**.

ColumnHeaderBand1		
DataBand1: Data Source: Customers		
{Customers.City}		
ColumnFooterBand1		

12. Edit these bands:

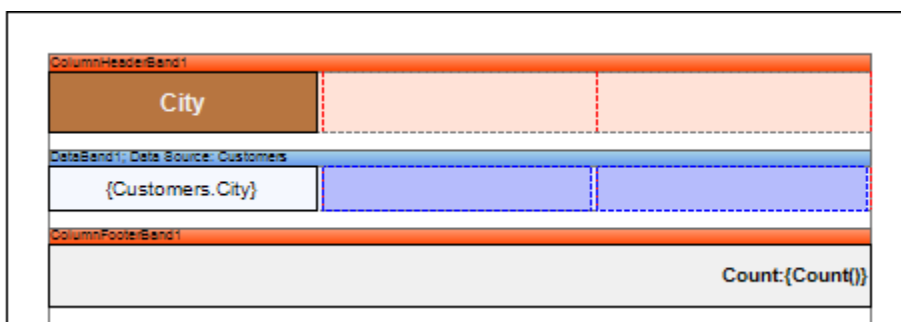
- 12.1. Align them by height;
- 12.2. Change values of properties, if required;
- 12.3. Change the background of bands;
- 12.4. Enable **Borders**, if required;
- 12.5. Set the border color.

13. Put text components with expressions in the these bands. Where expression of the text component in the **ColumnHeaderBand** is the column name and the expression of the text component in the **ColumnFooterBand** is the data footer.



14. Edit **Text** and **TextBox** component:

- 14.1. Drag and drop the text component in **ColumnHeaderBand** and **ColumnFooterBand**;
- 14.2. Change parameters of the text font: size, type, color;
- 14.3. Align the text component by width and height;
- 14.4. Change the background of the text component;
- 14.5. Align text in the textcomponent;
- 14.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
- 14.7. Enable **Borders** for the text component, if required.
- 14.8. Change the border color.



15. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows samples of reports with column headers.

Down Then Across

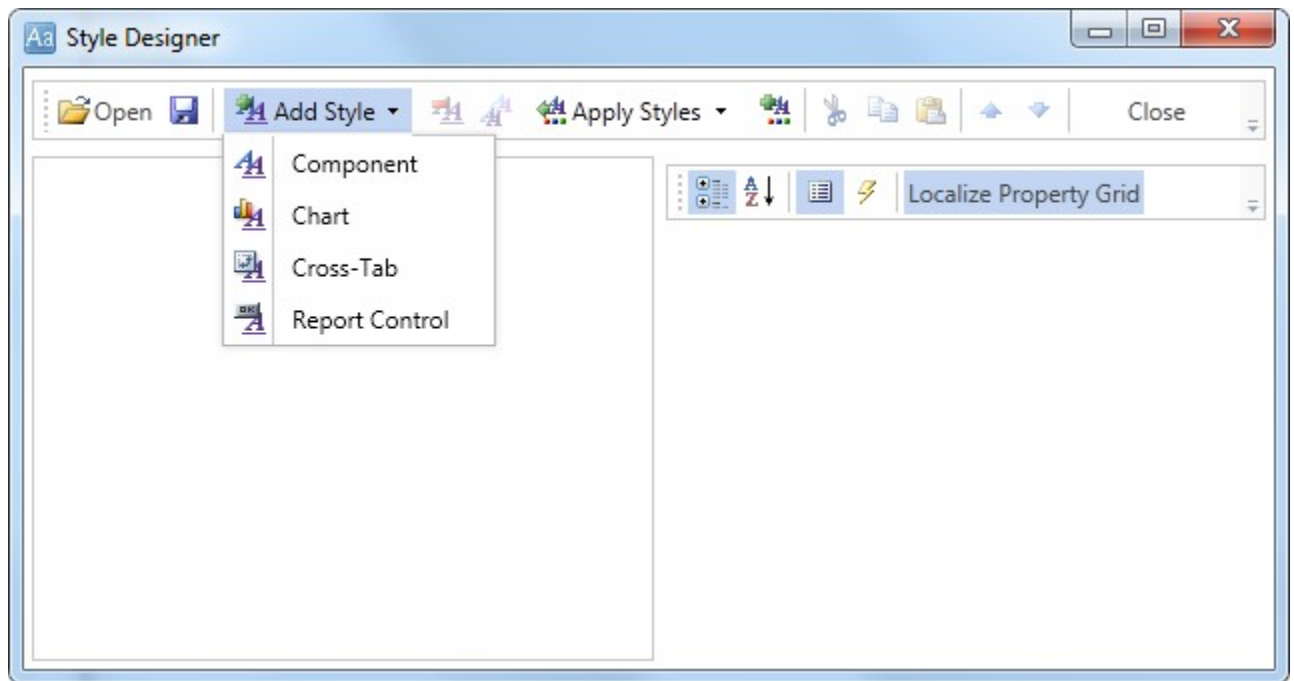
City	City	City
1.Aachen	22.Cowes	43.London
2.Albuquerque	23.Cunewalde	44.London
3.Anchorage	24.Églin	45.Luleå
4.Århus	25.Eugene	46.Lyon
5.Barcelona	26.Frankfurt a.M.	47.Madrid
6.Barquisimeto	27.Genève	48.Madrid
7.Bergamo	28.Graz	49.Madrid
8.Berlin	29.Helsinki	50.Mannheim
9.Bern	30.I. de Margarita	51.Marseille
10.Boise	31.Kirkland	52.México D.F.
11.Bräcke	32.København	53.México D.F.
12.Brandenburg	33.Köln	54.México D.F.
13.Bruxelles	34.Lander	55.México D.F.
14.Buenos Aires	35.Laipzig	56.México D.F.
15.Buenos Aires	36.Lille	57.Montréal
16.Buenos Aires	37.Lisboa	58.München
17.Butte	38.Lisboa	59.Münster
18.Campinas	39.London	60.Nantes
19.Caracas	40.London	61.Nantes
20.Charleroi	41.London	62.Oulu
21.Cork	42.London	63.Paris

Across Then Down

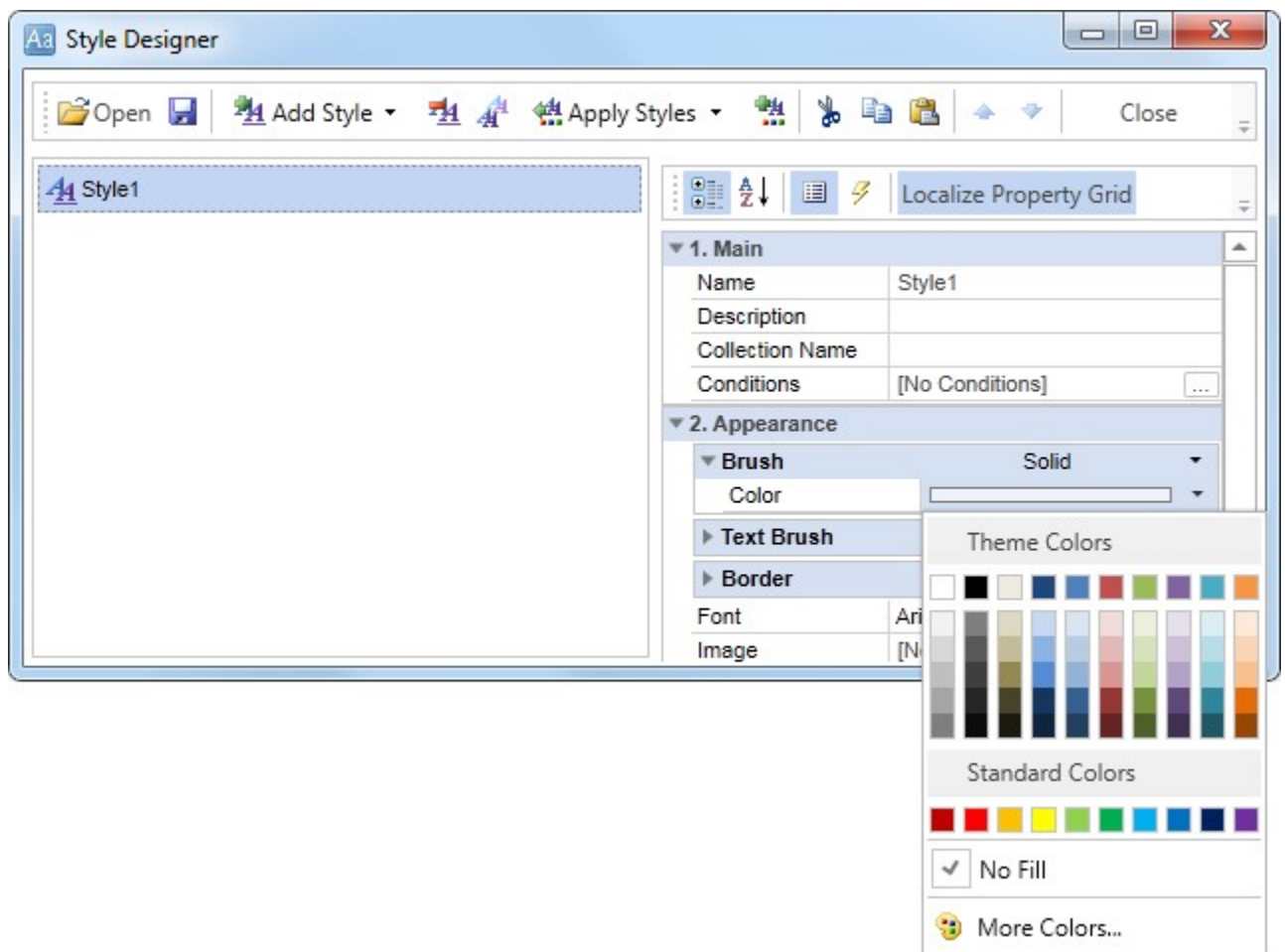
City	City	City
1.Aachen	2.Albuquerque	3.Anchorage
4.Århus	5.Barcelona	6.Barquisimeto
7.Bergamo	8.Berlin	9.Bern
10.Boise	11.Bräcke	12.Brandenburg
13.Bruxelles	14.Buenos Aires	15.Buenos Aires
16.Buenos Aires	17.Butte	18.Campinas
19.Caracas	20.Charleroi	21.Cork
22.Cowes	23.Cunewalde	24.Elgin
25.Eugene	26.Frankfurt a.M.	27.Genève
28.Graz	29.Helsinki	30.I. de Margarita
31.Kirkland	32.København	33.Köln
34.Lander	35.Lepzig	36.Lille
37.Lisboa	38.Lisboa	39.London
40.London	41.London	42.London
43.London	44.London	45.Luleå
46.Lyon	47.Madrid	48.Madrid
49.Madrid	50.Mannheim	51.Marseille
52.México D.F.	53.México D.F.	54.México D.F.
55.México D.F.	56.México D.F.	57.Montréal
58.München	59.Münster	60.Nantes
61.Nantes	62.Oulu	63.Paris

Adding styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then in the list of **Even style** and **Odd style** properties a new value (a style of a list of odd and even rows).

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered report with columns on a page and alternative color of rows:

Down Then Across

City	City	City
1.Aachen	22.Cowes	43.London
2.Albuquerque	23.Cunewalde	44.London
3.Anchorage	24.Églin	45.Luleå
4.Århus	25.Eugene	46.Lyon
5.Barcelona	26.Frankfurt a.M.	47.Madrid
6.Barquisimeto	27.Genève	48.Madrid
7.Bergamo	28.Graz	49.Madrid
8.Berlin	29.Helsinki	50.Mannheim
9.Bern	30.I. de Margarita	51.Marseille
10.Boise	31.Kirkland	52.México D.F.
11.Bräcke	32.København	53.México D.F.
12.Brandenburg	33.Köln	54.México D.F.
13.Bruxelles	34.Lander	55.México D.F.
14.Buenos Aires	35.Leipzig	56.México D.F.
15.Buenos Aires	36.Lille	57.Montréal
16.Buenos Aires	37.Lisboa	58.München
17.Butte	38.Lisboa	59.Münster
18.Campinas	39.London	60.Nantes
19.Caracas	40.London	61.Nantes
20.Charleroi	41.London	62.Oulu
21.Cork	42.London	63.Paris

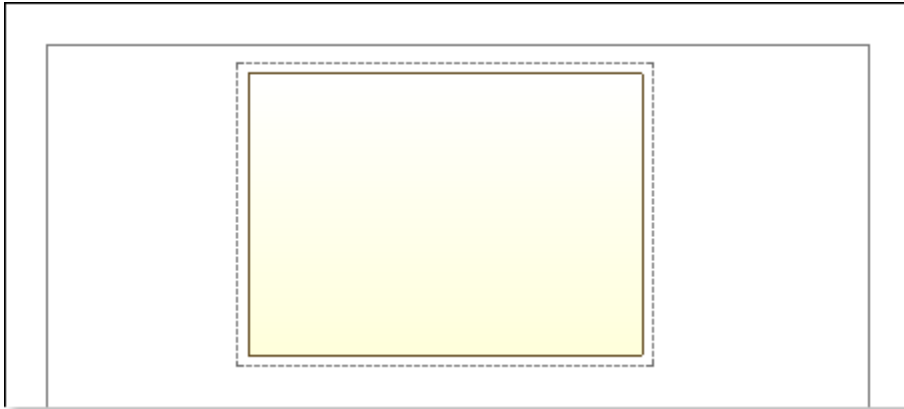
Across Then Down

City	City	City
1.Aachen	2.Albuquerque	3.Anchorage
4.Århus	5.Barcelona	6.Barquisimeto
7.Bergamo	8.Berlin	9.Bern
10.Boise	11.Bracke	12.Brandenburg
13.Bruxelles	14.Buenos Aires	15.Buenos Aires
16.Buenos Aires	17.Butte	18.Campinas
19.Caracas	20.Charleroi	21.Cork
22.Cowes	23.Cunewalde	24.Elgin
25.Eugene	26.Frankfurt a.M.	27.Genève
28.Graz	29.Helsinki	30.I. de Margarita
31.Kirkland	32.København	33.Köln
34.Lander	35.Lepzig	36.Lille
37.Lisboa	38.Lisboa	39.London
40.London	41.London	42.London
43.London	44.London	45.Luleå
46.Lyon	47.Madrid	48.Madrid
49.Madrid	50.Mannheim	51.Marseille
52.México D.F.	53.México D.F.	54.México D.F.
55.México D.F.	56.México D.F.	57.Montréal
58.München	59.Münster	60.Nantes
61.Nantes	62.Oulu	63.Paris

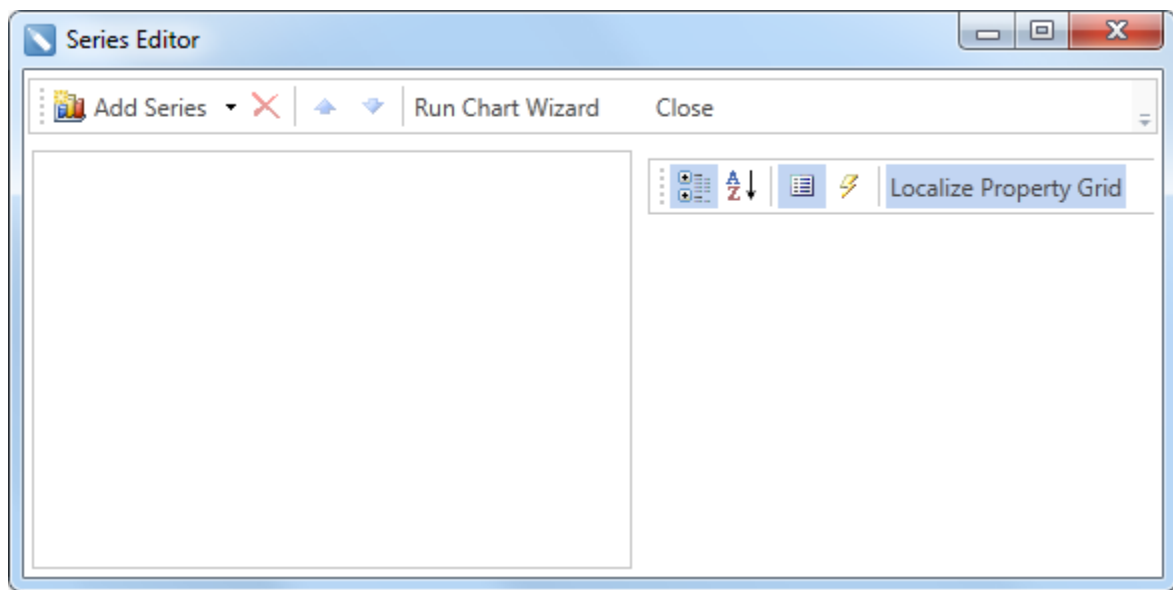
1.6 Report with Chart on Page

Do the following steps to create a report with charts:

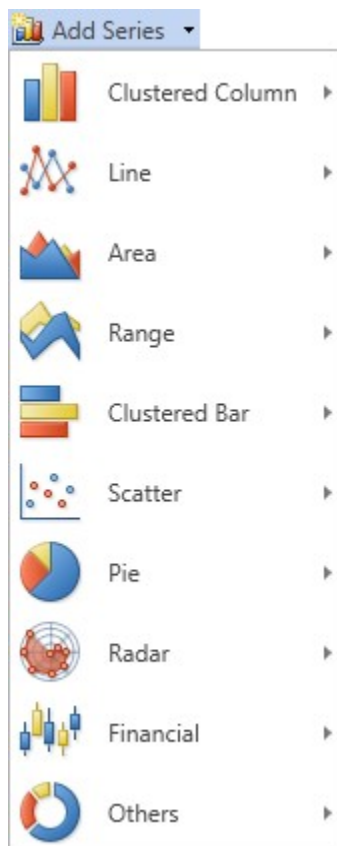
1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Put the **Chart** component on a page as seen on a picture below.



4. Edit the **Chart** component:
 - 4.1. Align it by width;
 - 4.2. Change properties of the **Chart** component. For example, set the **GrowToHeight** property to **true**, if it is required the Chart component be grown by height;
 - 4.3. Set **Borders**, if required, for the **Chart** component;
 - 4.4. Change the border color.
 - 4.5. Edit the chart area. For example, change the **Area.Brush.Color** property, if it is required to change the color of a chart area.
5. Change the type of a chart using the **Chart Type** property. For example, set it to **Clustered Column**:
6. Add series. Invoke the **Series Editor**, for example, by double-clicking the **Chart**.



Click the **Add Series** button to add a series and select the type of series in the menu. The picture below shows the menu of the **Add Series** button:



It should be noted that the type of number should match the type of chart, i.e. if the

Clustered Column chart type, then the series must be of the **Clustered Column** type.

7. Setup chart series:

7.1. Get the data for **Value** and for the **Argument** of series. There are three ways to get data for the series: set the column data from the dictionary, or specify an expression, or manually specify values for the series as a list, through the ',' separator. For example, create two rows, and manually define the values for these series as a list, with the ";" delimiter: arguments for **Series 1 - A; B**, the values - **1; 1.25**; for arguments **Series 2 - A; B**, the value - **2, 0.75**.

7.2. Change the values of the series properties. For example, set the **Show Zeros** property to **false**, if it is necessary to hide zero values;

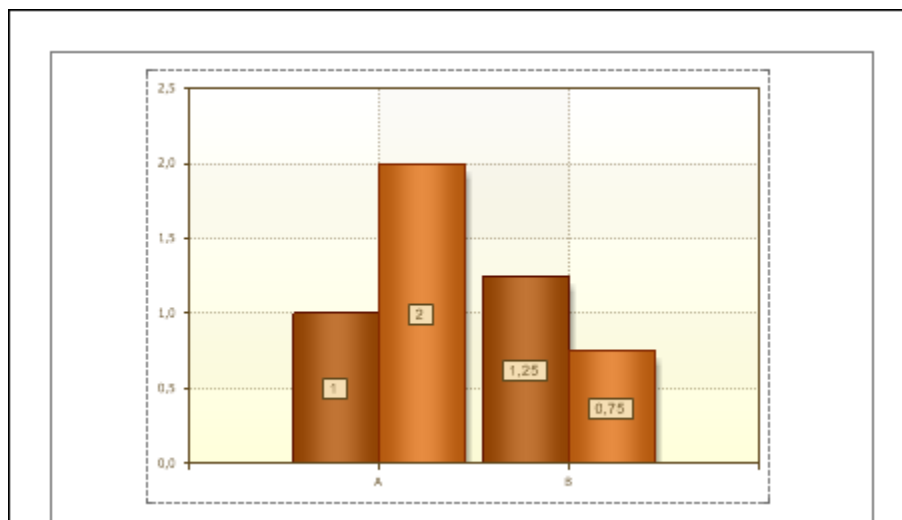
7.3. Enable or disable **Series Labels**;

7.4. Edit headers of rows: align, change the style, font, type of value, etc.;

7.5. Change the design of series, by setting values of the following properties:

Border Color, Brush, Show Shadow.

The picture below shows an example of a report template with the chart:



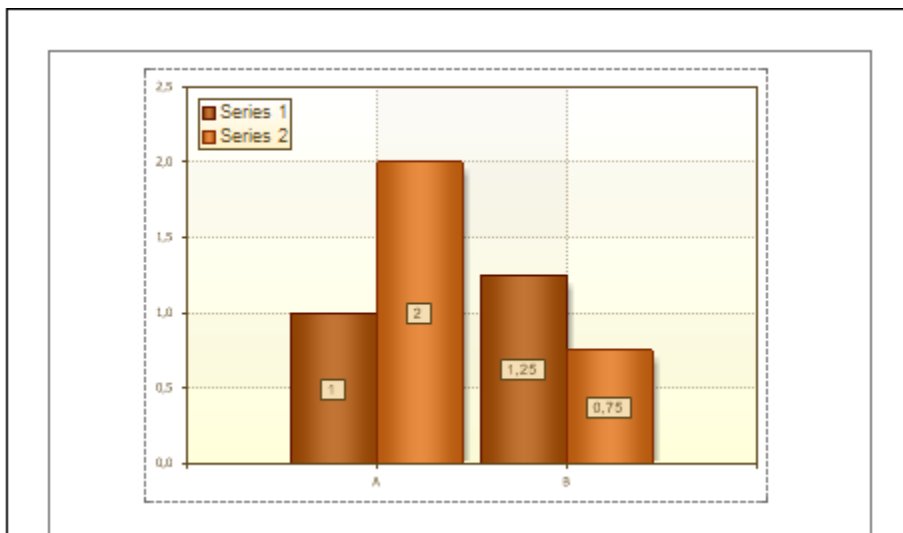
8. Edit **Legend**:

8.1. Enable or disable the visibility of **Legends**. You can do it by setting the value of the **Legend.Visible** property to **true** or **false**, respectively;

8.2. Align the legend horizontally and vertically;

8.3. Change the legends design, etc.

The picture below shows an example of a report template with the chart displaying the legend:

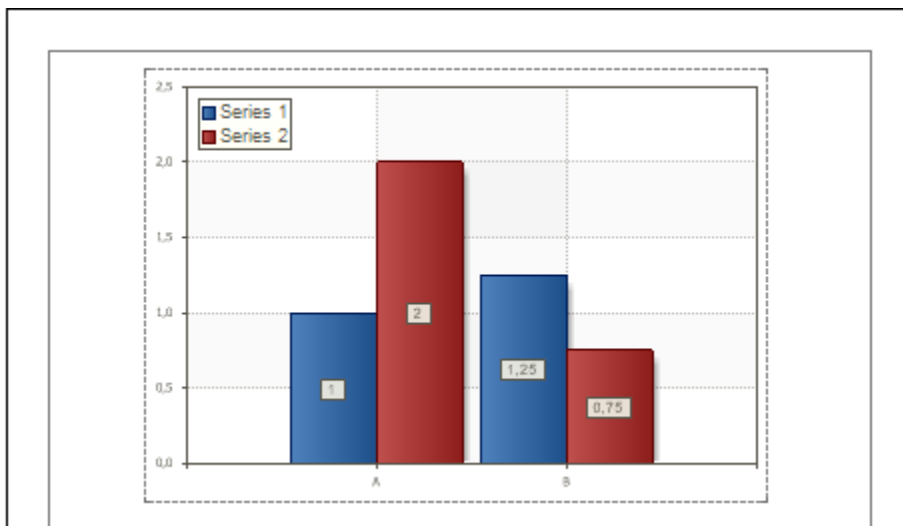


9. Change the style of the chart, i.e. completely change the appearance of the chart:

9.1. Change the **Style** property. Where the value of the property is a chart style;

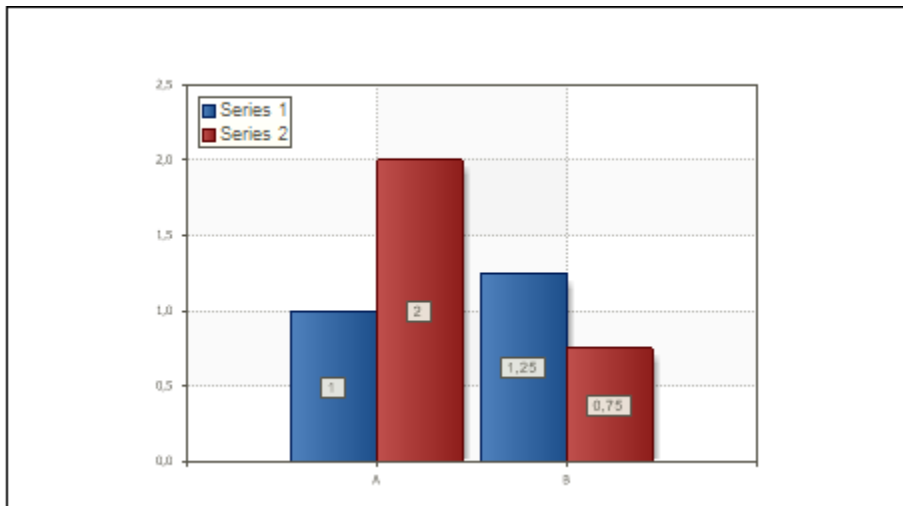
9.2. Set the **AllowApplyStyle** to the **true**. If the **AllowApplyStyle** property is set to **false**, then the report generator, when rendering, will take into account the values of the appearance of the series.

The picture below shows an example of a report template of the chart with a changed style:



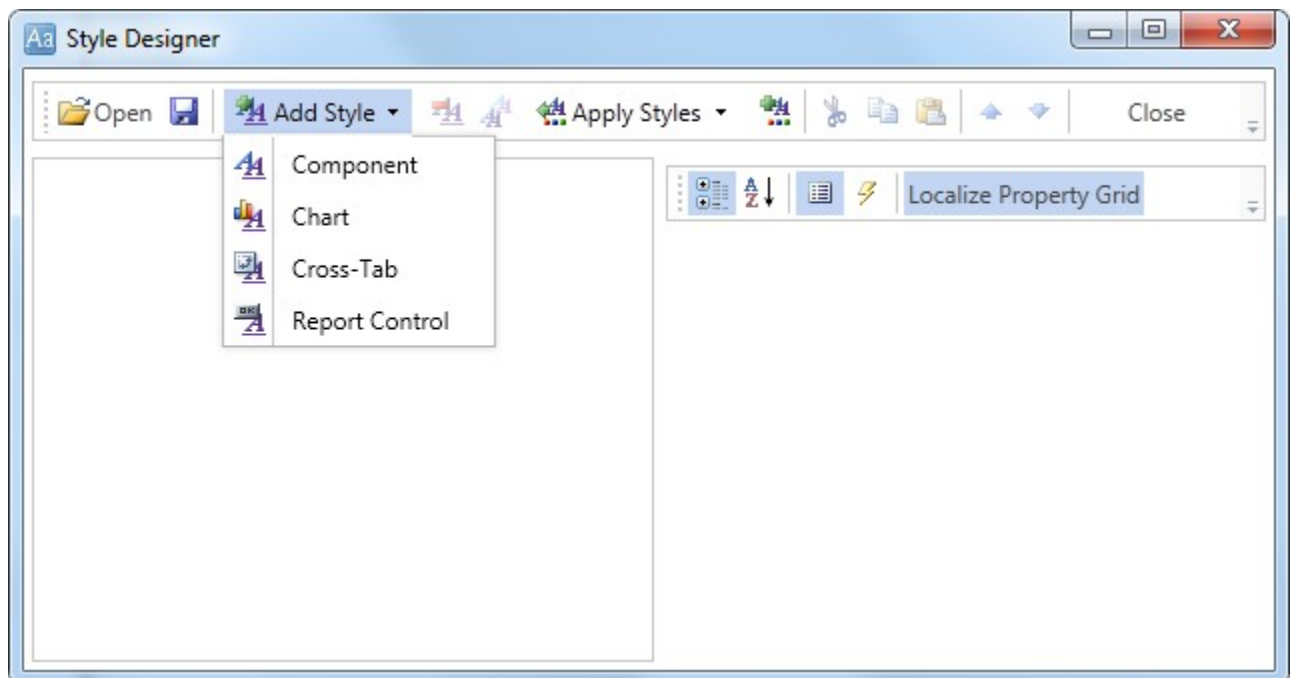
10. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

The picture below shows samples of reports with the chart:

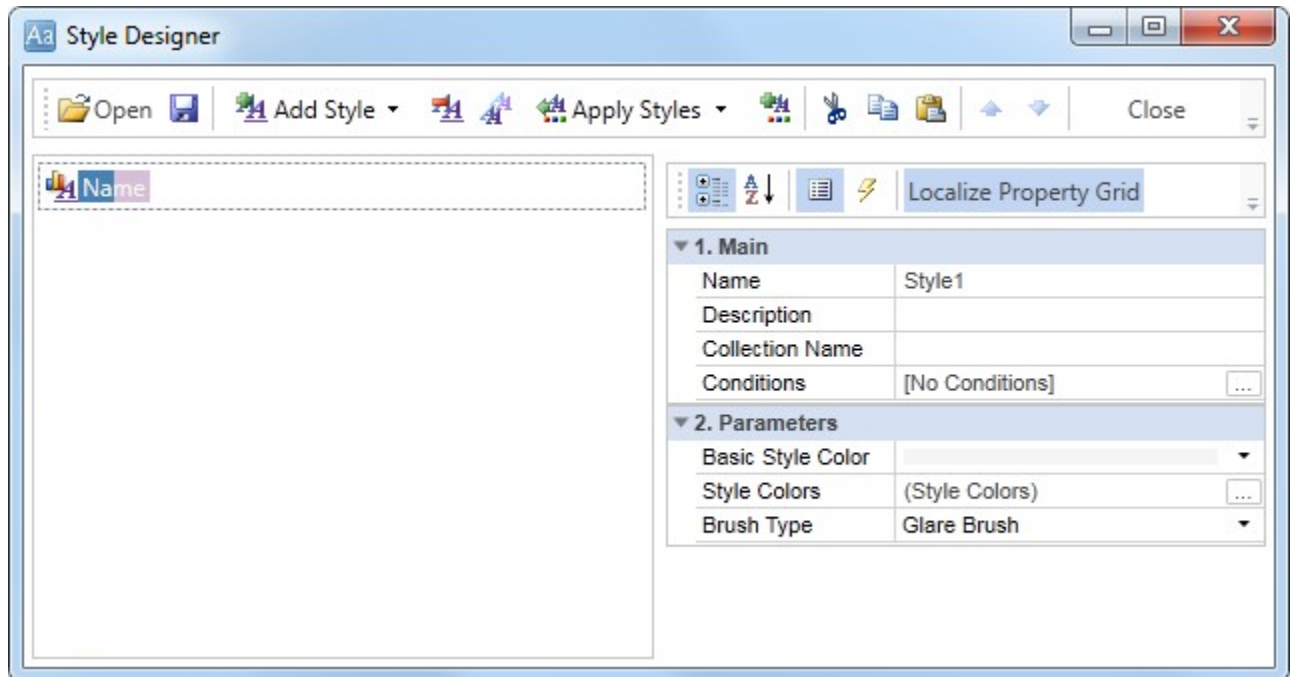


Adding styles

1. Go back to the report template;
2. Call the **Style Designer**;
The picture below shows the **Style Designer**:

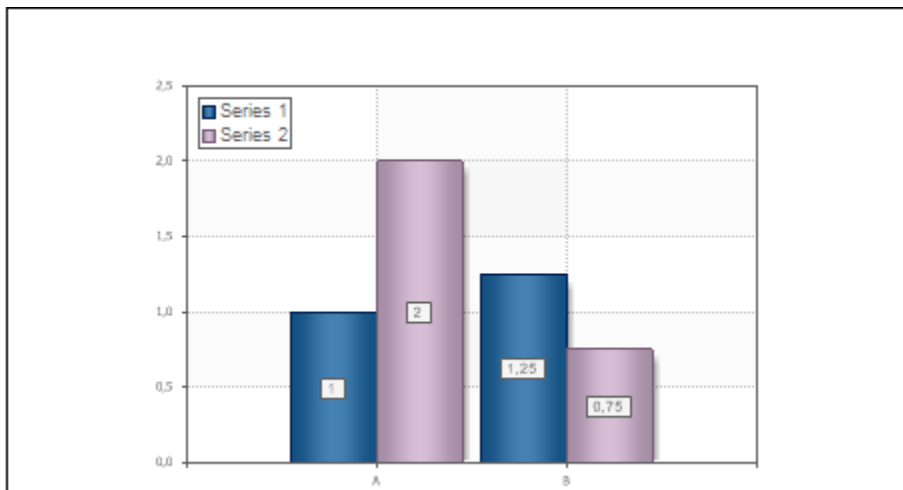


Click the **Add Style** button to start creating a style. Select **Chart** from the drop down list. Set the style using **Basic Color Style**, **Brush Type** and **Style Colors** group of properties.



Click **Close**. In the list of values of the **Style** property of the chart component a custom style will be displayed. In our case, the value is **Style for Chart**. Select this value;

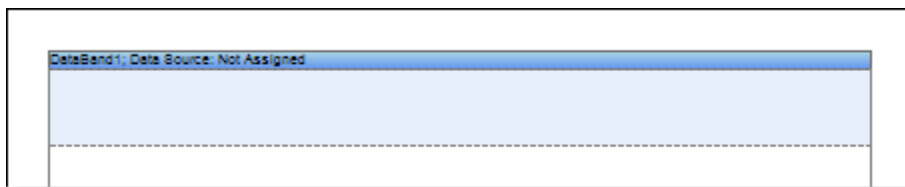
3. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows samples of reports with the chart with a style applied:



1.7 Report with Chart in Data Band

Suppose a **Chart** component is placed on the page of the report, then, for a report, this component will be rendered as a page item. If the **Chart** component is placed in the **DataBand**, then, when rendering a report, this component will be rendered as part of the **DataBand**. Since the **Chart** component placed in the **DataBand**, is rendered as a part of the **DataBand**, and will be printed as many times as the **DataBand** will be output. An example of designing a report with a chart in the **DataBand** will be described below. In this example, the chart will graphically display the detailed data of the data source in the **DataBand**. Follow the steps below in order to render a report with the **Chart** in the **DataBand**:

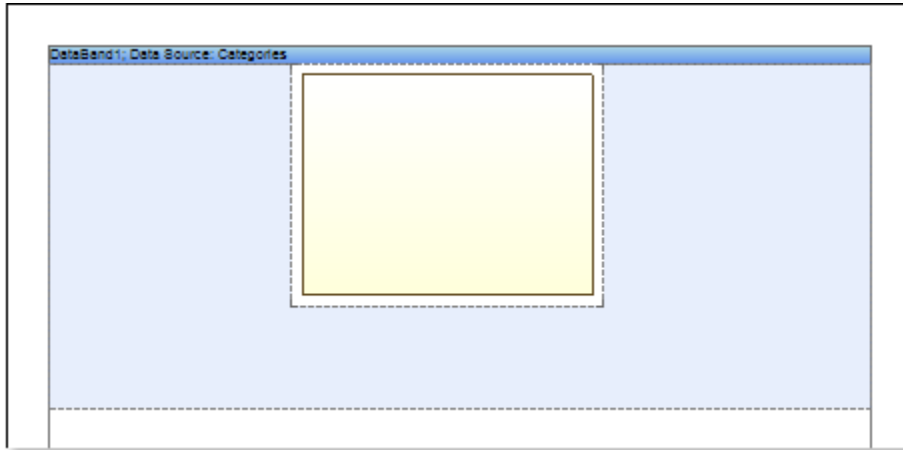
1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Create a **Relation** between data sources. In this case, the **Parent Data Source** is the **Categories** data source, and the **Child Data Source** is the **Products** data source;
4. Put the **DataBand** on a report template page:



5. Edit **DataBand**:
 - 5.1. Align the **DataBand** by height;
 - 5.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
 - 5.3. Change the **DataBand** background;
 - 5.4. Enable **Borders** for the **DataBand**, if required;
 - 5.5. Change the border color.
6. Define the data source for the **DataBand** using the **Data Source** property:



7. Put the **Chart** component in the **DataBand** as seen on a picture below:



8. Edit the **Chart** component:

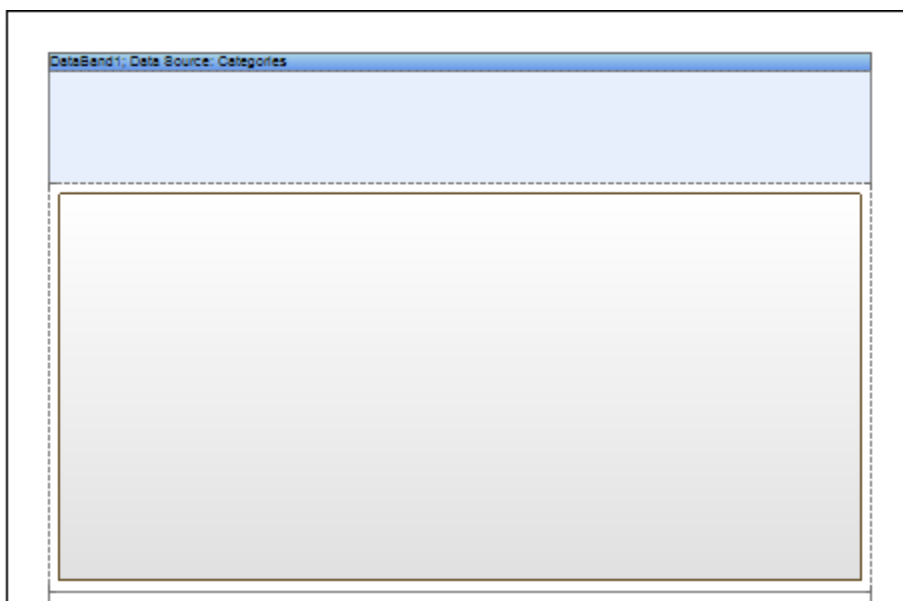
8.1. Align it by width;

8.2. Change properties of the **Chart** component. For example, set the **GrowToHeight** property to **true**, if it is required the Chart component be grown by height;

8.3. Set **Borders**, if required, for the **Chart** component;

8.4. Change the border color.

8.5. Edit the chart area. For example, change the **Area.Brush.Color** property, if it is required to change the color of a chart area.



9. Change the type of a chart using the **Chart Type** property. For example, set it to **Clustered Column**:

10. Define the data source for the **Chart** component using the **Data Source** property

Data Source	Products	...
-------------	----------	-----

11. Define the relation between data sources, using the **DataRelation** property of the **Chart** component:

Data Relation	Categories	...
---------------	------------	-----

12. Add series. Invoke the **Series Editor**, for example, by double-clicking the **Chart**:

13. Setup chart series:

13.1. Get the data for **Value** and for the **Argument** of series. There are three ways to get data for the series: set the column data from the dictionary, or specify an expression, or manually specify values for the series as a list, through the ',' separator. For example, create a series and specify columns from the dictionary: define the **Products.ProductName** for the **Argument** and **Products.UnitPrice** for the **Value**;

13.2. Change the values of the series properties. For example, set the **Show Zeros** property to **false**, if it is necessary to hide zero values;

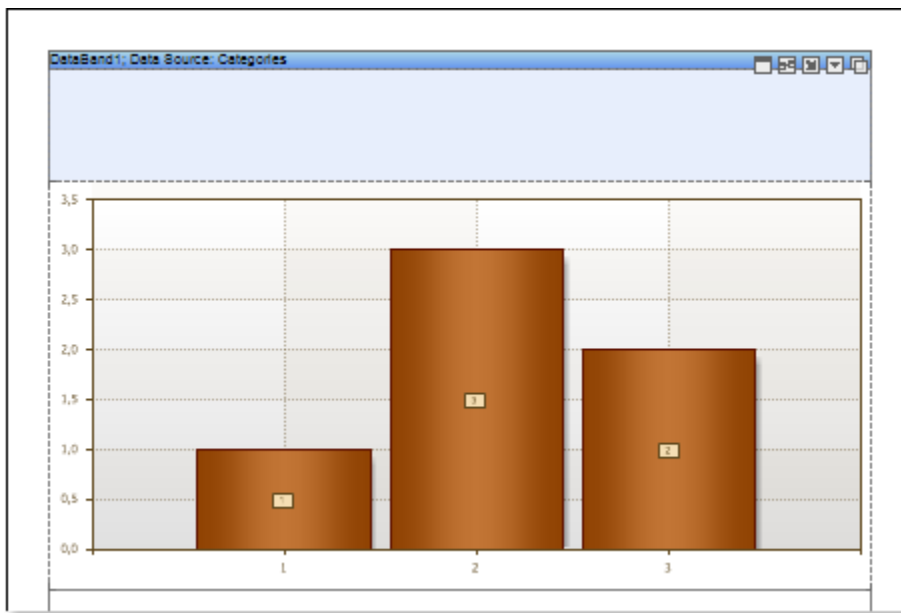
13.3. Enable or disable **Series Labels**;

13.4. Edit headers of rows: align, change the style, font, type of value, etc.;

13.5. Change the design of series, by setting values of the following properties:

Border Color, Brush, Show Shadow.

The picture below shows an example of a report template with the chart:



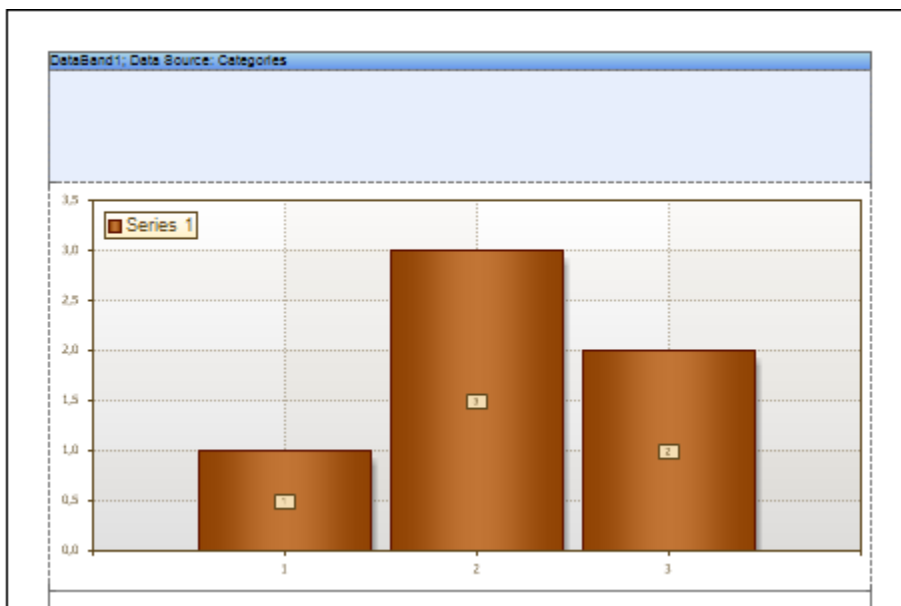
14. Edit **Legend**:

14.1. Enable or disable the visibility of **Legends**. You can do it by setting the value of the **Legend.Visible** property to **true** or **false**, respectively;

14.2. Align the legend horizontally and vertically;

14.3. Change the legends design, etc.

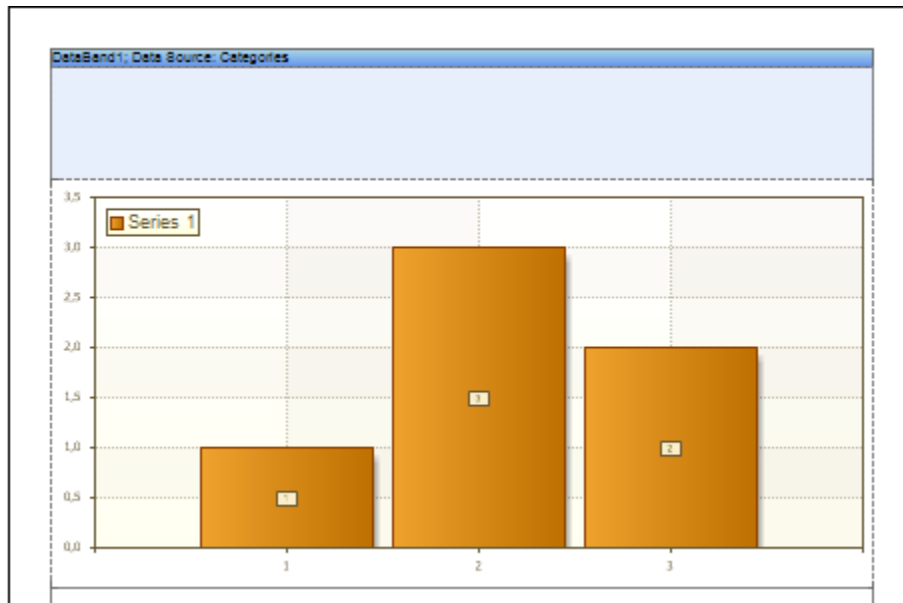
The picture below shows an example of a report template with the chart displaying the legend:



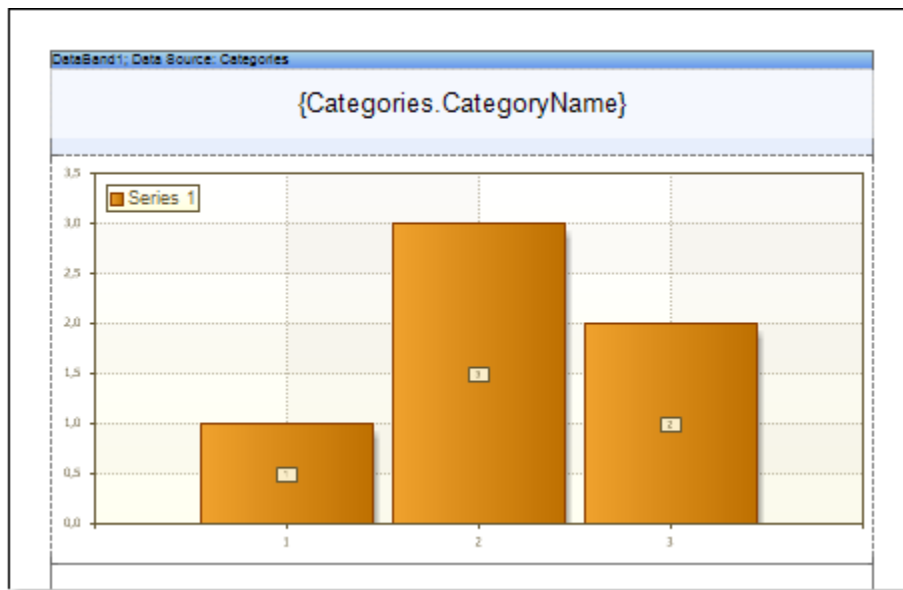
15. Change the style of the chart, i.e. completely change the appearance of the chart:

- 15.1. Change the **Style** property. Where the value of the property is a chart style;
- 15.2. Set the **AllowApplyStyle** to the **true**. If the **AllowApplyStyle** property is set to **false**, then the report generator, when rendering, will take into account the values of the appearance of the series.

The picture below shows an example of a report template of the chart with a changed style:

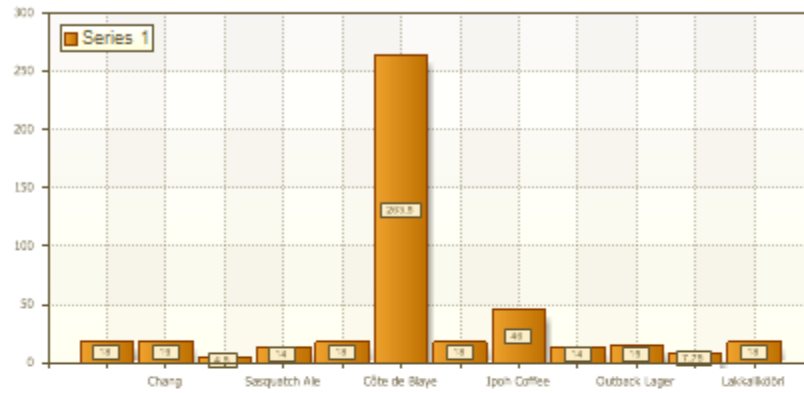


16. Put text components with an expression in the **DataBand**. Where the expression is a reference to the data field. For example, put a text component with the expression: **{Categories.CategoryName}**;
17. Edit **Text** and **TextBox** component:
 - 17.1. Drag and drop the text component in the **DataBand**;
 - 17.2. Change parameters of the text font: size, type, color;
 - 17.3. Align the text component by width and height;
 - 17.4. Change the background of the text component;
 - 17.5. Align text in the textcomponent;
 - 17.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
 - 17.7. Enable **Borders** for the text component, if required.
 - 17.8. Change the border color.

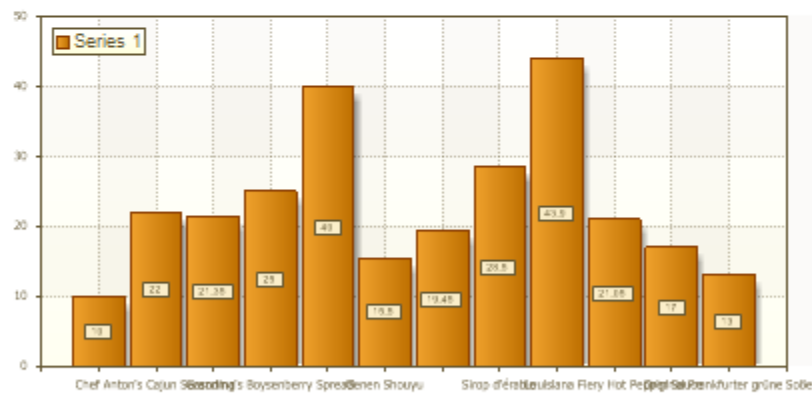


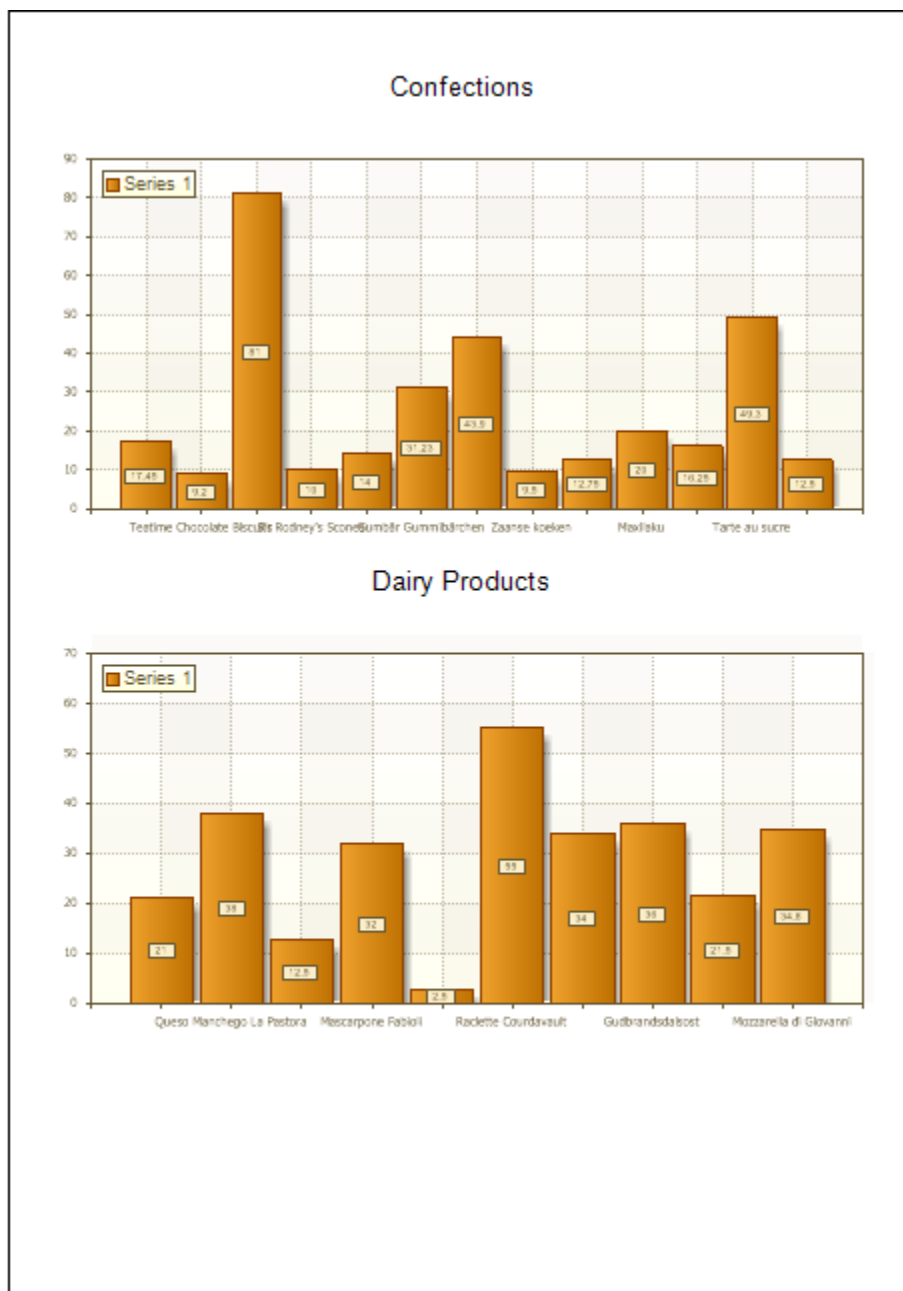
18. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of the report with the chart in the **DataBand**:

Beverages



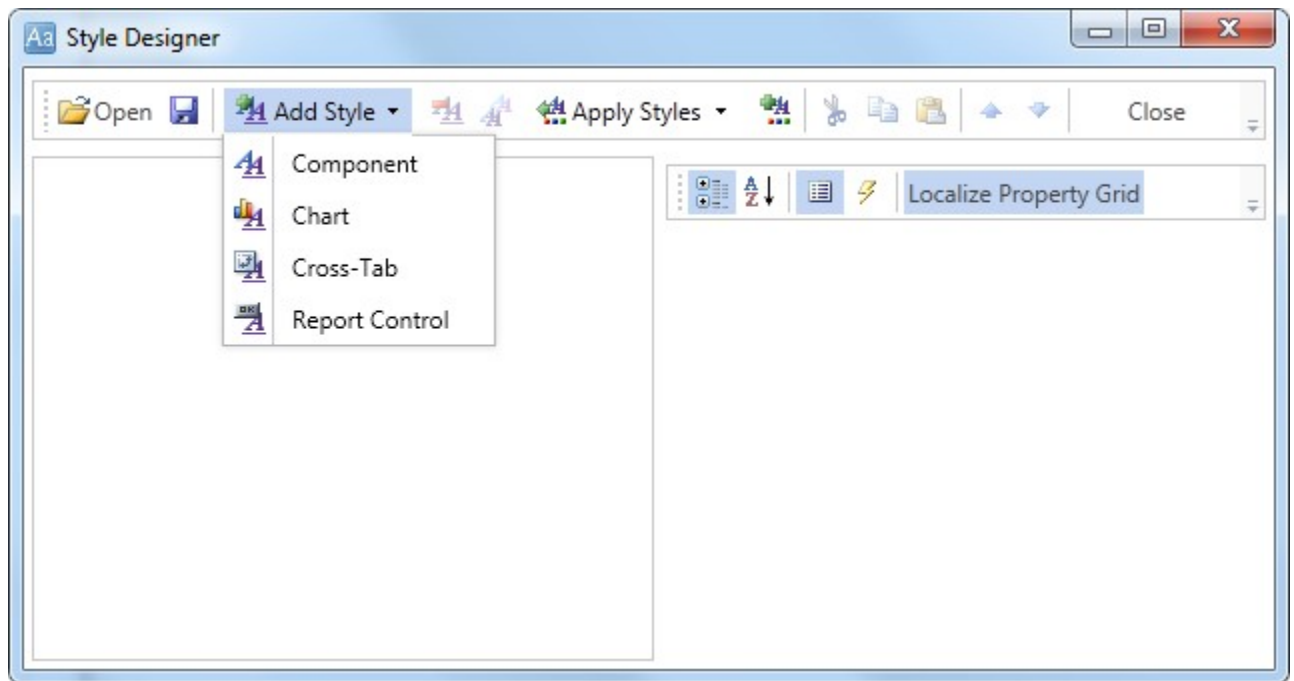
Condiments



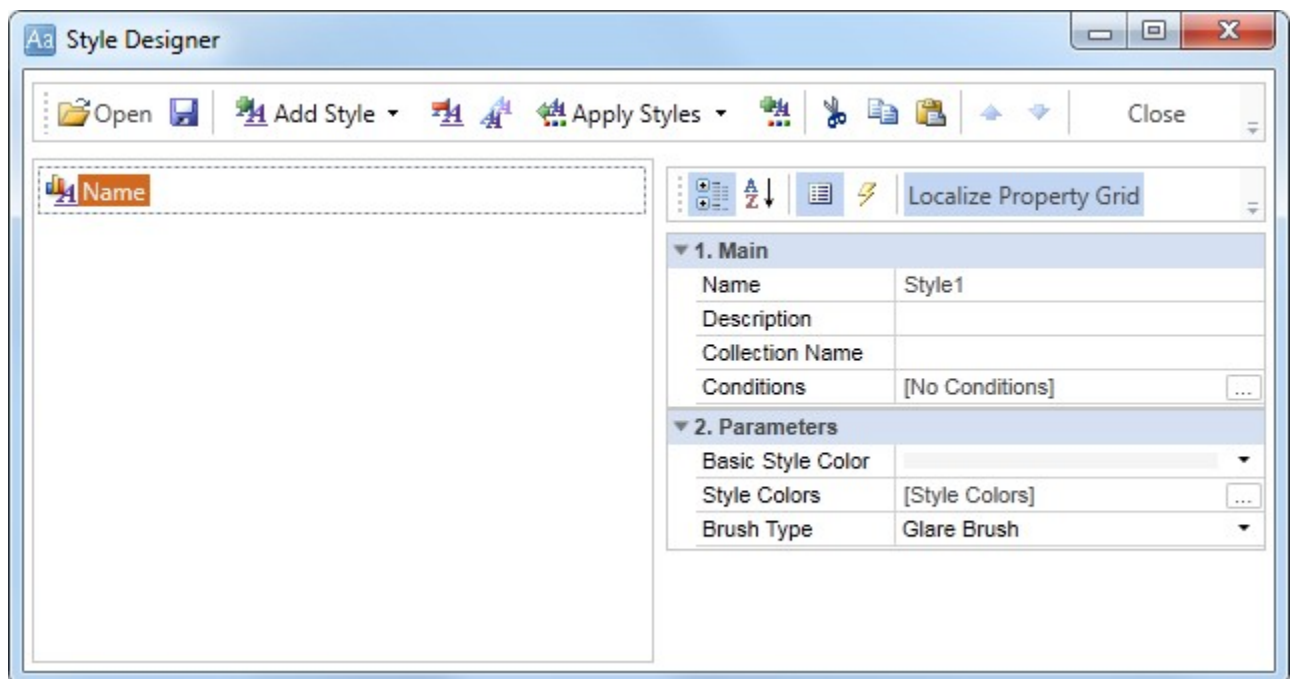


Adding styles

1. Go back to the report template;
2. Call the **Style Designer**;
The picture below shows the **Style Designer**:

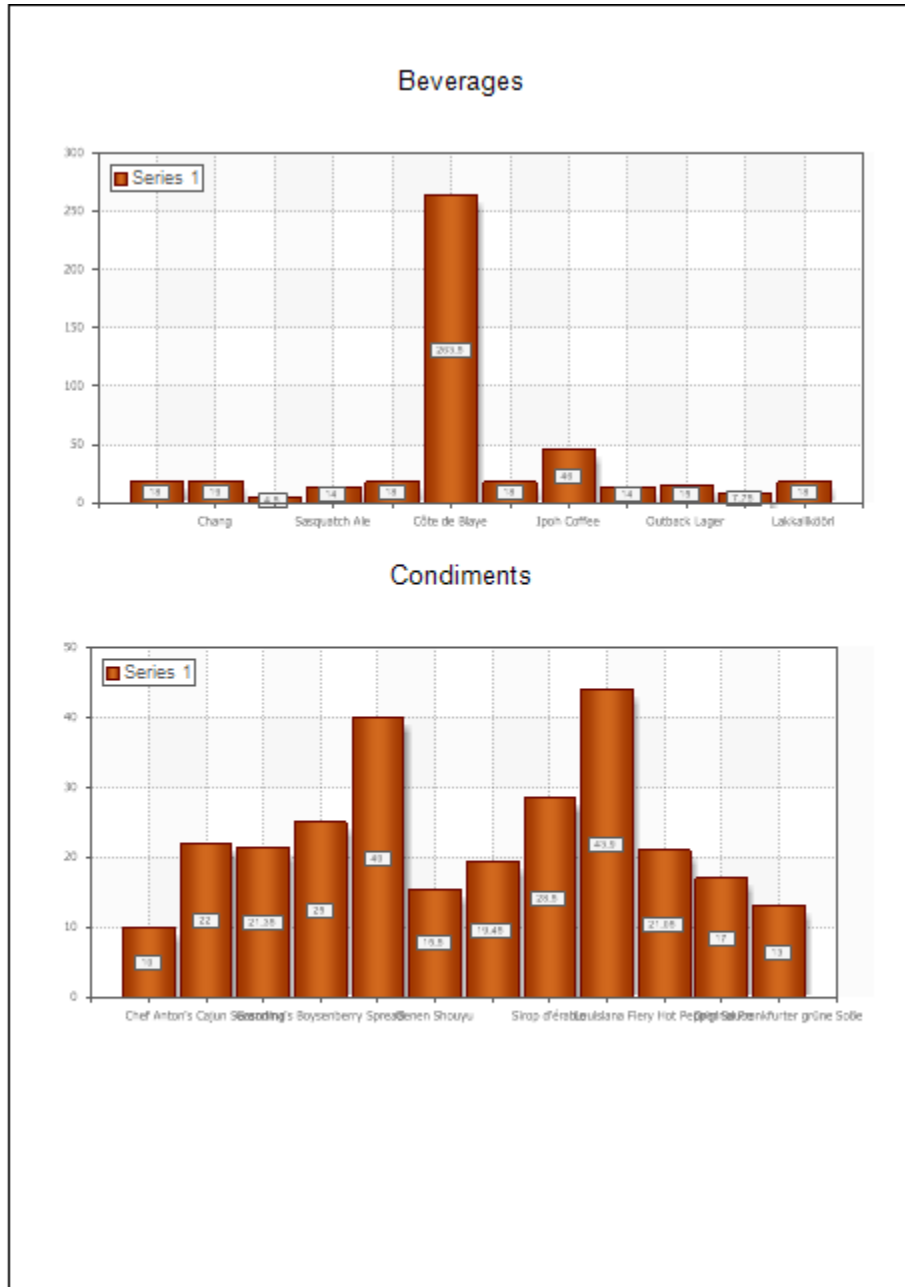


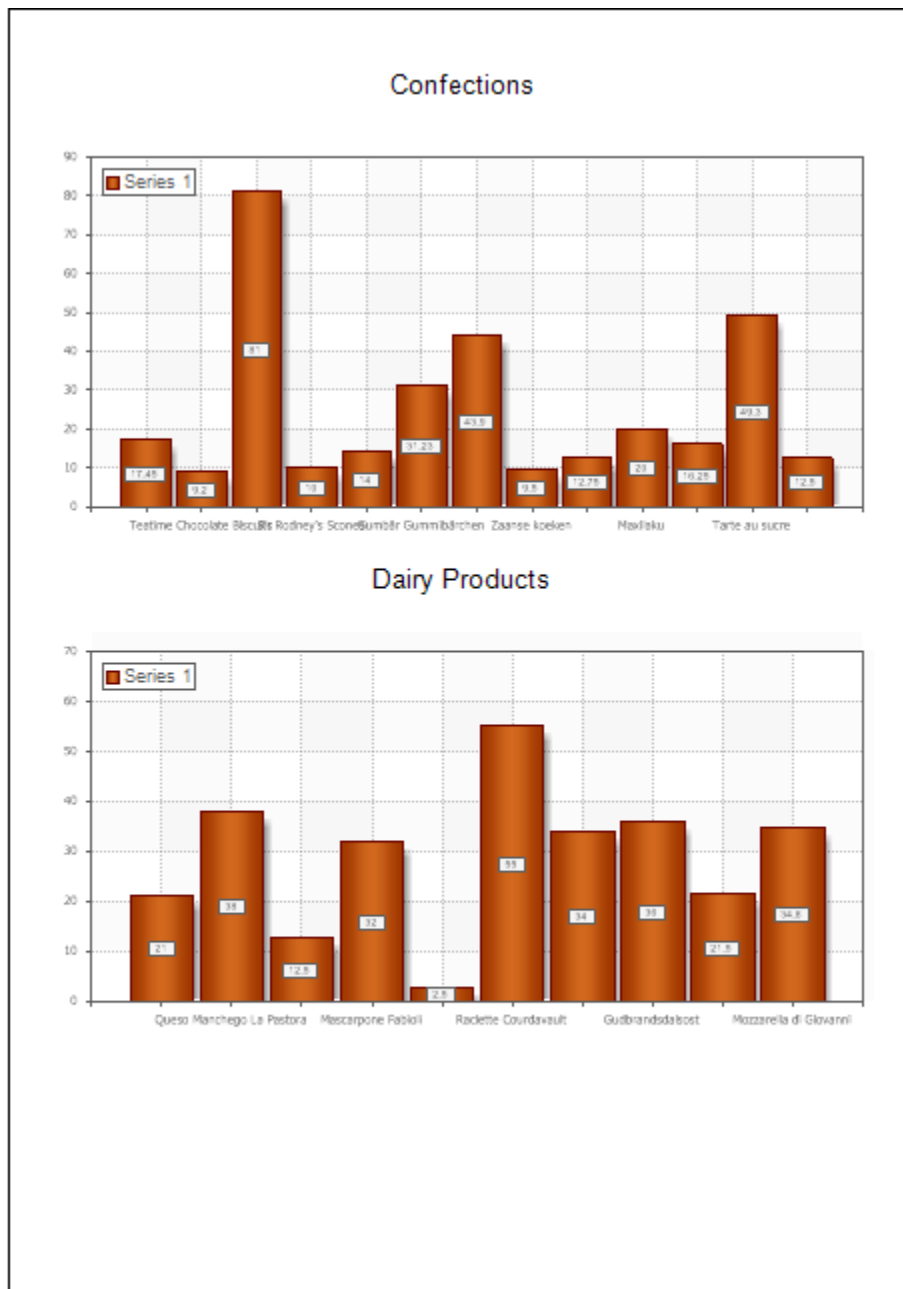
Click the **Add Style** button to start creating a style. Select **Chart** from the drop down list. Set the style using **Basic Color Style**, **Brush Type** and **Style Colors** group of properties.



Click **Close**. In the list of values of the **Style** property of the chart component a custom style will be displayed. In our case, the value is **Style for Chart**. Select this value;

3. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows samples of reports with the chart with a style applied:



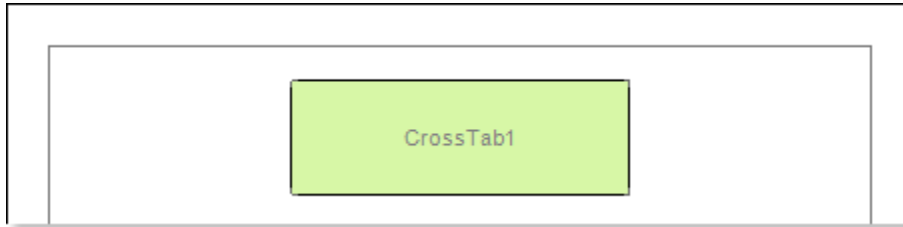



1.8 Report with Cross-Tab on Page

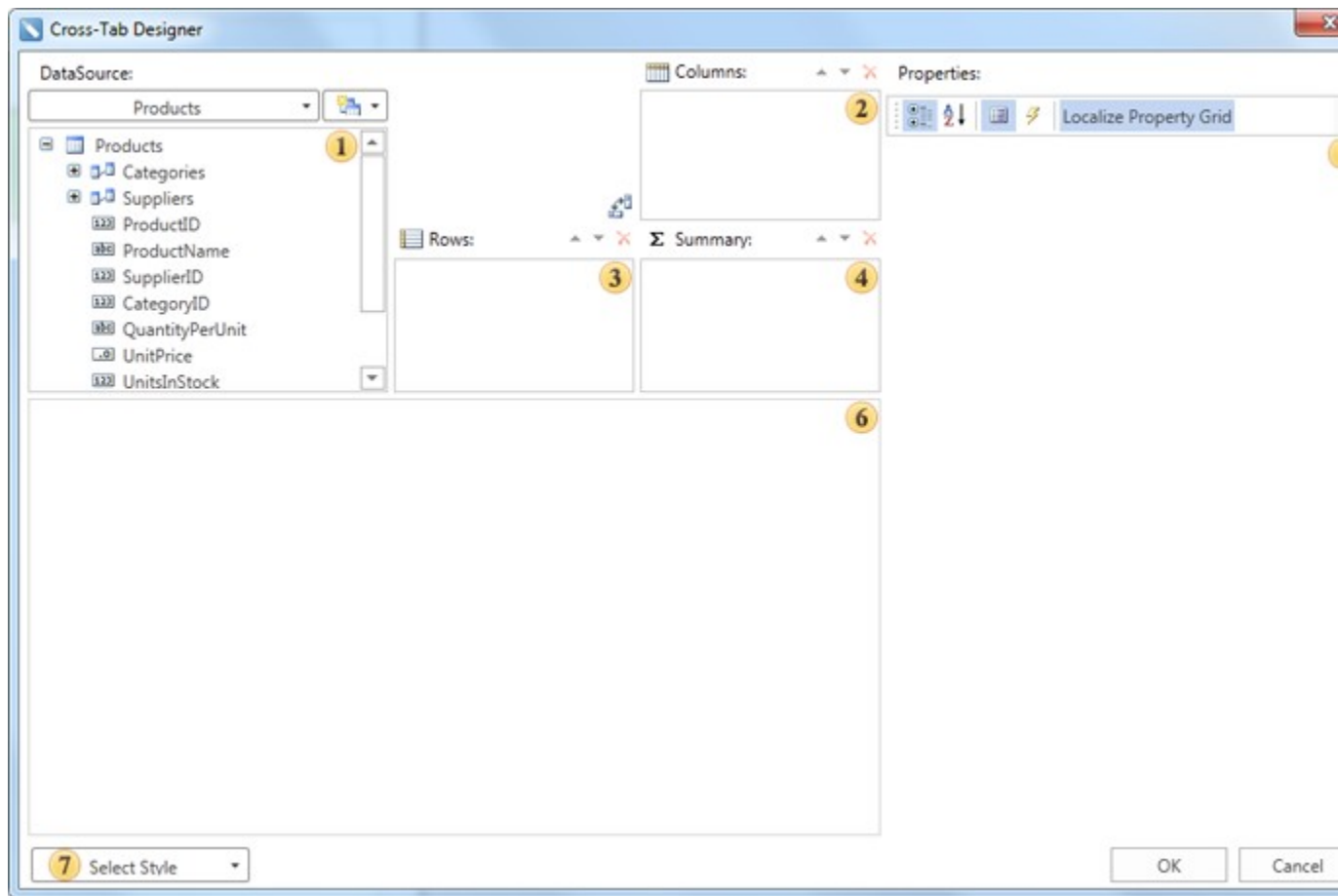
Do the following steps to create a report with the cross table:

1. Run the designer;

2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Put the **Cross-Tab** component on a page of the report template.



4. Edit the **Cross-Tab** component:
 - 4.1. For example, set the **GrowToHeight** property to **true**, to allow the **Cross-Tab** component to grow by height;
 5. Define the data source for the **Cross-Tab** component of the band, for example, using the **Data Source** property:
- A screenshot of a property editor window. It has a tab labeled 'Data Source'. Below the tab, there is a text field containing the word 'Products' and a small button with three dots '...' to its right.
6. Invoke the **Cross-Tab Designer**, for example, clicking the **Design...** item of the context menu of the cross table component. The picture below shows the **Cross-Tab Designer** window:



- 1 The **DataSource** field shows the data columns of the selected data source;
- 2 The **Columns** field shows a list of columns of the data source by what the columns in the cross table will be created;
- 3 The **Rows** field shows a list of rows of the data source by what the rows in the cross table will be created;
- 4 The **Summary** field shows a list of columns of the data source by what the summary in the cross table will be created;
- 5 The **Properties** field shows the properties of the selected item of the cross table;
- 6 The **Cross-Tab Cells** field shows cells of the cross table;
- 7 The **Select Style** button. When clicking the drop down list of styles for the cross table appear.

7. Do the following steps in the **Cross-Tab Designer**:

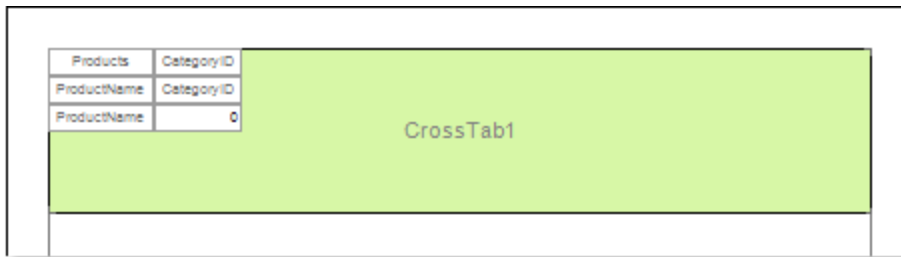
- 7.1. Add the data column from the **DataSource** to the **Columns** field of the cross-tab. For example, add the **CategoryID** data column to the **Columns** field of the cross-tab. Hence one entry from this data column will correspond to one column in the rendered cross-table, i.e. the number of entries in this data column

will be equal to the number of columns in the cross-table;

7.2. Add a column of the data source from **1** the **DataSource** field to **3** the **Rows** of the cross-table. For example, add the **ProductName** data column to the **Rows** field of the cross-table, and then one entry from this data column will correspond to one row in the rendered cross-table, i.e. the number of entries in this data column will be equal to the number of rows in the cross-table;

7.3. Add a data column from **1** the **DataSource** field to the **4 Summary** field of the cross-table. For example, add the **UnitInStock** data column to the **Summary** field of the cross-table, i.e. all entries in this data column will be summary entries in the cross-table;

8. Press the **OK** button in order to save your changes and go back to the report template with cross-table.



9. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a rendered cross-tabreport:

Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup		13						
Boston Crab Meat								123
Camembert Plerot				19				
Camaron Tigels								42
Chai	39							
Chang	17							
Chateause verte	69							
Chef Anton's Cajun Seasoning	53							
Chef Anton's Gumbo Mix								
Chocolate			15					
Côte de Blaye	17							
Escargots de Bourgogne								62

10. Go back to the report template;

11. Edit cells in the report template:

11.1. Set the font settings: type, style, size;

11.2. Set the background of cells;

- 11.3. Set the **Word Wrap** property to **true** if it is necessary to wrap text;
- 11.4. Switch on/off **Borders**;
- 11.5. Set the border color;
- 11.6. Set the background of cells etc.

Products	CategoryID	
ProductName	CategoryID	Total
ProductName	0	
Total		

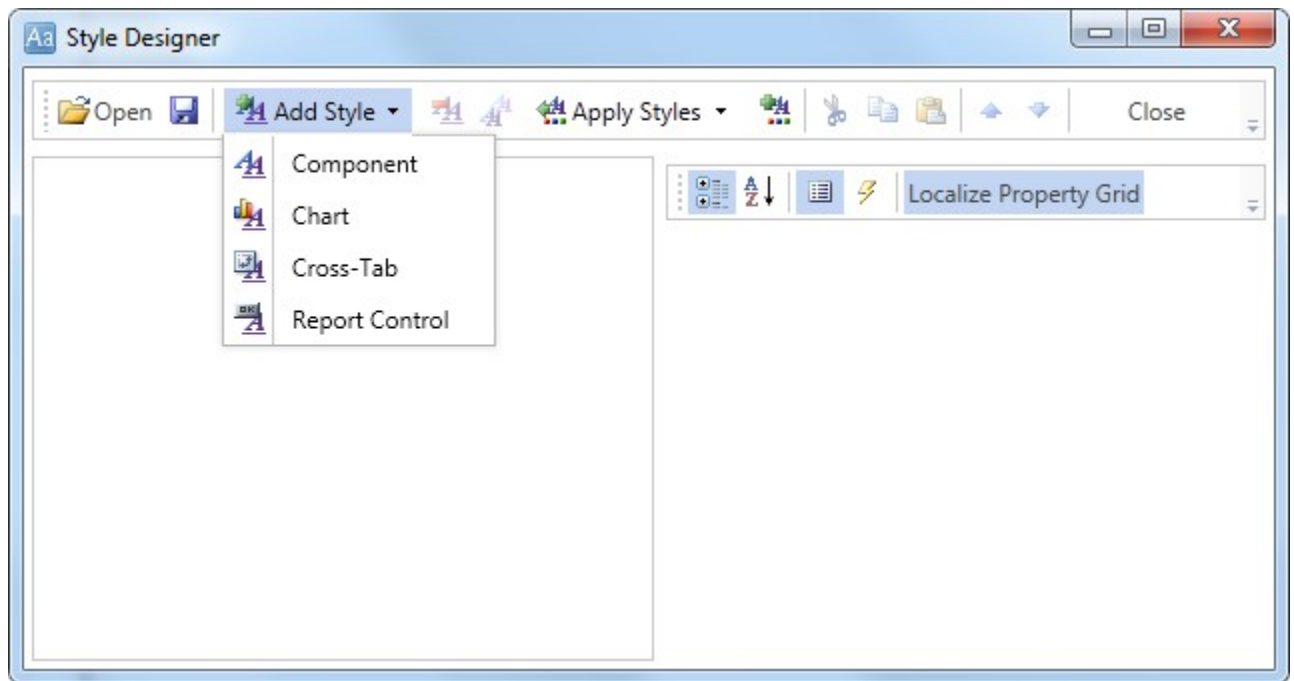
CrossTab1

12. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a report of the rendered report with the cross table after editing report template cells:

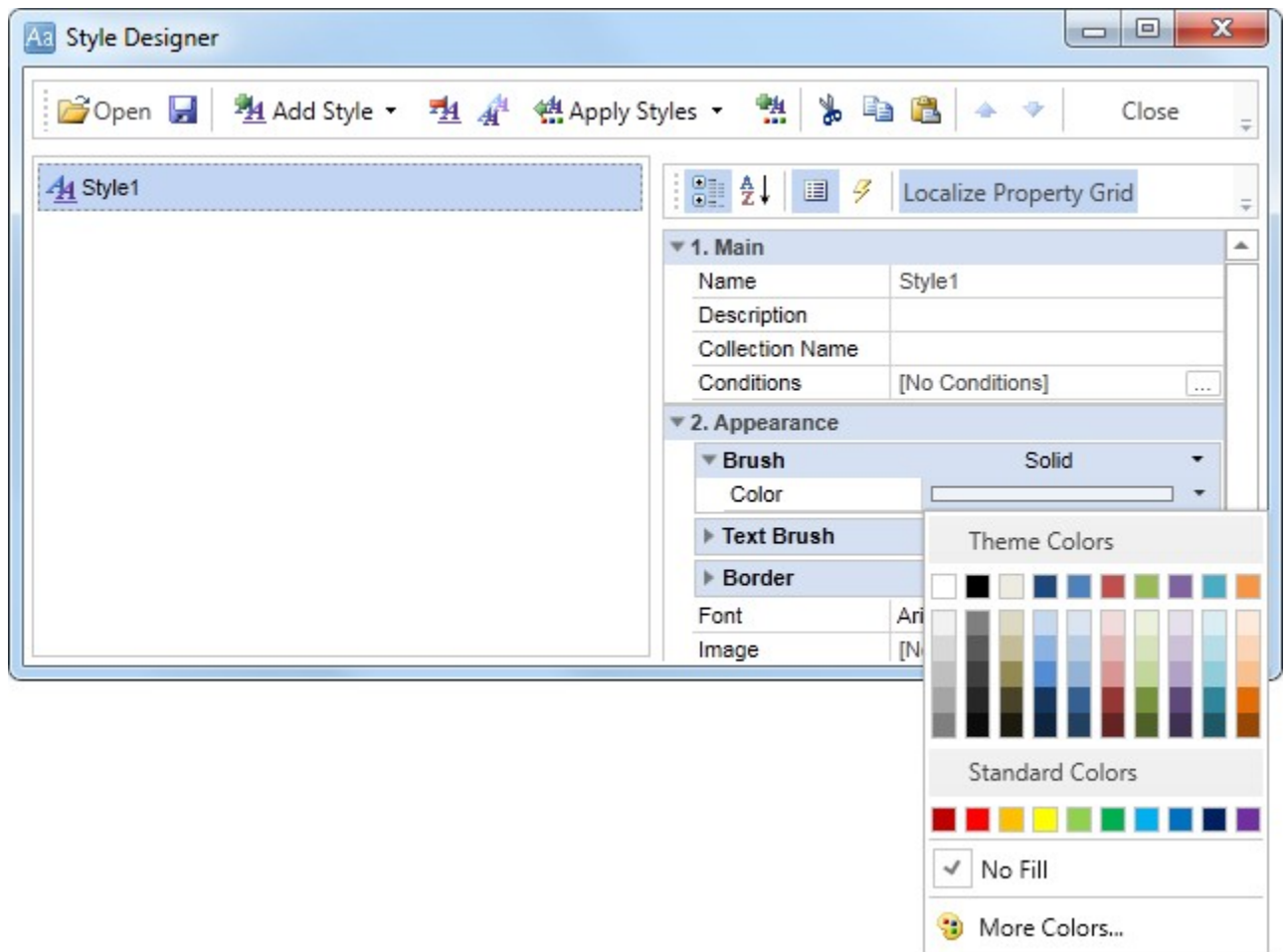
Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup			13					
Boston Crab Meat								123
Camembert Pierrot				19				
Carnarvon Tigers								42
Chai	39							
Chang	17							
Chartreuse verte	69							
Chef Anton's Cajun Seasoning		53						
Chef Anton's Gumbo Mix								
Chocolate			15					
Côte de Blaye	17							
Escargots de Bourgogne								62

Adding styles

1. Go back to the report template;
 2. Call the **Style Designer**;
- The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Cross-Tab** from the drop down list. To create the custom style, set the **Color** property. The picture below shows a sample of the **Style Designer** with created custom style:



Click **Close**. In the list of values of the **Select Style** button in the cross-table editor, a custom style will be displayed. In our case, the name is **Style for Cross-Tab**. Select this value;

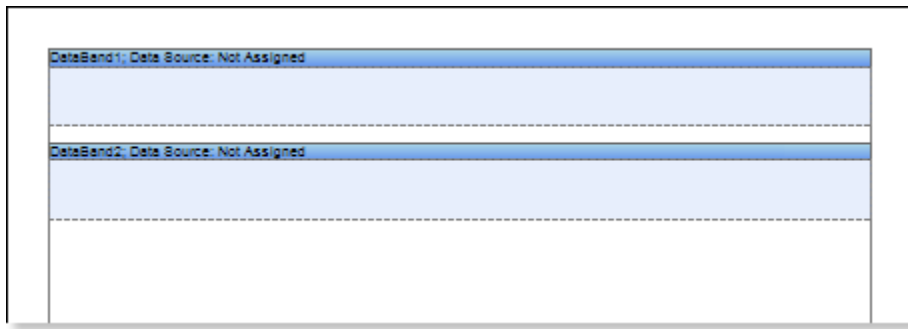
3. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of the rendered cross-table report using the custom style:

Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup		13						
Boston Crab Meat								123
Camembert Pierrot			19					
Camaron Tigers								42
Chai	39							
Chang	17							
Chartreuse verte	69							
Chef Anton's Cajun Seasoning		53						
Chef Anton's Gumbo Mix								
Chocolate			15					
Côte de Blaye	17							
Escargots de Bourgogne								62

1.9 Cross-Tab Report in Data Band

If the **Cross-Tab** component is placed in the **DataBand**, then when designing a report, this component will be constructed as part of the **DataBand**. Because the **Cross-Tab** component placed in the **DataBand** is designed as an element of the **DataBand**, then, when designing a report, this component will be printed as many times as the **DataBand**. Consider an example of building a report with the **Cross-Tab** in the **DataBand**. In this example, **Cross-Tab** will display the detailed entries in the **Master-Detail** report. Do the following steps in order to build a report with the **Cross-Tab** in the **DataBand**:

1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Create the **Relation** between data sources. If the **Relation** is not created and/or the **Relation** property will be not filled for the **Detail** data source, then, for each **Master** entries, all **Detail** entries will not be output;
4. Put two **DataBands** on a page of a report template;



5. Edit **DataBand1** and **DataBand2**:

- 5.1 Align the **DataBands** vertically;
- 5.2 Change the value of the required properties. For example, for the **DataBand1**, which is a **Master** component in the **Master-Detail** report, set the **Print If Detail Empty** property to **true**, if you want the **Master** entries be printed in any case, even if the **Detail** entries are not available. And for the **DataBand2**, which is a **Detail** component in the **Master-Detail** report, set the **CanShrink** property to **true**, if it is necessary for this band to be shrunk;
- 5.3 Change the background color of the **DataBand**;
- 5.4 If necessary, set **Borders** of the **DataBand**;

6. Specify data sources for **DataBands**, as well as assign the **Master** component. In our example, the **Master** component is the upper **DataBand1**, and hence indicate the **DataBand1** in the **Master Component** tab of the **Data Setup** dialog box of the lower **DataBand2** as the **Master** component;

7. Fill in the **Data Relation** property of the **DataBand**, which is the **Detail** component, in our case, this is the **DataBand2**:

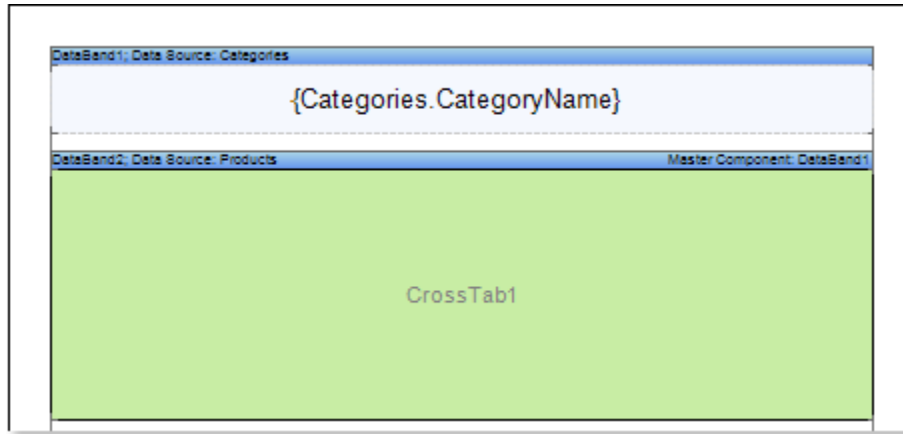


8. Put the text component with an expression. Where the expression is a reference to the data field. For example: the **DataBand1**, that is the **Master** component, put the text component with the **{Categories.CategoryName}** expression;

9. Edit text and text components located in the **DataBand**:

- 9.1. Drag the text component to the required place in the **DataBand**;
- 9.2. Align the text in a text component;
- 9.3. Change the value of the required properties. For example to set the **Word Wrap** property to **true**, if you want the text be wrapped;
- 9.4. Set **Borders** of a text component, if required.
- 9.5. Change the border color.

10. Put the **Cross-Tab** component in the **DataBand**. In this case, the **Cross-Tab** component will be located on the **DataBand2**, that is the **Detail** component of the report.



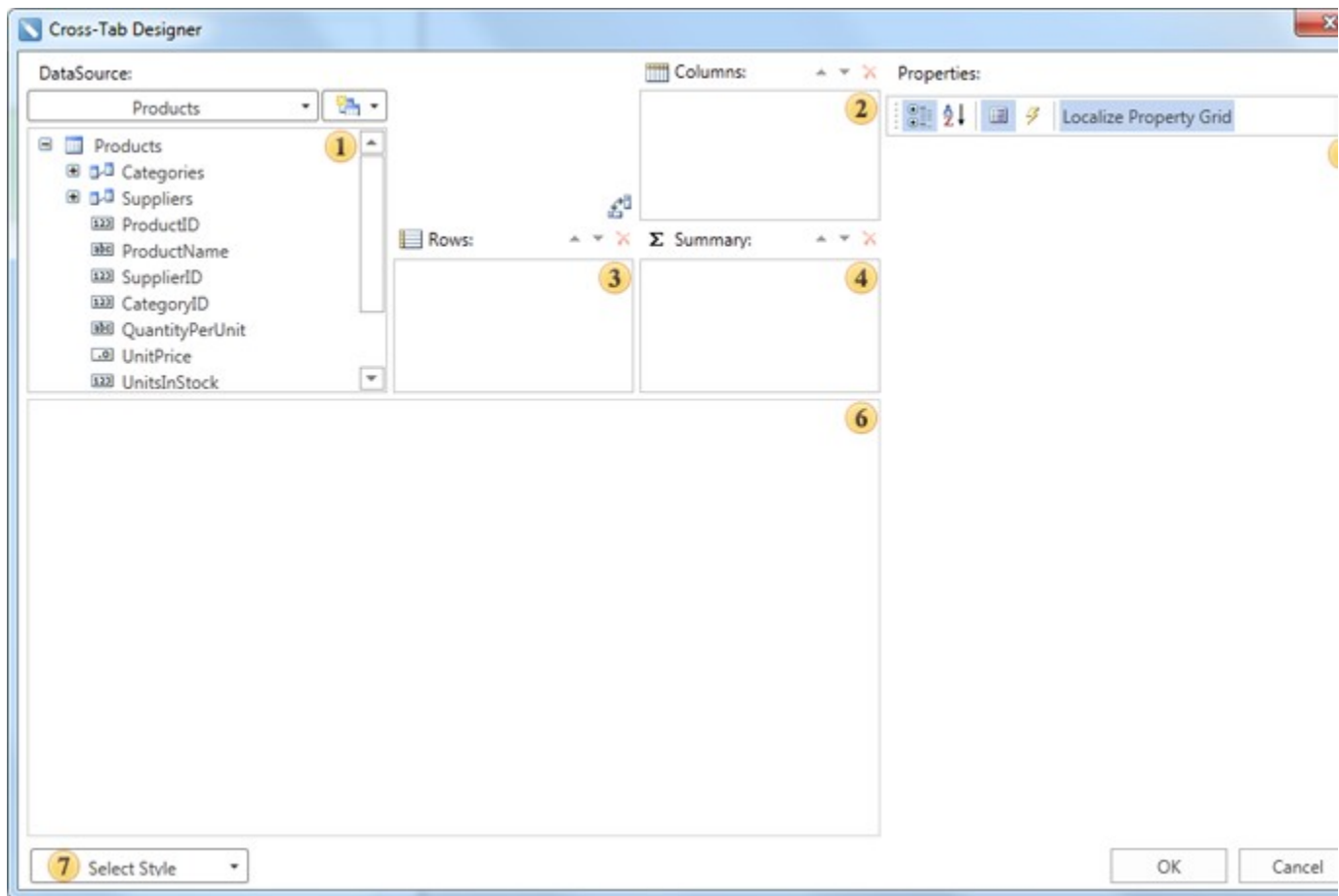
11. Edit the **Cross-Tab** component:

11.1 Change values of the **Cross-Tab** properties. For example, set the **Can Shrink** property to **true**, if you want the **Cross-Tab** component be shrunk;

12. Specify the data source for the band of the **Cross-Tab** component, for example, using the **Data Source**:



13. Call the **Cross-Tab Designer**, for example, by selecting **Edit .. (Design..)** of the context menu of the cross-table component.



- 1 The **DataSource** field. This field displays data columns of the selected data source;
- 2 The **Columns** field. This field displays a list of columns of the data source for the entries by which columns in the cross-table will be formed;
- 3 The **Rows** field. This field displays a list of columns of the data source for the entries by which lines in the cross-table will be formed;
- 4 The **Summary** field. This field displays a list of columns of the data source for the entries by which summaries in the cross-table will be formed;
- 5 The **Properties** field. This field displays the properties of the selected element of cross-table;
- 6 The **Cross-Tab Cells** field. This field displays cells of the cross-table;
- 7 The **Description** field. This field displays a short description of the selected properties of the cross-table item;
- 8 The **Select Style** button. When you click, the drop-down list of styles appears for the cross-table.

14. Do the following in the **Cross-Tab Designer** editor:

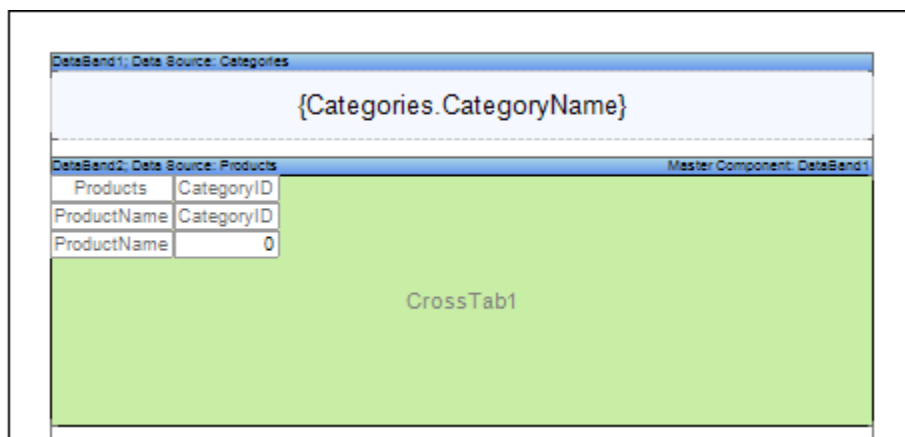
- 14.1. Add a data column from the 1 **DataSource** field to the 2 **Columns** field of

the cross-table. Add a data column from the **DataSource** field to the **Columns** field of the cross-table. For example, add the **CategoryID** data column of data to the **Columns** field of the cross-table, and then one entry from this data column will correspond to one column in the rendered cross-table;

14.2. Add a data column of the data source from the **1 DataSource** field to the **3 Rows** field of the cross-table. For example, add the **ProductName** data column to the **Rows** field of the cross-table, and then one entry from this data column will correspond to one row in the rendered cross-table, i.e. the number of entries in this data column will be equal to the number of rows in the cross-table;

14.3. Add a data column from the **1 DataSource** field to the **4 Summary** field of the cross-table. For example, add the **UnitInStock** data column to the **Summary** field of the cross-table, i.e. entries in this data column will be summary entries in the cross-table;

15. Press the **OK** button in order to save your changes and go back to the report template with the cross-table.



16. Render a report. Click the **Preview** button or call the **Viewer** by selecting the **Preview** of the menu item. The picture below shows an example of the cross-table report:

Beverages

Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup		13						
Boston Crab Meat								123
Camembert Pierrot				19				
Carnarvon Tigers								42
Chai	39							
Chang	17							
Chartreuse verte	69							
Chef Anton's Cajun Seasoning		53						
Chef Anton's Gumbo Mix								
Chocolate			15					
Côte de Blaye	17							
Escargots de Bourgogne								62
Filo Mix					38			
Flotemysost				26				
Gelöst				112				
Genen Shouyu		39						
Gnocchi di nonna Alice					21			
Gorgonzola Telino								
Grandma's Boysenberry Spread		120						
Gravad lax								11
Guaraná Fantástica		20						
Gudbrandsdalsost				26				
Gula Malacca		27						
Gumbär Gummibärchen			15					
Gustaf's Knäckebröd					104			
Ikura								31
Inlagd Sill								112
Ipoh Coffee		17						
Jack's New England Clam Chowder								85
Konbu								24
Lakkalikööri		57						
Laughing Lumberjack Lager		52						
Longlife Tofu								4
Louisiana Fiery Hot Pepper Sauce		76						
Louisiana Hot Spiced Okra		4						
Manjimup Dried Apples								20
Mascarpone Fabioli				9				
Maxilaku			10					
Mishi Kobe Niku						29		
Mozzarella di Giovanni				14				

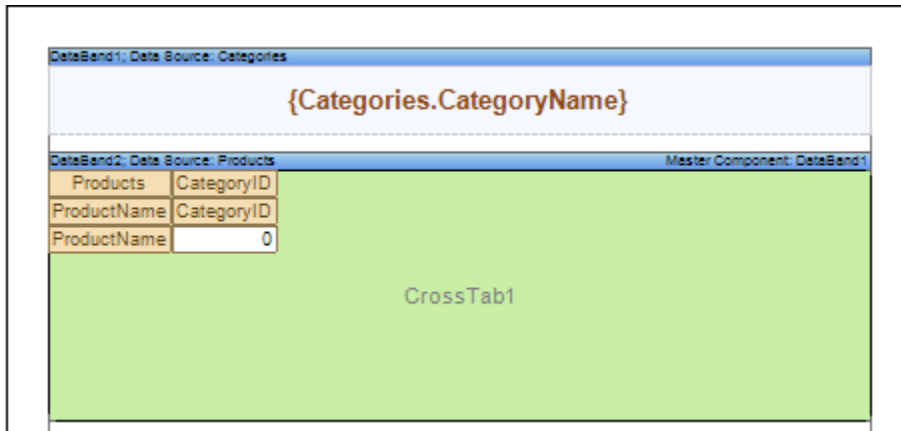
Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Nord-Ost Matjeshering								10
Northwoods Cranberry Sauce		6						
NuNuCa Nuß-Nougat-Creme			76					
Original Frankfurter grüne Soße		32						
Outback Lager	15							
Pâté chinois						115		
Pavlova			29					
Perth Pasties								
Queso Cabrales				22				
Queso Manchego La Pastora				86				
Raclette Courdavault				79				
Ravioli Angelo					36			
Rhönbräu Klosterbier	125							
Röd Kaviar								101
Rogede sild								5
Rössle Sauerkraut							26	
Sasquatch Ale	111							
Schoggi Schokolade			49					
Scottish Longbreads			6					
Singaporean Hokkien Fried Mee					26			
Sir Rodney's Marmalade			40					
Sir Rodney's Scones			3					
Sirop d'érable		113						
Spegesild								95
Steeleye Stout	20							
Tarte au sucre			17					
Teatime Chocolate Biscuits			25					
Thüringer Rostbratwurst								
Tofu							35	
Tourtière						21		
Tunnbröd					61			
Uncle Bob's Organic Dried Pears							15	
Valkoinen suklaa			65					
Vegie-spread		24						
Wimmers gute Semmelknödel					22			
Zaanse koeken			36					

Condiments

Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup		13						
Boston Crab Meat								123

17. Go back to the report template;
18. If necessary, edit the text component in the **DataBand**:
 - 18.1. Change the backgroundcolor of the text component;
 - 18.2. Change the style, color, and text type.
19. Edit cells in the report template:
 - 19.1. Change the font settings: type, style, size;
 - 19.2. Change the background color of a cell;

- 19.3. Set the **Word Wrap** property to **true**, if you want the text to be wrapped;
- 19.4. Set **Borders** if necessary;
- 19.5. Change the bordercolor.
- 19.6. Change the background color of cells, etc.



20. Render a report. Click the **Preview** button or call the **Viewer** by clicking the **Preview** menu item. The picture below shows an example of the cross-table report after editing cells of the report template:

Beverages

Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup		13						
Boston Crab Meat								123
Camembert Pierrot				19				
Carnarvon Tigers								42
Chai	39							
Chang	17							
Chartreuse verte	69							
Chef Anton's Cajun Seasoning		53						
Chef Anton's Gumbo Mix								
Chocolate			15					
Côte de Blaye	17							
Escargots de Bourgogne								62
Filo Mix					38			
Flotemysost				26				
Gelöst				112				
Genen Shouyu		39						
Gnocchi di nonna Alice					21			
Gorgonzola Telino								
Grandma's Boysenberry Spread		120						
Gravad lax								11
Guaraná Fantástica	20							
Gudbrandsdalsost				26				
Gula Malacca		27						
Gumbär Gummibärchen			15					
Gustaf's Knäckebröd					104			
Ikura								31
Inlagd Sill								112
Ipoh Coffee	17							
Jack's New England Clam Chowder								85
Konbu								24
Lakkalikööri	57							
Laughing Lumberjack Lager	52							
Longlife Tofu								4
Louisiana Fiery Hot Pepper Sauce		76						
Louisiana Hot Spiced Okra		4						
Manjimup Dried Apples								20
Mascarpone Fabioli				9				
Maxilaku			10					
Mishi Kobe Niku						29		
Mozzarella di Giovanni				14				

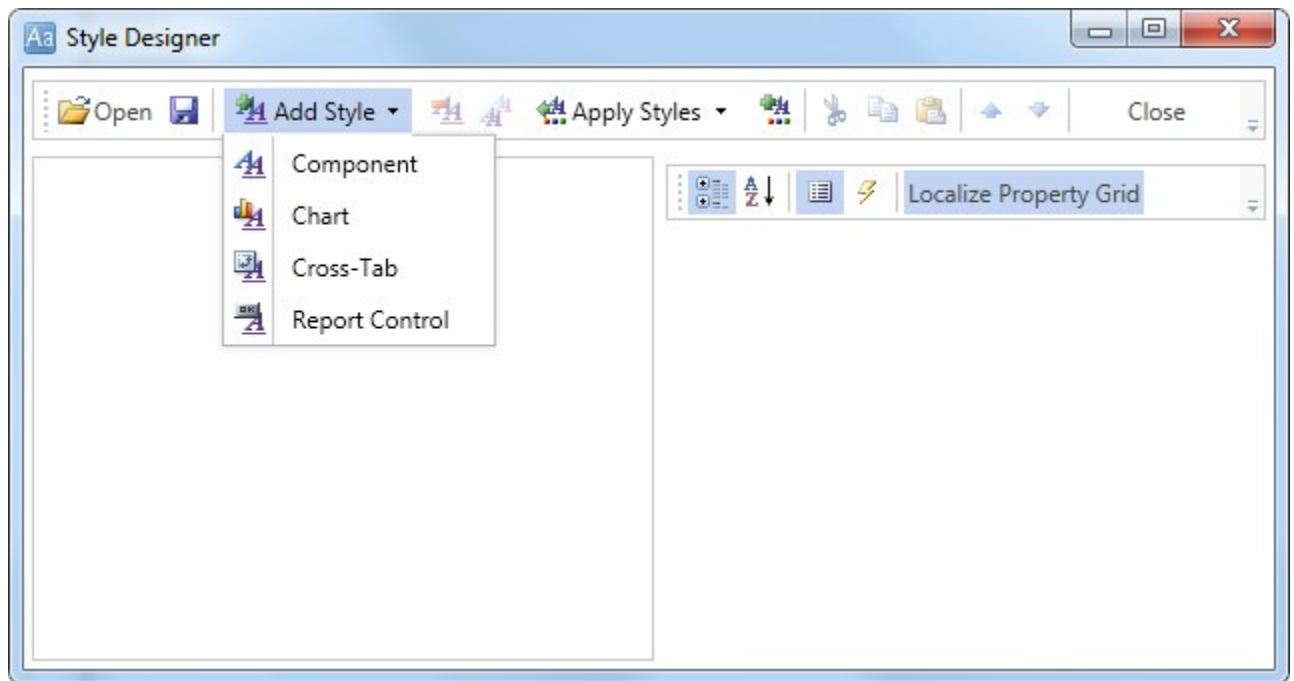
Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Nord-Ost Matjeshering								10
Northwoods Cranberry Sauce		6						
NuNuCa Nuß-Nougat-Creme			76					
Original Frankfurter grüne Soße		32						
Outback Lager	15							
Pâté chinois						115		
Pavlova			29					
Perth Pasties								
Queso Cabrales				22				
Queso Manchego La Pastora				86				
Raclette Courdavault				79				
Ravioli Angelo					36			
Rhönbräu Klosterbier	125							
Röd Kaviar								101
Rogede sild								5
Rössle Sauerkraut							26	
Sasquatch Ale	111							
Schoggi Schokolade			49					
Scottish Longbreads			6					
Singaporean Hokkien Fried Mee					26			
Sir Rodney's Marmalade			40					
Sir Rodney's Scones			3					
Sirop d'érable		113						
Spegesild								95
Steeleye Stout	20							
Tarte au sucre			17					
Teatime Chocolate Biscuits			25					
Thüringer Rostbratwurst								
Tofu							35	
Tourtière						21		
Tunnbröd					61			
Uncle Bob's Organic Dried Pears							15	
Valkoinen suklaa			65					
Veggie-spread		24						
Wimmers gute Semmelknödel					22			
Zaanse koeken			36					

Condiments

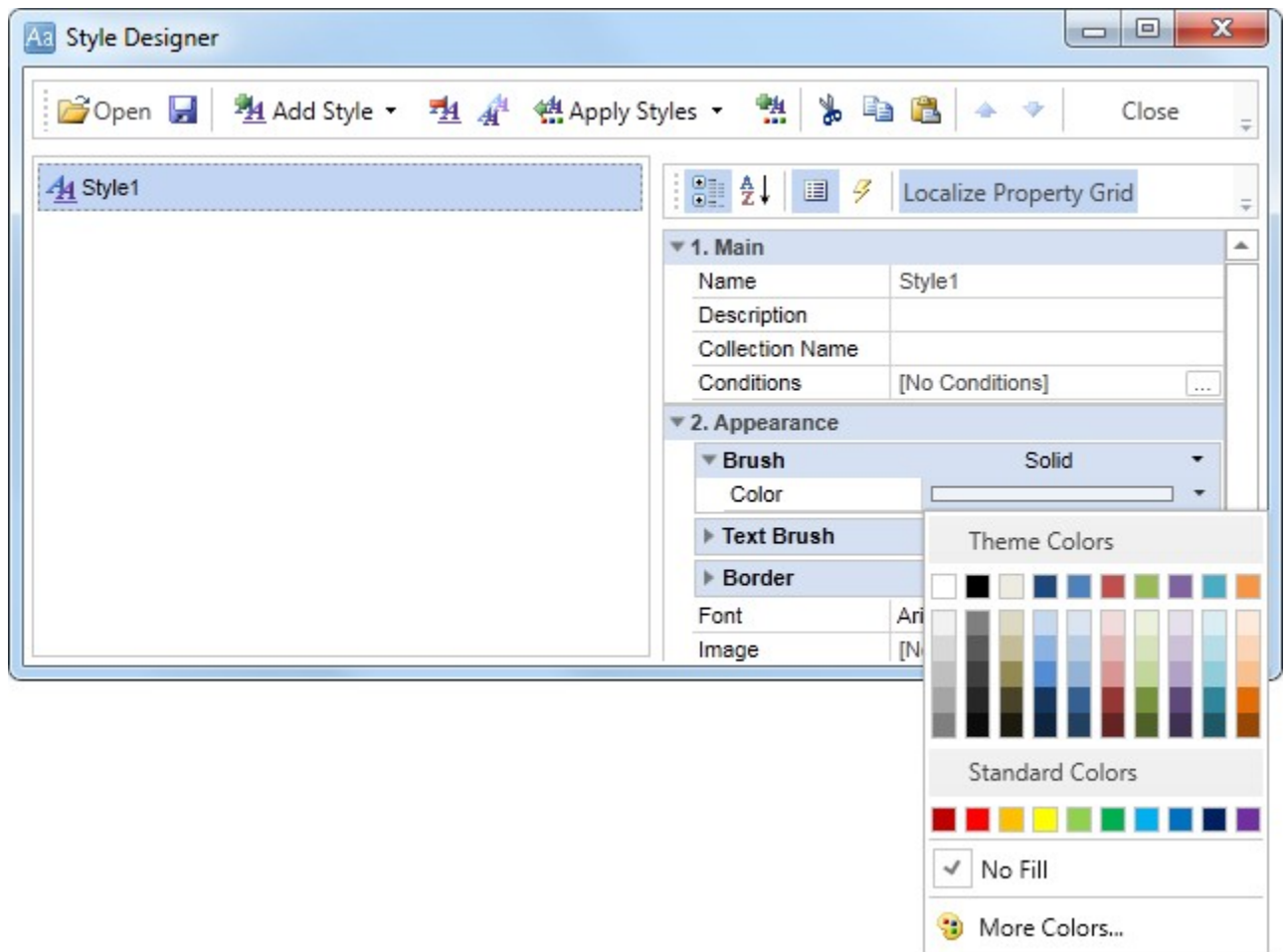
Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup		13						
Boston Crab Meat								123

Adding styles

1. Go back to the report template;
2. Invoke the **Style Designer**;



Click the **Add Style** button to start creating a style. Select **Cross-Tab** from the drop down list. Call the new style as **Style for Cross-Tab**. To create a custom style it is necessary to change the **Color** property, where the value of this property and is a color scheme.



After the style is created, press the **Close** button. In the list of values of the **Select Style** button in the editor of the cross-table, a custom style will be displayed. In our case, this is the **Style for Cross-Tab**. Select this value;

3. Render a report. Click the **Preview** button or call the **Viewer** by selecting the **Preview** menu item. Now you can see the result of the rendered report:

Beverages

Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup		13						
Boston Crab Meat								123
Camembert Pierrot				19				
Carnarvon Tigers								42
Chai	39							
Chang	17							
Chartreuse verte	69							
Chef Anton's Cajun Seasoning		53						
Chef Anton's Gumbo Mix								
Chocolate			15					
Côte de Blaye	17							
Escargots de Bourgogne								62
Filo Mix					38			
Flotemysost				26				
Gelöst				112				
Genen Shouyu		39						
Gnocchi di nonna Alice					21			
Gorgonzola Telino								
Grandma's Boysenberry Spread		120						
Gravad lax								11
Guaraná Fantástica	20							
Gudbrandsdalsost				26				
Gula Malacca		27						
Gumbär Gummibärchen			15					
Gustaf's Knäckebröd					104			
Ikura								31
Inlagd Sill								112
Ipoh Coffee	17							
Jack's New England Clam Chowder								85
Konbu								24
Lakkalikööri	57							
Laughing Lumberjack Lager	52							
Longlife Tofu							4	
Louisiana Fiery Hot Pepper Sauce		76						
Louisiana Hot Spiced Okra		4						
Manjimup Dried Apples							20	
Mascarpone Fabioli				9				
Maxilaku			10					
Mishi Kobe Niku						29		
Mozzarella di Giovanni				14				

Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Nord-Ost Matjeshering								10
Northwoods Cranberry Sauce		6						
NuNuCa Nuß-Nougat-Creme			76					
Original Frankfurter grüne Soße		32						
Outback Lager	15							
Pâté chinois						115		
Pavlova			29					
Perth Pasties								
Queso Cabrales				22				
Queso Manchego La Pastora				86				
Raclette Courdavault				79				
Ravioli Angelo					36			
Rhönbräu Klosterbier	125							
Röd Kaviar								101
Rogede sild								5
Rössle Sauerkraut							26	
Sasquatch Ale	111							
Schoggi Schokolade			49					
Scottish Longbreads			6					
Singaporean Hokkien Fried Mee					26			
Sir Rodney's Marmalade			40					
Sir Rodney's Scones			3					
Sirop d'érable		113						
Spegesild								95
Steeleye Stout	20							
Tarte au sucre			17					
Teatime Chocolate Biscuits			25					
Thüringer Rostbratwurst								
Tofu							35	
Tourtière						21		
Tunnbröd					61			
Uncle Bob's Organic Dried Pears							15	
Valkoinen suklaa			65					
Veggie-spread		24						
Wimmers gute Semmelknödel					22			
Zaanse koeken			36					

Condiments

Products	CategoryID							
ProductName	1	2	3	4	5	6	7	8
Alice Mutton								
Aniseed Syrup		13						
Boston Crab Meat								123

1.10 Hierarchical Report

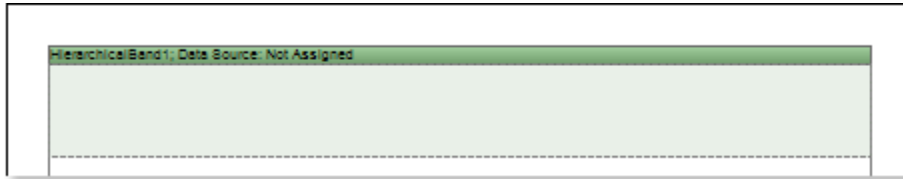
Do the following steps to create a hierarchical report:

1. Run the designer;

2. Connect data:

- 2.1. Create **New Connection**;
- 2.2. Create **New Data Source**;

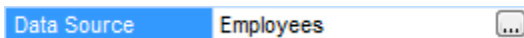
3. Put the **HierarchicalBand** on a page of the report template.



4. Edit the **HierarchicalBand**:

- 4.1. Align the **HierarchicalBand** by height;
- 4.2. Set the properties of the **HierarchicalBand**. For example, set the **Can Break** property to **true**, if it is necessary for the **HierarchicalBand** to be broken;
- 4.3. Set the background of the **HierarchicalBand**;
- 4.4. Set the **Borders** of the **HierarchicalBand**;
- 4.5. Set the border color.

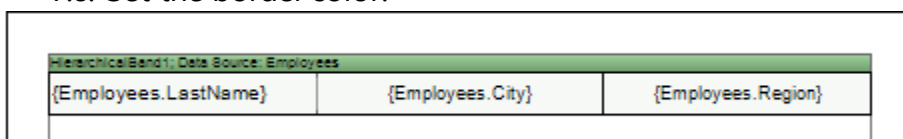
5. Set the data source of the **HierarchicalBand** using the **Data Source** property:



6. Put text components with expressions in the **HierarchicalBand**. Where the expression is a reference to the data field. For example, put three text component with expressions: **{Employees.LastName}**, **{Employees.City}**, and **{Employees.Region}**;

7. Edit text (**Text**) and text components (**TextBox**):

- 7.1. Drag the text component to the required place in the **HierarchicalBand**;
- 7.2. Set the font of the text: the size, style, color;
- 7.3. Align the text component vertically and horizontally;
- 7.4. Set the backgroundcolor of the text component;
- 7.5. Align text in the textcomponent;
- 7.6. Set values of the properties of a text component. For example, set the **Word Wrap** property to **true**, if you want the text to be wrapped;
- 7.7. Set **Borders** of a text component.
- 7.8. Set the border color.



8. Set the **KeyDataColumn** property, i.e. select a data column on which an identification number of the data row will be assigned. In this case, select the **EmployeeID** data column:

Key Data Column

9. Set the **MasterKeyDataColumn** property, i.e. select a data column on which the reference to the table's primary key of the parent entry will be specified. In this case, select the **ReportsTo** data column:

Master Key Data Column

10. Set the **Indent** property, i.e. set an offset of the detail entry in relation to the parent one. In this example, the **Indent** property will be 20 units in the report (centimeters, inches, hundredths of inches, pixels);

Indent

11. Set the **ParentValue** property, i.e. indicate the entry, which will be a parent for all rows. If this property is not specified, the default value is used. By default, the **Parent Value** property is set to **null**. In this case, the value of the **ParentValue** property is not specified, so the default value is used:

Parent Value

12. Click the **Preview** button or call **Viewer**, using the **Preview** menu item. After rendering a report, all references to data sources will be replaced with data from these sources. Data will be taken sequentially from the data source, which has been specified for this band. Number of copies of the **DataBand** in the report is equal to the number of rows in the data source.

Fuller	Tacoma	WA
Buchanan	London	
Dodsworth	London	
King	London	
Suyama	London	
Callahan	Seattle	WA
Peacock	Redmond	WA
Davolio	Seattle	WA
Leverling	Kirkland	WA

13. Go back to the report template;
14. If necessary, add other bands into the report template, for example, **HeaderBand**;
15. Edit this band:
 - 15.1. Align the **HeaderBand** vertically;
 - 15.2. Set properties of the **HeaderBand**, if necessary;
 - 15.3. Set the background color of the **HeaderBand**;
 - 15.4. If necessary, set the **Borders**;
 - 15.5. Change the border color.

HeaderBand1		
HierarchyBand2: Data Source: Employees		
{Employees.LastName}	{Employees.City}	{Employees.Region}

16. Put text components with the expressions. Where expressions in text components in the **HeaderBand** will be the data headers;
17. Edit text and text components:
 - 17.1. Drag the text component to the required place in the band;
 - 17.2. Set the font settings: size, style, color;
 - 17.3. Align the text component vertically and horizontally;
 - 17.4. Set the backgroundcolor of the text component;
 - 17.5. Align the text in a text component;
 - 17.6. Set the value of properties of a text component, if necessary;
 - 17.7. If necessary, set **Borders** of a text component;
 - 17.8. Set the border color.

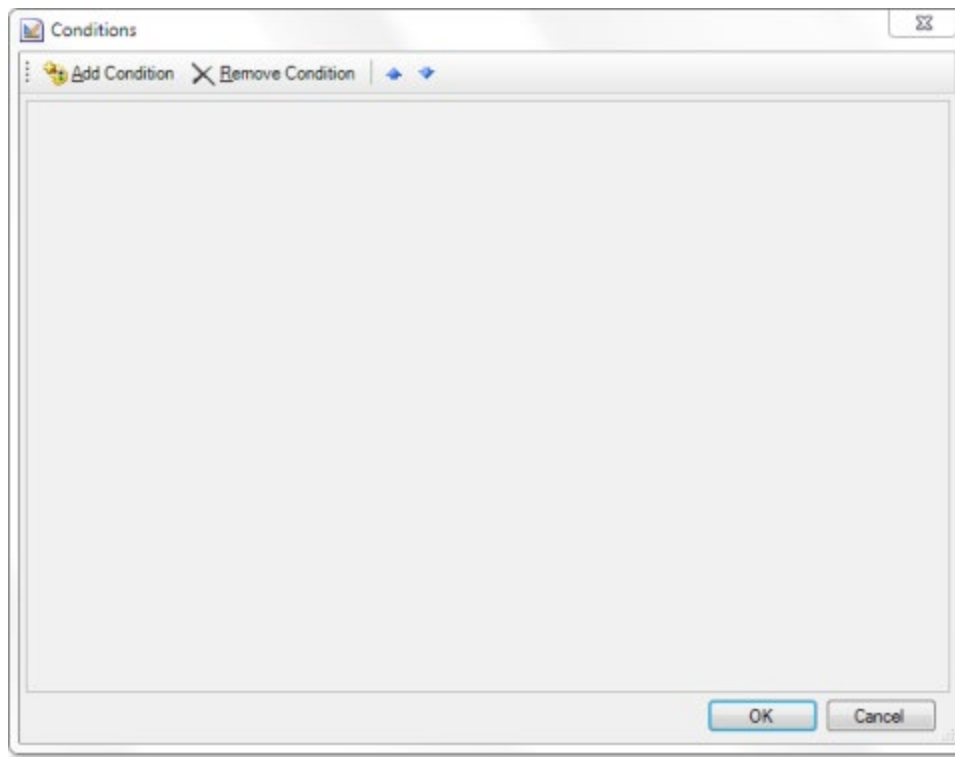
Header/Band1			
Employee		City	Region
Hierarchical/Band2: Data Source: Employees			
{Employees.LastName}	{Employees.City}	{Employees.Region}	

18. Click the **Preview** button or call **Viewer**, using the **Preview** menu item. After rendering a report, all references to data sources will be replaced with data from these sources:

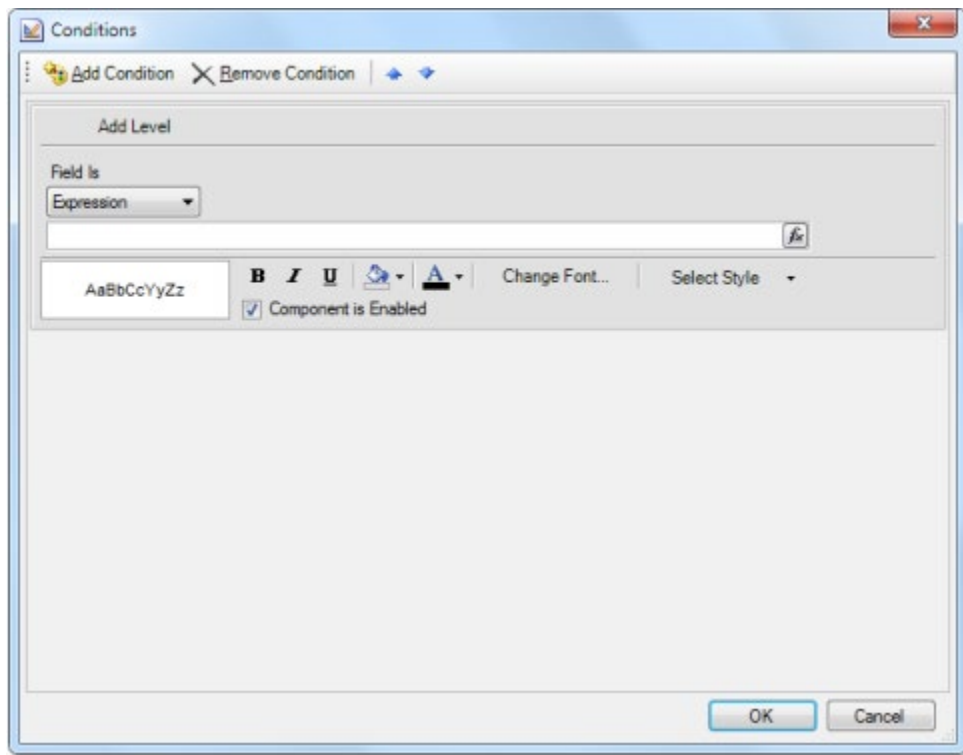
Employee		
City	Region	
Fuller	Tacoma	WA
Buchanan	London	
Dodsworth	London	
King	London	
Suyama	London	
Callahan	Seattle	WA
Peacock	Redmond	WA
Devolio	Seattle	WA
Leverling	Kirkland	WA

Adding styles

1. Go back to the report template;
1. Select component. In our case this is the text component;
2. Invoke the **Conditions** dialog box. For example, click the **Conditions** button on the control panel.



3. To get started, you must click the **Add Condition** button and in the **Conditions** dialog box the condition and formatting options will be displayed. The condition can be of two types: **Value** and **Expression**. In this case, consider an example of a condition, such as **Expression**. The picture below shows an example of **Conditions** dialog box with options and conditions of formatting:



4. Specify the options of conditional formatting. In this case, to specify the condition means to specify the expression. For example, **Line% 2 == 1**, and set the formatting means to change the background, for example, by pressing the **Back Color** button and selecting the drop-down list of values of the background color.
5. Click **OK**. It should also be noted that in order to odd and even rows have different styles, it is necessary to make a conditional formatting of each text component;
6. Render a report by clicking on the **Preview** tab or call the **Viewer** clicking the **Preview** menu item.

Employee	City	Region
Fuller	Tacoma	WA
Buchanan	London	
Dodsworth	London	
King	London	
Suyama	London	
Callahan	Seattle	WA
Peacock	Redmond	WA
Davolio	Seattle	WA
Leverling	Kirkland	WA

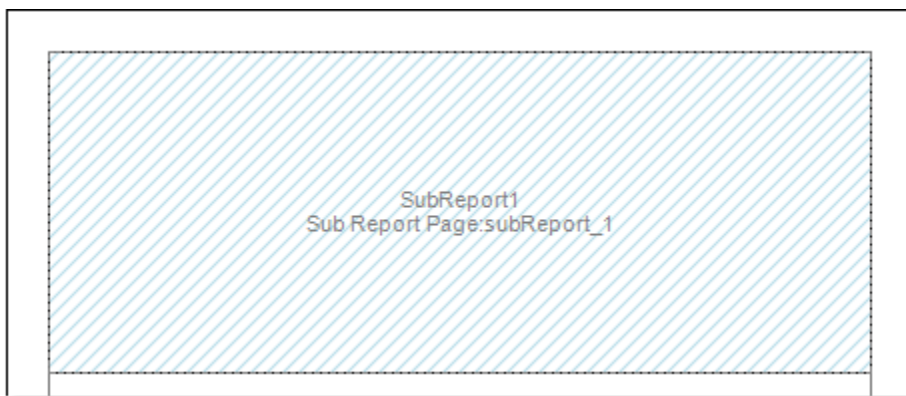
1.11 Report with Sub-Report

Do the following steps to create a sub-report:

1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Add the **Sub-Report** component to a report on a page of the report template:

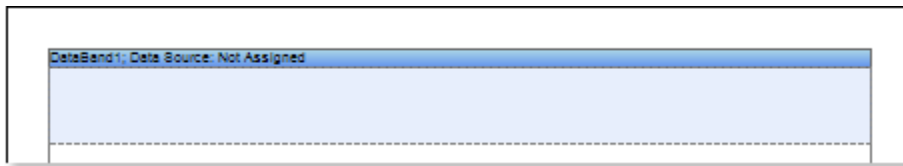


4. Edit the **Sub-Report** component:
 - 4.1. Stretch the **Sub-Report** component as seen on the picture below;
 - 4.2. Change the value of properties of **Sub-Report**. For example, set the **Keep Sub-Report Together** property to **true**, if you want the sub-report to be kept together;;
 - 4.3. Change the background color of the component.



5. Go to the sub-report page;

6. Add to the **DataBand** to the sub-report page;



7. Edit the **DataBand**:

7.1. Align the **DataBand** vertically;

7.2. Change values of properties of the **DataBand**. For example, set the **CanBreak** property to **true**, if you want this band to be broken;

7.3. Change background color of the band;

7.4. Set **Borders**, if necessary;

7.5. Change the border color.

8. Specify the data source for the **DataBand** using the **Data Source** property:



9. Put text components with expressions in the **DataBand**. Where an expression is a reference to a data field. For example, put the following expressions to two text components: **{Customers.CompanyName}** and **{Customers.City}**;

10. Edit **Text** and **TextBoxes**:

10.1. Drag the text component to the required place in the **DataBand**;

10.2. Set the text font: size, style, color;

10.3. Align text component vertically and horizontally;

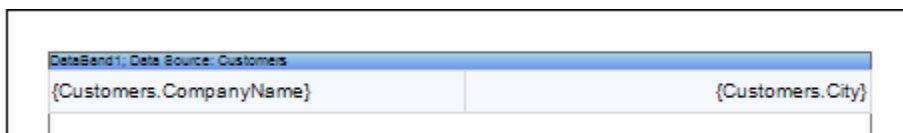
10.4. Set the background color of the text component;

10.5. Align text in the component;

10.6. Set values of the properties of text components. For example to set the **Word Wrap** property to **true**, if you want the text to be wrapped;

10.7. Set **Borders** of a text component.

10.8. Set the border color.



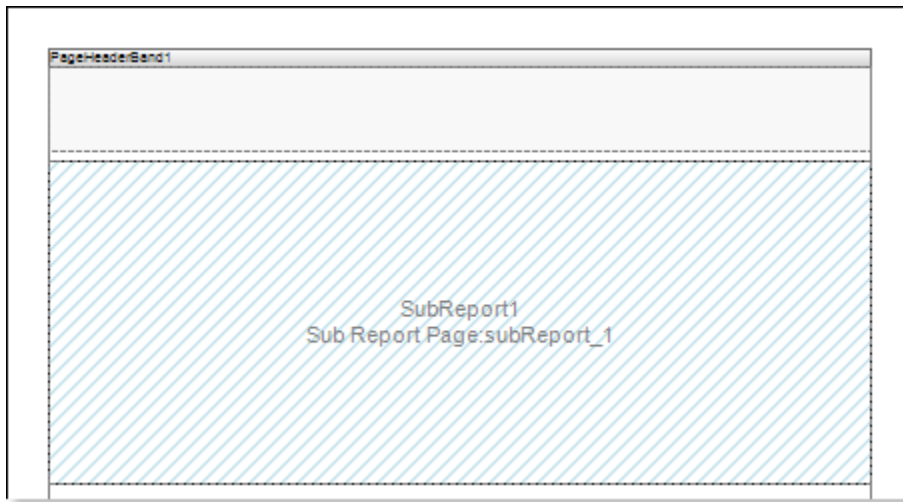
11. Click the **Preview** button or call **Viewer**, using the **Preview** menu item to see how the report will look like.

Alfreds Futterkiste	Berlin
Ana Trujillo Emparedados y helados	México D.F.
Antonio Moreno Taquería	México D.F.
Around the Horn	London
Berglunds snabbköp	Luleå
Blauer See Delikatessen	Mannheim

Alfreds Futterkiste	Berlin
Ana Trujillo Emparedados y helados	México D.F.
Antonio Moreno Taquería	México D.F.
Around the Horn	London
Berglunds snabbköp	Luleå
Blauer See Delikatessen	Mannheim

As can be seen from the picture above, the report generator rendered the report, which was located in the nested page and placed it on the report page but not in the Sub-Report component.

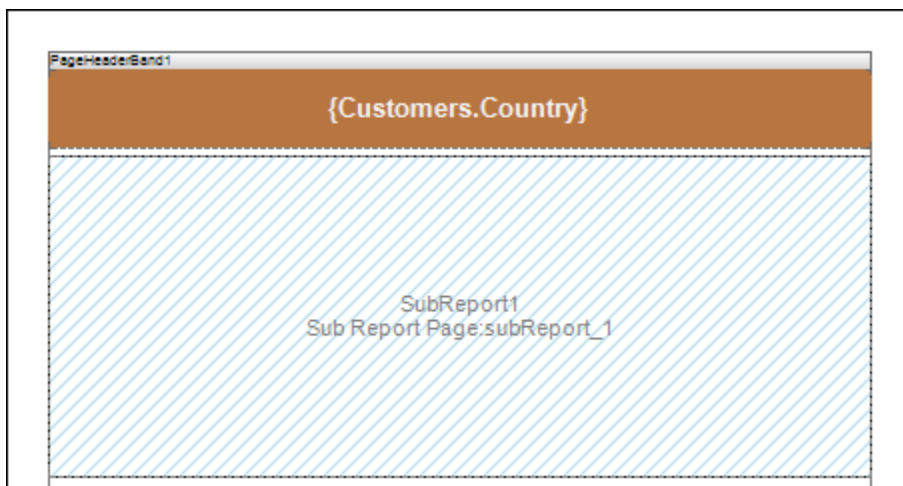
12. Go back to the report template;
13. If necessary, add some bands to the report template, for example, the **PageHeaderBand**;
14. Edit this band:
 - 14.1. Align vertically this band;
 - 14.2. Set values of the properties of the **PageHeaderBand**, if necessary;
 - 14.3. Set the background color;
 - 14.4. Set **Borders** of a text component.
 - 14.5. Set the border color.



15. Put a text component with expression where the expression of the text component in the **PageHeaderBand** will be the page title.

16. Edit the text component:

- 16.1. Drag the text component to the required place in the band;
- 16.2. Set the text font: size, style, color;
- 16.3. Align text component vertically and horizontally;
- 16.4. Set the background color of the text component;
- 16.5. Align text in the component;
- 16.6. Set values of the properties of text components;
- 16.7. Set **Borders** of a text component.
- 16.8. Set the border color.



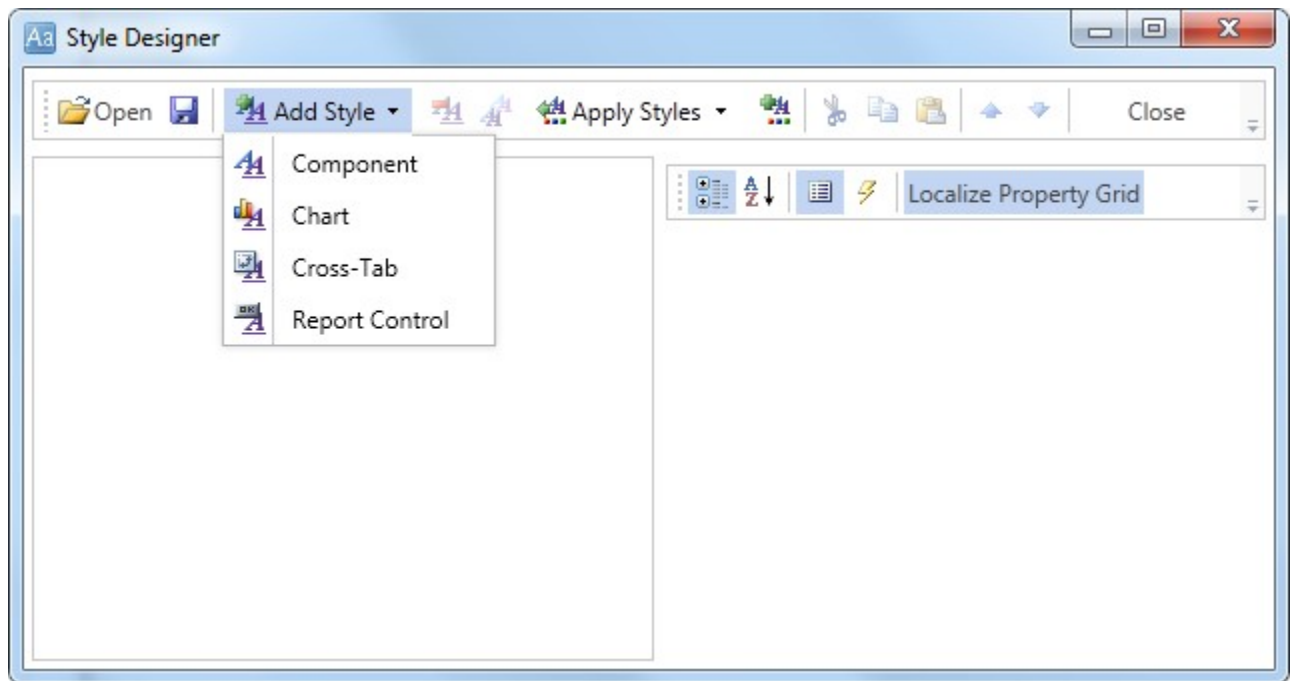
17. Click the **Preview** button or call **Viewer**, using the **Preview** menu item to see how the report will look like.

Germany	
Alfreds Futterkiste	Berlin
Ana Trujillo Emparedados y helados	México D.F.
Antonio Moreno Taquería	México D.F.
Around the Horn	London
Berglunds snabbköp	Luleå
Blaugauer Delikatessen	Mannheim

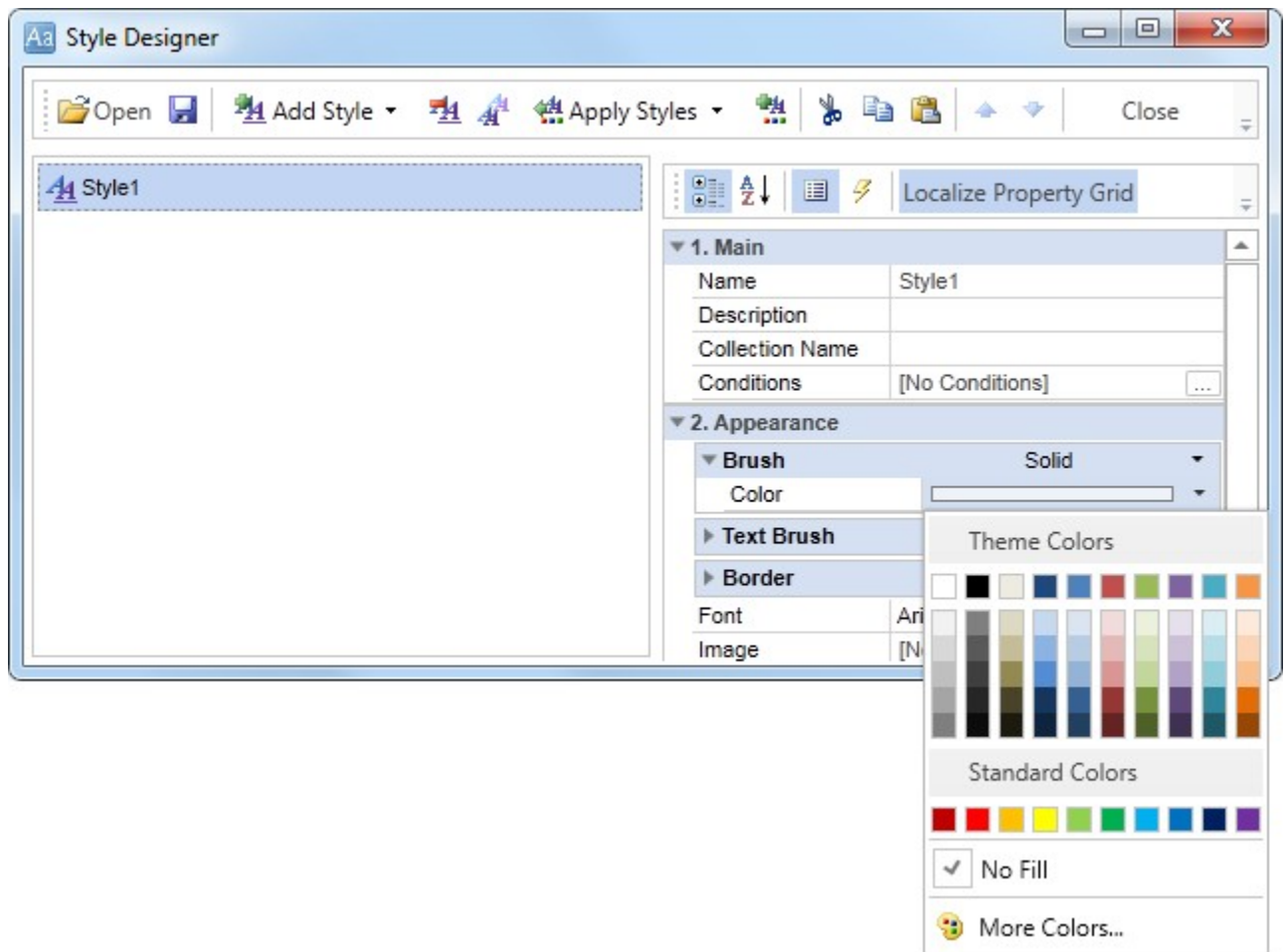
Poland	
Blondies père et fils	Strasbourg
Bólido Comidas preparadas	Madrid
Bon app'	Marseille
Bottom-DollarMarkes	Tsawassen
B's Beverages	London
Cactus Comidas para llevar	Buenos Aires

Adding styles

1. Go back to the report template;
2. Select the sub-report;
3. Select the **DataBand**;
4. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

5. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered sub-report with alternative color of rows:

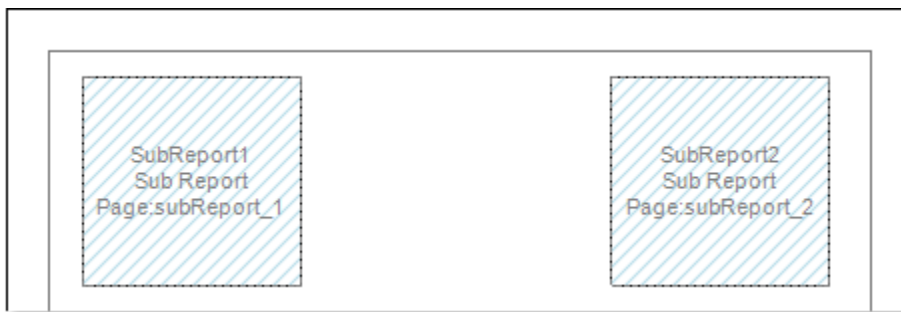
Germany	
Alfreds Futterkiste	Berlin
Ana Trujillo Emparedados y helados	México D.F.
Antonio Moreno Taquería	México D.F.
Around the Horn	London
Berglunds snabbköp	Luleå
Blauer See Delikatessen	Mannheim

Poland	
Biondesdidi père et fils	Strasbourg
Bólido Comidas preparadas	Madrid
Bon app'	Marseille
Bottom-Dollar/Markets	Tsawassen
B's Beverages	London
Cactus Comidas para llevar	Buenos Aires

1.12 Side-by-Side Report

The **Side-by-side** report is a type of independent data lists, located side by side. Do the following steps to create such a report:

1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Add **Sub-Report** components to a report on a page of the report template:



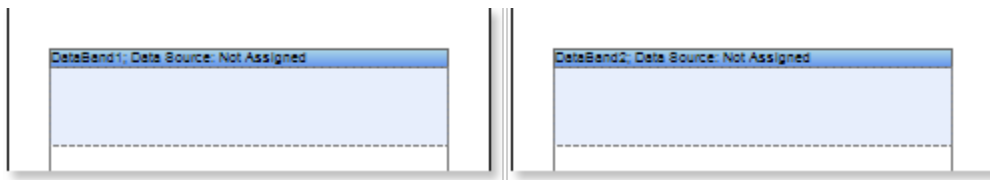
4. Edit **Sub-Report** components:

- 4.1. Stretch **Sub-Report** components as seen on the picture below;
- 4.2. Change the value of properties of **Sub-Report**. For example, set the **Keep Sub-Report Together** property to **true**, if you want the sub-report to be kept together;
- 4.3. Change the background color of the component.



5. Go to the sub-report page;

6. Add two **DataBands** to the sub-report page. Add **DataBand1** to the **Sub Report1** and **DataBand2** to the **Sub Report2**;



7. Edit the **DataBands**:

- 7.1. Align the **DataBands** vertically;
- 7.2. Change values of properties of the **DataBands**.
- 7.3. Change background color of the band;
- 7.4. Set **Borders**, if necessary;
- 7.5. Change the border color.

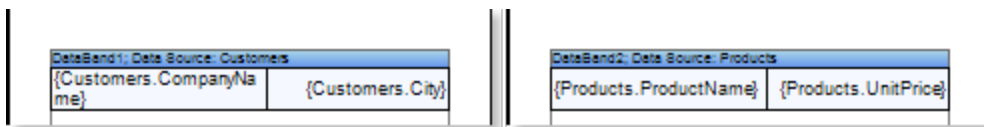
8. Specify the data source for the **DataBand** using the **Data Source** property. For example, set the **Customers** data source for the **DataBand1**, and the **Products** data source for the **DataBand2**:



9. Put text components with expressions in the **DataBands**. Where an expression is a reference to a data field. For example, put the following expressions to the **DataBand1**: **{Customers.CompanyName}** and **{Customers.City}**. put the following expressions to the **DataBand2**: **{Products.ProductName}** and **{Products.UnitPrice}**;

10. Edit **Text** and **TextBoxes**:

- 10.1. Drag the text component to the required place in the **DataBand**;
- 10.2. Set the text font: size, style, color;
- 10.3. Align text component vertically and horizontally;
- 10.4. Set the background color of the text component;
- 10.5. Align text in the component;
- 10.6. Set values of the properties of text components. For example to set the **Word Wrap** property to **true**, if you want the text to be wrapped;
- 10.7. Set **Borders** of a text component.
- 10.8. Set the border color.



11. Click the **Preview** button or call **Viewer**, using the **Preview** menu item to see how the report will look like:

Alfreds Futterkiste	Berlin	Chai	18
Ana Trujillo Emparedados y helados	México D.F.	Chang	19
Antonio Moreno Taquería	México D.F.	Aniseed Syrup	10
Around the Horn	London	Chef Anton's Cajun Seasoning	22
Berglunds snabbköp	Luleå	Chef Anton's Gumbo Mix	21,35
Blauer See Delikatessen	Mannheim	Grandma's Boysenberry Spread	25
Blondesddsl père et fils	Strasbourg	Uncle Bob's Organic Dried Pears	30
Bóldo Comidas preparadas	Madrid	Northwoods Cranberry Sauce	40
Bon app'	Marseille	Mishi Kobe Niku	97
Bottom-Dollar Markets	Tsawassen	Ikura	31
E's Beverages	London	Queso Cabrales	21
Cactus Comidas para llevar	Buenos Aires	Queso Manchego La Pastora	38
Centro comercial Mootezuma	México D.F.	Konbu	6
Chop-suey Chinese	Bern	Tofu	23,25
Comércio Mineiro	Sao Paulo	Genen Shouyu	15,5

As can be seen from the picture above, the report generator rendered the report, which was located in the nested page and placed it on the report page but not in the Sub-Report component.

12. Go back to the report template;
13. If necessary, add some bands to the report template, for example, the **HeaderBand**;
14. Edit this band:
 - 14.1. Align vertically this band;
 - 14.2. Set values of the properties of the **HeaderBand**, if necessary;
 - 14.3. Set the background color;
 - 14.4. Set **Borders** of a text component.
 - 14.5. Set the border color.

HeaderBand1	
DataBand1: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}

HeaderBand2	
DataBand2: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

15. Put a text component with expression where the expression of the text component in the **HeaderBand** will be the page title.
16. Edit the text component:

- 16.1. Drag the text component to the required place in the band;
- 16.2. Set the text font: size, style, color;
- 16.3. Align text component vertically and horizontally;
- 16.4. Set the background color of the text component;
- 16.5. Align text in the component;
- 16.6. Set values of the properties of text components;
- 16.7. Set **Borders** of a text component.
- 16.8. Set the border color.

HeaderBand1	
CompanyName	City
DataBand1: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}

HeaderBand2	
ProductName	UnitPrice
DataBand2: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

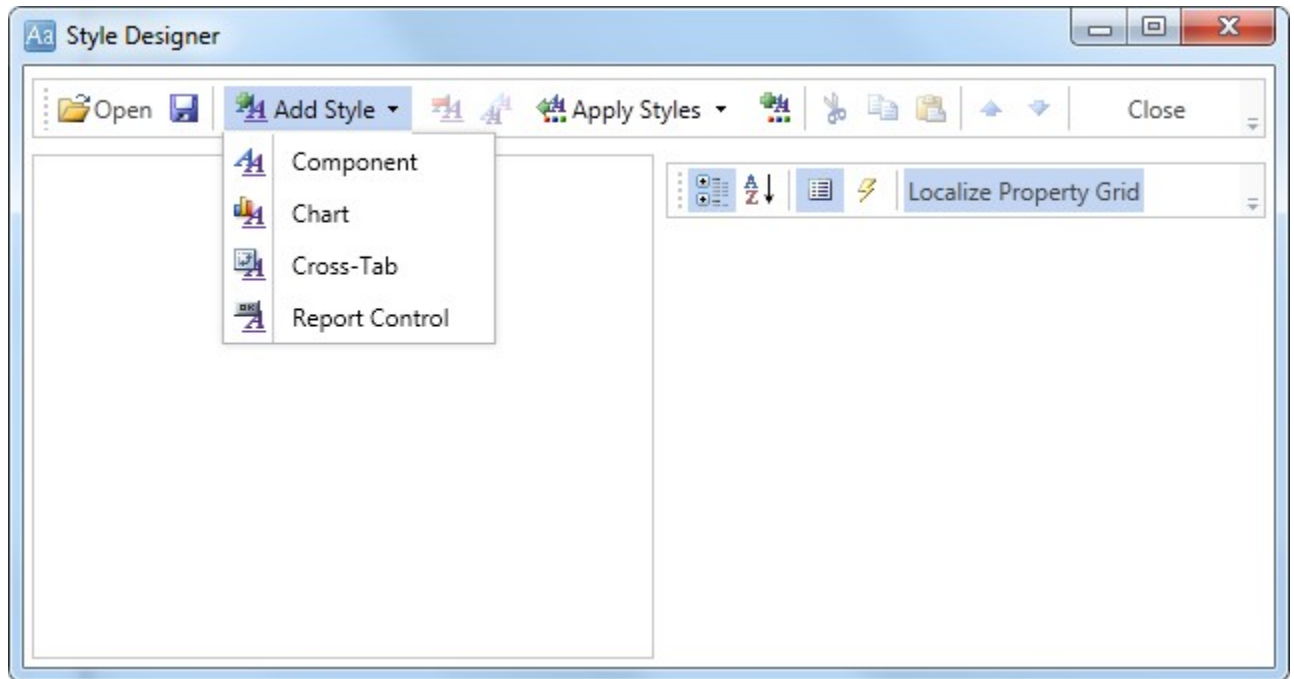
17. Click the **Preview** button or call **Viewer**, using the **Preview** menu item to see how the report will look like:

CompanyName	City	ProductName	UnitPrice
Alfreds Futterkiste	Berlin	Chai	18
Ana Trujillo Emparedados y helados	México D.F.	Chang	19
Antonio Moreno Taquería	México D.F.	Aniseed Syrup	10
Around the Horn	London	Chef Anton's Cajun Seasoning	22
Berglunds snabbköp	Luleå	Chef Anton's Gumbo Mix	21,35
Blauer See Delikatessen	Mannheim	Grandma's Boysenberry Spread	25
Blondesdsi père et fils	Strasbourg	Uncle Bob's Organic Dried Pears	30
Bóldo Comidas preparadas	Madrid	Northwoods Cranberry Sauce	40
Bon app'	Marseille	Mishi Kobe Niku	97
Bottom-Dollar Markets	Tsawassen	Ikura	31
B's Beverages	London	Queso Cabrales	21
Cactus Comidas para llevar	Buenos Aires	Queso Manchego La Pastora	38
Centro comercial Moctezuma	México D.F.	Konbu	6
Chop-suey Chinese	Bern	Tofu	23,25

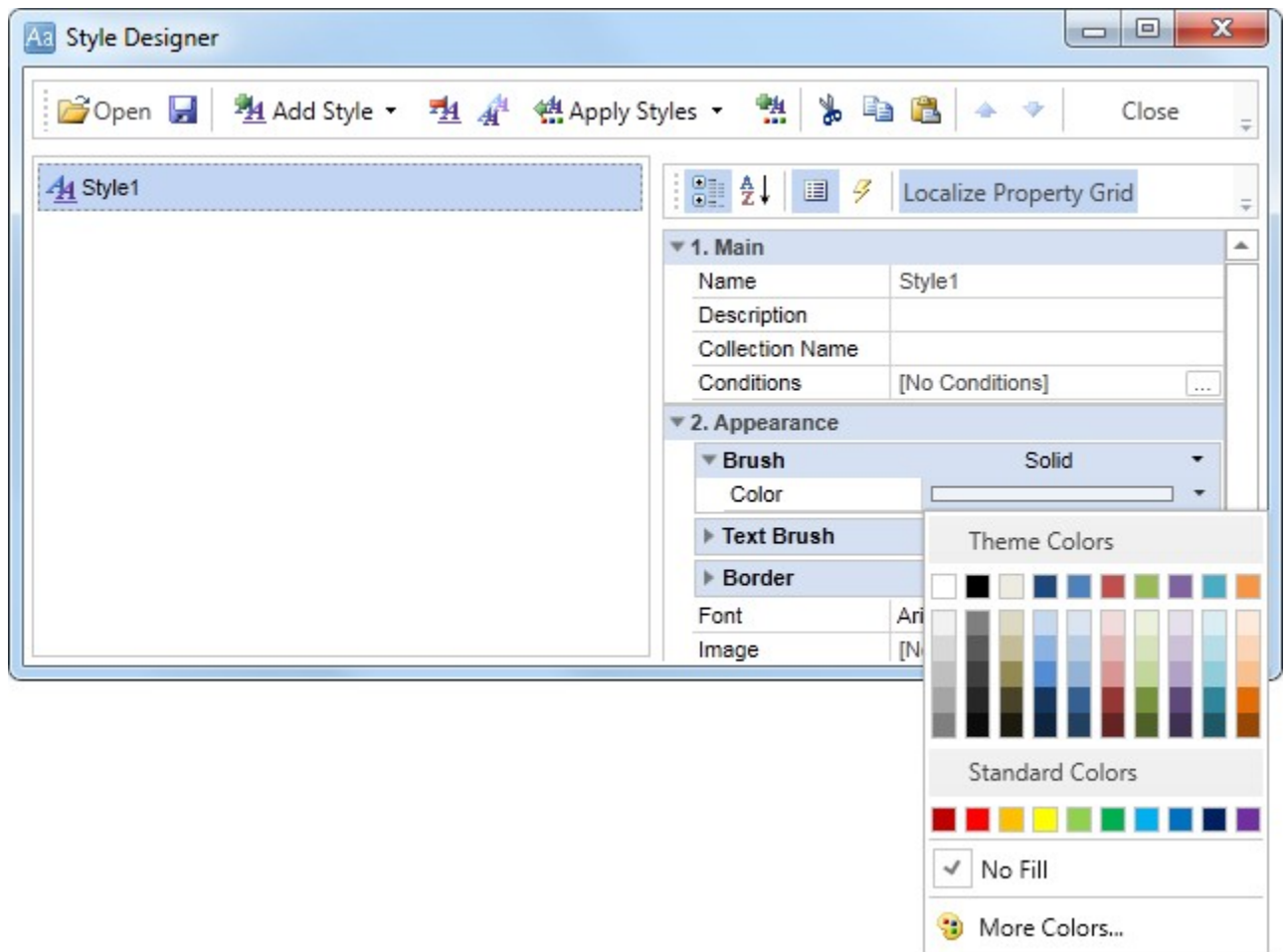
Adding styles

1. Go back to the report template;

2. Select the sub-report;
3. Select the **DataBand**;
4. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**.



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

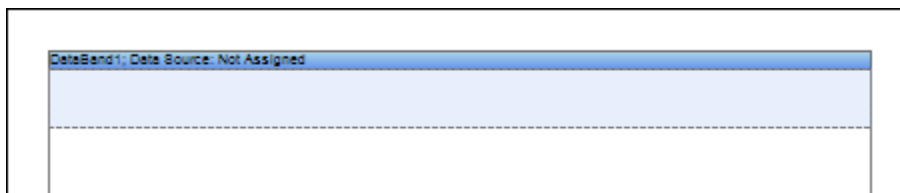
5. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered side-by-side report with alternative color of rows:

CompanyName	City	ProductName	UnitPrice
Alfreds Futterkiste	Berlin	Chai	18
Ana Trujillo Emparedados y helados	México D.F.	Chang	19
Antonio Moreno Taquería	México D.F.	Aniseed Syrup	10
Around the Horn	London	Chef Anton's Cajun Seasoning	22
Berglunds snabbköp	Luleå	Chef Anton's Gumbo Mix	21,35
Blauer See Delikatessen	Mannheim	Grandma's Boysenberry Spread	25
Blondesddsl père et fils	Strasbourg	Uncle Bob's Organic Dried Pears	30
Bólido Comidas preparadas	Madrid	Northwoods Cranberry Sauce	40
Bon app'	Marseille	Mishi Kobe Niku	97
Bottom-Dollar Markets	Tsawassen	Ikura	31
B's Beverages	London	Queso Cabrales	21
Cactus Comidas para llevar	Buenos Aires	Queso Manchego La Pastora	38
Centro comercial Moctezuma	México D.F.	Konbu	6
Chop-suey Chinese	Bern	Tofu	23,25

1.13 Report with Sub-Reports in Data Band

Do the following steps to create a simple list report:

1. Run the designer;
2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Put the **DataBand** on a page of a report template.



4. Edit **DataBand**:
 - 4.1. Align the **DataBand** by height;

- 4.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
- 4.3. Change the **DataBand** background color;
- 4.4. Enable **Borders** for the **DataBand**, if required;
- 4.5. Change the border color.

5. Define the data source for the **DataBand** using the **Data Source** property. For example, define the **Categories** data source for the **DataBand**:

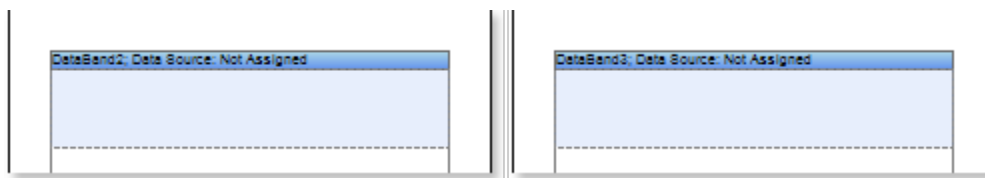


6. Put **Sub-Report** components in the **DataBand**;
7. Edit the **Sub-Report** components:
 - 7.1. Stretch the **Sub-Report** components as seen on the picture below;
 - 7.2. Change the value of properties of **Sub-Reports**. For example, set the **Keep Sub-Report Together** property to **true**, if you want the sub-report to be kept together;;
 - 7.3. Change the background color of the components.



8. Go to the sub-report page;

9. Add two **DataBands** to the sub-report page. Add **DataBand1** to the **Sub Report1** and **DataBand2** to the **Sub Report2**;



10. Edit the **DataBands**:
 - 10.1. Align the **DataBands** vertically;
 - 10.2. Change values of properties of the **DataBands**.
 - 10.3. Change background color of the band;
 - 10.4. Set **Borders**, if necessary;
 - 10.5. Change the border color.

11. Specify the data source for the **DataBand** using the **Data Source** property. For example, set the **Customers** data source for the **DataBand1**, and the **Products** data source for the **DataBand2**:

Data Source	Customers	...
Data Source	Products	...

12. Put text components with expressions in the **DataBands**. Where an expression is a reference to a data field. For example, put the following expressions to the **DataBand1**: **{Customers.CompanyName}** and **{Customers.City}**. put the following expressions to the **DataBand2**: **{Products.ProductName}** and **{Products.UnitPrice}**;

13. Edit **Text** and **TextBoxes**:

- 13.1. Drag the text component to the required place in the **DataBand**;
- 13.2. Set the text font: size, style, color;
- 13.3. Align text component vertically and horizontally;
- 13.4. Set the background color of the text component;
- 13.5. Align text in the component;
- 13.6. Set values of the properties of text components. For example to set the **Word Wrap** property to **true**, if you want the text to be wrapped;
- 13.7. Set **Borders** of a text component.
- 13.8. Set the border color.

DataBand2: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}

DataBand3: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

14. Click the **Preview** button or call **Viewer**, using the **Preview** menu item to see how the report will look like:

Alfreds Futterkiste	Berlin	Chai	18
Ana Trujillo Emparedados y helados	México D.F.	Chang	19
Antonio Moreno Taquería	México D.F.	Aniseed Syrup	10
Around the Horn	London	Chef Anton's Cajun Seasoning	22
Berglunds snabbköp	Luleå	Chef Anton's Gumbo Mix	21,35
Blauer See Delikatessen	Mannheim	Grandma's Boysenberry Spread	25
Blondesddsl père et fils	Strasbourg	Uncle Bob's Organic Dried Pears	30
Bóldo Comidas preparadas	Madrid	Northwoods Cranberry Sauce	40
Bon app'	Marseille	Mishi Kobe Niku	97
Bottom-Dollar Markets	Tsawassen	Ikura	31
B's Beverages	London	Queso Cabrales	21
Cactus Comidas para llevar	Buenos Aires	Queso Manchego La Pastora	38
Centro comercial Moctezuma	México D.F.	Konbu	6
Chop-suey Chinese	Bern	Tofu	23,25
Comércio Mineiro	Sao Paulo	Genen Shouyu	15,5
Consolidated Holdings	London	Pavlova	17,45
Drachenblut Delikatessen	Aachen	Alice Mutton	39
Du monde entier	Nantes	Carnarvon Tigers	62,5
Eastern Connection	London	Teatime Chocolate Biscuits	9,2
Ernst Handel	Graz	Sir Rodney's Marmalade	81
Familia Arquibaldo	Sao Paulo	Sir Rodney's Scones	10
FISSA Fabrica Inter. Salchichas S.A.	Madrid	Gustaf's Knäckebröd	21
Folies gourmandes	Lille	Tunnbröd	9
Folk och få HB	Bräcke	Guaraná Fantástica	4,5
Frankenversand	München	NuNuCaNuß-Nougat-Creme	14
France restauration	Nantes	Gumbär Gummibärchen	31,23
Franchi S.p.A.	Torino	Schoggi Schokolade	43,9

15. Go back to the report template;
16. If necessary, add some bands to the report template, for example, the **HeaderBand**;
17. Edit this band:
 - 17.1. Align vertically this band;
 - 17.2. Set values of the properties of the **HeaderBand**, if necessary;
 - 17.3. Set the background color;
 - 17.4. Set **Borders** of a textcomponent.
 - 17.5. Set the border color.

The diagram shows two data bands side-by-side. HeaderBand1 is on the left and HeaderBand2 is on the right. HeaderBand1 has a data source of 'Customers' and contains two fields: 'CompanyName' and 'City'. HeaderBand2 has a data source of 'Products' and contains two fields: 'ProductName' and 'UnitPrice'.

HeaderBand1	
DataBand2: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}

HeaderBand2	
DataBand3: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

18. Put a text component with expression where the expression of the text component in the **HeaderBand** will be the page title.

19. Edit the text component:

- 19.1. Drag the text component to the required place in the band;
- 19.2. Set the text font: size, style, color;
- 19.3. Align text component vertically and horizontally;
- 19.4. Set the background color of the text component;
- 19.5. Align text in the component;
- 19.6. Set values of the properties of text components;
- 19.7. Set **Borders** of a text component.
- 19.8. Set the border color.

The diagram shows the same two data bands as before, but with the text components 'CompanyName', 'City', 'ProductName', and 'UnitPrice' now visible in the header bands. The text components are placed in the header bands and are styled with a brown background and white text.

HeaderBand1	
CompanyName	City
DataBand2: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}

HeaderBand2	
ProductName	UnitPrice
DataBand3: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

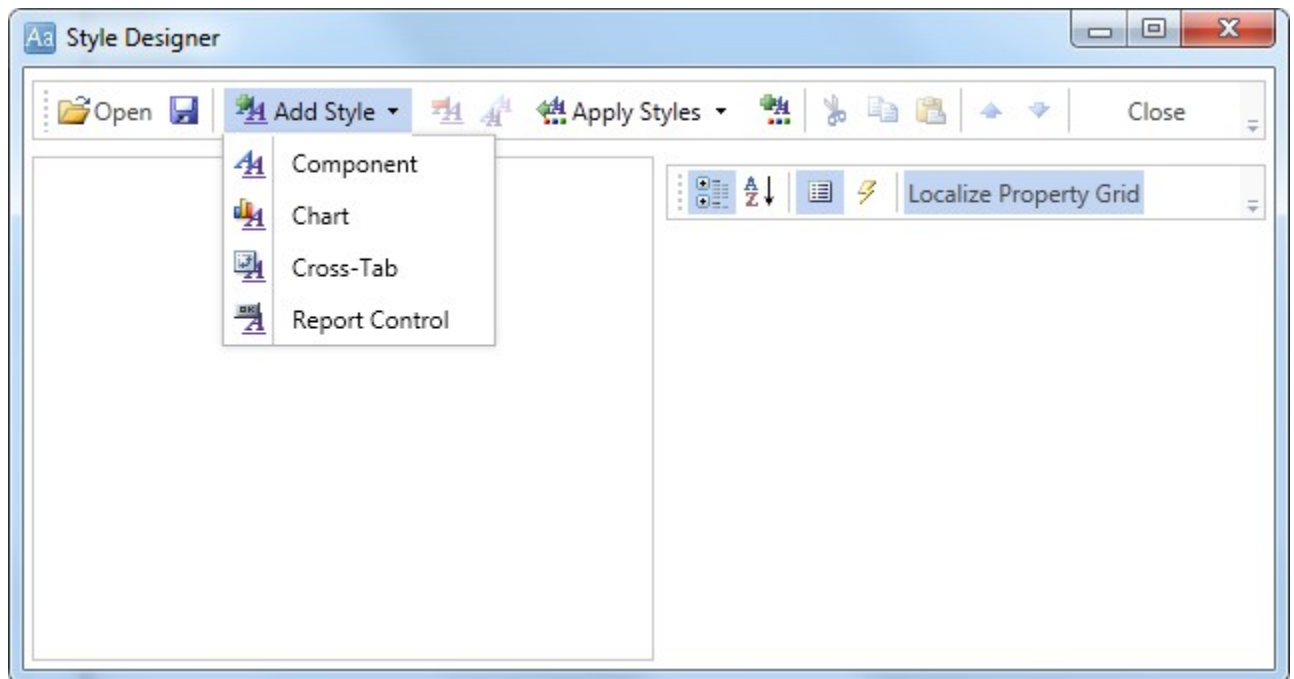
20. Click the **Preview** button or call **Viewer**, using the **Preview** menu item to see how the report will look like:

CompanyName	City	ProductName	UnitPrice
Alfreds Futterkiste	Berlin	Chai	18
Ana Trujillo Emparedados y helados	México D.F.	Chang	19
Antonio Moreno Taquería	México D.F.	Aniseed Syrup	10
Around the Horn	London	Chef Anton's Cajun Seasoning	22
Berglunds snabbköp	Luleå	Chef Anton's Gumbo Mix	21,35
Blauer See Delikatessen	Mannheim	Grandma's Boysenberry Spread	25
Blondesddsl père et fils	Strasbourg	Uncle Bob's Organic Dried Pears	30
Bóldo Comidas preparadas	Madrid	Northwoods Cranberry Sauce	40
Bon app'	Marseille	Mishi Kobe Niku	97
Bottom-Dollar Markets	Tsawassen	Ikura	31
B's Beverages	London	Queso Cabrales	21
Cactus Comidas para llevar	Buenos Aires	Queso Manchego La Pastora	38
Centro comercial Moctezuma	México D.F.	Konbu	6
Chop-suey Chinese	Bern	Tofu	23,25
Comércio Mineiro	Sao Paulo	Genen Shouyu	15,5
Consolidated Holdings	London	Pavlova	17,45
Drachenblut Delikatessen	Aachen	Alice Mutton	39
Du monde entier	Nantes	Carnarvon Tigers	62,5
Eastern Connection	London	Teatime Chocolate Biscuits	9,2
Ernst Handel	Graz	Sir Rodney's Marmalade	81
Familia Arquibaldo	Sao Paulo	Sir Rodney's Scones	10
FISSA Fabrica Inter. Salchichas S.A.	Madrid	Gustaf's Knäckebröd	21
Folies gourmandes	Lille	Tunnbröd	9
Folk och få HB	Bräcke	Guaraná Fantástica	4,5
Frankenversand	München	NuNuCaNuß-Nougat-Creme	14

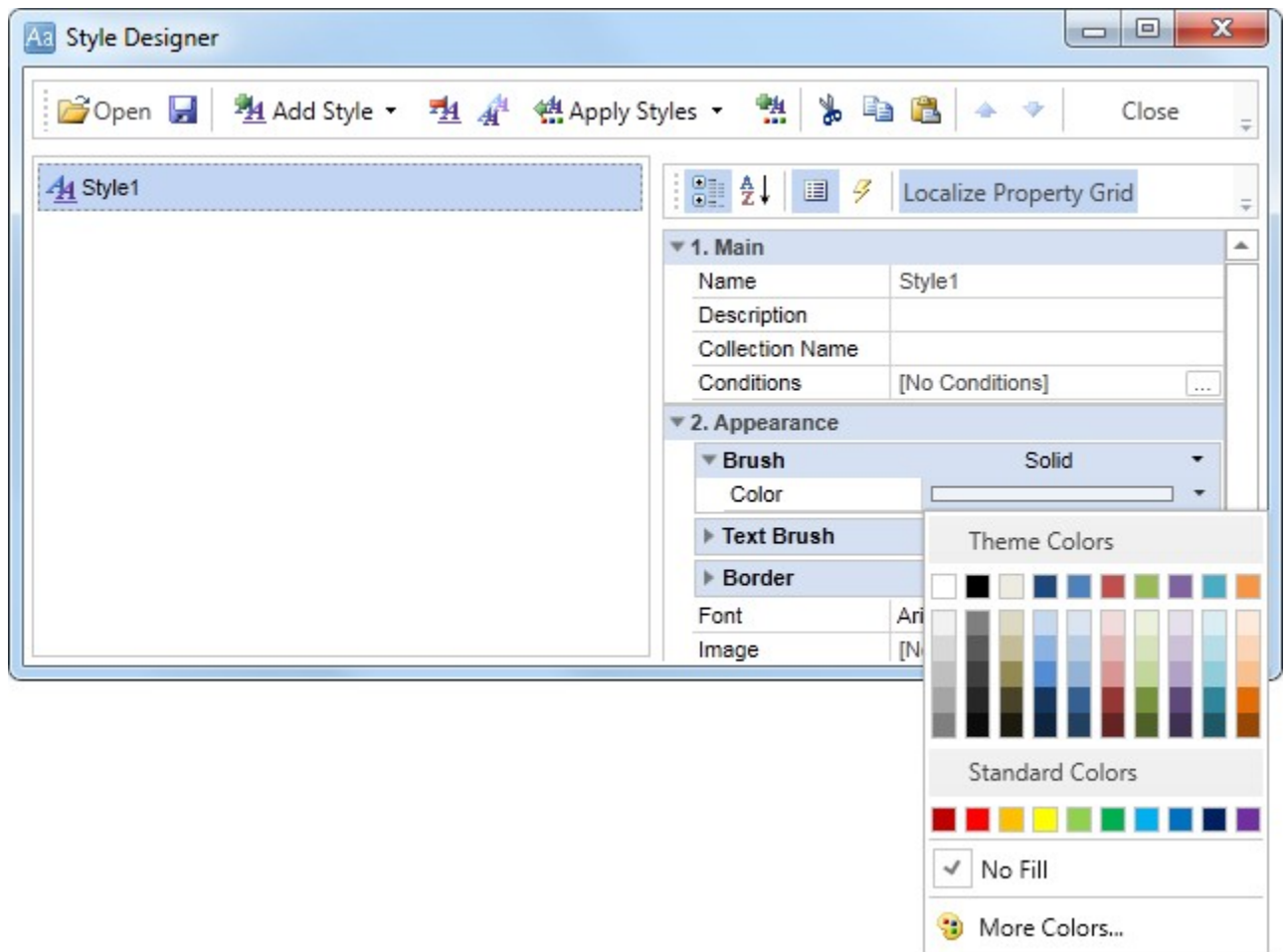
Adding styles

1. Go back to the report template;
2. Select the sub-report;
3. Select the **DataBand**;
4. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and,

using **Style Designer**, create a new style. The picture below shows the **Style Designer**.



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

5. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered report with sub-report and alternative color of rows:

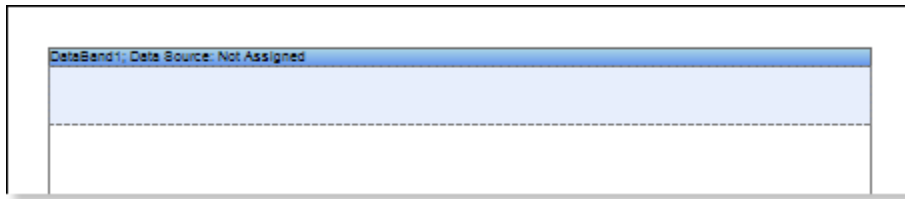
CompanyName	City	ProductName	UnitPrice
Alfreds Futterkiste	Berlin	Chai	18
Ana Trujillo Emparedados y helados	México D.F.	Chang	19
Antonio Moreno Taquería	México D.F.	Aniseed Syrup	10
Around the Horn	London	Chef Anton's Cajun Seasoning	22
Berglunds snabbköp	Luleå	Chef Anton's Gumbo Mix	21,35
Blauer See Delikatessen	Mannheim	Grandma's Boysenberry Spread	25
Blondesddsl père et fils	Strasbourg	Uncle Bob's Organic Dried Pears	30
Bólido Comidas preparadas	Madrid	Northwoods Cranberry Sauce	40
Bon app'	Marseille	Mishi Kobe Niku	97
Bottom-Dollar Markets	Tsawassen	Ikura	31
B's Beverages	London	Queso Cabrales	21
Cactus Comidas para llevar	Buenos Aires	Queso Manchego La Pastora	38
Centro comercial Moctezuma	México D.F.	Konbu	6
Chop-suey Chinese	Bern	Tofu	23,25
Comércio Mineiro	Sao Paulo	Genen Shouyu	15,5
Consolidated Holdings	London	Pavlova	17,45
Drachenblut Delikatessen	Aachen	Alice Mutton	39
Du monde entier	Nantes	Carnarvon Tigers	62,5
Eastern Connection	London	Teatime Chocolate Biscuits	9,2
Ernst Handel	Graz	Sir Rodney's Marmalade	81
Familia Arquibaldo	Sao Paulo	Sir Rodney's Scones	10
FISSA Fabrica Inter. Salchichas S.A.	Madrid	Gustaf's Knäckebröd	21
Folies gourmandes	Lille	Tunnbröd	9
Folk och få HB	Bräcke	Guaraná Fantástica	4,5
Frankenversand	München	NuNuCaNuß-Nougat-Creme	14

1.14 Master-Detail Report and Sub-Reports

Do the following steps to create a **Master-Detail** report with sub-reports:

1. Run the designer;

2. Connect data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Create **Relation** between data sources. If the relation will not be created and/or the **Relation** property of the **Detail** data source will not be filled, then, for **Master** entry, all **Detail** entries will be output;
4. Put the **DataBand1** on a page of a report template:

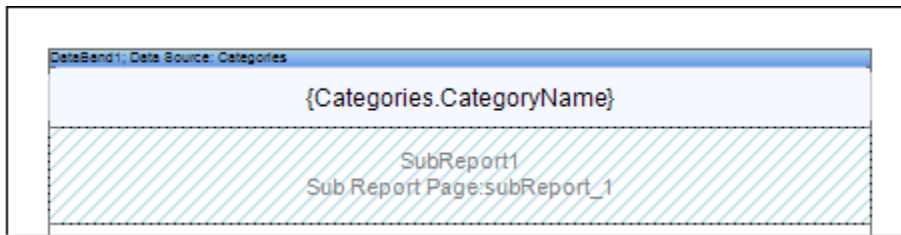


5. Edit **DataBand1**:
 - 5.1. Align the **DataBand1** by height;
 - 5.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
 - 5.3. Change the **DataBand1** background color;
 - 5.4. Enable **Borders** for the **DataBand1**, if required;
 - 5.5. Change the border color.
6. Define the data source for the **DataBand1** using the **Data Source** property. For example, define the **Categories** data source for the **DataBand2**:

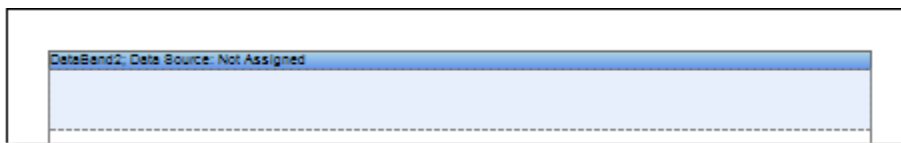


7. Put text components with expressions in the **DataBand1**. Where an expression is a reference to a data field. For example, put the text component with the following expression in the **DataBand1 (Master component)**: **{Categories.CategoryName}**;
8. Edit **Text** and **TextBoxes**:
 - 8.1. Drag the text component to the required place in the **DataBand1**;
 - 8.2. Set the text font: size, style, color;
 - 8.3. Align text component vertically and horizontally;
 - 8.4. Set the background color of the text component;
 - 8.5. Align text in the component;
 - 8.6. Set values of the properties of text components. For example to set the **Word Wrap** property to **true**, if you want the text to be wrapped;

- 8.7. Set **Borders** of a text component.
- 8.8. Set the border color.
9. Put a **Sub-Report** component in the **DataBand1**;
10. Edit the **Sub-Report** components:
 - 10.1. Stretch the **Sub-Report** components as seen on the picture below;
 - 10.2. Change the value of properties of **Sub-Reports**. For example, set the **Keep Sub-Report Together** property to **true**, if you want the sub-report to be kept together;;
 - 10.3. Change the background color of the components.



11. Go to the sub-report page;
12. Add to the **DataBand2** to the sub-report page.



13. Edit **DataBand2**:
 - 13.1. Align the **DataBand2** by height;
 - 13.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
 - 13.3. Change the **DataBand2** backgroundcolor;
 - 13.4. Enable **Borders** for the **DataBand2**, if required;
 - 13.5. Change the border color.
14. Define the data source for the **DataBand1** using the **Data Source** property. For example, define the **Products** data source for the **DataBand2**:



15. Define the **Master** component in a report. In our case set the **DataBand1** as a

Master component for the **DataBand2**;

16. Fill the **Data Relation** property of the **DataBand**, that is the **Detail** component, i.e. in this case for the **DataBand2**;

17. Put text components with expressions in the **DataBand1**. Where an expression is a reference to a data field. For example, put the text component with the following expression in the **DataBand2**: **{Products.ProductName}** and **{Products.UnitPrice}**;

18. Edit **Text** and **TextBoxes**:

18.1. Drag the text component to the required place in the **DataBand2**;

18.2. Set the text font: size, style, color;

18.3. Align text component vertically and horizontally;

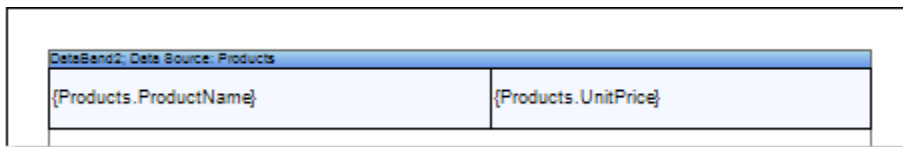
18.4. Set the background color of the text component;

18.5. Align text in the component;

18.6. Set values of the properties of text components. For example to set the **Word Wrap** property to **true**, if you want the text to be wrapped;

18.7. Set **Borders** of a text component.

18.8. Set the border color.



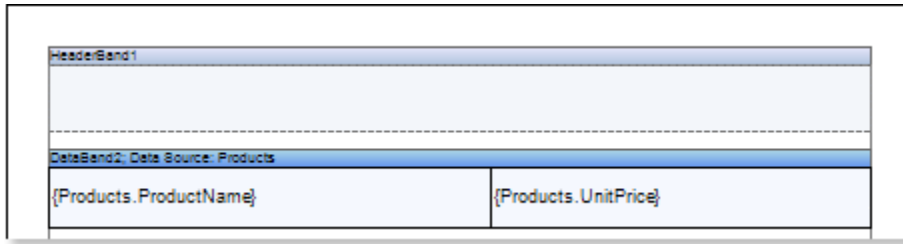
The screenshot shows a report design interface. A component labeled 'DataBand2: Data Source: Products' is displayed. It contains two text boxes. The first text box contains the expression '{Products.ProductName}' and the second text box contains the expression '{Products.UnitPrice}'. The text boxes are arranged horizontally within the DataBand2 component.

DataBand2: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

19. Click the **Preview** button or call **Viewer**, using the **Preview** menu item to see how the report will look like:

Beverages	
Chai	18
Chang	19
Guaraná Fantástica	4,5
Sasquatch Ale	14
Steeleye Stout	18
Côte de Blaye	263,5
Chartreuse verte	18
Ipoh Coffee	46
Laughing Lumberjack Lager	14
Outback Lager	15
Rhönbräu Klosterbier	7,75
Lakkaikööri	18
Condiments	
Aniseed Syrup	10
Chef Anton's Cajun Seasoning	22
Chef Anton's Gumbo Mix	21,35
Grandma's Boysenberry Spread	25
Northwoods Cranberry Sauce	40
Genen Shouyu	15,5
Gula Malacca	19,45

20. Go back to the report template;
21. If necessary, add some bands to the report template, for example, the **HeaderBand**;
22. Edit this band:
 - 22.1. Align vertically this band;
 - 22.2. Set values of the properties of the **HeaderBand**, if necessary;
 - 22.3. Set the background color;
 - 22.4. Set **Borders** of a text component.
 - 22.5. Set the border color.

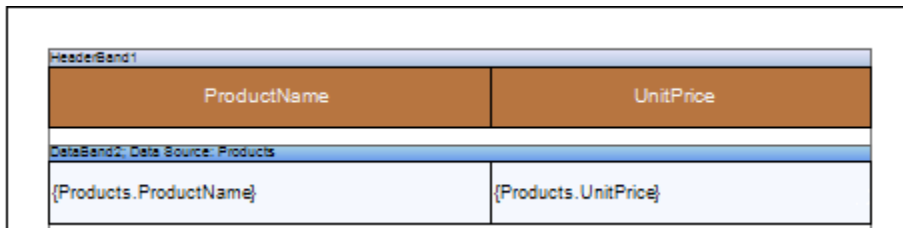


HeaderBand1	
DataBand2: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

23. Put a text component with expression where the expression of the text component in the **HeaderBand** will be the page title.

24. Edit the text component:

- 24.1. Drag the text component to the required place in the band;
- 24.2. Set the text font: size, style, color;
- 24.3. Align text component vertically and horizontally;
- 24.4. Set the background color of the text component;
- 24.5. Align text in the component;
- 24.6. Set values of the properties of text components;
- 24.7. Set **Borders** of a text component.
- 24.8. Set the border color.



HeaderBand1	
ProductName	UnitPrice
DataBand2: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

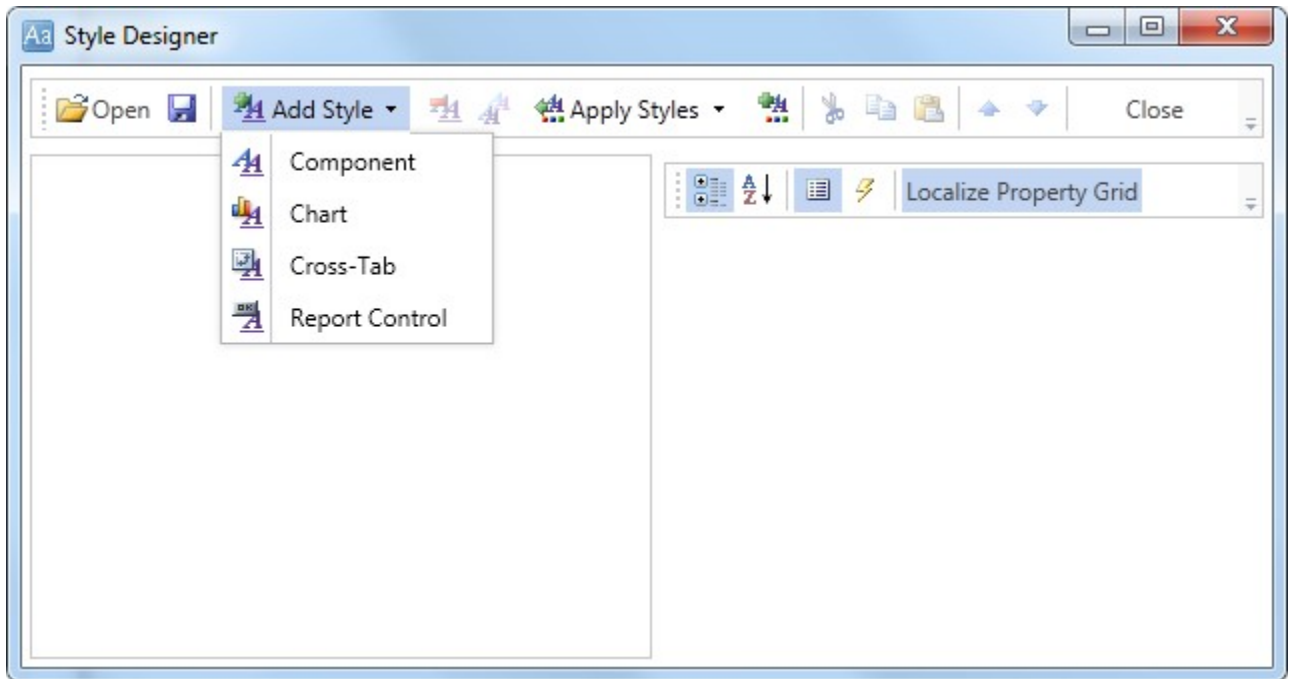
25. Click the **Preview** button or call **Viewer**, using an **F5** hot key or the **Preview** menu item to see how the report will look like:

Beverages	
ProductName	UnitPrice
Chai	18
Chang	19
Guaraná Fantástica	4,5
Sasquatch Ale	14
Steeleye Stout	18
Côte de Blaye	263,5
Chartreuse verte	18
Ipoh Coffee	46
Laughing Lumberjack Lager	14
Outback Lager	15
Rhönbräu Klosterbier	7,75
Lakkalikööri	18
Condiments	
ProductName	UnitPrice
Aniseed Syrup	10
Chef Anton's Cajun Seasoning	22
Chef Anton's Gumbo Mix	21,35
Grandma's Boysenberry Spread	25
Northwoods Cranberry Sauce	40
Genen Shouyu	15,5
Gula Malacca	19,45

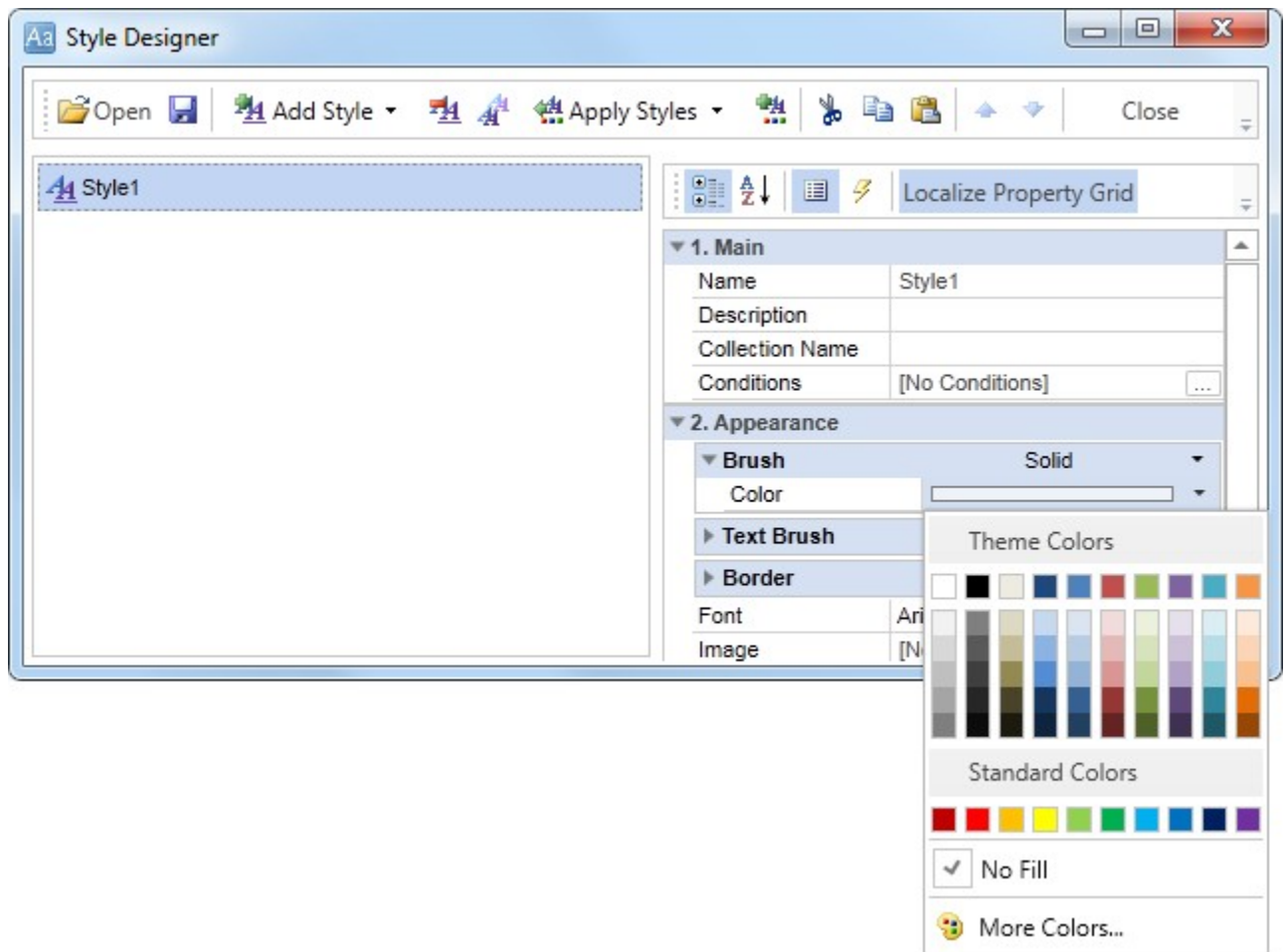
Adding styles

1. Go back to the report template;
2. Select the sub-report;
3. Select the **DataBand**;
4. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and,

using **Style Designer**, create a new style. The picture below shows the **Style Designer**.



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

5. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered "**master-detail report with sub-report**" with alternative color of rows:

Beverages	
ProductName	UnitPrice
Chai	18
Chang	19
Guaraná Fantástica	4,5
Sasquatch Ale	14
Steeleye Stout	18
Côte de Blaye	263,5
Chartreuse verte	18
Ipoh Coffee	46
Laughing Lumberjack Lager	14
Outback Lager	15
Rhönbräu Klosterbier	7,75
Lakkalikööri	18
Condiments	
ProductName	UnitPrice
Aniseed Syrup	10
Chef Anton's Cajun Seasoning	22
Chef Anton's Gumbo Mix	21,35
Grandma's Boysenberry Spread	25
Northwoods Cranberry Sauce	40
Genen Shouyu	15,5
Gula Malacca	19,45

1.15 Report with Empty Band

The **EmptyBand** is used to fill free space at the bottom of a page. This tutorial describes how to create a report with the **EmptyBand**:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Design a report or load a previously saved one. Consider creating a report with the **EmptyBand** on the base of the **Master-Detail** report. Suppose there is a **Master-Detail** report in which data is printed on half of a page, then to fill the empty space you can use the **EmptyBand**. The picture below shows the rendered **Master-Detail** report:

Beverages	
ProductName	UnitPrice
1 Chai	18
2 Chang	19
3 Guaraná Fantástica	4,5
4 Sasquatch Ale	14
5 Steeleye Stout	18
6 Côte de Blaye	263,5
7 Chantreuse verte	18
8 Ipoh Coffee	46
9 Laughing Lumberjack Lager	14
10 Outback Lager	15
11 Rhönbräu Klosterbier	7,75
12 Lakkaikööri	18

4. Go back to the **Master-Detail** report template.

DataBand1: Data Source: Categories	
{Categories.CategoryName}	
HeaderBand1	
ProductName	UnitPrice
DataBand2: Data Source: Products	
Master Component: DataBand1	
{Line} {Products.ProductName}	{Products.UnitPrice}

5. Add the **EmptyBand** in the report template;
6. Edit the **EmptyBand**:
 - 6.1. Align it by height;
 - 6.2. Change the value of required properties. For example, set the **CanGrow** property to **true**, if you want the band be grown;
 - 6.3. Set the background color of the **EmptyBand**;
 - 6.4. If necessary, set **Borders** of the EmptyBand);
7. Put text components with an expression in the **EmptyBand**. Where the expression is a reference to the data field. For example, put a text component with the expression: **{Line}**;
8. Edit **Text** and **TextBox** component:
 - 8.1. Drag and drop the text component in the **EmptyBand**;
 - 8.2. Change parameters of the text font: size, type, color;
 - 8.3. Align the text component by width and height;
 - 8.4. Change the background of the text component;
 - 8.5. Align text in the textcomponent;
 - 8.6. Change the value of properties of the text component. For example, set the **WordWrap** property to **true**, if you need a text to be wrapped;
 - 8.7. Enable **Borders** for the text component, if required.
 - 8.8. Change the border color.

DataBand1: Data Source: Categories	
{Categories.CategoryName}	
HeaderBand1	
ProductName	UnitPrice
DataBand2: Data Source: Products	
Master Component: DataBand1	
{Line} {Products.ProductName}	{Products.UnitPrice}
EmptyBand1	
{Line}	

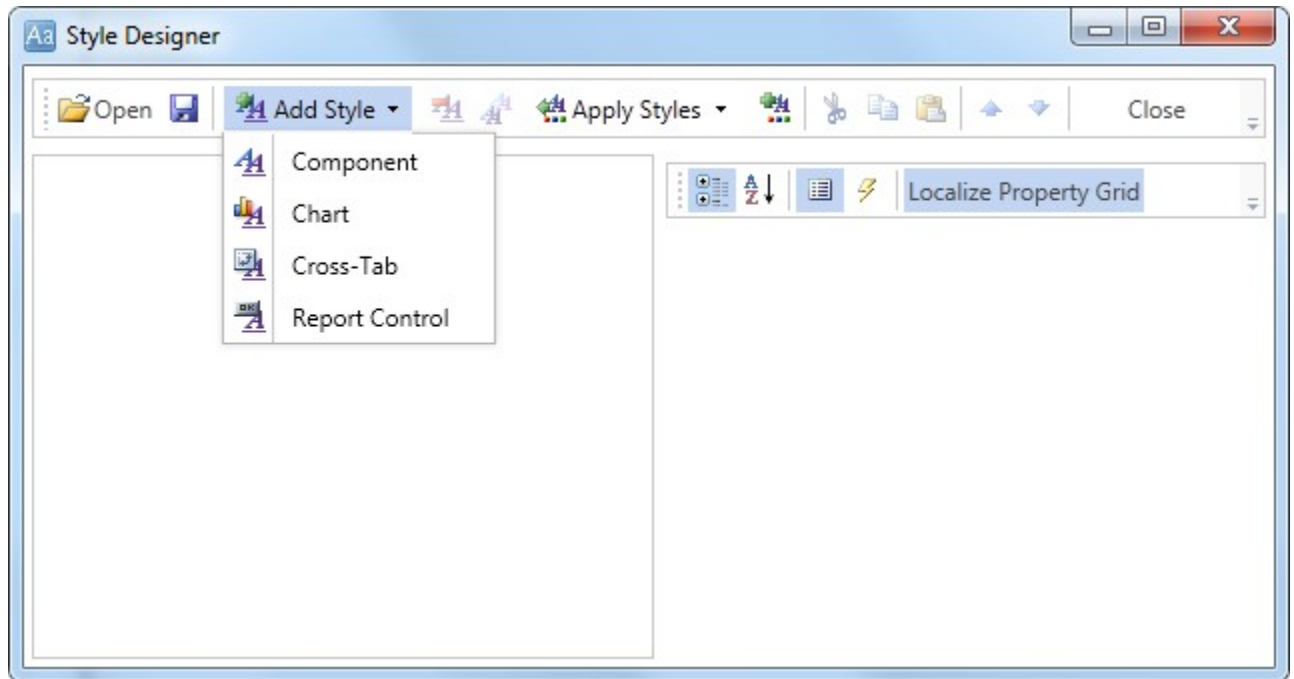
9. Click the **Preview** button or invoke the **Viewer**, pressing the **Preview** menu item. The picture below shows a sample of the report:

Beverages	
ProductName	UnitPrice
1 Chai	18
2 Chang	19
3 Guaraná Fantástica	4,5
4 Sasquatch Ale	14
5 Steeleye Stout	18
6 Côte de Blaye	263,5
7 Chantreuse verte	18
8 Ipoh Coffee	46
9 Laughing Lumberjack Lager	14
10 Outback Lager	15
11 Rhônebräu Klosterbräu	7,75
12 Lakkalikööri	18
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

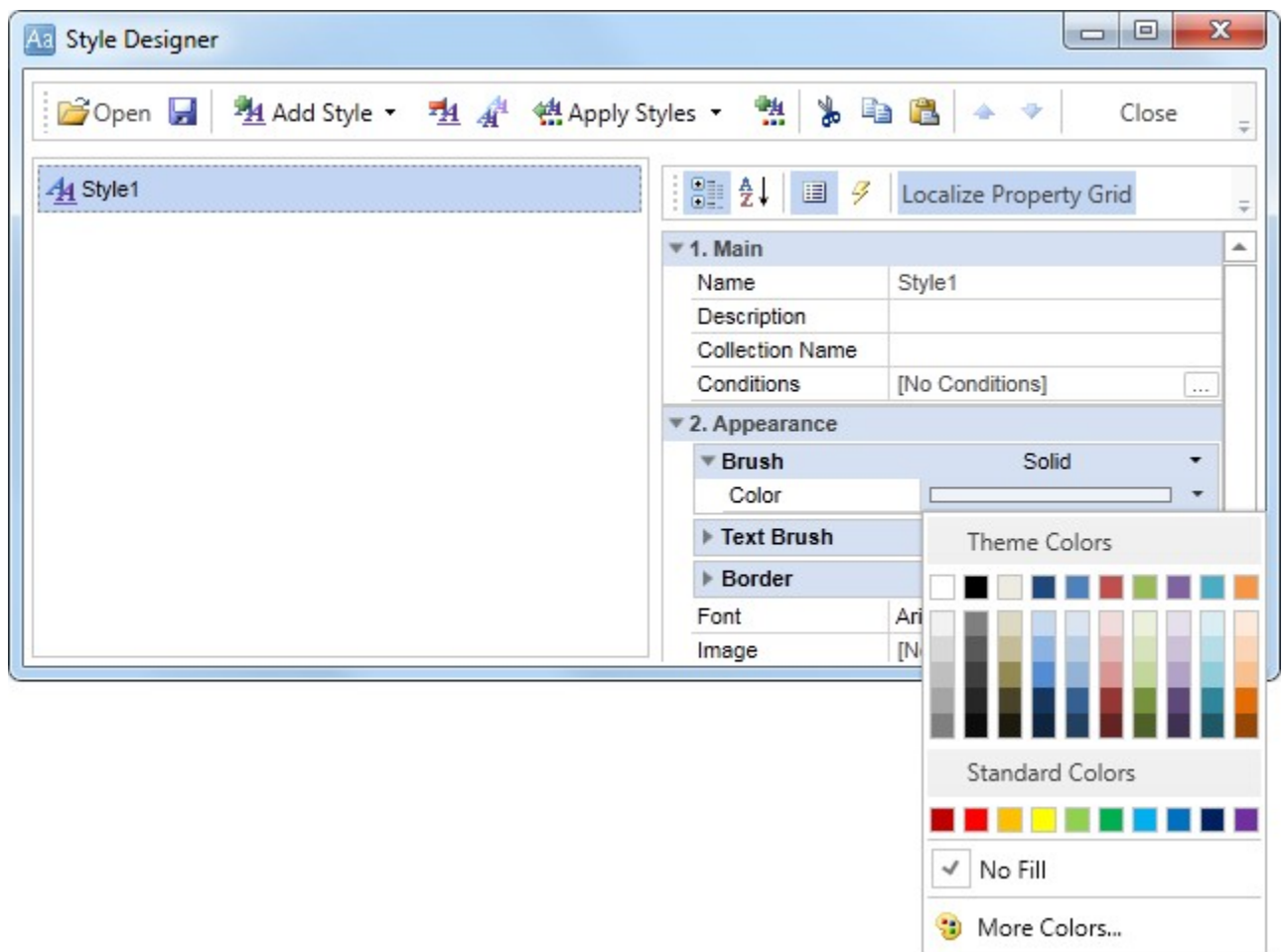
As can be seen in the picture above blank lines will be numbered and output in the report.

Adding styles

1. Go back to the report template;
2. Select the **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**.



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

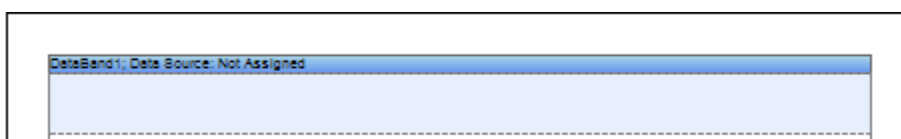
5. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows a sample of a rendered report:

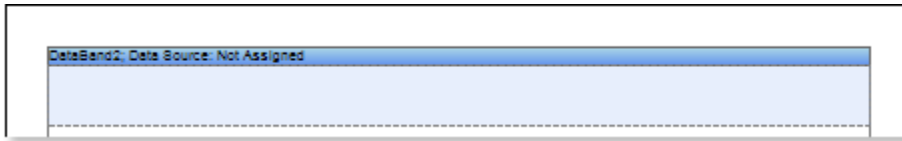
Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delícia	Rio de Janeiro
FISSA Fabrica Inter. Salchichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Cames	Rio de Janeiro
Vins et alcools Chevalier	Reims
Count:10	

1.16 Drill-Down Report Using Page in Report

The **Drill-Down** report using the pages in the report is an interactive report in what detailed data are placed on the page of a report and the relation between master and detailed data in the report is organized with the help of the **Interaction.Drill-Down Page** property. This type of report must contain at least two pages: a one with master data, and a second with detailed ones. Follow the steps below in order to design the report:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Put the **DataBand1** on the **Page1** and **DataBand2** on **Page2** of a report. In this case, the master data will be located on the first page, and detailed - on the second page.





4. Edit **DataBand1** and **DataBand2**:

- 4.1. Align the **DataBands** vertically;
- 4.2. Change the value of the required properties;
- 4.3. Change the background color of the **DataBand**;
- 4.4. If necessary, set **Borders** of the **DataBand**;

5. Define a data source for **DataBands** using the **Data Source** property:

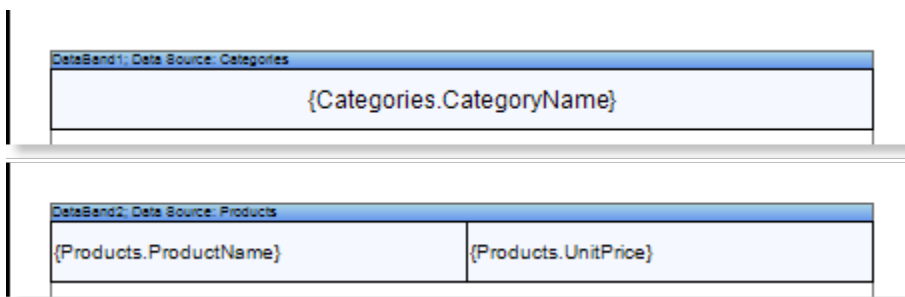
Data Source	Categories	...
Data Source	Products	...

6. Put the text components with expressions. Where the expression is a reference to the data field. For example: put the text component with the **{Categories.CategoryName}** expression in the **DataBand1**, and put two text components with the

{Products.ProductName} and **{Products.UnitePrice}** expressions in the **DataBand2**;

7. Edit text and text components located in the **DataBands**:

- 7.1. Drag the text component to the required place in the **DataBands**;
- 7.2. Align the text in a text component;
- 7.3.** Change the value of the required properties. For example to set the **Word Wrap** property to **true**, if you want the text be wrapped;
- 7.4. Set **Borders** of a text component, if required.
- 7.5. Change the border color.



8. Select a text component in the **DataBand1**;

9. Set the **Interaction.Drill-Down Enabled** to **true**;

10. Set the Interaction.Drill-Down Page to **Page2**;

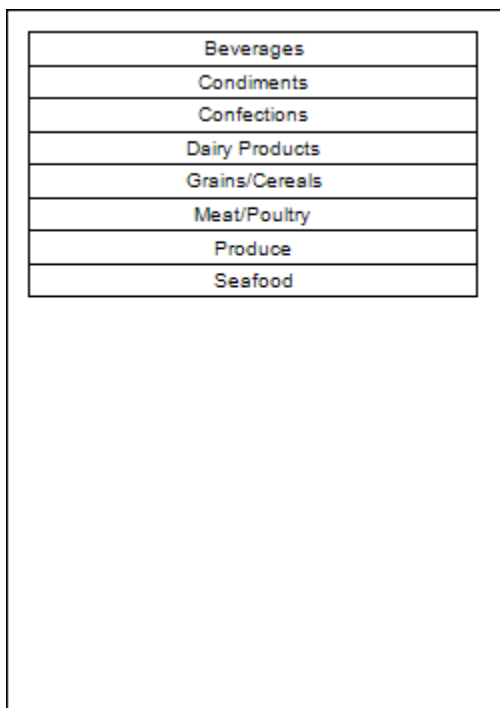
11. Edit **Drill-Down Parameter 1** for the text component of the **DataBand 1**:

11.1. The **Name** property should be set to **CategoryID**;

11.2. The **Expression** property should be set to **Categories.CategoryID**;

12. Set filter in the **DataBand2**, in this case, we specify the **(int) this ["CategoryID"] == Products.CategoryID** expression;

13. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of a report:



Beverages
Condiments
Confections
Dairy Products
Grains/Cereals
Meat/Poultry
Produce
Seafood

When you click the **Beverages**, the user will see the detailed data that correspond to filtering conditions and parameters of detailing. The picture below shows a page of a rendered report with detailed data of the **Beverages** entry:

Chai	18
Chang	19
Guaraná Fantástica	4,5
Sasquatch Ale	14
Steeleye Stout	18
Côte de Blaye	263,5
Chartreuse verte	18
Ipoh Coffee	46
Laughing Lumberjack Lager	14
Outback Lager	15
Rhönbräu Klosterbier	7,75
Lakkalikööri	18

14. Go back to the report template;
15. Add other bands to a report template, for example, add the **HeaderBand** to the **Page2** of a report;
16. Edit the band:
 - 16.1. Align it by height;
 - 16.2. Change values of properties, if required;
 - 16.3. Change the background of the band;
 - 16.4. Enable **Borders**, if required;
 - 16.5. Set the border color.

HeaderBand1	
DataBand2: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

17. Put a text component with an expression in this band. The expression in the text component is a header in the **HeaderBand**.
18. Edit text and textcomponents:
 - 18.1. Drag and drop the text component in the band;
 - 18.2. Change font options: size, type, color;
 - 18.3. Align text component by height and width;

- 18.4. Change the background of the text component;
- 18.5. Align text in the text component;
- 18.6. Change values of text component properties, if required;
- 18.7. Enable **Borders** of the text component, if required;
- 18.8. Set the border color.

HeaderBand1	
ProductName	UnitPrice
DataBand2: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

19. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows the structure of a report, i.e. shows the ratio of detailed data to the master **Condiments** entry:

Page

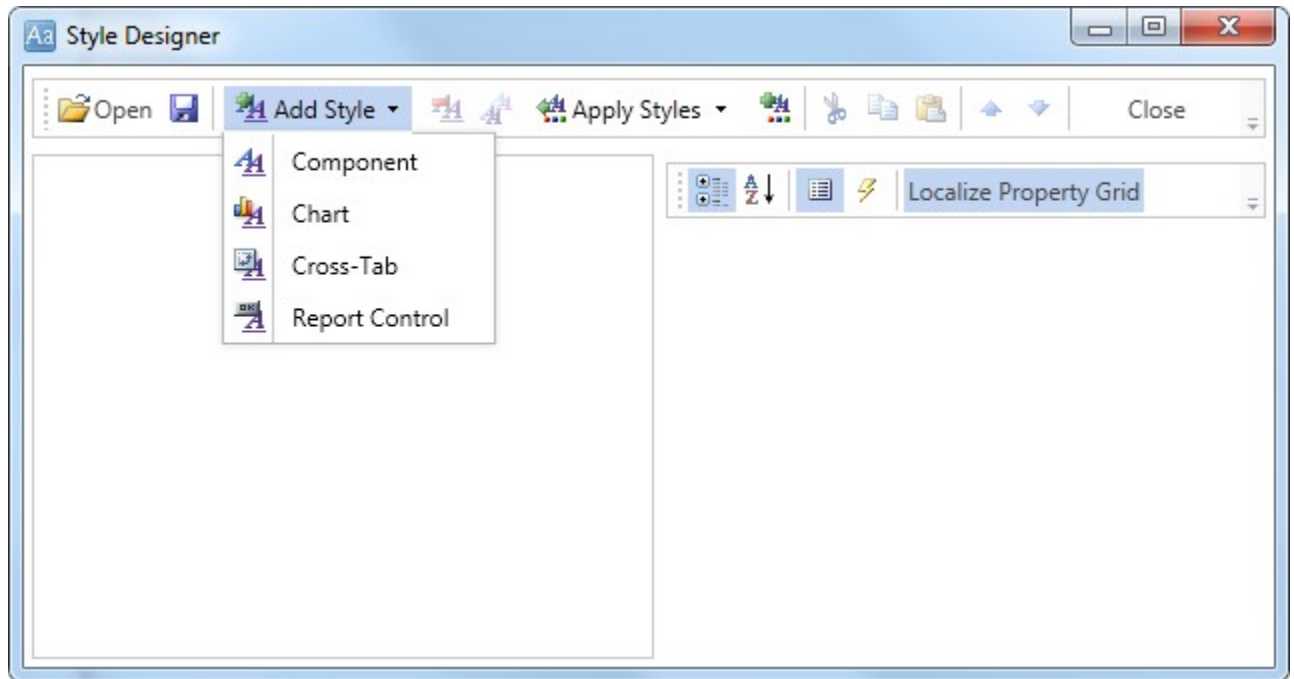
Beverages
Condiments
Confections
Dairy Products
Grains/Cereals
Meat/Poultry
Produce
Seafood

Page 2 (Drill-Down Page)

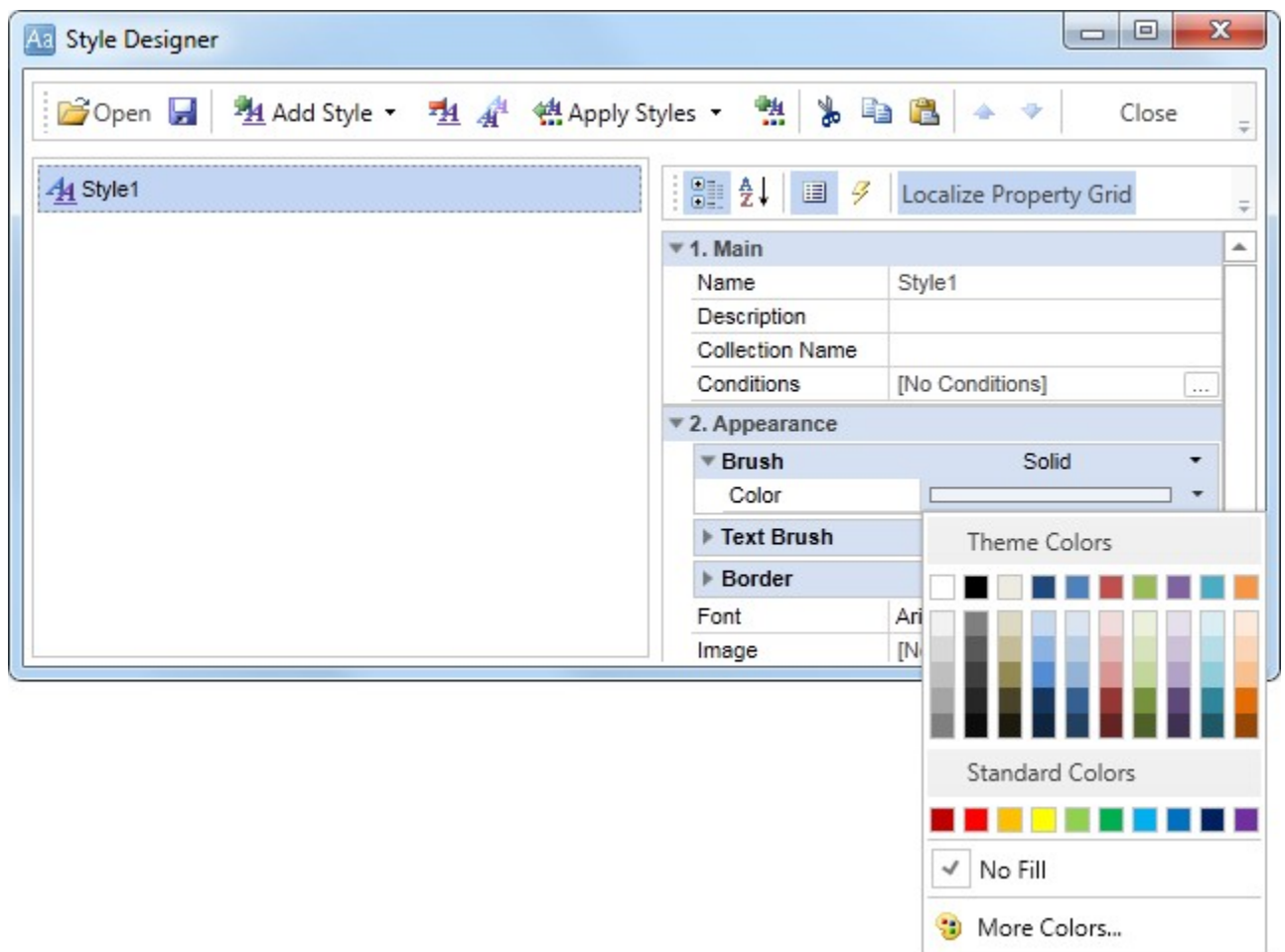
ProductName	UnitPrice
Aniseed Syrup	10
Chef Anton's Cajun Seasoning	22
Chef Anton's Gumbo Mix	21,35
Grandma's Boysenberry Spread	25
Northwoods Cranberry Sauce	40
Genen Shouyu	15,5
Gula Malacca	19,45
Sirup d'érable	28,5
Veggie-spread	43,9
Louisiana Fiery Hot Pepper Sauce	21,05
Louisiana Hot Spiced Okra	17
Original Frankfurter grüne Soße	13

Adding styles

1. Go back to the report template;
2. Select the **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**.



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

5. The picture below shows the structure of a report, i.e. shows the ratio of detailed data to the **Confections** master entry with different styles even/odd rows of the **DataBand**:

Page

Beverages
Condiments
Confections
Dairy Products
Grains/Cereals
Meat/Poultry
Produce
Seafood

Page 2 (Drill-Down Page)

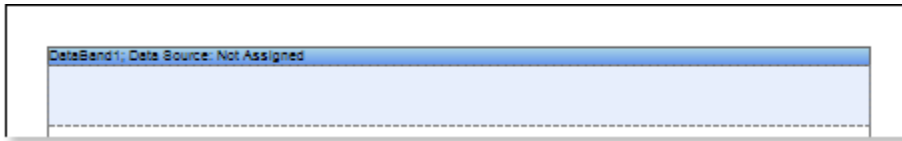
ProductName	UnitPrice
Pavlova	17,45
Teatime Chocolate Biscuits	9,2
Sir Rodney's Marmalade	81
Sir Rodney's Scones	10
NuNuCaNuß-Nougat-Creme	14
Gumbär Gummibärchen	31,23
Schoggi Schokolade	43,9
Zaanse koeken	9,5
Chocolade	12,75
Maxilaku	20
Valkoinen suklaa	16,25
Tarte au sucre	49,3
Scottish Longbreads	12,5

1.17 Drill-Down Report Using External Report

Drill-Down report using external report is an interactive report in what detailed data are placed in an external report and the relationship between master and detailed data in reports is organized using the **Interaction.Drill-Down Report** property. Follow the steps below in order to design the report:

Creating a report with detailed data

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Put the **DataBand** on a report page:



4. Edit the **DataBand**:

- 4.1. Align the **DataBand**;
- 4.2. Change the values of properties;
- 4.3. Set the background color of the **DataBand**;
- 4.4. Set **Borders**, if required;
- 4.5. Set the border color.

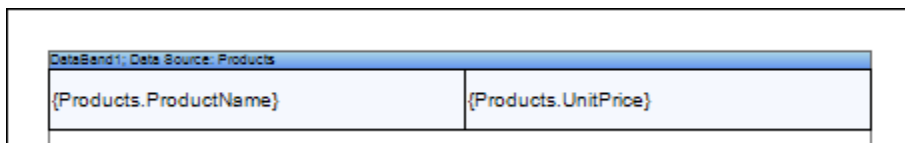
5. Specify the data source in **DataBand** using the **Data Source** property:



6. Put text components with expressions in the **DataBand**. Where the expression is a reference to the data field. For example: put two text components with the **{Products.ProductName}** and **{Products.UnitPrice}** expressions in the **DataBand**;

7. Edit text and text components located in the **DataBand**:

- 7.1. Drag the text component to the required place in the **DataBand**;
- 7.2. Align the text in a text component;
- 7.3. Change the value of the required properties. For example to set the **Word Wrap** property to **true**, if you want the text be wrapped;
- 7.4. Set **Borders** of a text component, if required;
- 7.5. Change the border color.



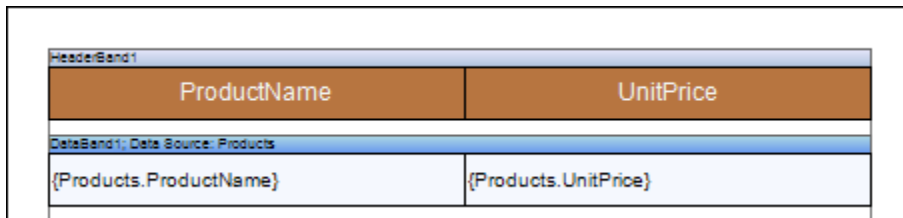
8. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of a report:

Chai	18
Chang	19
Aniseed Syrup	10
Chef Anton's Cajun Seasoning	22
Chef Anton's Gumbo Mix	21,35
Grandma's Boysenberry Spread	25
Uncle Bob's Organic Dried Pears	30
Northwoods Cranberry Sauce	40
Mishi Kobe Niku	97
Ikura	31
Queso Cabrales	21
Queso Manchego La Pastora	38
Konbu	6
Tofu	23,25
Genen Shouyu	15,5
Pavlova	17,45
Alice Mutton	39
Carnarvon Tigers	62,5
Teatime Chocolate Biscuits	9,2
Sir Rodney's Marmalade	81
Sir Rodney's Scones	10
Gustaf's Knäckebröd	21
Tunnbröd	9

9. Go back to the report template;
10. Add other bands to a report template, for example, add the **HeaderBand** to the report page;
11. Edit the band:
 - 11.1. Align it by height;
 - 11.2. Change values of properties, if required;
 - 11.3. Change the background of the band;
 - 11.4. Enable **Borders**, if required;
 - 11.5. Set the border color.

HeaderBand1	
DataBand1: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

12. Put a text component with an expression in this band. The expression in the text component is a header in the **HeaderBand**.
13. Edit text and textcomponents:
 - 13.1. Drag and drop the text component in the band;
 - 13.2. Change font options: size, type, color;
 - 13.3. Align text component by height and width;
 - 13.4. Change the background of the text component;
 - 13.5. Align text in the textcomponent;
 - 13.6. Change values of text component properties, if required;
 - 13.7. Enable **Borders** of the text component, if required;
 - 13.8. Set the border color.



The screenshot shows a report design interface. At the top, there is a light blue header band labeled 'HeaderBand1'. Below it is a table with two columns: 'ProductName' and 'UnitPrice'. The table is divided into two sections: a header section with a brown background and a data section with a light blue background. The data section is labeled 'DataBand1: Data Source: Products'. The data section contains two rows: the first row has the text '{Products.ProductName}' and '{Products.UnitPrice}' in the two columns respectively. The second row is empty.

HeaderBand1	
ProductName	UnitPrice
DataBand1: Data Source: Products	
{Products.ProductName}	{Products.UnitPrice}

14. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of a report:

ProductName	UnitPrice
Chai	18
Chang	19
Aniseed Syrup	10
Chef Anton's Cajun Seasoning	22
Chef Anton's Gumbo Mix	21,35
Grandma's Boysenberry Spread	25
Uncle Bob's Organic Dried Pears	30
Northwoods Cranberry Sauce	40
Mishi Kobe Niku	97
Ikura	31
Queso Cabrales	21
Queso Manchego La Pastora	38
Konbu	5
Tofu	23,25
Genen Shouyu	15,5
Pavlova	17,45
Alice Mutton	39
Carnarvon Tigers	62,5
Teatime Chocolate Biscuits	9,2
Sir Rodney's Marmalade	81
Sir Rodney's Scones	10
Gustaf's Knäckebröd	21

15. Go back to the report template;

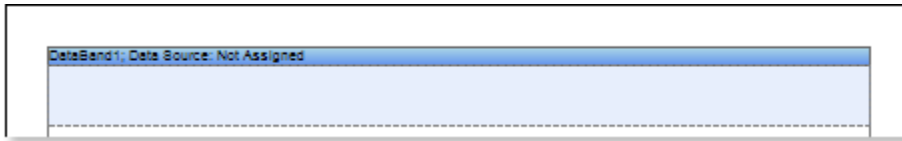
16. Set filtering in the **DataBand**. For example, set the following expression:

CategoryID == Products.CategoryID;

17. Save the report. For example, save the report with detailed data on a local disk in the root directory D:\, with the **Drill-Down Report** name, i.e. full path to the file will be **D:\ Drill-Down Report.mrt**.

Creating a report with master data

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Put the **DataBand** on a report page:



4. Edit the **DataBand**:

- 4.1. Align the **DataBand**;
- 4.2. Change the values of properties;
- 4.3. Set the background color of the **DataBand**;
- 4.4. Set **Borders**, if required;
- 4.5. Set the border color.

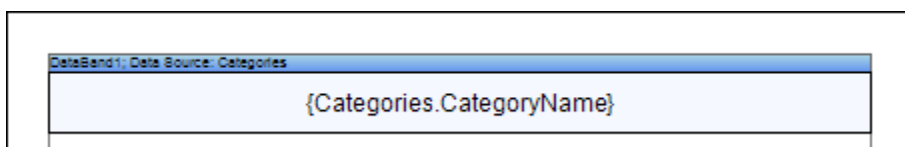
5. Specify the data source in **DataBand** using the **Data Source** property:



6. Put a text component with expressions in the **DataBand**. Where the expression is a reference to the data field. For example: put the text component with the **{Categories.CategoryName}** expression in the **DataBand**;

7. Edit text and text components located in the **DataBand**:

- 7.1. Drag the text component to the required place in the **DataBand**;
- 7.2. Align the text in a text component;
- 7.3. Change the value of the required properties. For example to set the **Word Wrap** property to **true**, if you want the text be wrapped;
- 7.4. Set **Borders** of a text component, if required;
- 7.5. Change the border color.



8. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of a report:

Beverages
Condiments
Confections
Dairy Products
Grains/Cereals
Meat/Poultry
Produce
Seafood

Creating an interactive report

1. Go back to the report template with the master data;
2. Select a text component in the **DataBand**;
3. Set the **Interaction.Drill-Down Enabled** property to **true**;
4. Set the **Interaction.Drill-Down Report** property. Where the value of this property is the full path to the report with detailed data. In our tutorial, the **Interaction.Drill-Down Report** property will be set to **D:\\Drill-Down Report.mrt**;
5. Edit **Drill-Down Parameter 1**:
 - 5.1. The **Name** property should be set to **CategoryID**;
 - 5.2. The **Expression** property should be set to **Categories.CategoryID**;
6. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for

this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database. The picture below shows a sample of a report:

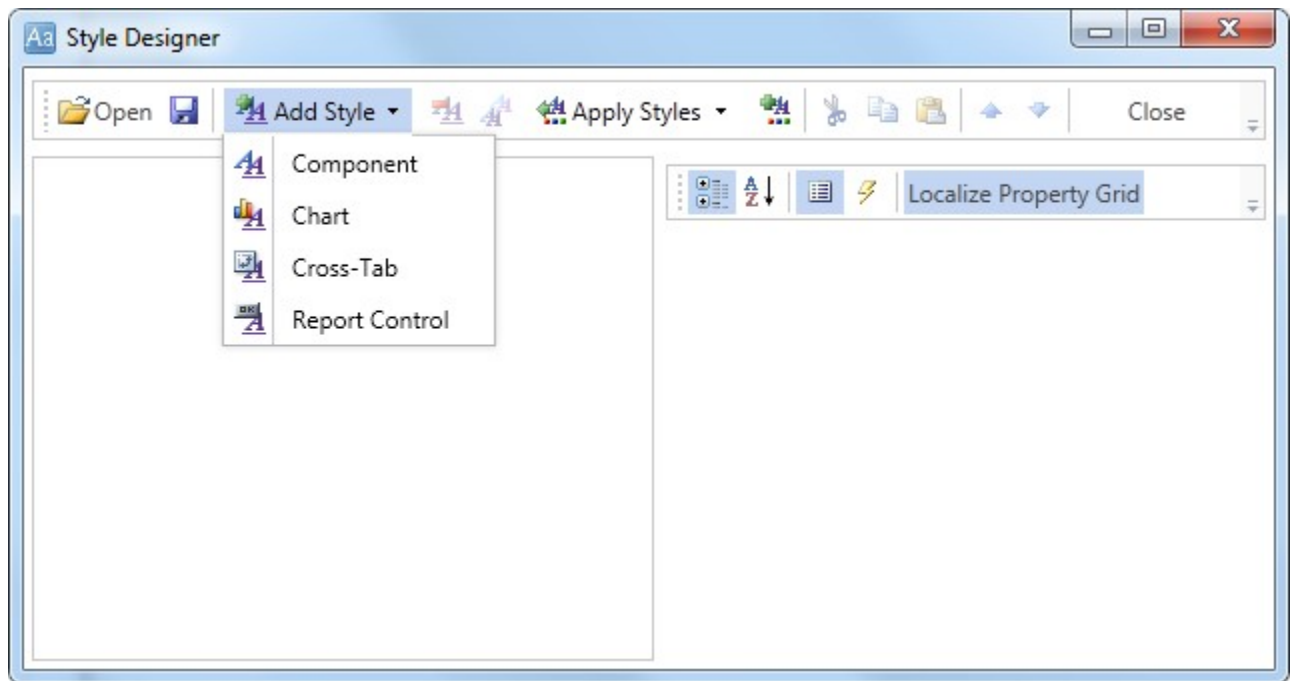
Beverages
Condiments
Confections
Dairy Products
Grains/Cereals
Meat/Poultry
Produce
Seafood

When you click the **Beverages**, the user will see the detailed data that correspond to filtering conditions and parameters of detailing. The picture below shows a page of a rendered report with detailed data of the **Beverages** entry:

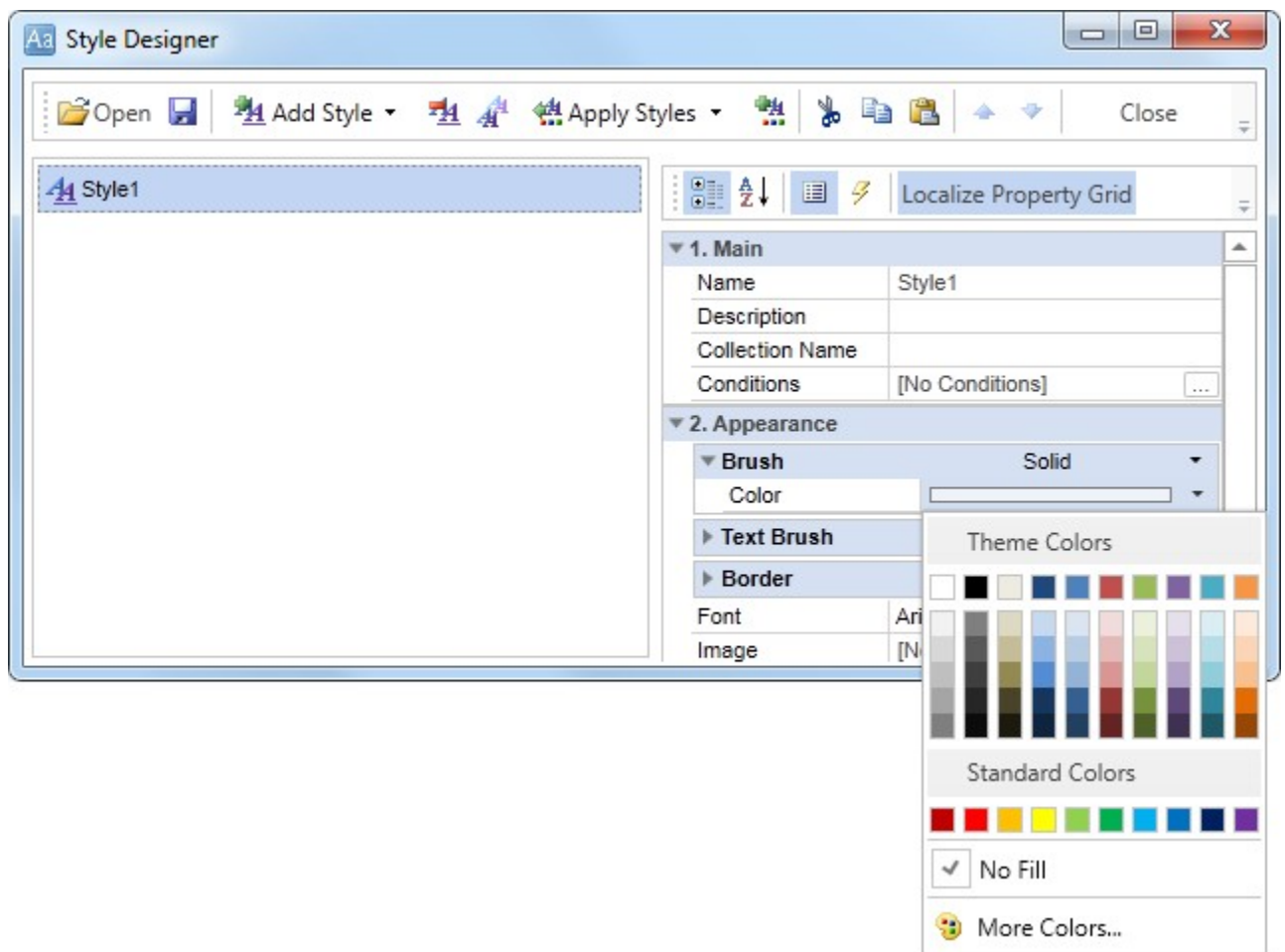
ProductName	UnitPrice
Chai	18
Chang	19
Guaraná Fantástica	4,5
Sasquatch Ale	14
Steeleye Stout	18
Côte de Blaye	263,5
Chartreuse verte	18
Ippoh Coffee	46
Laughing Lumberjack Lager	14
Outback Lager	15
Rhinöbräu Klosterbräu	7,75
Lakkalikööri	18

Adding styles

1. Go back to the report template;
2. Select the **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**.



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

1. Save changes in the detailed report by clicking the **Save** button;
2. Open the report with master data in the designer;
3. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. The picture below shows the structure of the report, i.e. shows the ratio of the detailed data to the **Meat/Poultry** master entries with different styles of even/odd rows of the **DataBand** in the detailing report:

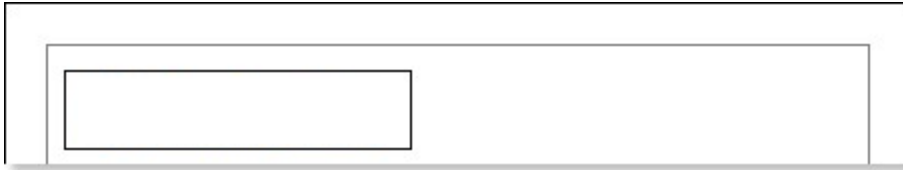
Report	Drill-Down Report														
Beverages	<table> <tr> <th>ProductName</th><th>UnitPrice</th></tr> <tr> <td>Mishi Kobe Niku</td><td>97</td></tr> <tr> <td>Alice Mutton</td><td>39</td></tr> <tr> <td>Thüringer Rostbratwurst</td><td>123,79</td></tr> <tr> <td>Perth Pasties</td><td>32,8</td></tr> <tr> <td>Tourtière</td><td>7,45</td></tr> <tr> <td>Pâté chinois</td><td>24</td></tr> </table>	ProductName	UnitPrice	Mishi Kobe Niku	97	Alice Mutton	39	Thüringer Rostbratwurst	123,79	Perth Pasties	32,8	Tourtière	7,45	Pâté chinois	24
ProductName	UnitPrice														
Mishi Kobe Niku	97														
Alice Mutton	39														
Thüringer Rostbratwurst	123,79														
Perth Pasties	32,8														
Tourtière	7,45														
Pâté chinois	24														
Condiments															
Confections															
Dairy Products															
Grains/Cereals															
Meat/Poultry															
Produce															
Seafood															

1.18 Report without Bands

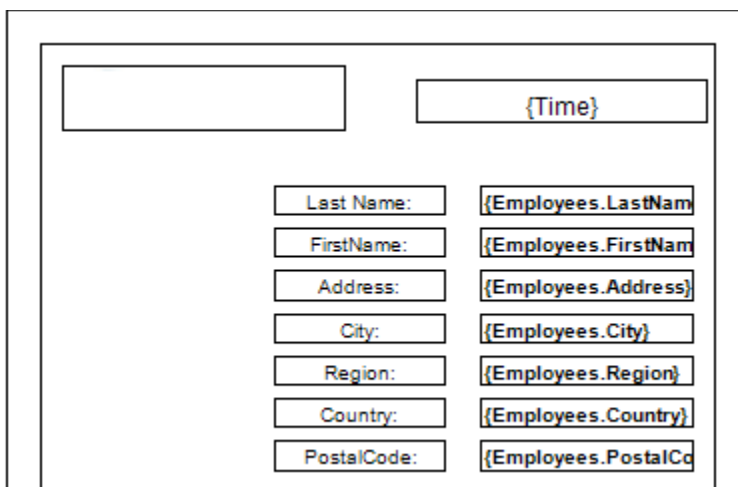
If it is necessary to display data from only one entry of the data source or data from variables or other data sources that are not lists, the report can be created without the bands. In this case, components are placed directly on a report page.

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Put the **Image** component with the image on a page;
4. Edit the **Image** component and an image:
 - 4.1. Drag and drop the **Image** component on the report page;
 - 4.2. Align the **Image** component by height and width;
 - 4.3. Set the background color of the **Image** component;
 - 4.4. Align the image in the component;
 - 4.5. Change values of the properties of the **Image** component. For example to set

- the **Print** property to **true**, if you want this component be printed;
- 4.6. If necessary, set **Borders** of the **Image** component;
- 4.7. Set the border color.



5. Put **TextBoxes** with the text on a page. In this report, put 15 Text components. The **TextBox1** contains the **{Time}** system variable, which will display the current time and date. **2-8 TextBoxes** contain the row names in the address box, and **9-15 TextBoxes** will include links to datasources;
6. Edit text and textcomponents:
- 6.1. Drag and drop the text component in the band;
 - 6.2. Change font options: size, type, color;
 - 6.3. Align text component by height and width;
 - 6.4. Change the background of the text component;
 - 6.5. Align text in the textcomponent;
 - 6.6. Change values of text component properties, if required;
 - 6.7. Enable **Borders** of the text component, if required;
 - 6.8. Set the border color.



	{Time}
Last Name:	{Employees.LastNam}
FirstName:	{Employees.FirstNam}
Address:	{Employees.Address}
City:	{Employees.City}
Region:	{Employees.Region}
Country:	{Employees.Country}
PostalCode:	{Employees.PostalCo}

7. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item:

The screenshot shows a report template with a header section containing a blank box and a date/time box displaying "23.09.2010 14:10:30". Below the header is a list of employee details, each with a label and a value in a box:

Last Name:	Davolio
FirstName:	Nancy
Address:	Apt. 2A
City:	Seattle
Region:	WA
Country:	USA
PostalCode:	98122

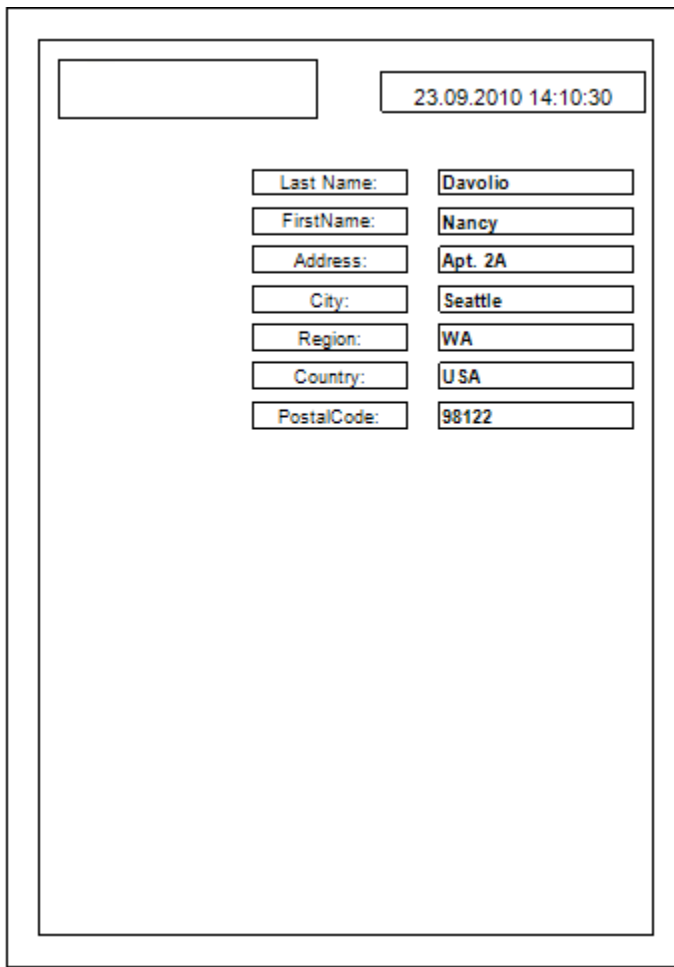
8. Go back to the report template;

9. Disable **Borders** of all components. Enable bottom borders for **9-15 TextBoxes**:

The screenshot shows the same report template as before, but with the borders of the text boxes disabled. The header section contains a blank box and a date/time box displaying "{Time}". Below the header is a list of employee details, each with a label and a value in a box:

Last Name:	{Employees.LastName}
FirstName:	{Employees.FirstName}
Address:	{Employees.Address}
City:	{Employees.City}
Region:	{Employees.Region}
Country:	{Employees.Country}
PostalCode:	{Employees.PostalCo}

10. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.



The screenshot shows a report preview window. At the top, there is a header section with a large empty box on the left and a date/time stamp '23.09.2010 14:10:30' on the right. Below the header, there is a form with the following fields and values:

Last Name:	Davolio
FirstName:	Nancy
Address:	Apt. 2A
City:	Seattle
Region:	WA
Country:	USA
PostalCode:	98122

1.19 Report with Multiple Pages in Template

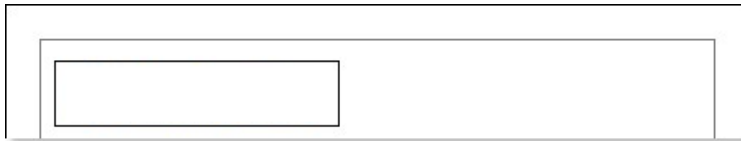
If you want to design a report, for example, with the cover page, the report template will consist of minimum two pages: the cover page and page with data. Creating a report with several pages in the template includes the following steps:

Creating a cover page

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;

2.2. Create a **New Data Source**;

3. Put an Image component on a report page;
4. Edit the Image component:
 - 4.1. Drag the **Image** component to the desired location on the report page;
 - 4.2. Align the **Image** component by height and width;
 - 4.3. Set the background color of the component;
 - 4.4. Align the image in the Image component;
 - 4.5. Set properties of the **Image** component. For example, set the **Print** property to **true**, if you want this component be printed;
 - 4.6. Set **Borders** of the component, if required;
 - 4.7. Set the border color.



5. On the report page Text components should be placed. We put 9 text components on this page. **TextBox1** will contain the **Report on Employees** text, which is the title of the report. **TextBoxes 2-5** will contain names in the address box, and **TextBoxes 6-9** will contain references to the source data;
6. Edit text and textcomponents:
 - 6.1. Drag and drop the text component in the band;
 - 6.2. Change font options: size, type, color;
 - 6.3. Align text component by height and width;
 - 6.4. Change the background of the text component;
 - 6.5. Align text in the textcomponent;
 - 6.6. Change values of text component properties, if required;
 - 6.7. Enable **Borders** of the text component, if required;
 - 6.8. Set the border color.

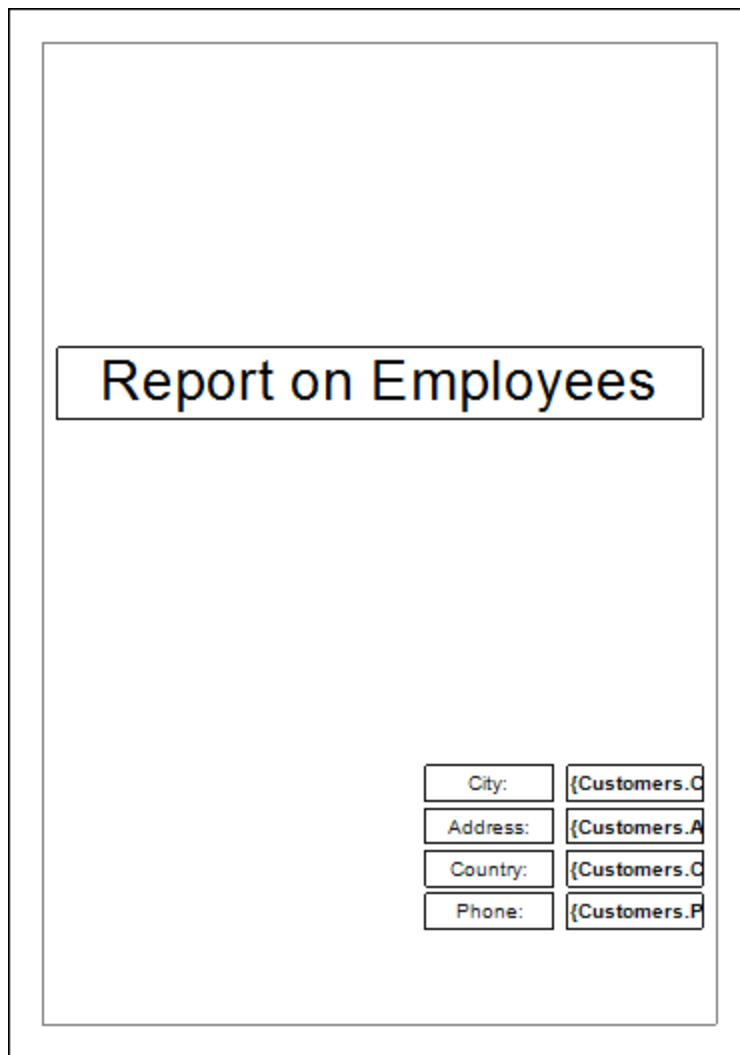
Report on Employees

City:	{Customers.C
Address:	{Customers.A
Country:	{Customers.C
Phone:	{Customers.P

7. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item:

Report on Employees	
City:	Berlin
Address:	Obere Str. 57
Country:	Germany
Phone:	030-0074321

8. Go back to the report template;
9. Disable **Borders** for all components. Enable only the bottom borders in **TextBoxes 6-9**. The figure below submitted revised report template:



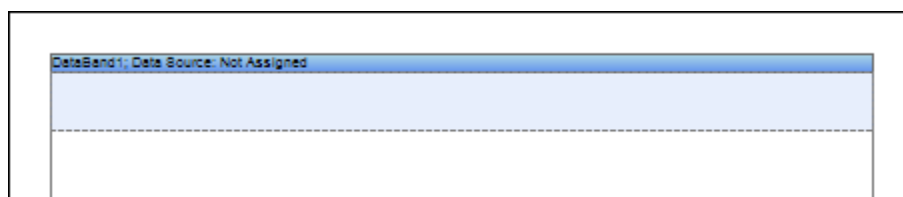
A screenshot of a report template titled "Report on Employees". The title is centered in a rectangular box. Below the title, there is a large empty rectangular area. In the bottom right corner of this area, there is a form with four rows of labels and data fields:

City:	{Customers.C
Address:	{Customers.A
Country:	{Customers.C
Phone:	{Customers.P

10. Create a second page in a report template and start editing it;

Creating a page with data

1. Put the **DataBand** page on the report template.



A screenshot of a report template showing a **DataBand** page. The page has a light blue header bar with the text "DataBand1: Data Source: Not Assigned". Below the header bar is a large empty rectangular area.

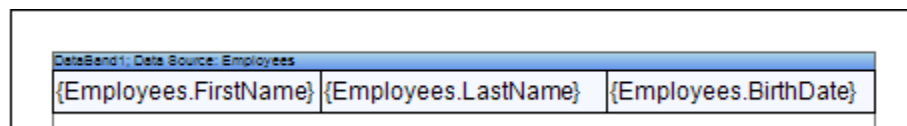
2. Edit **DataBand**:

2.1. Align the **DataBand** by height;

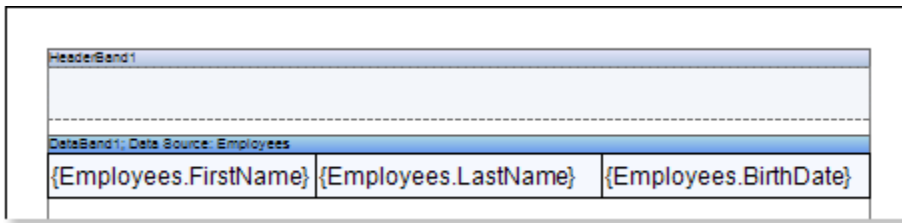
- 2.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
 - 2.3. Change the **DataBand** background;
 - 2.4. Enable **Borders** for the **DataBand**, if required;
 - 2.5. Change the border color.
3. Specify the data source in the **DataBand** using the **Data Source** property:



4. Put text components with expressions on **DataBands**. Where expression is a reference to the data field. For example, put two text components with the following expressions: **{Employees.FirstName}**, **{Employees.LastName}** and **{Employees.BirthDate}**;
5. Edit **Text** and **TextBox** component:
 - 5.1. Drag and drop the text component in **DataBands**;
 - 5.2. Change parameters of the text font: size, type, color;
 - 5.3. Align the text component by width and height;
 - 5.4. Change the background of the text component;
 - 5.5. Align text in the text component;
 - 5.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
 - 5.7. Enable **Borders** for the text component, if required.
 - 5.8. Change the border color.



6. Add other bands to the report template, for example, the **HeaderBand**;
7. Edit this bands:
 - 7.1. Align it by height;
 - 7.2. Change values of properties, if required;
 - 7.3. Change the background of bands;
 - 7.4. Enable **Borders**, if required;
 - 7.5. Set the border color.

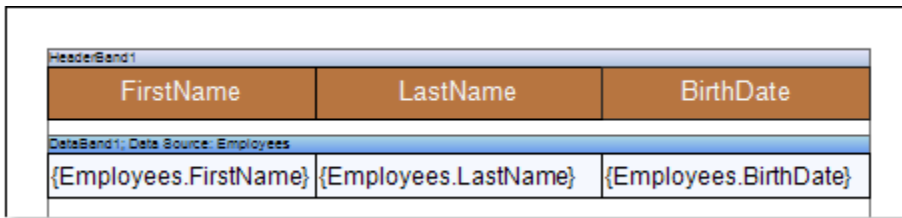


Header:Band1		
DataBand1: Data Source: Employees		
{Employees.FirstName}	{Employees.LastName}	{Employees.BirthDate}

8. Put text components with expressions in the band. The expression in the text component is a header in the **HeaderBand**.

9. Edit text and textcomponent:

- 9.1. Drag and drop the text component in the band;
- 9.2. Change font options: size, type, color;
- 9.3. Align text component by height and width;
- 9.4. Change the background of the text component;
- 9.5. Align text in the textcomponent;
- 9.6. Change values of text component properties, if required;
- 9.7. Enable **Borders** of the text component, if required;
- 9.8. Set the border color.



Header:Band1		
FirstName	LastName	BirthDate
DataBand1: Data Source: Employees		
{Employees.FirstName}	{Employees.LastName}	{Employees.BirthDate}

9. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database.

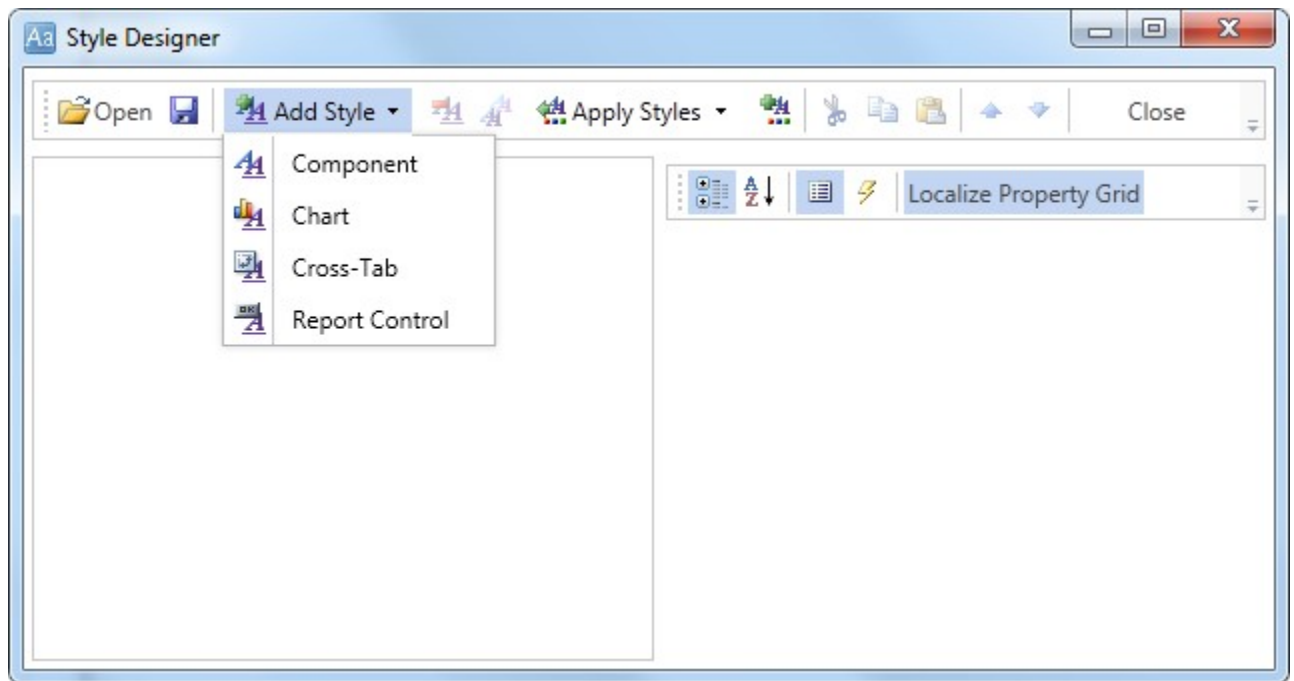
Report on Employees

City:	Berlin
Address:	Obere Str. 57
Country:	Germany
Phone:	030-0074321

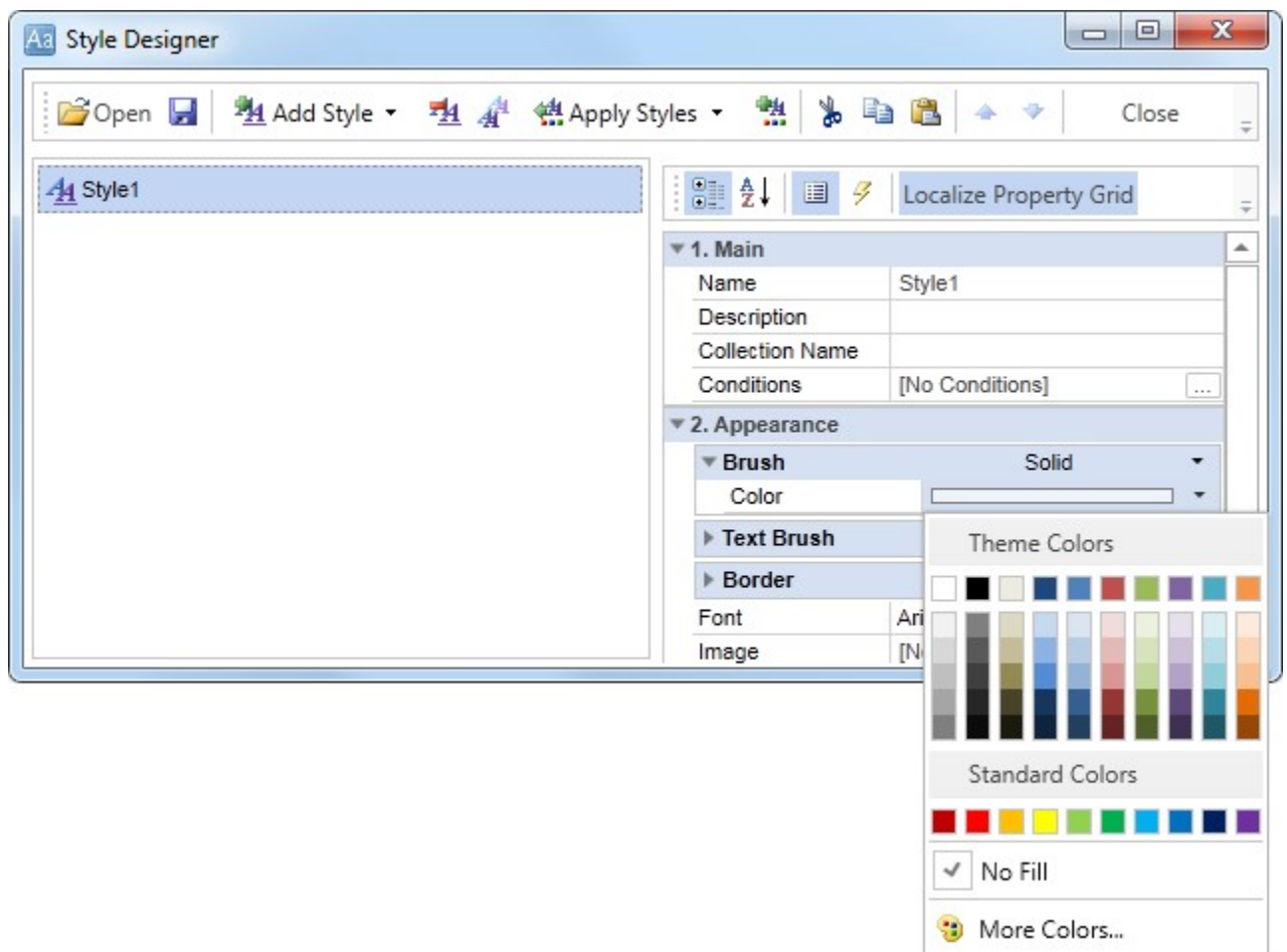
FirstName	LastName	BirthDate
Nancy	Davolio	08.12.1948 0:00:00
Andrew	Fuller	19.02.1952 0:00:00
Janet	Leverling	30.08.1963 0:00:00
Margaret	Peacock	19.09.1937 0:00:00
Steven	Buchanan	04.03.1955 0:00:00
Michael	Suyama	02.07.1963 0:00:00
Robert	King	29.05.1960 0:00:00
Laura	Callahan	09.01.1958 0:00:00
Anne	Dodsworth	27.01.1966 0:00:00

Adding Styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Report on Employees

City:	Berlin
Address:	Obere Str. 57
Country:	Germany
Phone:	030-0074321

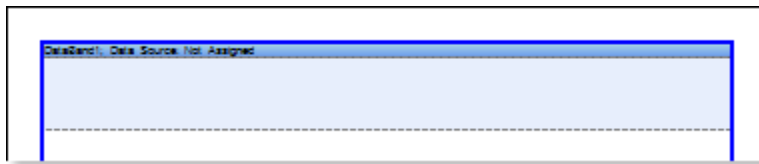
FirstName	LastName	BirthDate
Nancy	Davolio	08.12.1948 0:00:00
Andrew	Fuller	19.02.1952 0:00:00
Janet	Leverling	30.08.1963 0:00:00
Margaret	Peacock	19.09.1937 0:00:00
Steven	Buchanan	04.03.1955 0:00:00
Michael	Suyama	02.07.1963 0:00:00
Robert	King	29.05.1960 0:00:00
Laura	Callahan	09.01.1958 0:00:00
Anne	Dodsworth	27.01.1966 0:00:00

1.20 Report with Segmented Pages

If data in a report should be placed on a single page by width or height, and a page size is small, you can add the required number of segments by width and/or height. In this case, one segment is a whole page and summary page consists of several segments across by width or height. In order to design a report with segmented pages, follow the steps below:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Define the number of segments by height and/or width. For example, set the **Segment per Height** property to **2**, i.e. the number of segments by height is **2**.

4. Put the **DataBand** on a segment of the report template.



5. Edit **DataBand**:

- 5.1. Align the **DataBand** by height;
- 5.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
- 5.3. Change the **DataBand** background;
- 5.4. Enable **Borders** for the **DataBand**, if required;
- 5.5. Change the border color.

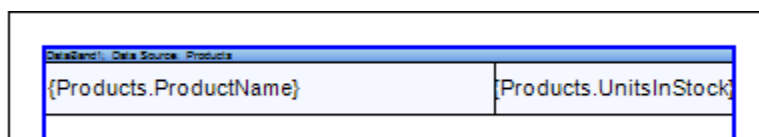
6. Specify the data source in the **DataBand** using the **Data Source** property:



7. Put text components with expressions on **DataBands**. Where expression is a reference to the data field. For example, put two text components with the following expressions: **{Products.ProductName}** and **{Products.UnitsInStock}**;

8. Edit **Text** and **TextBox** component:

- 8.1. Drag and drop the text component in **DataBands**;
- 8.2. Change parameters of the text font: size, type, color;
- 8.3. Align the text component by width and height;
- 8.4. Change the background of the text component;
- 8.5. Align text in the text component;
- 8.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
- 8.7. Enable **Borders** for the text component, if required.
- 8.8. Change the border color.



9. Click the **Preview** button or invoke the **Viewer**, pressing **F5** or clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report

will be the same as the amount of data rows in the database.

Chai	39
Chang	17
Aniseed Syrup	13
Chef Anton's Cajun Seasoning	53
Chef Anton's Gumbo Mix	0
Grandma's Boysenberry Spread	120
Uncle Bob's Organic Dried Pears	15
Northwoods Cranberry Sauce	6
Mishi Kobe Niku	29
Ikura	31
Queso Cabrales	22
Queso Manchego La Pastora	86
Konbu	24
Tofu	35
Genen Shouyu	39
Pavlova	29
Alice Mutton	0
Carnarvon Tigers	42
Teatime Chocolate Biscuits	25
Sir Rodney's Marmalade	40
Sir Rodney's Scones	3
Gustaf's Knäckebröd	104
Tunnbröd	61
Guaraná Fantástica	20
NuNuCa Nut-Nougat-Creme	76
Gumbär Gummitbärchen	15
Schoggi Schokolade	49
Rössle Sauerkraut	25
Thüringer Rostbratwurst	0
Nord-Ost Matjeshering	10
Gorgonzola Telino	0
Mascarpone Fabioli	9
Gelato	112
Sasquatch Ale	111
Steeleye Stout	20
Inlagd Sill	112
Gravad lax	11
Côte de Blaye	17
Chartreuse verte	69

10. Add other bands to the report template, for example, the **HeaderBand**;

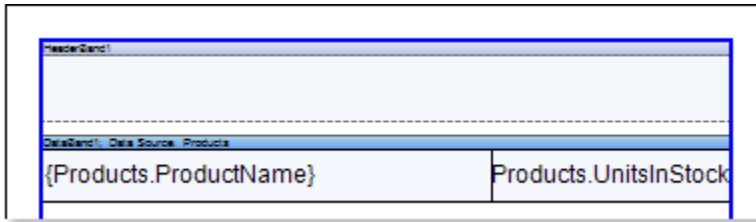
11. Edit this bands:

11.1. Align it by height;

11.2. Change values of properties, if required;

11.3. Change the background of bands;

- 11.4. Enable **Borders**, if required;
- 11.5. Set the border color.

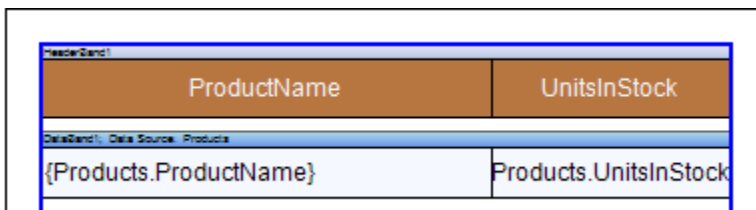


HeaderBand1	
DataBand1: Data Source: Products	
{Products.ProductName}	Products.UnitsInStock

12. Put text components with expressions in the band. The expression in the text component is a header in the **HeaderBand**.

13. Edit text and textcomponent:

- 13.1. Drag and drop the text component in the band;
- 13.2. Change font options: size, type, color;
- 13.3. Align text component by height and width;
- 13.4. Change the background of the text component;
- 13.5. Align text in the textcomponent;
- 13.6. Change values of text component properties, if required;
- 13.7. Enable **Borders** of the text component, if required;
- 13.8. Set the border color.



HeaderBand1	
ProductName	UnitsInStock
DataBand1: Data Source: Products	
{Products.ProductName}	Products.UnitsInStock

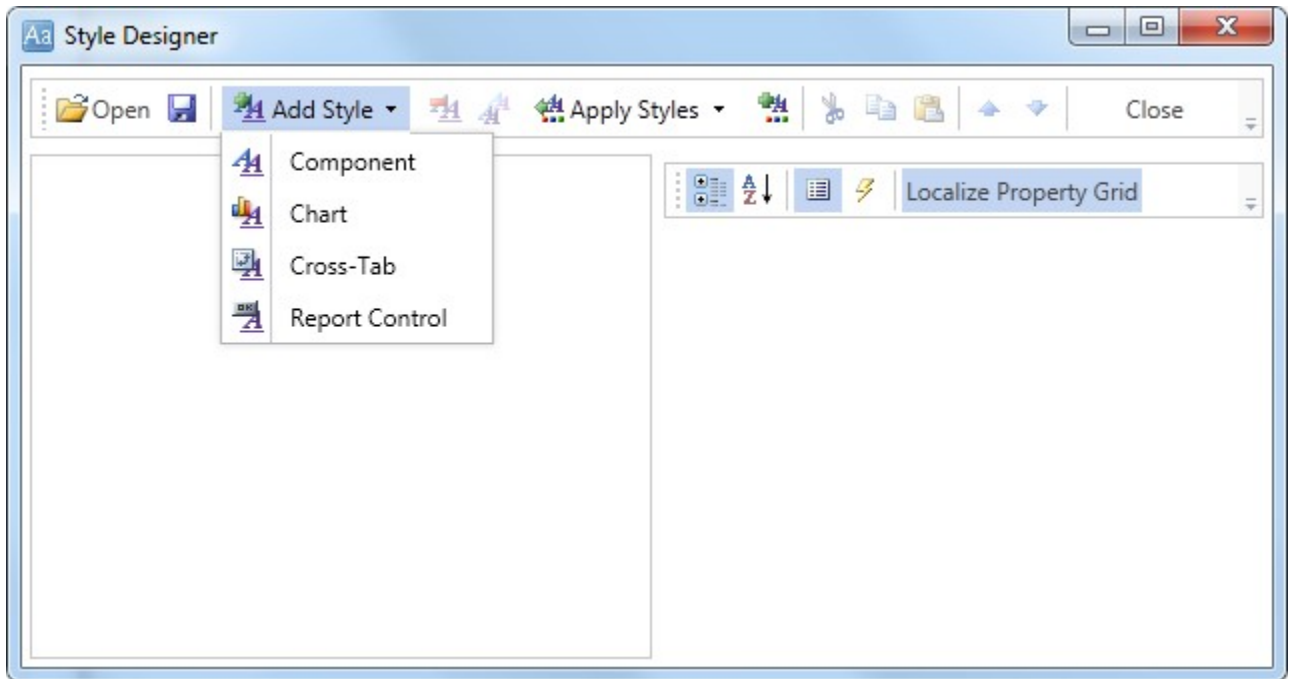
14. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

ProductName	UnitsInStock
Chai	39
Chang	17
Aniseed Syrup	13
Chef Anton's Cajun Seasoning	53
Chef Anton's Gumbo Mix	0
Grandma's Boysenberry Spread	120
Uncle Bob's Organic Dried Pears	15
Northwoods Cranberry Sauce	6
Mishi Kobe Niku	29
Kura	31
Queso Cabrales	22
Queso Manchego La Pastora	86
Konbu	24
Tofu	35
Genen Shouyu	39
Pavlova	29
Alice Mutton	0
Carnarvon Tigers	42
Teatime Chocolate Biscuits	25
Sir Rodney's Marmalade	40
Sir Rodney's Scones	3
Gustaf's Knäckebröd	104
Tunnbröd	61
Guaraná Fantástica	20
NuNuCa Nuts-Nougat-Creme	76
Gumbär Gummitbärchen	15
Schoggi Schokolade	49
Rössle Sauerkraut	26
Thüringer Rostbratwurst	0
Nord-Ost Matjeshering	10
Gorgonzola Telino	0
Mascarpone Fabioli	9
Gelbst	112
Sasquatch Ale	111
Steeleye Stout	20
Inlag'd Sill	112
Gravad lax	11
Côte de Blaye	17

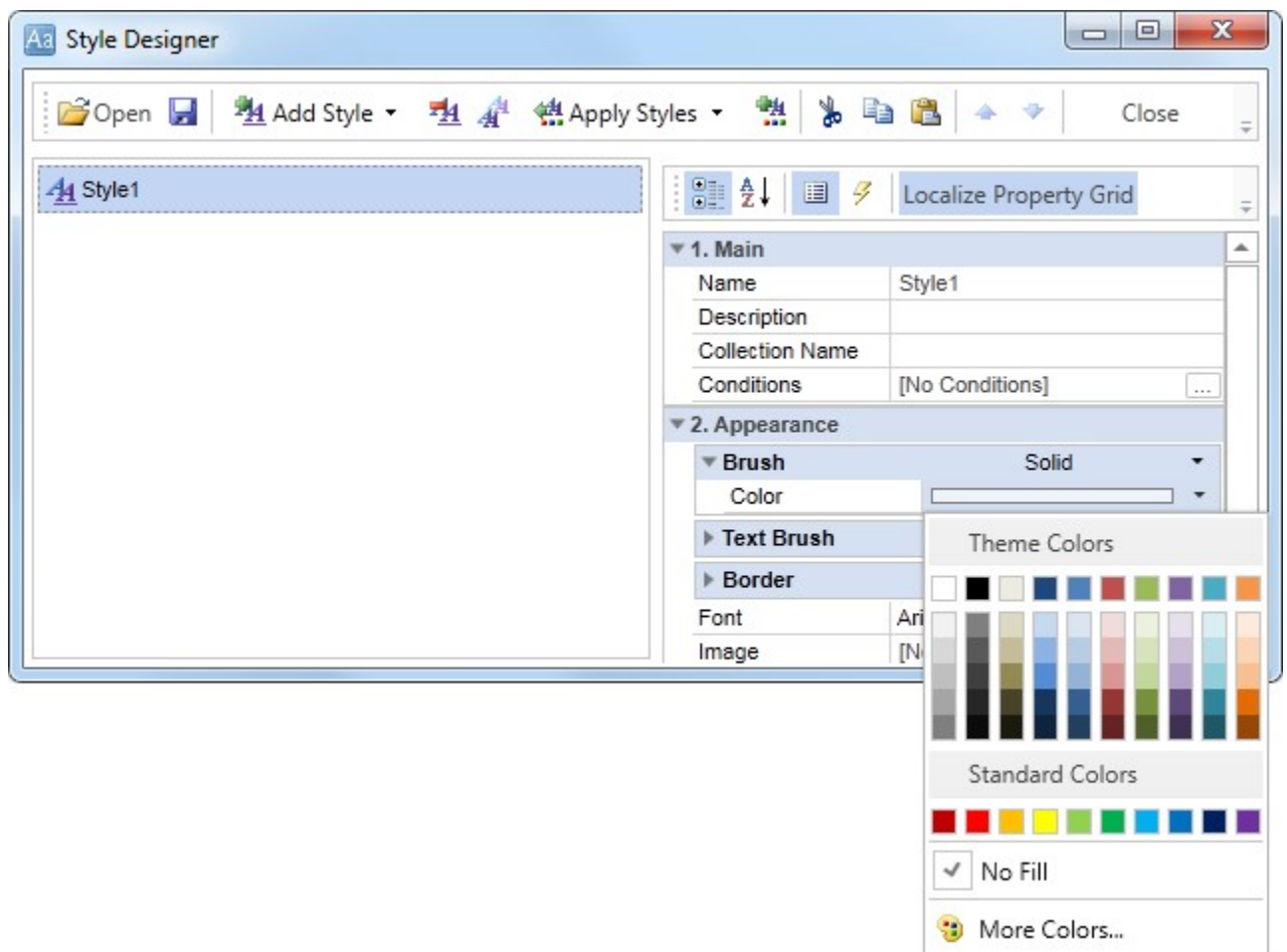
Adding Styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and,

using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

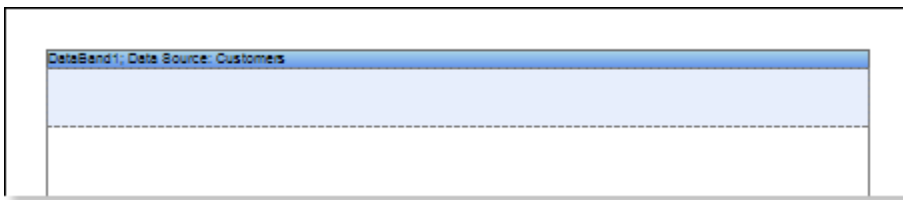
ProductName	UnitsInStock
Chai	39
Chang	17
Aniseed Syrup	13
Chef Anton's Cajun Seasoning	53
Chef Anton's Gumbo Mix	0
Grandma's Boysenberry Spread	120
Uncle Bob's Organic Dried Pears	15
Northwoods Cranberry Sauce	6
Mishi Kobe Niku	29
Kura	31
Queso Cabrales	22
Queso Manchego La Pastora	86
Konbu	24
Tofu	35
Genen Shouyu	39
Pavlova	29
Alice Mutton	0
Carnarvon Tigers	42
Teatime Chocolate Biscuits	25
Sir Rodney's Marmalade	40
Sir Rodney's Scones	3
Gustaf's Knäckebröd	104
Tunnbröd	61
Guaraná Fantástica	20
NuNuCa Nuts-Nougat-Creme	76
Gumbär Gummitbärchen	15
Schoggi Schokolade	49
Rössle Sauerkraut	26
Thüringer Rostbratwurst	0
Nord-Ost Matjeshering	10
Gorgonzola Telino	0
Mascarpone Fabioli	9
Gelbst	112
Sasquatch Ale	111
Steeleye Stout	20
Inlagd Sill	112
Gravad lax	11
Côte de Blaye	17

1.21 Report with Primitives on Page

Primitives are: **Horizontal Line**, **Vertical Line**, **Rectangle** and **Rounded Rectangle**.

Besides, you may use the **Shape** component. When placing a primitive on a page, the primitive will be rendered as a page item. In order to design a report with primitives on a page, follow the steps below:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Put the **DataBand** on a page of a report template.



4. Edit **DataBand**:
 - 4.1. Align the **DataBand** by height;
 - 4.2. Change values of band properties. For example, set the **Can Shrink** property to **true**, if you wish the data band to be broken;
 - 4.3. Change the **DataBand** background;
 - 4.4. Enable **Borders** for the **DataBand**, if required;
 - 4.5. Change the border color.
5. Define the data source for the **DataBand** using the **Data Source** property:



6. Put text components with expressions on the **DataBand**. Where expression is a reference to the data field. For example, put two text components with expressions: **{Employees.FirstName}** and **{Employees.City}**;
7. Edit **Text** and **TextBox** component:
 - 7.1. Drag and drop the text component in the **DataBand**;
 - 7.2. Change parameters of the text font: size, type, color;
 - 7.3. Align the text component by width and height;
 - 7.4. Change the background of the text component;
 - 7.5. Align text in the textcomponent;
 - 7.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;

7.7. Enable **Borders** for the text component, if required.

7.8. Change the border color.

DataGrid: Data Source: Employees	
{Employees.FirstName}	{Employees.City}

8. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Nancy	Seattle
Andrew	Tacoma
Janet	Kirkland
Margaret	Redmond
Steven	London
Michael	London
Robert	London
Laura	Seattle
Anne	London

9. Go back to the report template.

10. Add the **Shape** component to a report template and edit it:

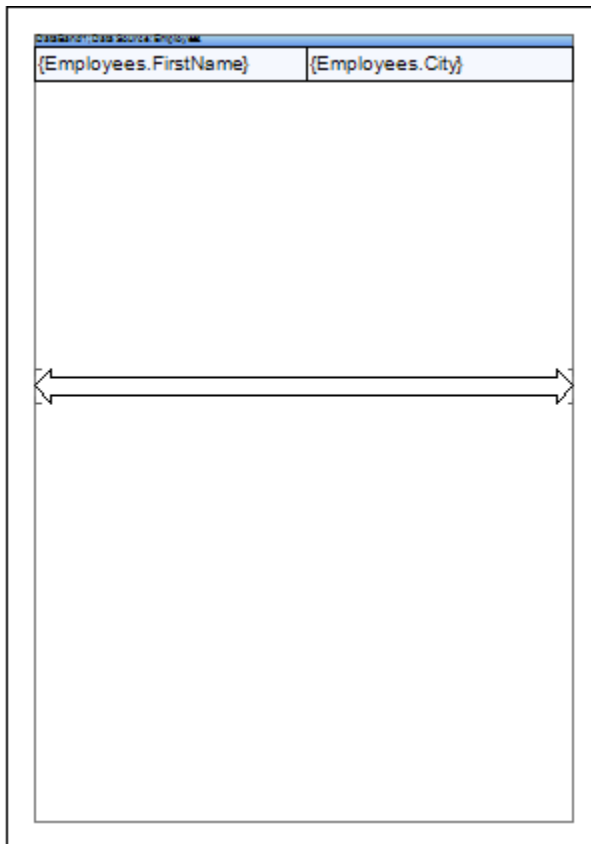
10.1. Drag and drop the **Shape** component on the page;

10.2. Change the type of a shape using the **Shape Type** property. Set the **Shape Type** property to **Complex Arrow**;

10.3. Stretch the **Shape** component horizontally and vertically;

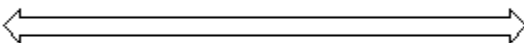
10.4. Change the value of other properties. For example, set the **Grow to Height** property to **true**.

The picture below shows a report template with the **Shape** component placed on the report page:



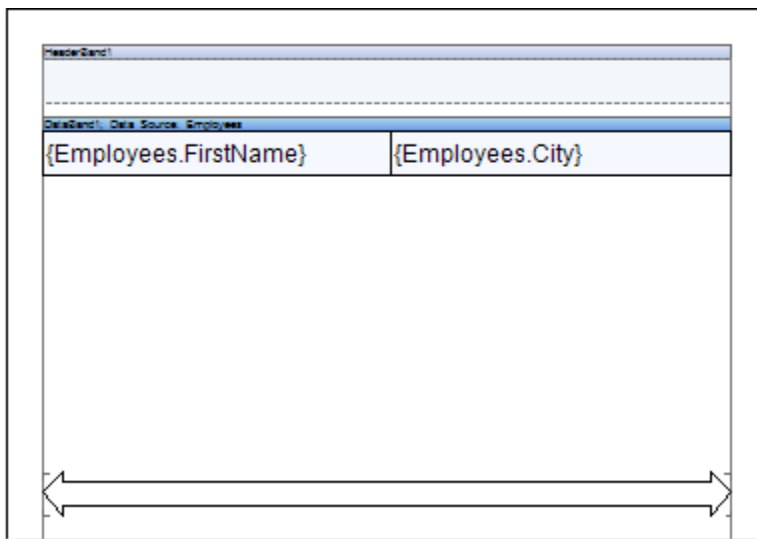
11. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Nancy	Seattle
Andrew	Tacoma
Janet	Kirkland
Margaret	Redmond
Steven	London
Michael	London
Robert	London
Laura	Seattle
Anne	London



12. Go back to the report template.
13. If needed, add other bands to the report template, for example, **HeaderBand**;
14. Edit this bands:
 - 14.1. Align it by height;
 - 14.2. Change values of properties, if required;
 - 14.3. Change the background color of the band;
 - 14.4. Enable **Borders**, if required;
 - 14.5. Set the border color.

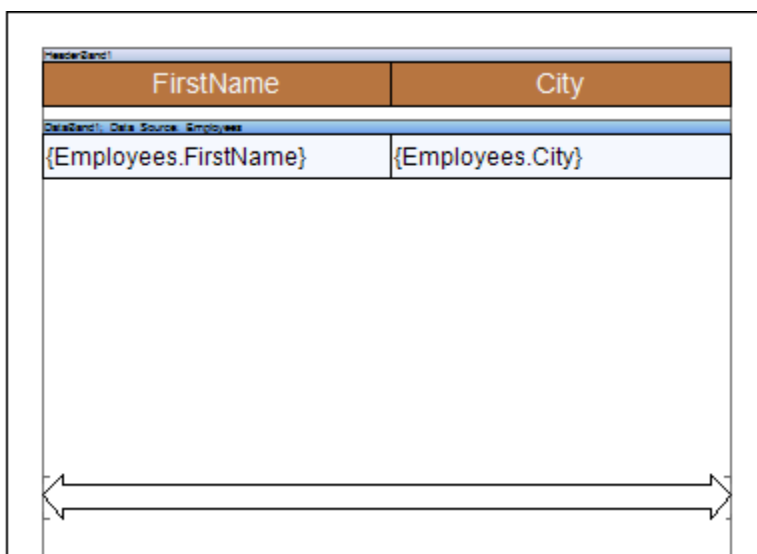
The picture below shows a report template with a **HeaderBand**:



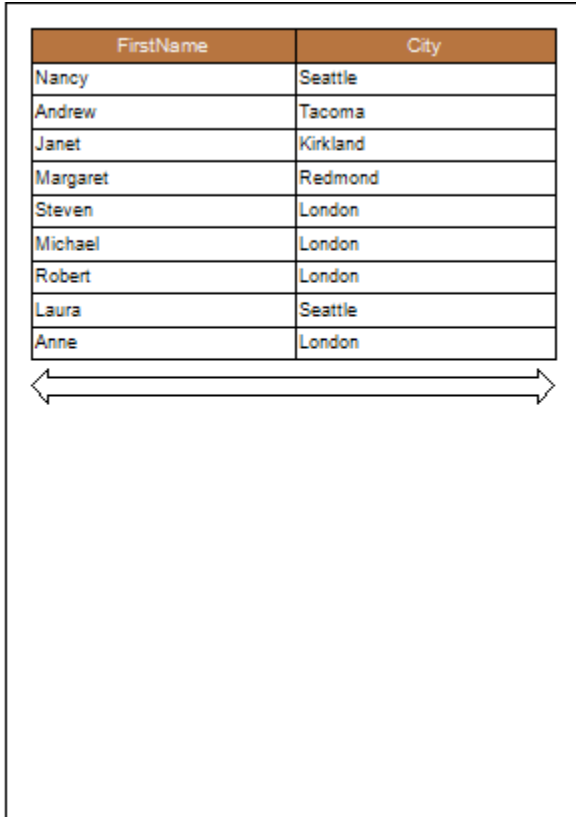
15. Put text components with expressions in the this band. The expression in the text component is a header in the **HeaderBand**.

16. Edit text and textcomponents:

- 16.1. Drag and drop the text component in the band;
- 16.2. Change font options: size, type, color;
- 16.3. Align text component by height and width;
- 16.4. Change the background of the text component;
- 16.5. Align text in the textcomponent;
- 16.6. Change values of text component properties, if required;
- 16.7. Enable **Borders** of the text component, if required;
- 16.8. Set the border color.



17. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database.



FirstName	City
Nancy	Seattle
Andrew	Tacoma
Janet	Kirkland
Margaret	Redmond
Steven	London
Michael	London
Robert	London
Laura	Seattle
Anne	London

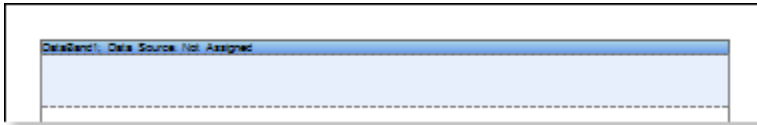
1.22 Report with Primitives in Band

Primitives are: **Horizontal Line**, **Vertical Line**, **Rectangle** and **Rounded Rectangle**. Besides, you may use the **Shape** component. When placing a primitive on a band, the primitive will be rendered on a page as many times as the band will be printed. In order to design a report with primitives on a band, follow the steps below:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;

2.2. Create a **New Data Source**;

3. Put the **DataBand** on a page of a report template.



4. Edit **DataBand**:

- 4.1. Align the **DataBand** by height;
- 4.2. Change values of band properties. For example, set the **Can Shrink** property to **true**, if you wish the data band to be broken;
- 4.3. Change the **DataBand** background;
- 4.4. Enable **Borders** for the **DataBand**, if required;
- 4.5. Change the border color.

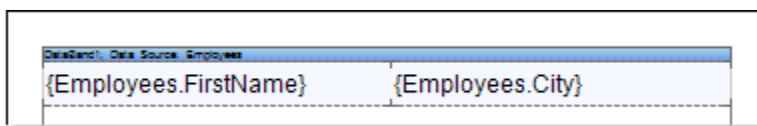
5. Define the data source for the **DataBand** using the **Data Source** property:



6. Put text components with expressions on the **DataBand**. Where expression is a reference to the data field. For example, put two text components with expressions: **{Employees.FirstName}** and **{Employees.City}**;

7. Edit **Text** and **TextBox** component:

- 7.1. Drag and drop the text component in the **DataBand**;
- 7.2. Change parameters of the text font: size, type, color;
- 7.3. Align the text component by width and height;
- 7.4. Change the background of the text component;
- 7.5. Align text in the text component;
- 7.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
- 7.7. Enable **Borders** for the text component, if required.
- 7.8. Change the border color.



8. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Nancy	Seattle
Andrew	Tacoma
Janet	Kirkland
Margaret	Redmond
Steven	London
Michael	London
Robert	London
Laura	Seattle
Anne	London

9. Go back to the report template.

10. Add the **Shape** component to a report template in the **DataBand** and edit it:

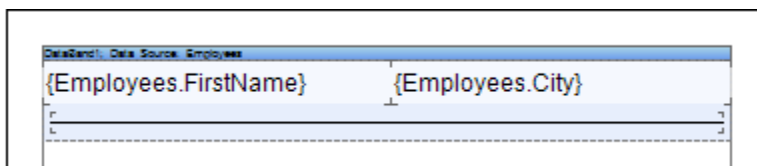
10.1. Drag and drop the **Shape** component on the page;

10.2. Change the type of a shape using the **Shape Type** property. Set the **Shape Type** property to **Complex Arrow**;

10.3. Stretch the **Shape** component horizontally and vertically;

10.4. Change the value of other properties. For example, set the **Grow to Height** property to **true**.

The picture below shows a report template with the **Shape** component placed on the report page:

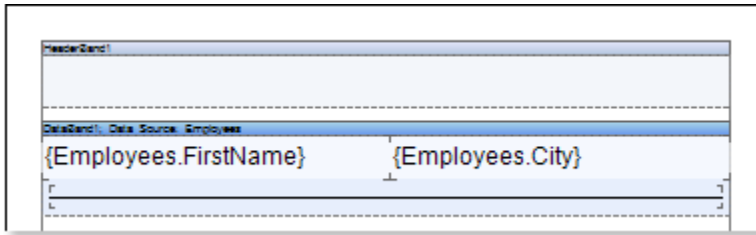


11. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Nancy	Seattle
Andrew	Tacoma
Janet	Kirkland
Margaret	Redmond
Steven	London
Michael	London
Robert	London
Laura	Seattle
Anne	London

12. Go back to the report template.
13. If needed, add other bands to the report template, for example, **HeaderBand**;
14. Edit this bands:
 - 14.1. Align it by height;
 - 14.2. Change values of properties, if required;
 - 14.3. Change the background color of the band;
 - 14.4. Enable **Borders**, if required;
 - 14.5. Set the border color.

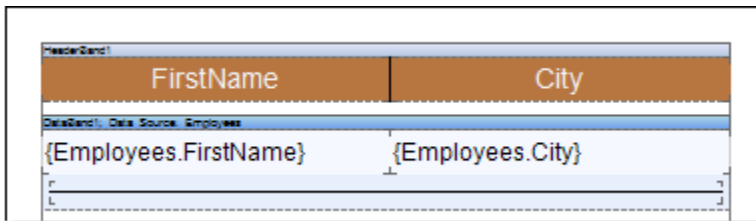
The picture below shows a report template with a **HeaderBand**:



15. Put text components with expressions in the this band. The expression in the text component is a header in the **HeaderBand**.

16. Edit text and textcomponents:

- 16.1. Drag and drop the text component in the band;
- 16.2. Change font options: size, type, color;
- 16.3. Align text component by height and width;
- 16.4. Change the background of the text component;
- 16.5. Align text in the textcomponent;
- 16.6. Change values of text component properties, if required;
- 16.7. Enable **Borders** of the text component, if required;
- 16.8. Set the border color.

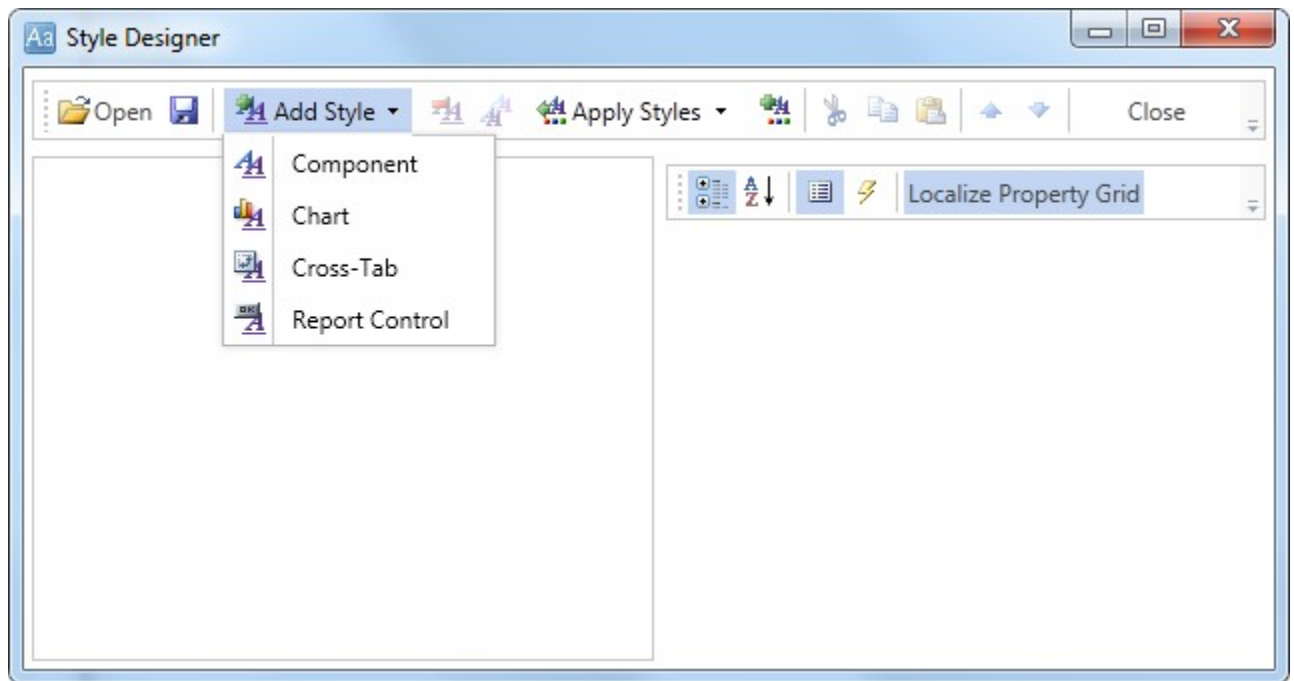


17. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database.

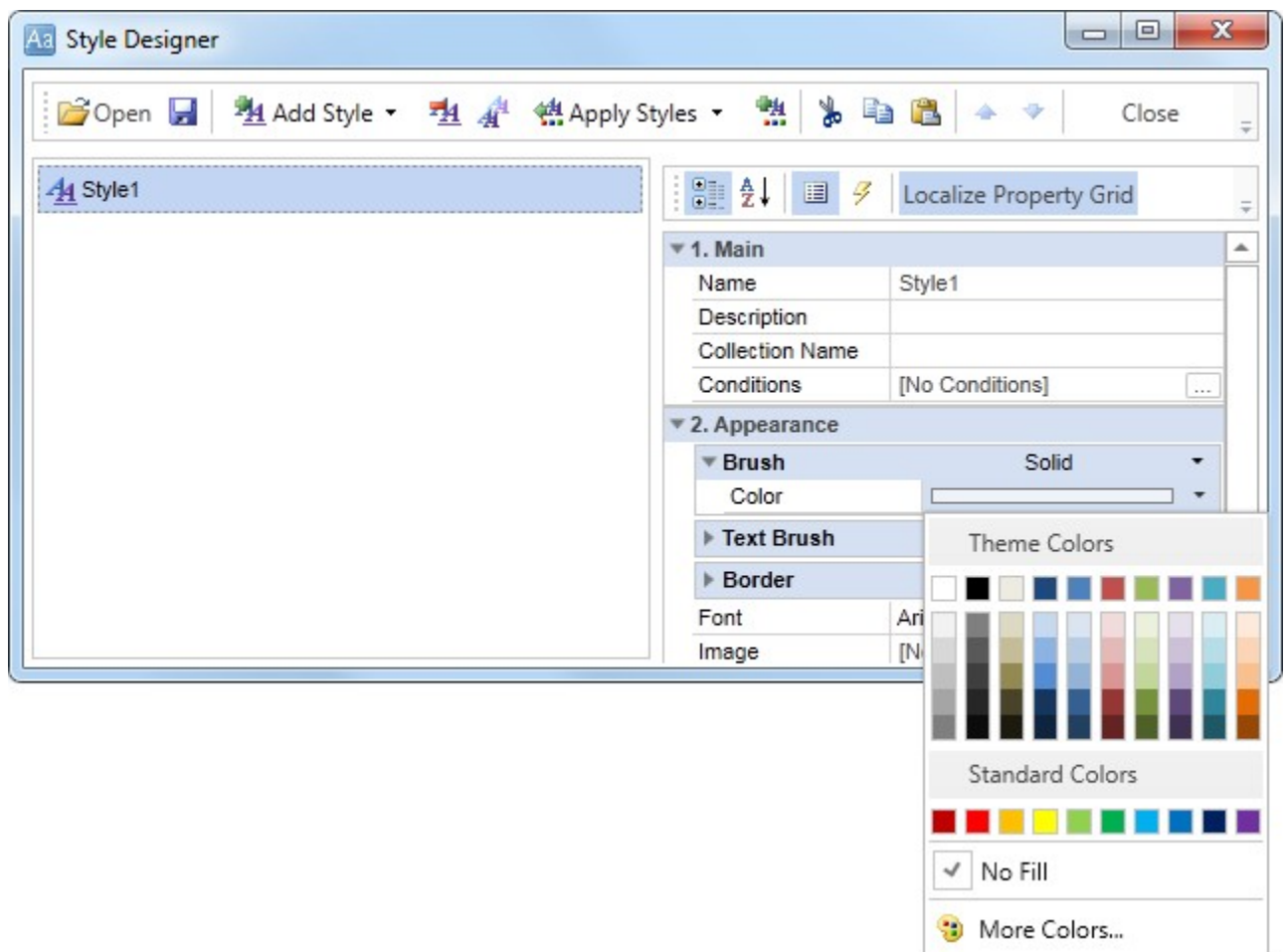
FirstName	City
Nancy	Seattle
Andrew	Tacoma
Janet	Kirkland
Margaret	Redmond
Steven	London
Michael	London
Robert	London
Laura	Seattle
Anne	London

Adding Styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

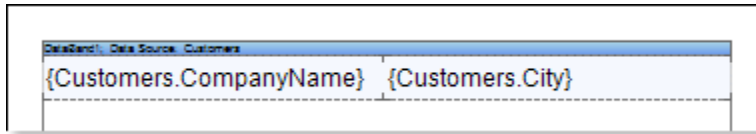
FirstName	City
Nancy	Seattle
Andrew	Tacoma
Janet	Kirkland
Margaret	Redmond
Steven	London
Michael	London
Robert	London
Laura	Seattle
Anne	London

1.23 Report with Cross-Primitives

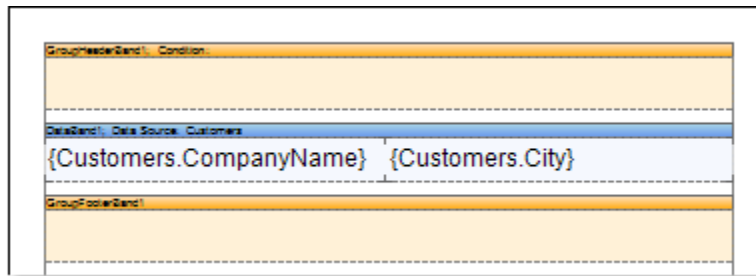
Cross-primitives include: **Vertical Line**, **Rectangle** and **Rounded Rectangle**. The start and end points of cross-primitives can be placed on different components of a report. In order to design a report with cross-primitives, follow the steps below:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;

3. Create a report or load previously saved one. For our example we take a Simple List Report report, described in **Simple List Report** article.



4. Add **GroupHeaderBand** and **GroupFooterBand** to a report template. The **GroupHeaderBand** should be placed above the **DataBand** to which it applies. The **GroupFooterBand** should be placed below the **DataBand**. And it is meant exactly the **DataBand**, that is associated with the **GroupHeaderBand**. Each **GroupFooterBand**, refers to a certain **GroupHeaderBand**. The **GroupFooterBand** will not be output without the **GroupHeaderBand**.



5. Edit the **GroupHeaderBand** and the **GroupFooterBand**:

5.1. Align them by height;

5.2. Change the values of the required properties. For example, set the **KeepGroupHeaderTogether** property for the **GroupHeaderBand** to **true**, if you want the **GroupHeaderBand** be kept with the group. And set the **KeepGroupFooterTogether** property for the **GroupFooterBand** to **true**, if you want this band be kept with the group;

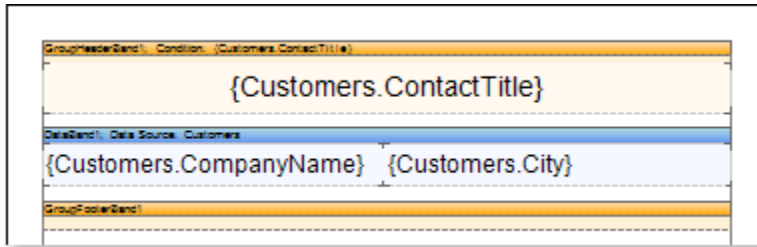
5.3. Set the background color for the **GroupHeaderBand**;

5.4. If necessary, set the **Borders** for the **DataBand**;

6. Set the condition of data grouping in the report using the **Condition** property of the **GroupHeaderBand**. Condition for the grouping can be set by specifying an expression or by selecting a column from a data source. In this example, we specify the **{Customers.ContactTitle}** expression of the grouping condition, so, when rendering the report, a list of companies will be grouped by the **ContactTitle** column data.

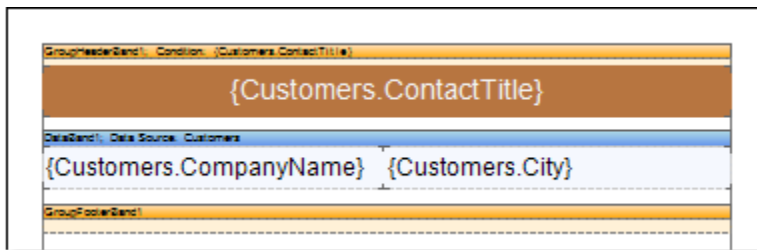
7. Put a text component in the **GroupHeaderBand** with the following expression: **{Customers.ContactTitle}**. So when rendering the report, as a group header, the entries from the **ContactTitle** data column will be output. Put a text component in the

GroupFooterBand with the following expression: **{Count ()}**. The **{Count ()}** function will count the number of entries in each group.



8. Edit expressions, and text components:

- 8.1. Drag and drop text components in the **GroupHeaderBand** and **GroupFooterBand**;
- 8.2. Set the font settings: size, style, color;
- 8.3. Align text components by height and width;
- 8.4. Set background color of text components;
- 8.5. Set the expression in the text components;
- 8.6. Set the value of the required properties;
- 8.7. Set **Borders** of text components, if required;
- 8.8. Set the border color.

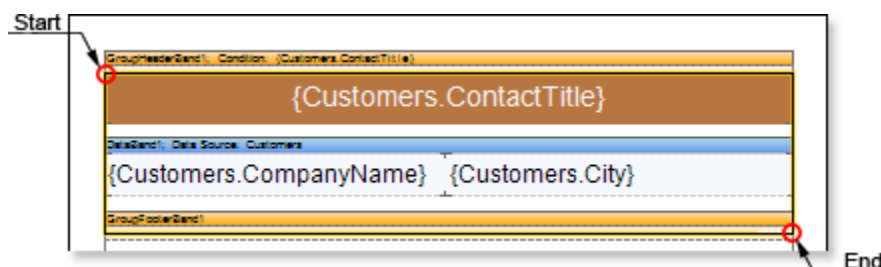


9. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering a report all references to data fields will be changed on data from specified fields.

Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delícia	Rio de Janeiro
FISSA Fabrica Inter.	Madrid
Salchichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevalier	Reims
Assistant Sales Agent	
Folies gourmandes	Lille
Ricardo Adocicados	Rio de Janeiro
Assistant Sales Representative	
Rattlesnake Canyon Grocery	Albuquerque

10. Go back to the report template;

11. Add the **Rectangle** cross-primitive to the report template. Starting points of the rectangle will lie in the **GroupHeaderBand**, and the end point will lie in the **GroupFooterBand**.



12. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering a report all references to data fields will be changed on data from specified fields. The picture below shows a rendered report page with grouping and the rendered **Rectangle** cross-primitive:

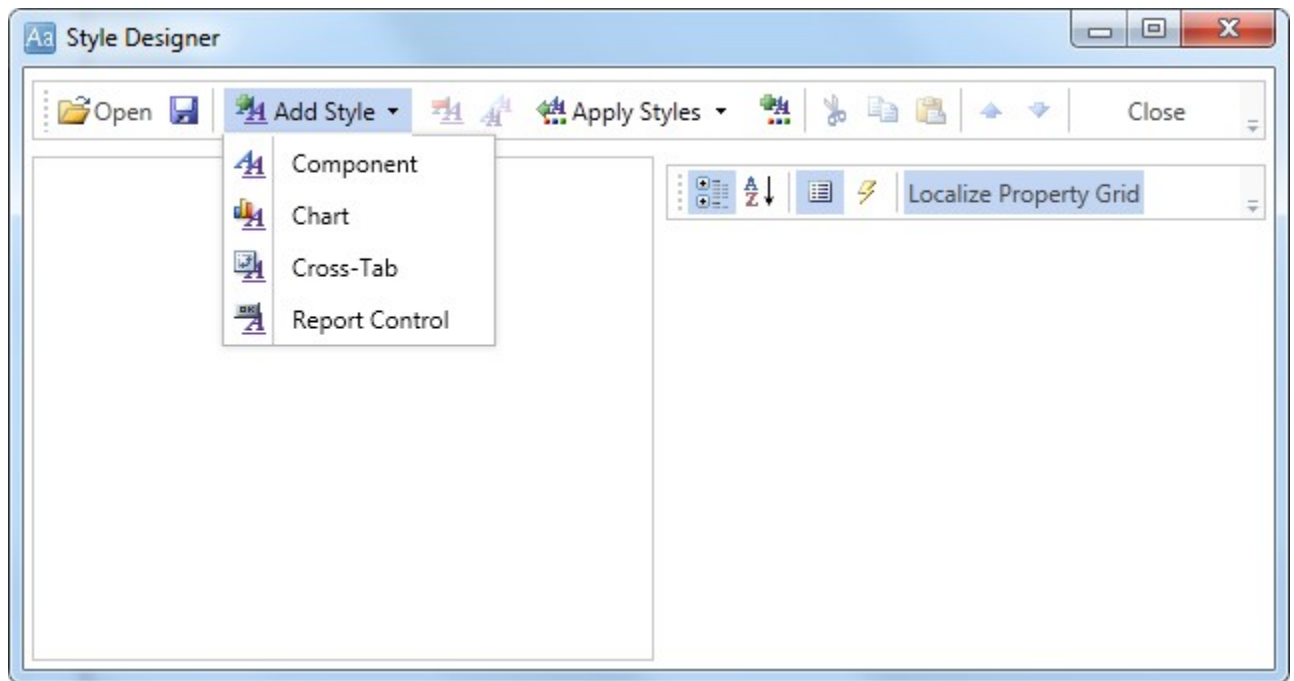
Start

Sales Representative	
HILARION-Abastos	San Cristóbal
Around the Horn	London
La corne d'abondance	Versailles
Old World Delicatessen	Anchorage
Hungry Coyote Import Store	Elgin
Lehmanns Marktstand	Frankfurt a.M.
Alfreds Futterkiste	Berlin
Die Wandernde Kuh	Stuttgart
Rancho grande	Buenos Aires
Franchi S.p.A.	Torino
Consolidated Holdings	London
Save-a-lot Markets	Boise
Princesa Isabel Vinhos	Lisboa
Blauer See Delikatessen	Mannheim
Tradição Hipermercados	Sao Paulo
B's Beverages	London
Pericles Comidas clásicas	México D.F.

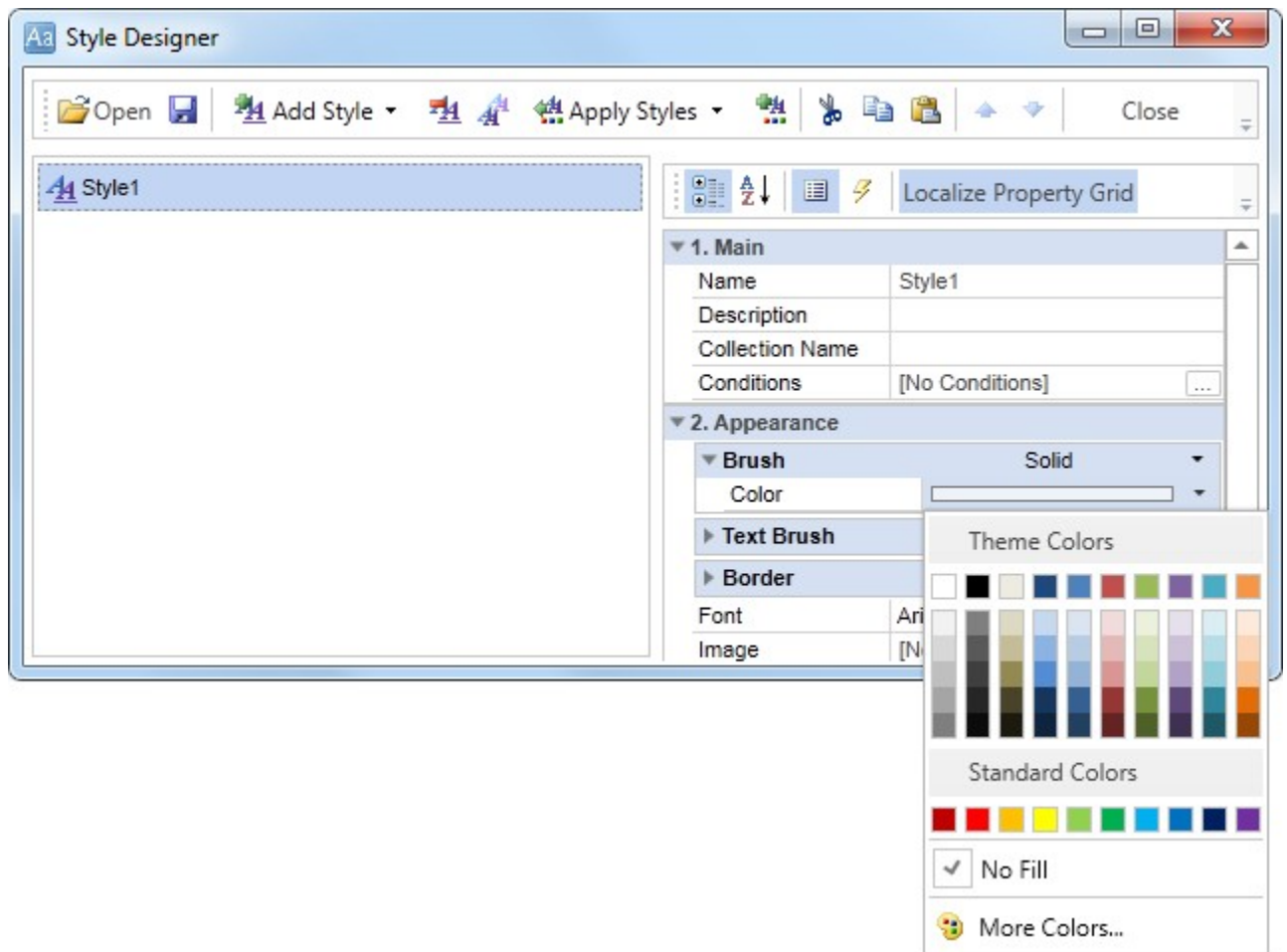
End

Adding Styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Sales Representative	
HILARION-Abastos	San Cristóbal
Around the Horn	London
La corne d'abondance	Versailles
Old World Delicatessen	Anchorage
Hungry Coyote Import Store	Elgin
Lehmans Marktstand	Frankfurt a.M.
Alfreds Futterkiste	Berlin
Die Wandernde Kuh	Stuttgart
Rancho grande	Buenos Aires
Franchi S.p.A.	Torino
Consolidated Holdings	London
Save-a-lot Markets	Boise
Princesa Isabel Vinhos	Lisboa
Blauer See Delikatessen	Mannheim
Tradição Hipermercados	Sao Paulo
B's Beverages	London
Pericles Comidas clásicas	México D.F.

1.24 Drill-Down Report

A Drill-Down report is an interactive report in what blocks can collapse/expand its content by clicking on the block title. Follow the steps below to create a report with dynamic folding in the preview window:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Design a report or load already created one. For example, take a group report, which was reviewed in the "**Report with Grouping**". The picture below shows a report template with groups:

GroupHeaderBand1: Condition: {Customers.ContactTitle}	
{Customers.ContactTitle}	
DataBand1: Data Source: Customers	
{Customers.CompanyName}	{Customers.City}
GroupFooterBand1	
Count:{Count()}}	

4. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering a report all references to data fields will be changed on data from specified fields.

Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delicia	Rio de Janeiro
FISSA Fabrica Inter. Salchichas S.A.	Madrid
Suprêmes délicies	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevalier	Reims
Count:10	
Assistant Sales Agent	
Folies gourmandes	Lille
Ricardo Adocicados	Rio de Janeiro
Count:2	
Assistant Sales Representative	
Rattlesnake Canyon Grocery	Albuquerque
Count:1	
Marketing Assistant	
Queen Cozinha	Sao Paulo
Familia Arquibaldo	Sao Paulo
Morgenstern Gesundkost	Leipzig
Mère Pâillarde	Montréal

5. Go back to the report template.

6. Select the **GroupHeaderBand**.

7. Set the **Interaction.Collapsing Enabled** property to **true**.

8. Change the value of the **Interaction.Collapsed** property. In our case, set the **Interaction.Collapsed** property to **{GroupLine! = 1}**. So, when rendering a report all the groups except the first one will be collapsed.

9. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering a report all references to data fields will be changed on data from specified fields.

Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delicia	Rio de Janeiro
FISSA Fabrica Inter. Salchichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevalier	Reims
Count:10	
Assistant Sales Agent	
Count:2	
Assistant Sales Representative	
Count:1	
Marketing Assistant	
Count:6	
Marketing Manager	
Count:12	
Order Administrator	
Count:2	

To expand or collapse a group you should click on the **GroupHeaderBand** in the rendered report. If it is necessary for the group be collapsed together with the group summary, the **Interaction.CollapseGroupFooter** property should be set to **true**. The picture below shows the report page rendered with the collapsed report:

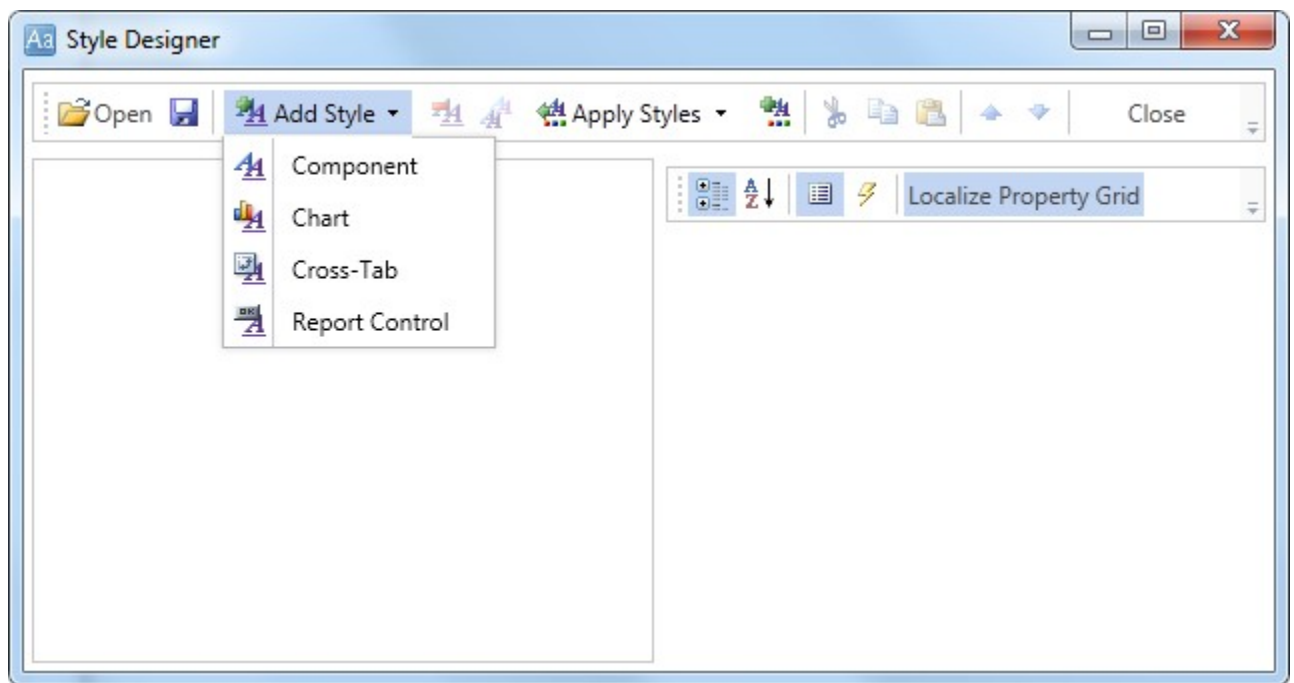
Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delicia	Rio de Janeiro
FISSA Fabrica Inter. Saichichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevallier	Ralsms

Count: 10

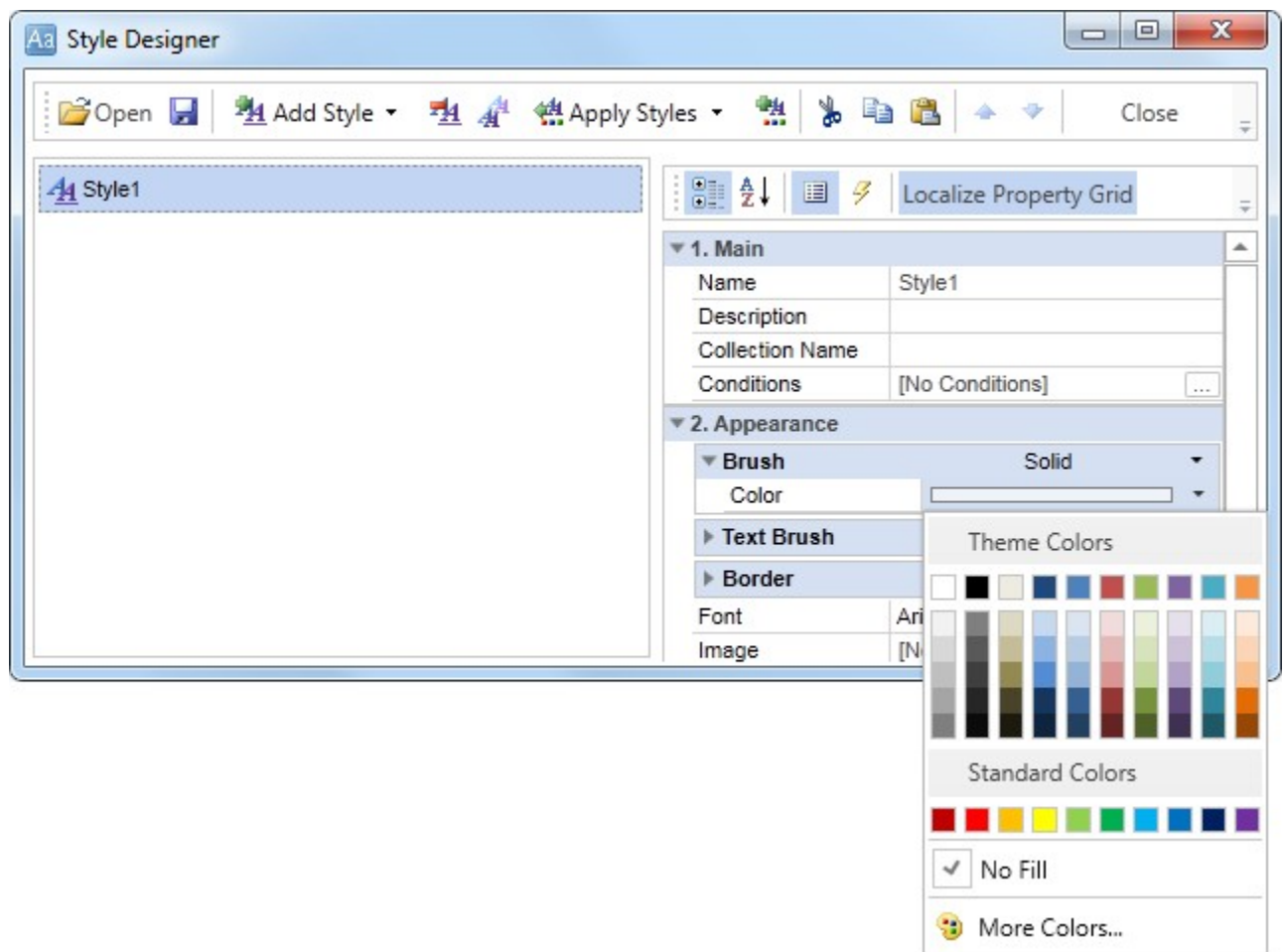
Assistant Sales Agent
Assistant Sales Representative
Marketing Assistant
Marketing Manager
Order Administrator
Owner
Owner/Marketing Assistant
Sales Agent
Sales Associate
Sales Manager

Adding Styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

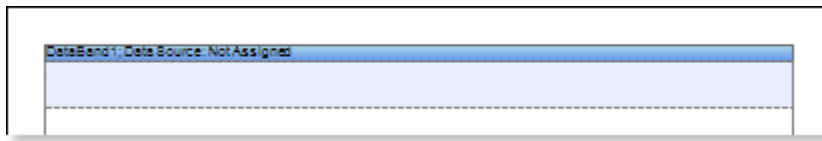
Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delicia	Rio de Janeiro
FISSA Fabrica Inter. Saichichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevallier	Ralsms
Count:10	
Assistant Sales Agent	
Assistant Sales Representative	
Marketing Assistant	
Marketing Manager	
Order Administrator	
Owner	
Owner/Marketing Assistant	
Sales Agent	
Sales Associate	
Sales Manager	

1.25 Report with Dynamic Data Sorting in Preview

When designing a report, data used in a report are not always sorted in the order that is needed. In this case, the sorting can be done by means of the report generator. One way to sort the data is dynamic sorting. A report with dynamic data sorting in the preview window is an interactive report in which changing of dynamic data sorting is done by clicking the component, which dynamic sorting is enabled. Follow the steps below in order to render a report with dynamic data sorting in the preview window:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;

3. Put a **DataBand** on a page of a report template.



4. Edit **DataBand**:

- 4.1. Align the **DataBand** by height;
- 4.2. Change values of band properties. For example, set the **Can Break** property to **true**, if you wish the data band to be broken;
- 4.3. Change the **DataBand** background;
- 4.4. Enable **Borders** for the **DataBand**, if required;
- 4.5. Change the border color.

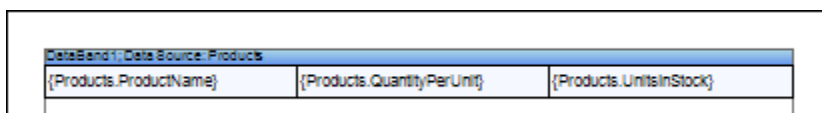
5. Set the data source for the **DataBand** using the **Data Source** property:



6. Put text components with expressions in the **DataBand**. Where expression is a reference to the data field. For example, put three text components with expressions: **{Products.ProductName}**, **{Products.QuantityPerUnit}**, and **{Products.UnitsInStock}**;

7. Edit **Text** and **TextBox** component:

- 7.1. Drag and drop the text component in the **DataBand**;
- 7.2. Change parameters of the text font: size, type, color;
- 7.3. Align the text component by width and height;
- 7.4. Change the background of the text component;
- 7.5. Align text in the text component;
- 7.6. Change the value of properties of the text component. For example, set the **Word Wrap** property to **true**, if you need a text to be wrapped;
- 7.7. Enable **Borders** for the text component, if required.
- 7.8. Change the border color.



8. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified

fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database.

Chai	10 boxes x 20 bags	39
Chang	24 - 12 oz bottles	17
Aniseed Syrup	12 - 550 ml bottles	13
Chef Anton's Cajun Seasoning	48 - 6 oz jars	53
Chef Anton's Gumbo Mix	36 boxes	0
Grandma's Boysenberry Spread	12 - 8 oz jars	120
Uncle Bob's Organic Dried Pears	12 - 1 lb pkgs.	15
Northwoods Cranberry Sauce	12 - 12 oz jars	6
Mishi Kobe Niku	18 - 500 g pkgs.	29
Ikura	12 - 200 ml jars	31
Queso Cabrales	1 kg pkg.	22

9. Go back to the report template;

10. If needed, add other bands to the report template, for example, **ReportTitleBand** and **ReportSummaryBand**;

11. Edit these bands:

- 11.1. Align them by height;
- 11.2. Change values of properties, if required;
- 11.3. Change the background of bands;
- 11.4. Enable **Borders**, if required;
- 11.5. Set the border color.

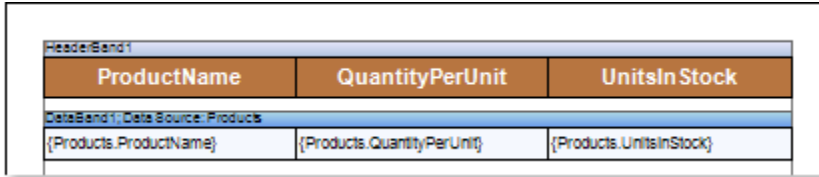
HeaderBand1		
DataBand1: Data Source: Products		
{Products.ProductName}	{Products.QuantityPerUnit}	{Products.UnitsInStock}

12. Put text components with expressions in the these bands. The expression in the text component is a title in the **ReportTitleBand**, and a summary in the **ReportSummaryBand**.

13. Edit text and textcomponents:

- 13.1. Drag and drop the text component in the band;
- 13.2. Change font options: size, type, color;
- 13.3. Align text component by height and width;
- 13.4. Change the background of the text component;
- 13.5. Align text in the textcomponent;
- 13.6. Change values of text component properties, if required;

- 13.7. Enable **Borders** of the text component, if required;
13.8. Set the border color.



The screenshot shows a report design interface. At the top, there is a header band labeled 'HeaderBand1' with a light blue background. Below it is a table with three columns: 'ProductName', 'QuantityPerUnit', and 'UnitsInStock'. The table has a light blue header row and a white data row. The data row contains the following values: '{Products.ProductName}', '{Products.QuantityPerUnit}', and '{Products.UnitsInStock}'. Below the table is a data band labeled 'DataBand1: Data Source: Products' with a light blue background. The data band contains the same three columns as the table above it.

HeaderBand1		
ProductName	QuantityPerUnit	UnitsInStock
DataBand1: Data Source: Products		
{Products.ProductName}	{Products.QuantityPerUnit}	{Products.UnitsInStock}

14. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database.

ProductName	QuantityPerUnit	UnitsInStock
Chai	10 boxes x 20 bags	39
Chang	24 - 12 oz bottles	17
Aniseed Syrup	12 - 550 ml bottles	13
Chef Anton's Cajun Seasoning	48 - 6 oz jars	53
Chef Anton's Gumbo Mix	36 boxes	0
Grandma's Boysenberry Spread	12 - 8 oz jars	120
Uncle Bob's Organic Dried Pears	12 - 1 lb pkgs.	15
Northwoods Cranberry Sauce	12 - 12 oz jars	6
Mishi Kobe Niku	18 - 500 g pkgs.	29
Ikura	12 - 200 ml jars	31
Queso Cabrales	1 kg pkg.	22
Queso Manchego La Pastora	10 - 500 g pkgs.	86
Konbu	2 kg box	24
Tofu	40 - 100 g pkgs.	35
Genen Shouyu	24 - 250 ml bottles	39
Pavlova	32 - 500 g boxes	29
Alice Mutton	20 - 1 kg tins	0
Carnarvon Tigers	16 kg pkg.	42
Teatime Chocolate Biscuits	10 boxes x 12 pieces	25
Sir Rodney's Marmalade	30 gift boxes	40
Sir Rodney's Scones	24 pkgs. x 4 pieces	3
Gustaf's Knäckebröd	24 - 500 g pkgs.	104
Tunnbröd	12 - 250 g pkgs.	61
Guaraná Fantástica	12 - 355 ml cans	20
NuNuCa Nuß-Nougat-Creme	20 - 450 g glasses	76
Gumbär Gummitbärchen	100 - 250 g bags	15
Schoggi Schokolade	100 - 100 g pieces	49
Rössle Sauerkraut	25 - 825 g cans	26
Thüringer Rostbratwurst	50 bags x 30 sausgs.	0
Nord-Ost Matjeshering	10 - 200 g glasses	10
Gorgonzola Telino	12 - 100 g pkgs	0
Mascarpone Fabioli	24 - 200 g pkgs.	9
Gelbst	500 g	112

15. Go back to the report template;

16. Select a text component or any other component, on what one clicks and in the rendered report sorting will be done. In this case, select the **TextBox4** component in the **HeaderBand** with the **ProductName** text;

17. Change the value of the **Interaction.Sorting Column** property. The value of this property will be a column of the data source by what sorting will be done. Set the **Interaction.Sorting Column** property to **DataBand1.ProductName**;

18. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database.

ProductName	QuantityPerUnit	UnitsInStock
Chai	10 boxes x 20 bags	39
Chang	24 - 12 oz bottles	17
Aniseed Syrup	12 - 550 ml bottles	13
Chef Anton's Cajun Seasoning	48 - 6 oz jars	53
Chef Anton's Gumbo Mix	36 boxes	0
Grandma's Boysenberry Spread	12 - 8 oz jars	120
Uncle Bob's Organic Dried Pears	12 - 1 lb pkgs.	15
Northwoods Cranberry Sauce	12 - 12 oz jars	6
Mishi Kobe Niku	18 - 500 g pkgs.	29
Ikura	12 - 200 ml jars	31
Queso Cabrales	1 kg pkg.	22
Queso Manchego La Pastora	10 - 500 g pkgs.	86
Konbu	2 kg box	24
Tofu	40 - 100 g pkgs.	35
Genen Shoyu	24 - 250 ml bottles	39
Pavlova	32 - 500 g boxes	29
Alice Mutton	20 - 1 kg tins	0
Carnarvon Tigers	16 kg pkg.	42
Teatime Chocolate Biscuits	10 boxes x 12 pieces	25
Sir Rodney's Marmalade	30 gift boxes	40
Sir Rodney's Scones	24 pkgs. x 4 pieces	3
Gustaf's Knäckebröd	24 - 500 g pkgs.	104
Tunnbröd	12 - 250 g pkgs.	61
Guaraná Fantástica	12 - 355 ml cans	20
NuNuCa Nuß-Nougat-Creme	20 - 450 g glasses	76
Gumbär Gummitäbchen	100 - 250 g bags	15
Schoggi Schokolade	100 - 100 g pieces	49
Rössle Sauerkraut	25 - 825 g cans	26
Thüringer Rostbratwurst	50 bags x 30 sausgs.	0
Nord-Ost Matjeshering	10 - 200 g glasses	10
Gorgonzola Telino	12 - 100 g pkgs	0
Mascarpone Fabioli	24 - 200 g pkgs.	9
Gelbst	500 g	112

19. To enable sorting of data by the specified data column, you should click a report component which the **Interaction.Sorting Column** property was set earlier. In our example, you should click the **TextBox4**. After clicking the text component, data will be sorted in **Ascending** direction. To change the sorting direction from **Ascending** to **Descending**, you need to click the text component again, i.e. each time after clicking the text component sorting direction will be changed. The picture below shows the first page of the report rendered with different sorting directions:

Ascending

ProductName	QuantityPerUnit	UnitsInStock
Alice Mutton	20 - 1 kg tins	0
Aniseed Syrup	12 - 550 ml bottles	13
Boston Crab Meat	24 - 4 oz tins	123
Camembert Pierrot	15 - 300 g rounds	19
Carnarvon Tigers	16 kg pkg.	42
Chai	10 boxes x 20 bags	39
Chang	24 - 12 oz bottles	17
Chartreuse verte	750 cc per bottle	69
Chef Anton's Cajun Seasoning	48 - 6 oz jars	53
Chef Anton's Gumbo Mix	36 boxes	0
Chocolate	10 pkgs.	15
Côte de Blaye	12 - 75 cl bottles	17
Escargots de Bourgogne	24 pieces	62
Filo Mix	16 - 2 kg boxes	38
Flotemysost	10 - 500 g pkgs.	26
Gelöst	500 g	112
Genen Shouyu	24 - 250 ml bottles	39
Gnocchi di nonna Alice	24 - 250 g pkgs.	21
Gorgonzola Telino	12 - 100 g pkgs	0
Grandma's Boysenberry Spread	12 - 6 oz jars	120
Gravad lax	12 - 500 g pkgs.	11
Guaraná Fantástica	12 - 355 ml cans	20
Gudbrandsdalsost	10 kg pkg.	26
Gula Malacca	20 - 2 kg bags	27
Gumbär Gummitärchen	100 - 250 g bags	15
Gustaf's Knäckebröd	24 - 500 g pkgs.	104
Ikura	12 - 200 ml jars	31
Inlagd Sill	24 - 250 g jars	112
Ippoh Coffee	16 - 500 g tins	17
Jack's New England Clam Chowder	12 - 12 oz cans	85
Konbu	2 kg box	24
Lakkalikööri	500 ml	57
Laughing Lumberjack Lager	24 - 12 oz bottles	52

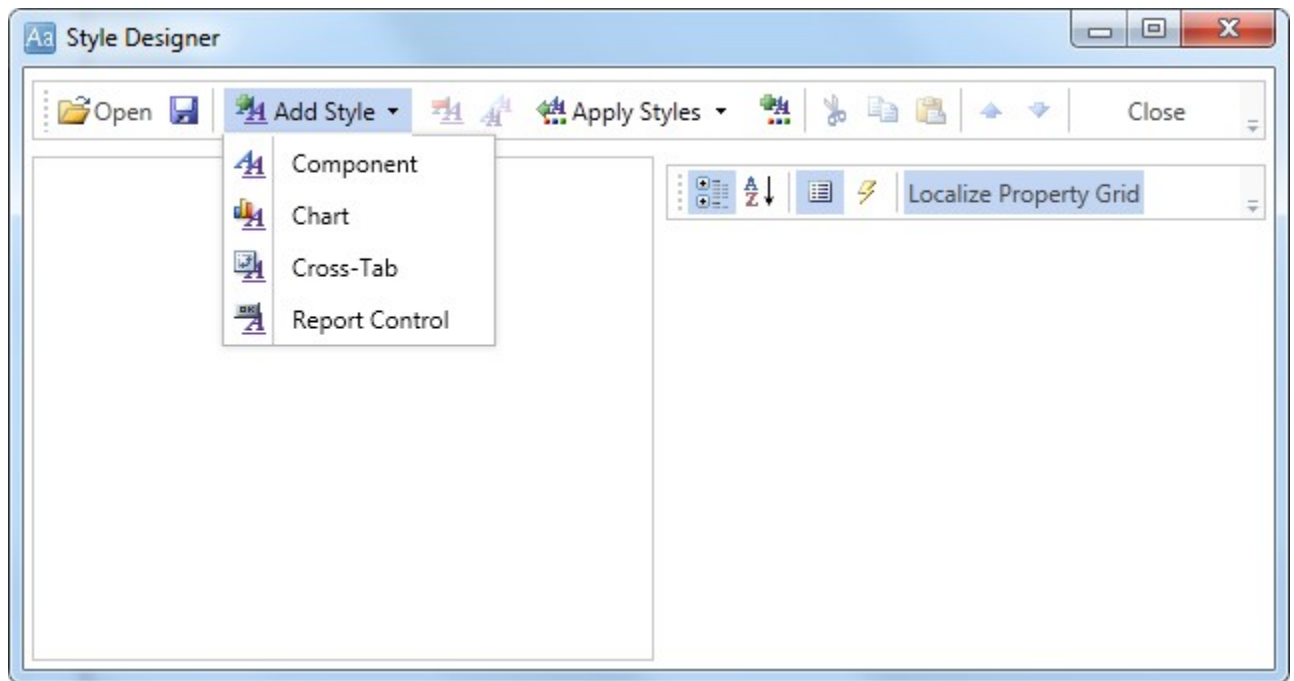
Descending

ProductName	QuantityPerUnit	UnitsInStock
Zaanse koeken	10 - 4 oz boxes	36
Wimmers gute Semmelknödel	20 bags x 4 pieces	22
Vegle-spread	15 - 625 g Jars	24
Valkoinen suklaa	12 - 100 g bars	65
Uncle Bob's Organic Dried Pears	12 - 1 lb pkgs.	15
Tunbröd	12 - 250 g pkgs.	61
Tourtère	16 pies	21
Tofu	40 - 100 g pkgs.	35
Thüringer Rostbratwurst	50 bags x 30 sausgs.	0
Teatime Chocolate Biscuits	10 boxes x 12 pieces	25
Tarte au sucre	48 pies	17
Steeleye Stout	24 - 12 oz bottles	20
Spegeelid	4 - 450 g glasses	95
Sir Rodney's Scones	24 pkgs. x 4 pieces	3
Sir Rodney's Marmalade	30 gift boxes	40
Singaporean Hokkien Fried Mee	32 - 1 kg pkgs.	26
Scottish Longbreads	10 boxes x 8 pieces	6
Schoggi Schokolade	100 - 100 g pieces	49
Sasquatch Ale	24 - 12 oz bottles	111
Rössle Sauerkraut	25 - 625 g cans	26
Rogede sild	1k pkg.	5
Röd Kaviar	24 - 150 g jars	101
Rhinbräu Klosterbier	24 - 0.5 l bottles	125
Ravioli Angelo	24 - 250 g pkgs.	36
Raclette Courdavault	5 kg pkg.	79
Queso Manchego La Pastora	10 - 500 g pkgs.	86
Queso Cabrales	1 kg pkg.	22
Perth Pasties	48 pieces	0
Pavlova	32 - 500 g boxes	29
Pâté châtinais	24 boxes x 2 pies	115
Outback Lager	24 - 355 ml bottles	15
Original Frankfurter grüne Soße	12 boxes	32

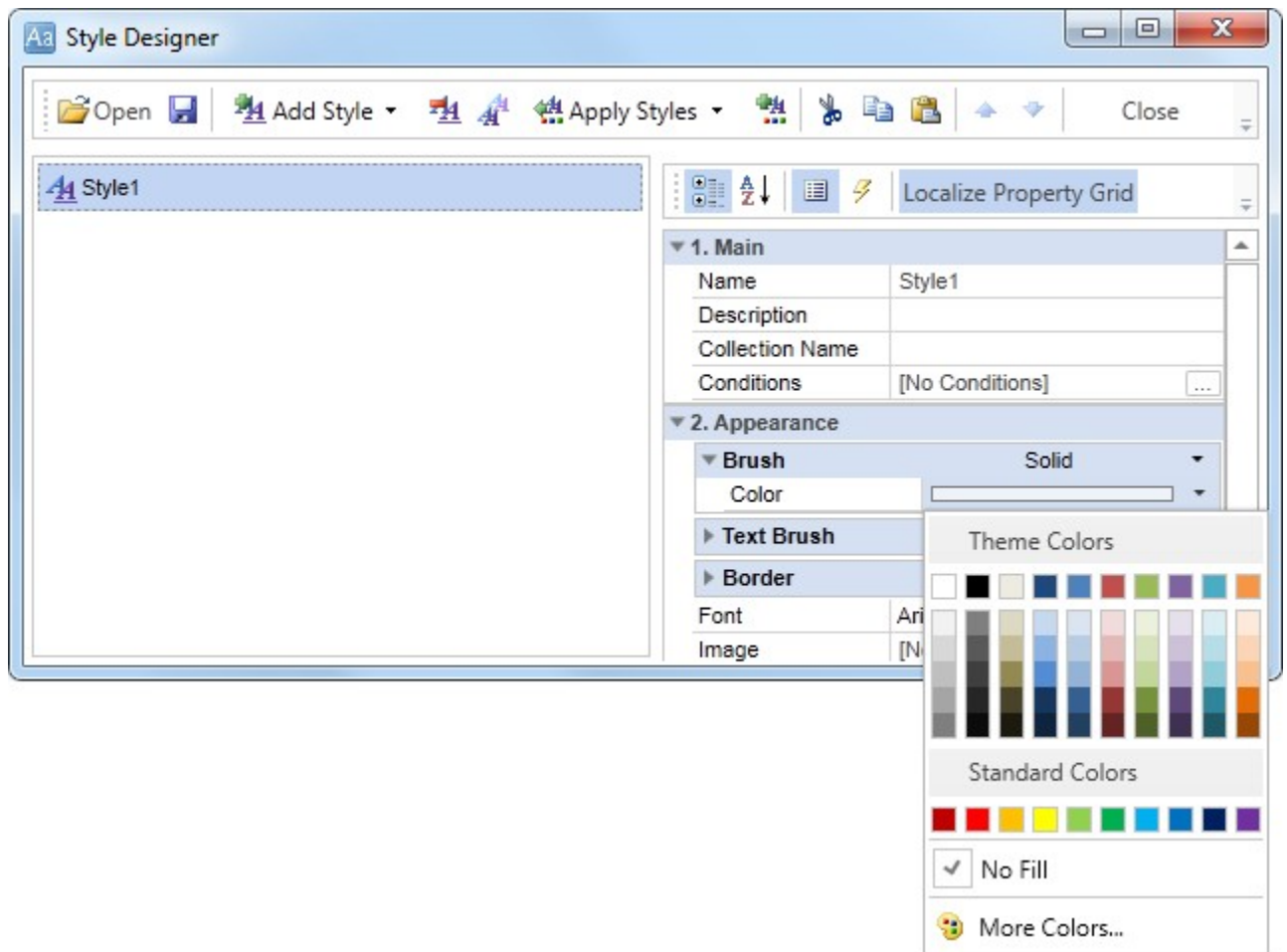
Sorting direction displays the "arrow" icon.

Adding Styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Ascending

ProductName	QuantityPerUnit	UnitsInStock
Alice Mutton	20 - 1 kg tins	0
Aniseed Syrup	12 - 550 ml bottles	13
Boston Crab Meat	24 - 4 oz tins	123
Camembert Pierrot	15 - 300 g rounds	19
Carnarvon Tigers	16 kg pkg.	42
Chai	10 boxes x 20 bags	39
Chang	24 - 12 oz bottles	17
Chartreuse verte	750 cc per bottle	69
Chef Anton's Cajun Seasoning	48 - 6 oz jars	53
Chef Anton's Gumbo Mix	36 boxes	0
Chocolate	10 pkgs.	15
Côte de Blaye	12 - 75 cl bottles	17
Escargots de Bourgogne	24 pieces	62
Filo Mix	16 - 2 kg boxes	38
Flotemysost	10 - 500 g pkgs.	26
Gelöst	500 g	112
Genen Shouyu	24 - 250 ml bottles	39
Gnocchi di nonna Alice	24 - 250 g pkgs.	21
Gorgonzola Telino	12 - 100 g pkgs	0
Grandma's Boysenberry Spread	12 - 8 oz jars	120
Gravad lax	12 - 500 g pkgs.	11
Guaraná Fantástica	12 - 355 ml cans	20
Gudbrandsdalsost	10 kg pkg.	26
Gula Malacca	20 - 2 kg bags	27
Gumbär Gummitäbchen	100 - 250 g bags	15
Gustaf's Knäckebröd	24 - 500 g pkgs.	104
Ikura	12 - 200 ml jars	31
Inlagd Sill	24 - 250 g jars	112
Ipoh Coffee	16 - 500 g tins	17
Jack's New England Clam Chowder	12 - 12 oz cans	85
Konbu	2 kg box	24
Lakkalikööri	500 ml	57
Laughing Lumberjack Lager	24 - 12 oz bottles	52

Descending

ProductName	QuantityPerUnit	UnitsInStock
Zaanse koeken	10 - 4 oz boxes	36
Wimmers gute Semmelknödel	20 bags x 4 pieces	22
Vegle-spread	15 - 625 g Jars	24
Valkoinen suklaa	12 - 100 g bars	65
Uncle Bob's Organic Dried Pears	12 - 1 lb pkgs.	15
Tunnbröd	12 - 250 g pkgs.	61
Tourtière	16 pies	21
Tofu	40 - 100 g pkgs.	35
Thüringer Rostbratwurst	50 bags x 30 sausgs.	0
Teatime Chocolate Biscuits	10 boxes x 12 pieces	25
Tarte au sucre	48 pies	17
Steeleye Stout	24 - 12 oz bottles	20
Spegesild	4 - 450 g glasses	95
Sirup d'érable	24 - 500 ml bottles	113
Sir Rodney's Scones	24 pkgs. x 4 pieces	3
Sir Rodney's Marmalade	30 gift boxes	40
Singaporean Hokkien Fried Mee	32 - 1 kg pkgs.	26
Scottish Longbreads	10 boxes x 8 pieces	6
Schoggi Schokolade	100 - 100 g pieces	49
Sasquatch Ale	24 - 12 oz bottles	111
Rössle Sauerkraut	25 - 625 g cans	26
Rogede sild	1k pkg.	5
Röd Kaviar	24 - 150 g Jars	101
Rhönbräu Klosterbier	24 - 0.5 l bottles	125
Ravioli Angelo	24 - 250 g pkgs.	36
Raclette Courdavault	5 kg pkg.	79
Queso Manchego La Pastora	10 - 500 g pkgs.	86
Queso Cabrales	1 kg pkg.	22
Perth Pasties	48 pieces	0
Pavlova	32 - 500 g boxes	29
Pâté chinois	24 boxes x 2 pies	115
Outback Lager	24 - 355 ml bottles	15
Original Frankfurter grüne Soße	12 boxes	32

1.26 Report With Dynamic Collapsing in Preview

The report with dynamic collapsing is an interactive report in what items can collapse/expand its contents by clicking the title of the block. In order to create a report with dynamic folding in the preview window, you should do the following:

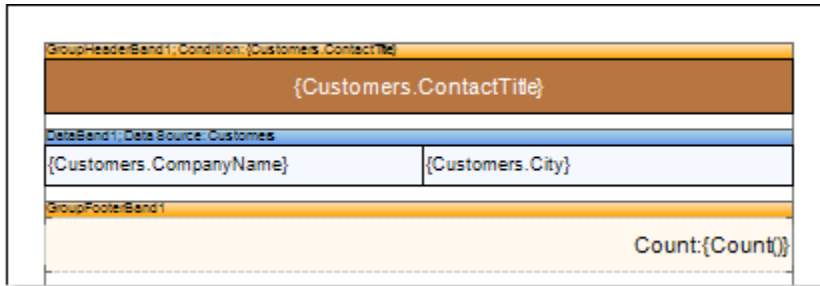
Run the designer;

Connect the data:

2.1. Create a **New Connection**;

2.2. Create a **New Data Source**;

3. Create a report or open a previously designed one. For example, open a report with grouping, which was reviewed in the chapter "Report from the groups." The picture below shows a report template with groups:



4. Render your report. Click on the **Preview** tab or invoke the report viewer clicking the Preview in the menu. After rendering a report, all references to the data field will be replaced with data from these fields. The picture below shows a report page with the grouping:

Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delicia	Rio de Janeiro
FISSA Fabrica Inter. Saichichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevalier	Reims
Count:10	
Assistant Sales Agent	
Folles gourmandes	Lille
Ricardo Adocicados	Rio de Janeiro
Count:2	
Assistant Sales Representative	
Rattlesnake Canyon Grocery	Albuquerque
Count:1	
Marketing Assistant	
Queen Cozinha	Sao Paulo
Familia Arquibaldo	Sao Paulo
Morgenstern Gesundkost	Leipzig
Mère Pâillarde	Montréal

- Go back to the report template;
- Select the GroupHeaderBand;
- Set the **Interaction.Collapsing Enabled** property to **true**:

Collapsing Enabled

True



- Change the value of the **Interaction.Collapsed**. In this case, set this property to **{GroupLine!=1}**, i.e. all the groups except the first one will be collapsed:

Collapsed



{GroupLine!=1}



- Render the report. Click on the **Preview** tab or invoke the report viewer clicking the Preview in the menu. After rendering a report, all references to the data field will be replaced with data from these fields. The picture below shows the rendered page of the report:

Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delicia	Rio de Janeiro
FISSA Fabrica Inter. Saichichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevallier	Reims
Count:10	
Assistant Sales Agent	
Count:2	
Assistant Sales Representative	
Count:1	
Marketing Assistant	
Count:6	
Marketing Manager	
Count:12	
Order Administrator	
Count:2	

In order to expand or collapse the group, select the **GroupHeaderBand** in the rendered report. If you want to collapse the group together with the the group footer you should set the **Interaction.Collapse Group Footer** property set to **true**. The picture below shows a rendered report page with the collapsed items:

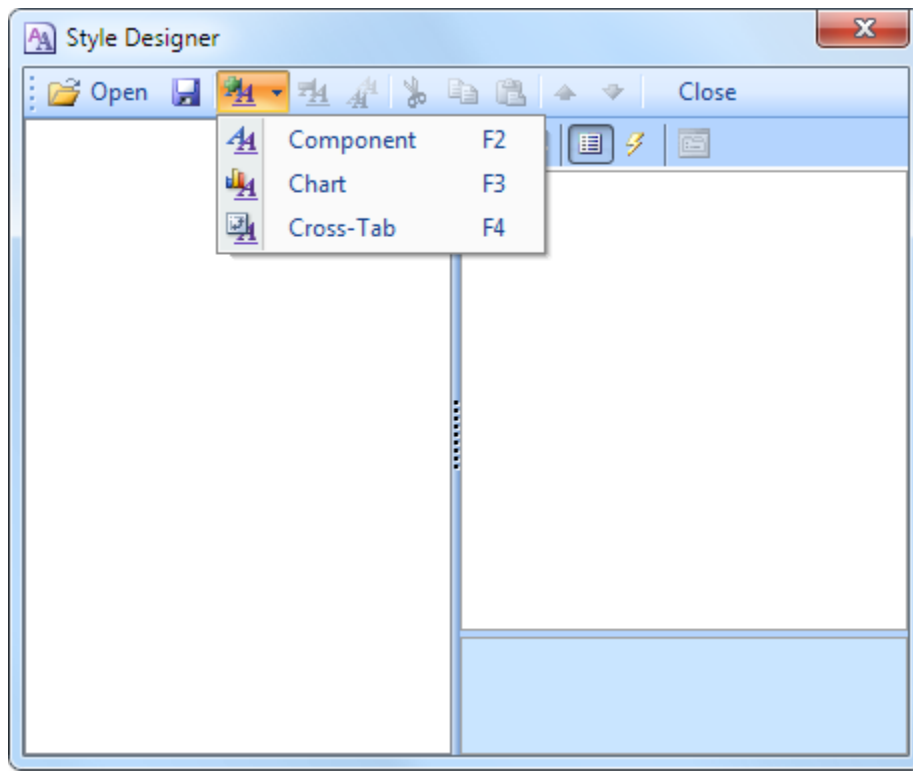
Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delicia	Rio de Janeiro
FISSA Fabrica Inter. Saichichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevallier	Reims

Count: 10

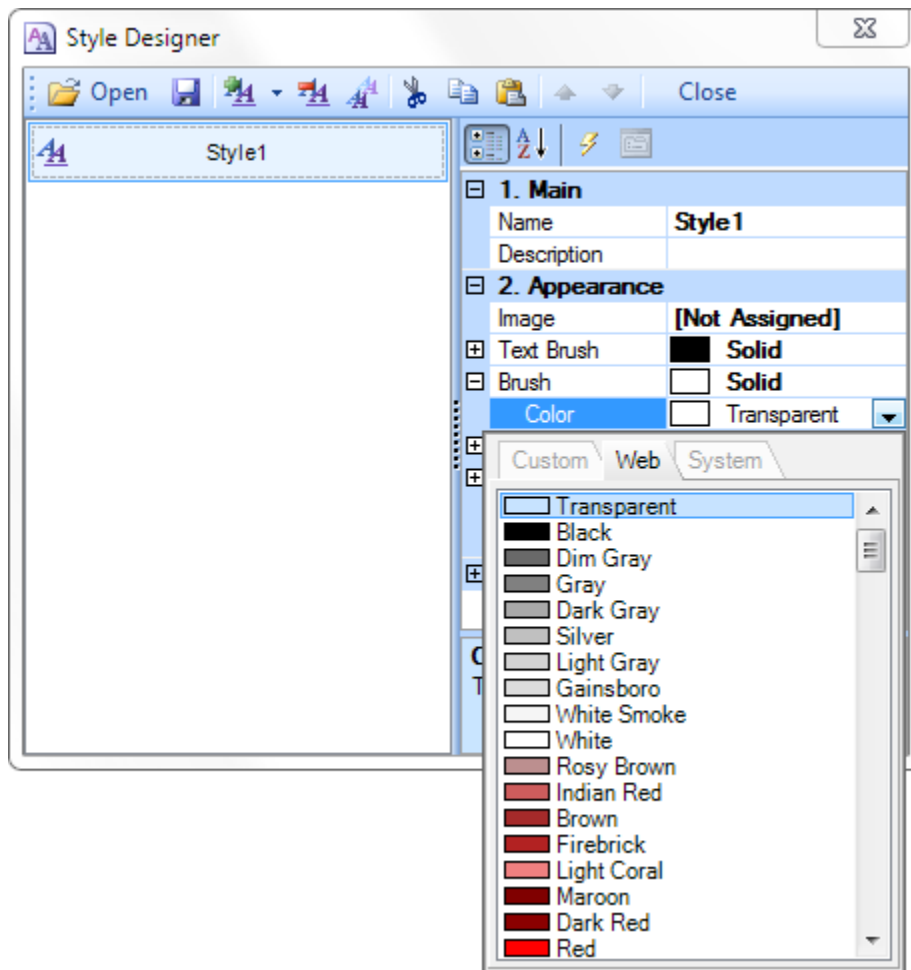
Assistant Sales Agent
Assistant Sales Representative
Marketing Assistant
Marketing Manager
Order Administrator
Owner
Owner/Marketing Assistant
Sales Agent
Sales Associate
Sales Manager

Adding Styles

1. Go back to the report template;
2. Select **DataBand**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Accounting Manager	
Bottom-Dollar Markets	Tsawassen
Romero y tomillo	Madrid
Que Delicia	Rio de Janeiro
FISSA Fabrica Inter. Saichichas S.A.	Madrid
Suprêmes délices	Charleroi
QUICK-Stop	Cunewalde
LILA-Supermercado	Barquisimeto
Wartian Herkku	Oulu
Hanari Carnes	Rio de Janeiro
Vins et alcools Chevallier	Ralsms

Count:10

Assistant Sales Agent
Assistant Sales Representative
Marketing Assistant
Marketing Manager
Order Administrator
Owner
Owner/Marketing Assistant
Sales Agent
Sales Associate
Sales Manager

1.27 Report with Table Component

Do the following steps to design a report with the **Table** component:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Put a **Table** component on a page of a report template.

Table1: Data Source: Not Assigned				

4. Edit the **Table** component:

- 4.1. Set the amount of columns and rows using, for example, the **RowCount** and **ColumnCount** properties. Set these properties to 5 and 3 respectively;
- 4.2. Set the number of headers and footers in the table using, for example, the **HeaderRowCount** and **FooterRowCount** properties. Set the **HeaderRowCount** property to 1;
- 4.3. Align the **Table** component by height;
- 4.4. Change values of the component. for example, set the **CanBreak** property to **true**, if it is required for the **Table** component be broken;

5. Set the data source of the **Table** component using the **Data Source** property:

Data Source	Customers	...
-------------	-----------	-----

6. Put some text and expressions in the table cells. For example, cells of the first and third rows will contain only text, that will be a data header. Cells of the second and fourth rows will contain expressions, references to data source;

7. Edit text and cells:

- 7.1. Set font parameters of text: size, style, color;
- 7.2. Set color of table cells;
- 7.3. Align text in cells;
- 7.4. Change values of cells. For example, set the **WordWrap** property to **true**, if it is necessary for the text to be wrapped.

Table1: Data Source: Customers		
CompanyName	City	Country
{Customers.CompanyName}	{Customers.City}	{Customers.Country}
	ContactName:	{Customers.ContactName}
	Phone:	{Customers.Phone}
	Fax:	{Customers.Fax}

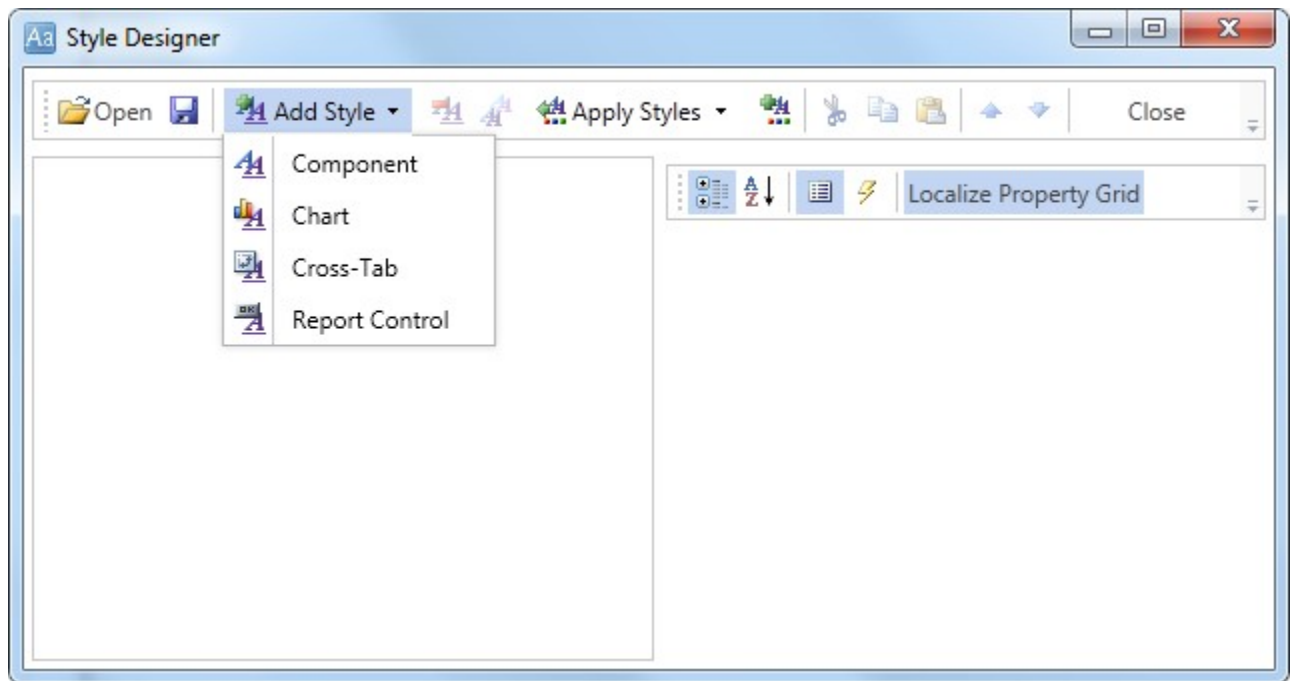
8. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified

fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **Table** in the rendered report will be the same as the amount of data rows in the database.

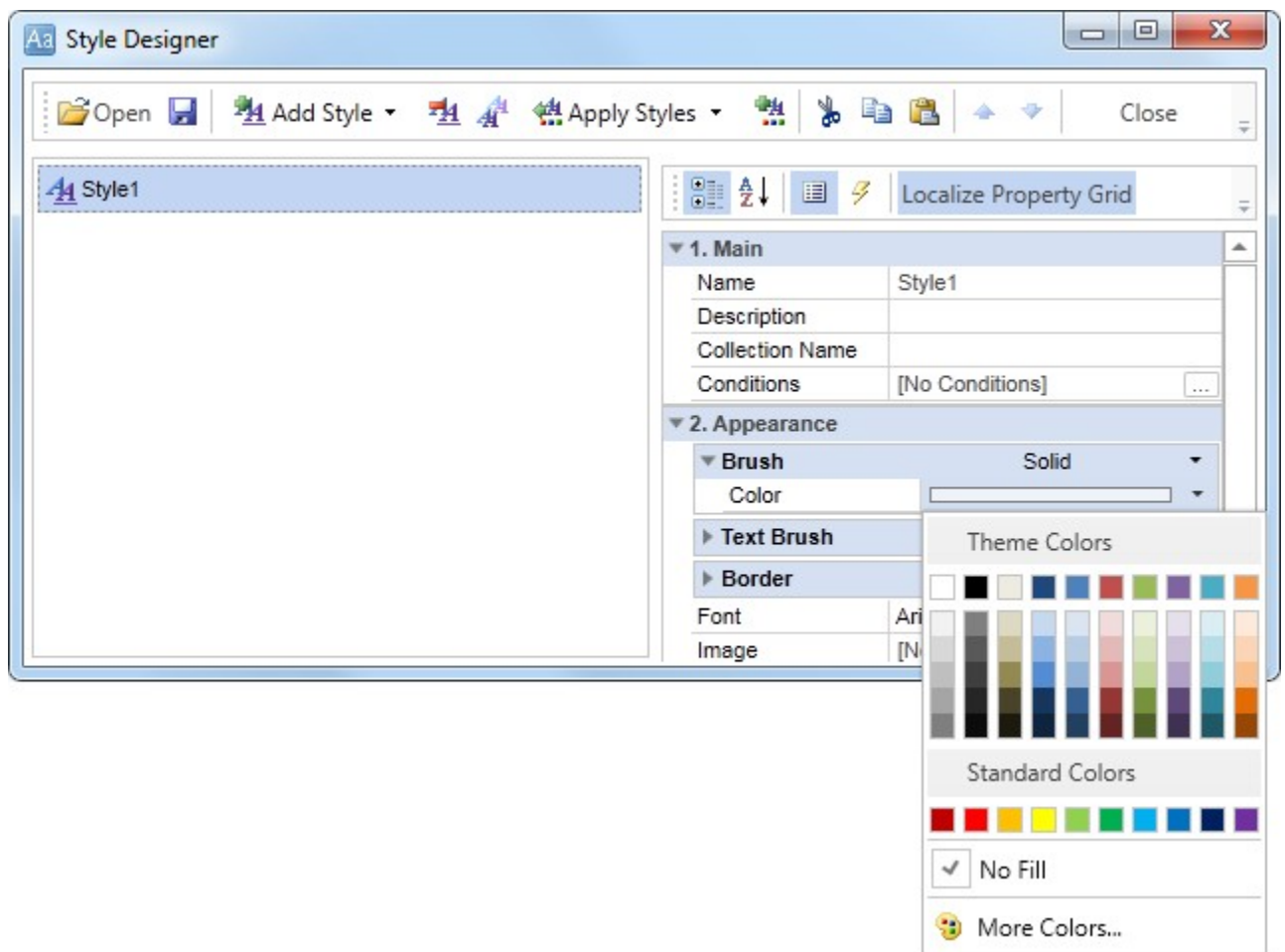
CompanyName	City	Country
Alfreds Futterkiste	Berlin	Germany
	ContactName:	Maria Anders
	Phone:	030-0074321
	Fax:	030-0076545
Ana Trujillo Emparedados y helados	México D.F.	Mexico
	ContactName:	Ana Trujillo
	Phone:	(5) 555-4729
	Fax:	(5) 555-3745
Antonio Moreno Taquería	México D.F.	Mexico
	ContactName:	Antonio Moreno
	Phone:	(5) 555-3932
	Fax:	
Around the Horn	London	UK
	ContactName:	Thomas Hardy
	Phone:	(171) 555-7788
	Fax:	(171) 555-6750
Berglunds snabbköp	Luleå	Sweden
	ContactName:	Christina Berglund
	Phone:	0921-12 34 65
	Fax:	0921-12 34 67
Blauer See Delikatessen	Mannheim	Germany
	ContactName:	Hanna Moos
	Phone:	0621-08480
	Fax:	0621-08924
Bonolis père et fils	Strasbourg	France
	ContactName:	Fredérique Citeaux
	Phone:	88.60.15.31
	Fax:	88.60.15.32
Bólido Comidas preparadas	Madrid	Spain
	ContactName:	Martin Sommer
	Phone:	(91) 555 22 82
	Fax:	(91) 555 91 99

Adding Styles

1. Go back to the report template;
2. Select the **Table** component;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

CompanyName	City	Country
Alfreds Futterkiste	Berlin	Germany
	ContactName:	Marie Anders
	Phone:	030-0074321
	Fax:	030-0076545
Ana Trujillo Emparedados y helados	México D.F.	Mexico
	ContactName:	Ana Trujillo
	Phone:	(5) 555-4729
	Fax:	(5) 555-3745
Antonio Moreno Taquería	México D.F.	Mexico
	ContactName:	Antonio Moreno
	Phone:	(5) 555-3932
	Fax:	
Around the Horn	London	UK
	ContactName:	Thomas Hardy
	Phone:	(171) 555-7788
	Fax:	(171) 555-6750
Berglunds snabbköp	Luleå	Sweden
	ContactName:	Christina Berglund
	Phone:	0921-12 34 55
	Fax:	0921-12 34 67
Blauer See Delikatessen	Mannheim	Germany
	ContactName:	Hanna Moos
	Phone:	0621-08480
	Fax:	0621-08924
Bonnesdél père et fils	Strasbourg	France
	ContactName:	Frédérique Citeaux
	Phone:	88.60.15.31
	Fax:	88.60.15.32
Bólido Comidas preparadas	Madrid	Spain
	ContactName:	Martin Sommer
	Phone:	(91) 555 22 82
	Fax:	(91) 555 91 99

1.28 Master-Detail Report with Table

Do the following steps to design a **Master-Detail** report with the **Table** component:

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Create **Relation** between data sources. If the relation will not be created and/or the **Relation** property of the **Detail** data source will not be filled, then, for **Master** entry, all **Detail** entries will be output.
4. Put two **Table** components on a page of a report template.

5. Edit **Table** components:

5.1. Change the number of rows and columns in the **Table** component. For example, using the **RowCount** and **ColumnCount** properties. Set the **RowCount** and **ColumnCount** properties of the **Table1** component to **3** and **1** respectively. And for the **Table2** component - values of **3** and **3**;

5.2. Set the number of headers and footers in the table using, for example, the **HeaderRowsCount** and **FooterRowsCount** properties. Set the **FooterRowsCount** property of the **Table1** to **1**. Set the **HeaderRowsCount** and **FooterRowsCount** property of the **Table2** to **1** and **1** respectively;

5.3. Align the **Table** component by height;

5.4. Set the height of rows in the table. To do this, select the **Table** component and, dragging the horizontal border line, edit the row height. In addition, if you want to change the row height, leaving the height of the **Table** component unchanged, it is necessary to hold down the **Ctrl** button before editing the row height;

5.5. Change columns width in the table. To do this, select the **Table** component, and change width by dragging the vertical border of a column;

5.6. Change values of properties. For example, set the **Print if Detail Empty** property of the **Table** component, which is the **Master** component in the **Master-Detail** report, to **true**, if you want the **Master** entries be printed in any case, even if the **Detail** entries are not available. Set the **CanShrink** property of the **Table** component, which is the **Detail** component in the **Master-Detail** report to **true**, if you want this component beshrunk;

5.7. Set color of table cells;

5.8. Set **Borders** of cells of the **Table** component, if necessary;

6. Specify data sources for the **Table** components, as well as set the **Master** component. In our case, the **Master** component is the **Table1**. This means that in the **Data Setup** window of the **Table2** component on the tab of the **Master Component**, specify **Table1** as the **Master** component;

7. Fill in the DataRelation property of the **Table2** component, which is the **Detail** entry in this report:

Data Relation	Categories	...
---------------	------------	-----

8. Set expressions in table cells. Where an expression is a reference to a data source. For example: the **Table1** component, which is the **Master** component, set the following expressions for the first and second rows: **{Categories.CategoryName}** and **{Categories.Description}**, respectively. The third row of the **Table1** is a total row, and in this case, it is blank. The first row of the **Table2** is the header row of data, so the expression in cells of the first row will be the data header. In the cells of the second row we specify references to data sources. The third row in the **Table2** is the total row, so the expression in this line will be a total. Set the Count function for the third row;

9. Edit text boxes and cells:

- 9.1. Set the font options: size, style, color;
- 9.2. Set the background color of cells;
- 9.3. Align the text in cells;
- 9.4. Set the value of properties of cells. For example, set the **Word Wrap** property to **true**, if you want the text be wrapped;

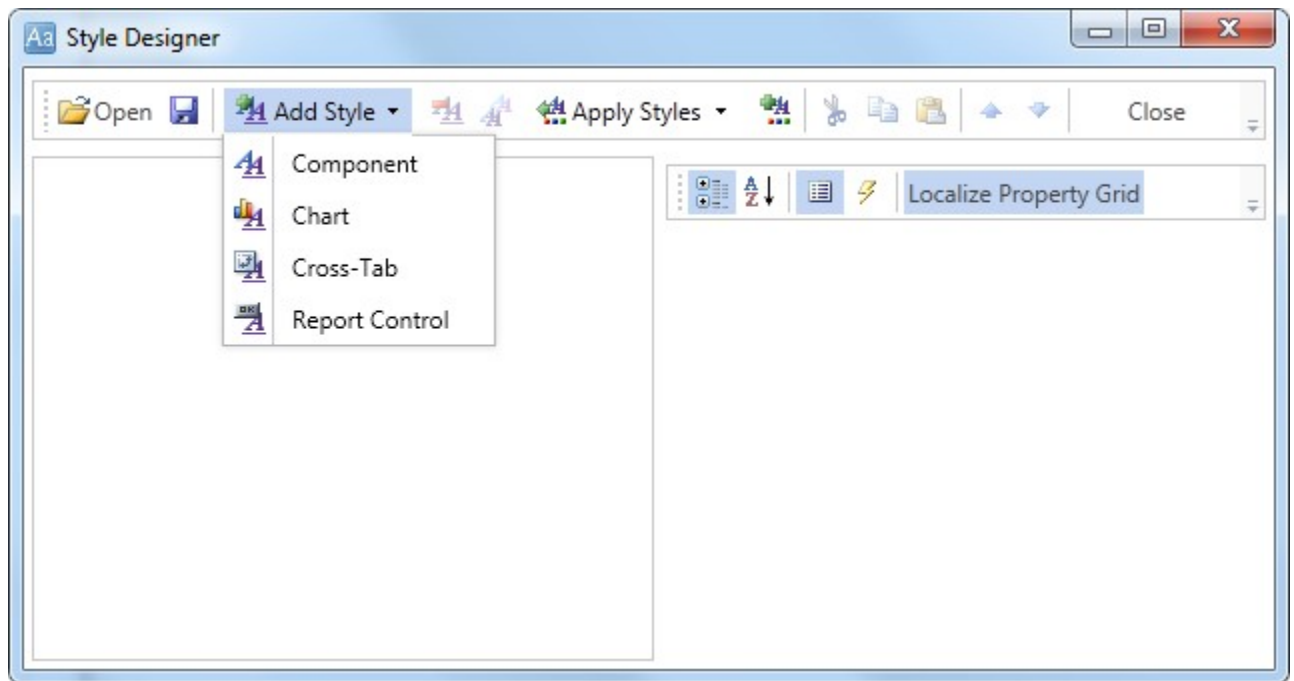
Table1: Data Source: Categories		
{Categories.CategoryName}		
{Categories.Description}		
Table2: Data Source: Products		
MasterComponent: Table1		
ProductName	QuantityPerUnit	UnitPrice
{Products.ProductName}	{Products.QuantityPerUnit}	{Products.UnitPrice}
		Count: {Count(Table2)}

10. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields.

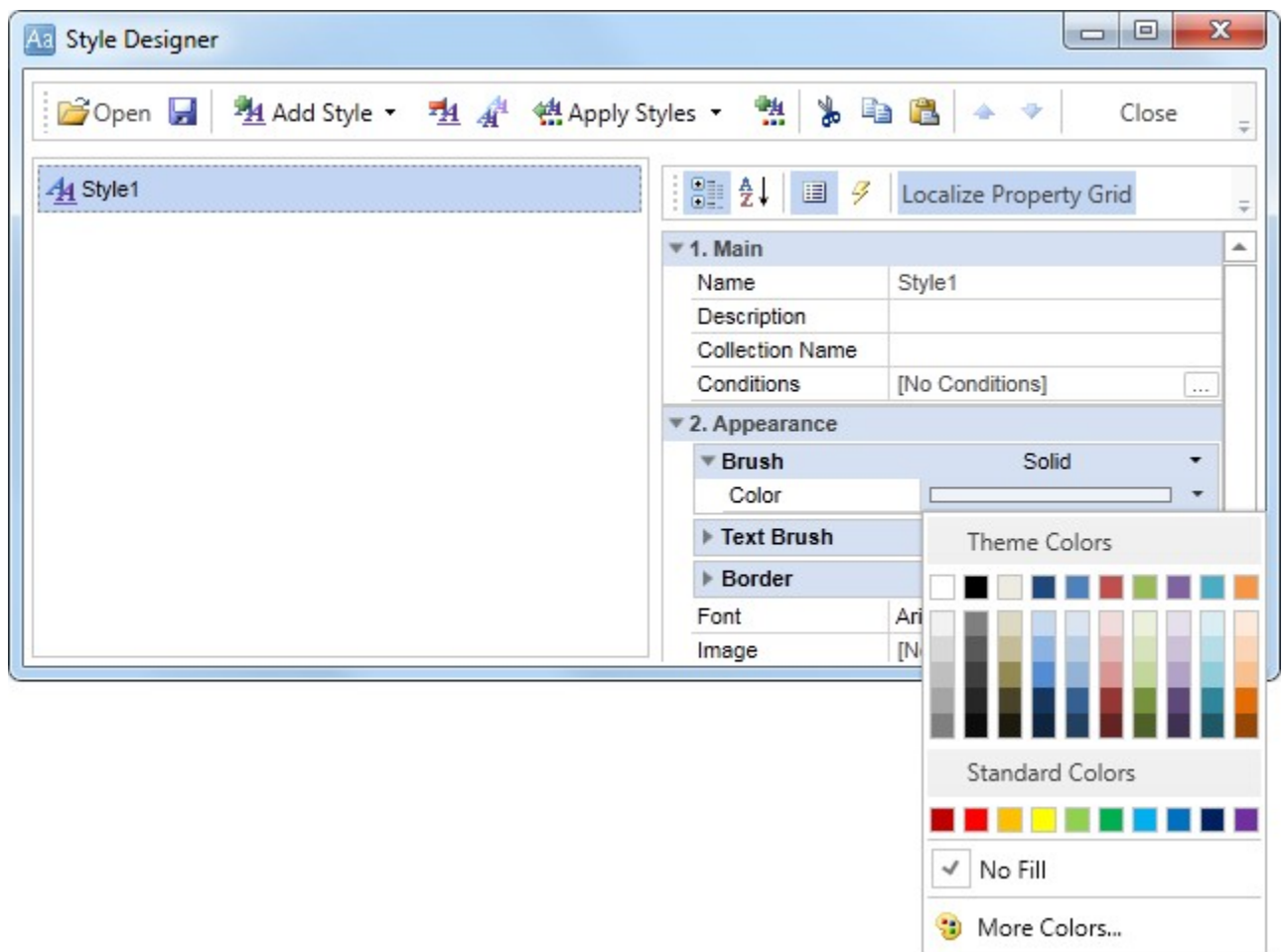
Beverages		
Soft drinks, coffees, teas, beers, and ales		
ProductName	QuantityPerUnit	UnitPrice
Chai	10 boxes x 20 bags	18
Chang	24 - 12 oz bottles	19
Gusman's Fantastic	12 - 355 ml cans	4.5
Besquatch Ale	24 - 12 oz bottles	14
Steeleye Stout	24 - 12 oz bottles	18
Côte de Blaye	12 - 75 cl bottles	263.5
Chartrouse verte	750 cc per bottle	18
Ippoh Coffee	16 - 500 g tins	46
Laughing Lumberjack Lager	24 - 12 oz bottles	14
Outback Lager	24 - 355 ml bottles	15
Rhinorbu Klosterbräu	24 - 0.5 l bottles	7.75
Lekkelliköör	500 ml	18
		Count: 12
Condiments		
Sweet and savory sauces, relishes, spreads, and seasonings		
ProductName	QuantityPerUnit	UnitPrice
Aniseed Syrup	12 - 550 ml bottles	10
Chef Anton's Cajun Seasoning	48 - 6 oz jars	22
Chef Anton's Gumbo Mix	36 boxes	21.35
Grandma's Boysenberry Spread	12 - 8 oz jars	25
Northwoods Cranberry Sauce	12 - 12 oz jars	40
Genen Shoyu	24 - 250 ml bottles	15.5
Gula Melacca	20 - 2 kg bags	19.45
Slurp d'érable	24 - 500 ml bottles	28.5
Veggie-spread	15 - 625 g jars	43.9
Louisiana Fiery Hot Pepper Sauce	32 - 8 oz bottles	21.05
Louisiana Hot Spiced Okra	24 - 8 oz jars	17
Original Frankfurter grüne Soße	12 boxes	13
		Count: 12

Adding Styles

1. Go back to the report template;
2. Select the **Table** component. In this case the **Table2** component;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Beverages		
Soft drinks, coffees, teas, beers, and ales		
ProductName	QuantityPerUnit	UnitPrice
Chai	10 boxes x 20 bags	18
Chang	24 - 12 oz bottles	19
Guaraná Fantástica	12 - 355 ml cans	4.5
Basquatch Ale	24 - 12 oz bottles	14
Steelye Stout	24 - 12 oz bottles	18
Côte de Blaye	12 - 75 cl bottles	263.5
Chateau verte	750 cc per bottle	18
Ipoh Coffee	16 - 500 g tins	46
Laughing Lumberjack Lager	24 - 12 oz bottles	14
Outback Lager	24 - 355 ml bottles	15
Rhinobird Kiosterbier	24 - 0.5l bottles	7.75
Lekkelliköör	500 ml	18
		Count: 12
Condiments		
Sweet and savory sauces, relishes, spreads, and seasonings		
ProductName	QuantityPerUnit	UnitPrice
Aniseed Syrup	12 - 550 ml bottles	10
Chef Anton's Cajun Seasoning	48 - 6 oz jars	22
Chef Anton's Gumbo Mix	36 boxes	21.35
Grandma's Boysenberry Spread	12 - 8 oz jars	25
Northwoods Cranberry Sauce	12 - 12 oz jars	40
Genen Shoyu	24 - 250 ml bottles	15.5
Gula Melacca	20 - 2 kg bags	19.45
Sirop d'érable	24 - 500 ml bottles	28.5
Vegiespread	15 - 625 g jars	43.9
Louisiana Fiery Hot Pepper Sauce	32 - 8 oz bottles	21.05
Louisiana Hot Spiced Okra	24 - 8 oz jars	17
Original Frankfurter grüne Soße	12 boxes	13
		Count: 12

1.29 Anchors in Report

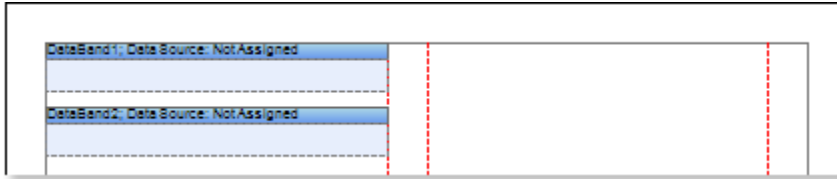
A report with anchors is a report in what there is a page of contents and links (called anchors) to other pages in the report. Follow the steps below in order to design a report with the anchors.

Creating a page of contents

1. Run the designer;
2. Connect the data:
 - 2.1. Create a **New Connection**;
 - 2.2. Create a **New Data Source**;
3. Create **Relation** between data sources. If the relation will not be created and/or the

Relation property of the **Detail** data source will not be filled, then, for **Master** entry, all **Detail** entries will be output;

4. Change the number of columns on a page. For example, set the **Columns** property to **2**, and the **ColumnGaps** property to **1**;
5. Put two **DataBands** on a page of the report template



6. Edit **DataBand1** and **DataBand2**:

- 6.1. Align them by height;
- 6.2. Change values of required properties. For example, if to set the **PrintIfDetailEmpty** property of the **DataBand1** that is the **Master** component in the **Master-Detail** report to **true**, if it is necessary all **Master** entries be printed in any case, even if **Detail** entries not present. And set the **CanShrink** property of the **DataBand2** that is the **Detail** component in the **Master-Detail** report to **true**, if it is necessary to shrink this band;
- 6.3. Change the background color of the **DataBands**;
- 6.4. Enable **Borders** of the band, if required;

7. Specify the data sources for **DataBands**, as well as assign the **Master** component. In this case, the **Master** component is the upper **DataBand1**, and hence in the **DataSetup** window the lower **DataBand2** on the **Wizard** tab in the **Master Component** should indicate **DataBand1** as a **Master** component. Indicate the data sources for **DataBands** using the **Data Source** property:

Data Source	Categories	...
Data Source	Products	...

8. Fill the **DataRelation** property of the **DataBand2**, which is the **Detail** component:

Data Source	Categories	...
-------------	------------	-----

9. Put text components with expressions on **DataBands**. For example: on the **DataBand1**, which is the **Master** component, we put the text component with the following expression: **{Categories.CategoryName}**, and on the **DataBand2**, which is the **Detail** component we put two text components with expressions: **{Products.ProductName}** and **{GetAnchorPageNumber (sender.TagValue)}**;

10. Edit texts and text components of **DataBands**:

10.1. Drag and drop a text component in the **DataBand**;

10.2. Set the font settings: size, style, color;

10.3. Align the text component by height and width;

10.4. Set the backgroundcolor of the text component;

10.5. Align the text in the component;

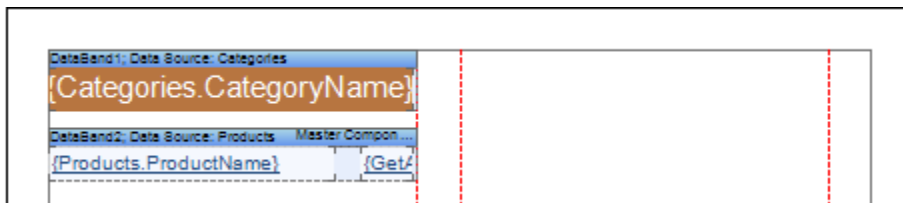
10.6. Change the values of the required properties. For example set **WordWrap** property to **true**, if you want the text be wrapped;

10.7. If necessary, set **Borders** for the text component;

10.8. Set the border color.

10.9. Change the value of the **Hyperlink** property for the text component with the **{Products.ProductName}** expression. In this case, set the **Hyperlink** property to the **#{Products.ProductName}** value;

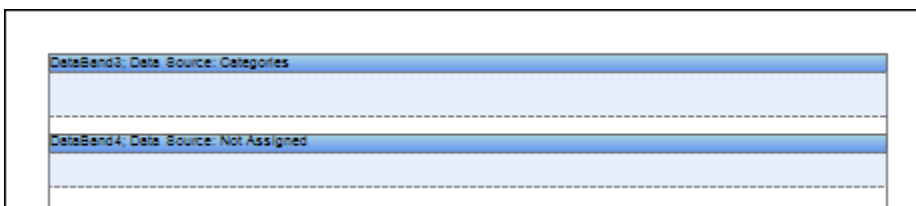
10.10 Change the value of the **Hyperlink** and **Tag** properties for the text component with the **{GetAnchorPageNumber(sender.TagValue)}**. The **Hyperlink** property should be set to **#{Products.ProductName}**, and the **Tag** property to **{Products.ProductName}**.



Creating a master list

11. Create a second page in the report template;

12. Put two **DataBands** on the page of the report template.



13. Edit **DataBand3** and **DataBand4**:

13.1. Align the **DataBand** by height;

13.2. Change the values of the required properties. For example set the **Print if Detail Empty** property of the **DataBand3**, which is the **Master** component in the Master-Detail report to **true**, if you want the Master records be printed in any case,

even if the **Detail** entries are not present. Set the **CanShrink** property of the **DataBand4**, which is the **Detail** component in the Master-Detail report to **true**, if it is necessary for this band be shrunk;

13.3. Set background color of the **DataBand**;

13.4. If it is necessary, set **Borders** for the **DataBand**;

14. Specify the data sources for DataBands, as well as assign the **Master** component. In this case, the **Master** component is the upper **DataBand3**, and hence in the **DataSetup** window the lower **DataBand4** on the **Wizard** tab in the **Master Component** should indicate **DataBand3** as a **Master** component. Indicate the data sources for **DataBands** using the **Data Source** property:

Data Source	Categories	...
Data Source	Products	...

15. Fill the **DataRelation** property of the **DataBand4**, which is the **Detail** component:

Data Source	Categories	...
-------------	------------	-----

16. Put text components with expressions on **DataBands**. For example: on the **DataBand3**, which is the **Master** component, we put the text component with the following expression: **{Categories.CategoryName}**, and on the **DataBand4**, which is the **Detail** component we put two text components with expressions:

{Products.ProductName}, **{Products.QuantityPerUnit}**, and **{Products.UnitPrice}**;

17. Edit texts and text components of **DataBands**:

17.1. Drag and drop a text component in the **DataBand**;

17.2. Set the font settings: size, style, color;

17.3. Align the text component by height and width;

17.4. Set the backgroundcolor of the text component;

17.5. Align the text in the component;

17.6. Change the values of the required properties. For example set **WordWrap** property to **true**, if you want the text be wrapped;

17.7. If necessary, set **Borders** for the text component;

17.8. Set the border color.

DataBand3: Data Source: Categories		
{Categories.CategoryName}		

DataBand4: Data Source: Products		Master Component: DataBand3
{Products.ProductName}	{Products.QuantityPerUnit}	{Products.UnitPrice}

18. Select the **DataBand**, which is the **Master** data source. In our case, this is the **DataBand3**:

18.1. Set the **Interaction.Bookmark** property of the **DataBand3** to **{Categories.CategoryName}**;

19. Select the **DataBand**, which is the Detail data source. In our case, this is the **DataBand4**:

19.1. Set the **Interaction.Bookmark** property to **{Products.ProductName}**;

19.2. Subscribe to the event. Set the **RenderingEvent** to **{AddAnchor (Products.ProductName)};**

Report rendering

20. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering a report all references to data fields will be changed on data from specified fields.

Beverages			
Chai	3	Schoggi Schokolade	4
Chang	3	Zaanse koeken	4
Guaraná Fantástica	3	Chocolade	4
Sasquatch Ale	3	Maxilaku	4
Steele's Stout	3	Valkoinen suklaa	4
Côte de Blaye	3	Tarte au sucre	4
Chartreuse verte	3	Scottish Longbreads	4
Ipoh Coffee	3	Dairy Products	
Laughing Lumberjack Lager	3	Queso Cabrales	4
Outback Lager	3	Queso Manchego La Pastora	4
Rhinbräu Klosterbier	3	Gorgonzola Telling	4
Lakkaikööri	3	Mascarpone Fabioli	4
Condiments		Gelöst	4
Aniseed Syrup	3	Raclette Courdavault	4
Chef Anton's Cajun Seasoning	3	Camembert Pierrot	4
Chef Anton's Gumbo Mix	3	Gudbrandsdalsost	4
Grandma's Boysenberry Spread	3	Pioltomyssost	4
Northwoods Cranberry Sauce	3	Mozzarella di Giovanni	4
Genen Shouyu	3	Grains/Cereals	
Gula Malacca	3	Gustaf's Knäckebröd	4
Sirop d'érable	3	Tunnbröd	4
Veggie-spread	3	Singaporean Hokkien Fried Mee	4
Louisiana Fiery Hot Pepper Sau	3	Filo Mix	4
Louisiana Hot Spiced Okra	3	Gnocchi di nonna Alice	4
Original Frankfurter grüne Soße	3	Ravioli Angelo	4
Confections		Wimmers gute Semmelknödel	4
Pavlova	3	Meat/Poultry	
Teatime Chocolate Biscuits	3	Mishi Kobe Niku	5
Sir Rodney's Marmalade	3	Alice Mutton	5
Sir Rodney's Scones	3	Thüringer Rostbratwurst	5
NuNuCa Nuß-Nougat-Creme	3	Perth Pasties	5
Gumbär Gummitäbchen	3	Tourtière	5
		Pâté chinois	5

Beverages		
Chai	10 boxes x 20 bags	18
Chang	24 - 12 oz bottles	19
Guinness Fantástica	12 - 355 ml cans	4,5
Sasquatch Ale	24 - 12 oz bottles	14
SteelEye Stout	24 - 12 oz bottles	18
Côte de Blaye	12 - 75 cl bottles	283,5
Chartreuse verte	750 cc per bottle	18
Ispah Coffee	16 - 500 g tins	46
Laughing Lumberjack Lager	24 - 12 oz bottles	14
Outback Lager	24 - 355 ml bottles	15
Rhinokru Klosterbier	24 - 0.5 l bottles	7,75
Lakkalikööri	500 ml	18
Condiments		
Aniseed Syrup	12 - 550 ml bottles	10
Chef Anton's Cajun Seasoning	48 - 6 oz jars	22
Chef Anton's Gumbo Mix	36 boxes	21,35
Grandma's Boysenberry Spread	12 - 8 oz jars	25
Northwoods Cranberry Sauce	12 - 12 oz jars	40
Genen Shoyu	24 - 250 ml bottles	15,5
Gula Melacca	20 - 2 kg bags	19,45
Sirop d'érable	24 - 500 ml bottles	28,5
Veggie-spread	15 - 825 g jars	43,9
Louisiana Fiery Hot Pepper Sauce	32 - 8 oz bottles	21,05
Louisiana Hot Spiced Okra	24 - 8 oz jars	17
Original Frankfurter grüne Soße	12 boxes	13

In the rendered report, when clicking an entry in the table of contents the transition to this entry in the report will be done.

21. Go back to the report template;
22. If needed, add other bands to the report template, for example, **HeaderBand**;
23. Edit this band:
 - 23.1. Align it by height;
 - 23.2. Change values of properties, if required;
 - 23.3. Change the background of the band;
 - 23.4. Set **Borders**, if required;
 - 23.5. Set the border color.

DataBand3: Data Source: Categories		
{Categories.CategoryName}		
HeaderBand1		
DataBand4: Data Source: Products		
Master Component: DataBand3		
{Products.ProductName}	{Products.QuantityPerUnit}	{Products.UnitPrice}

24. Put text components with expressions in this band. The expression in the text component is a header in the **HeaderBand**.

25. Edit text and textcomponents:

- 25.1. Drag and drop the text component in the band;
- 25.2. Change font options: size, type, color;
- 25.3. Align text component by height and width;
- 25.4. Change the background of the text component;
- 25.5. Align text in the textcomponent;
- 25.6. Change values of text component properties, if required;
- 25.7. Enable **Borders** of the text component, if required;
- 25.8. Set the border color.

DataBand3: Data Source: Categories		
{Categories.CategoryName}		
HeaderBand1		
ProductName	QuantityPerUnit	UnitPrice
DataBand4: Data Source: Products		
Master Component: DataBand3		
{Products.ProductName}	{Products.QuantityPerUnit}	{Products.UnitPrice}

26. Click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item. After rendering all references to data fields will be changed on data form specified fields. Data will be output in consecutive order from the database that was defined for this report. The amount of copies of the **DataBand** in the rendered report will be the same as the amount of data rows in the database.

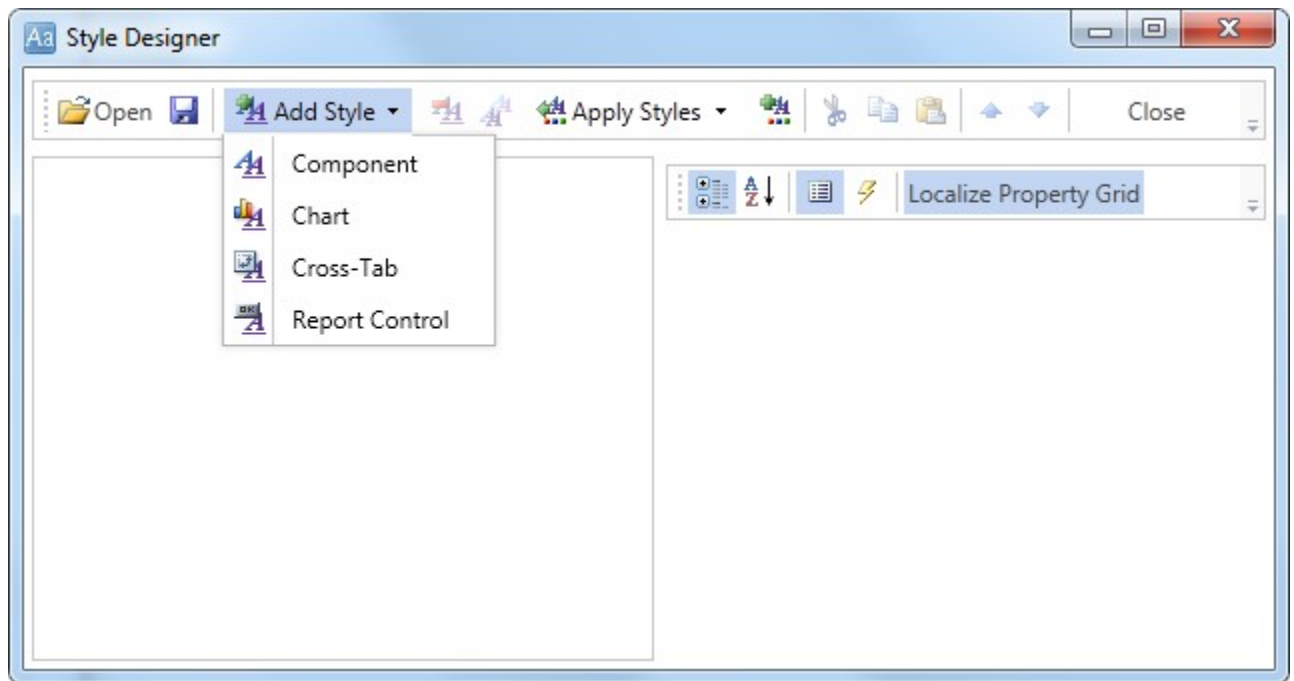
Beverages			
Chai	3	Schoggi Schokolade	4
Chang	3	Zaanse koeken	4
Guaraná Fantástica	3	Chocolade	4
Sasquatch Ale	3	Maxilaku	4
Steele's Stout	3	Valkolinen suklaa	4
Côte de Blaye	3	Tarte au sucre	4
Chartreuse verte	3	Scottish Longbreads	4
Ipoh Coffee	3	Dairy Products	
Laughing Lumberjack Lager	3	Queso Cabrales	4
Outback Lager	3	Queso Manchego La Pastora	4
Rindbräu Klosterbräu	3	Gorgonzola Telling	4
Lakkalikööri	3	Mascarpone Fabioli	4
Condiments		Gelöst	4
Aniseed Syrup	3	Raclette Courdavault	4
Chef Anton's Cajun Seasoning	3	Camembert Pierrot	4
Chef Anton's Gumbo Mix	3	Gudbrandsdalsost	4
Grandma's Boysenberry Spread	3	Piitemysost	4
Northwoods Cranberry Sauce	3	Mozzarella di Giovanni	4
		Grains/Cereals	
Genen Shouyu	3	Gustaf's Knäckebröd	4
Gula Malacca	3	Tunnbröd	4
Sirop d'érable	3	Singaporean Hokkien Fried Mee	4
Veggie-spread	3	Filo Mix	4
Louisiana Fiery Hot Pepper Sau	3	Gnocchi di nonna Alice	5
Louisiana Hot Spiced Okra	3	Ravioli Angelo	5
Original Frankfurter grüne Soße	3	Wimmers gute Semmelknödel	5
Confections		Meat/Poultry	
Pavlova	3	Mishi Kobe Niku	5
Teatime Chocolate Biscuits	3	Alice Mutton	5
Sir Rodney's Marmalade	3	Thüringer Rostbratwurst	5
Sir Rodney's Scones	4	Perth Pasties	5
NuNuCa Nuß-Nougat-Creme	4	Tourtière	5
Gumbär Gummitaschen	4	Pâté chinois	5

Beverages		
ProductName	QuantityPerUnit	UnitPrice
Chai	10 boxes x 20 bags	18
Chang	24 - 12 oz bottles	19
Guaraná Fantástica	12 - 355 ml cans	4,5
Wasatch Ale	24 - 12 oz bottles	14
Steeleye Stout	24 - 12 oz bottles	18
Côte de Blaye	12 - 75 cl bottles	263,5
Chateau verte	750 cc per bottle	18
Ipoh Coffee	16 - 500 g tins	46
Laughing Lumberjack Lager	24 - 12 oz bottles	14
Outback Lager	24 - 355 ml bottles	15
Rhinberg Klosterbier	24 - 0.5 l bottles	7,75
Lakkalikööri	500 ml	18

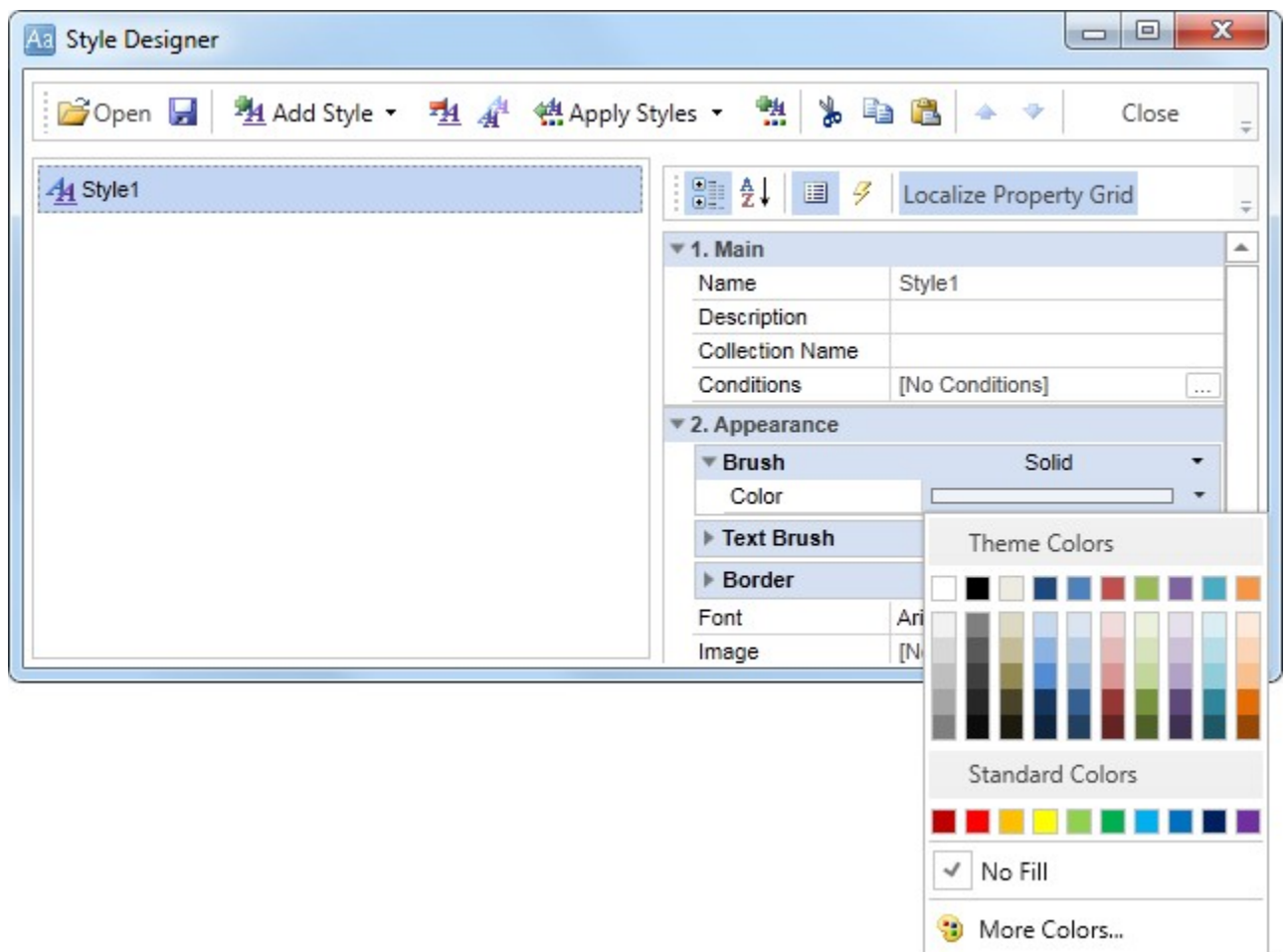
Condiments		
ProductName	QuantityPerUnit	UnitPrice
Aniseed Syrup	12 - 550 ml bottles	10
Chef Anton's Cajun Seasoning	48 - 8 oz jars	22
Chef Anton's Gumbo Mix	36 boxes	21,35
Grandma's Boysenberry Spread	12 - 8 oz jars	25
Northwoods Cranberry Sauce	12 - 12 oz jars	40
Genen Shoyu	24 - 250 ml bottles	15,5
Gula Melacca	20 - 2 kg bags	19,45
Sirop d'érable	24 - 500 ml bottles	28,5
Veggie-spread	15 - 625 g jars	43,9
Louisiana Fiery Hot Pepper Sauce	32 - 8 oz bottles	21,05
Louisiana Hot Spiced Okra	24 - 8 oz jars	17
Original Frankfurter grüne Soße	12 boxes	13

Adding Styles

1. Go back to the report template;
2. Select the **DataBand**. In our case, select the **DataBand4**;
3. Change values of **Even style** and **Odd style** properties. If values of these properties are not set, then select the **Edit Styles** in the list of values of these properties and, using **Style Designer**, create a new style. The picture below shows the **Style Designer**:



Click the **Add Style** button to start creating a style. Select **Component** from the drop down list. Set the **Brush.Color** property to change the background color of a row. The picture below shows a sample of the **Style Designer** with the list of values of the **Brush.Color** property:



Click **Close**. Then a new value in the list of **Even style** and **Odd style** properties (a style of a list of odd and even rows) will appear.

4. To render the report, click the **Preview** button or invoke the **Viewer**, clicking the **Preview** menu item.

Beverages			
Chai	3	Schoggi Schokolade	4
Chang	3	Zaanse koeken	4
Guaraná Fantástica	3	Chocolade	4
Sasquatch Ale	3	Maxilaku	4
Steele's Stout	3	Valkoinen suklaa	4
Côte de Blaye	3	Tarte au sucre	4
Chartreuse verte	3	Scottish Longbreads	4
Ipoh Coffee	3	Dairy Products	
Laughing Lumberjack Lager	3	Queso Cabrales	4
Outback Lager	3	Queso Manchego La Pastora	4
Rhinbräu Klosterbier	3	Gorgonzola Telling	4
Lakkalikööri	3	Mascarpone Fabioli	4
Condiments		Gelöst	4
Aniseed Syrup	3	Raclette Courdavault	4
Chef Anton's Cajun Seasoning	3	Camembert Pierrot	4
Chef Anton's Gumbo Mix	3	Gudbrandsdalsost	4
Grandma's Boysenberry Spread	3	Piitemysost	4
Northwoods Cranberry Sauce	3	Mozzarella di Giovanni	4
		Grains/Cereals	
Genen Shouyu	3	Gustaf's Knäckebröd	4
Gula Malacca	3	Tunnbröd	4
Sirop d'érable	3	Singaporean Hokkien Fried Mee	4
Veggie-spread	3	Filo Mix	4
Louisiana Fiery Hot Pepper Sau	3	Gnocchi di nonna Alice	5
Louisiana Hot Spiced Okra	3	Ravioli Angelo	5
Original Frankfurter grüne Soße	3	Wimmers gute Semmelknödel	5
Confections		Meat/Poultry	
Pavlova	3	Mishi Kobe Niku	5
Teatime Chocolate Biscuits	3	Alice Mutton	5
Sir Rodney's Marmalade	3	Thüringer Rostbratwurst	5
Sir Rodney's Scones	4	Perth Pasties	5
NuNuCa Nuß-Nougat-Creme	4	Tourtière	5
Gumbär Gummitaschen	4	Pâté chinois	5

Beverages		
ProductName	QuantityPerUnit	UnitPrice
Chai	10 boxes x 20 bags	18
Chang	24 - 12 oz bottles	19
Guaraná Fantástica	12 - 355 ml cans	4,5
Wasatch Ale	24 - 12 oz bottles	14
Steeleye Stout	24 - 12 oz bottles	18
Côte de Blaye	12 - 75 cl bottles	263,5
Chateau verte	750 cc per bottle	18
Ipoh Coffee	16 - 500 g tins	46
Laughing Lumberjack Lager	24 - 12 oz bottles	14
Outback Lager	24 - 355 ml bottles	15
Rhinokru Klosterbier	24 - 0.5 l bottles	7,75
Lakkalikööri	500 ml	18
Condiments		
ProductName	QuantityPerUnit	UnitPrice
Aniseed Syrup	12 - 550 ml bottles	10
Chef Anton's Cajun Seasoning	48 - 8 oz jars	22
Chef Anton's Gumbo Mix	36 boxes	21,35
Grandma's Boysenberry Spread	12 - 8 oz jars	25
Northwoods Cranberry Sauce	12 - 12 oz jars	40
Genen Shouyu	24 - 250 ml bottles	15,5
Gula Melacca	20 - 2 kg bags	19,45
Sirup d'érable	24 - 500 ml bottles	28,5
Veggie-spread	15 - 625 g jars	43,9
Louisiana Fiery Hot Pepper Sauce	32 - 8 oz bottles	21,05
Louisiana Hot Spiced Okra	24 - 8 oz jars	17
Original Frankfurter grüne Soße	12 boxes	13

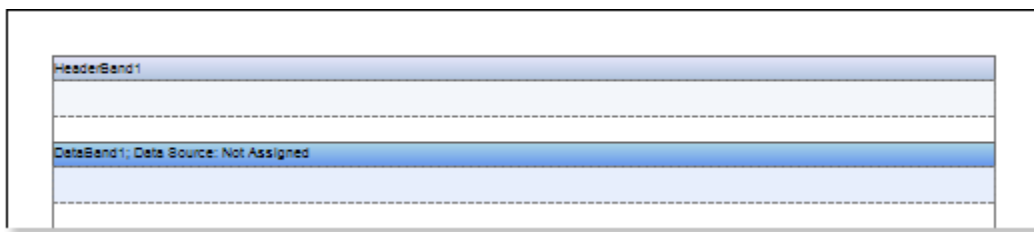
1.30 Invoice Report

The invoice is most often used in accounting for the tax (customs) control or in the international supply of goods. This document usually includes the cost of transportation, shipping operations, insurance, payment of export duties, as well as various taxes (fees), and more. If your activity requires constant creation of invoices, for optimization, time and cost savings, it is logical to assume that it is easier to create a document template. Using it, you change only the data, saving yourself from routine work to create the structure of the invoice and its design.

You can create templates and tools in many ways, but I want to help you save time in finding these resources. In this tutorial you will learn how to quickly create an invoice template, decorate it and get the finished document. This will take you some time. I will try as much as possible to describe in detail the process of creating such a report.

In order to create an invoice, you should do the following steps:

1. Run the designer;
2. Connect the data:
 - 2.1. Create **New Connection**;
 - 2.2. Create **New Data Source**;
3. Put the **DataBand** on the page of the report template;
4. Put the **HeaderBand** above the **DataBand**. The picture below shows an example of the report template with the bands on the page:



Edit the bands **DataBand** and **HeaderBand**:

- 5.1. Align them by height;
 - 5.2. Set the properties of the **DataBand**. For example, set the **Can Break** property to **true**, if you want the band be broken;
 - 5.3. Set the background color for the bands;
 - 5.4. If necessary, set **Borders**;
 - 5.5. Set the border color.
6. Specify the data source for the **DataBand** using the **Data Source** property from the object inspector:



7. Put text components in the **HeaderBand** with texts **Unit Name**, **Description**, **Qty**,

Item Price, Total;

8. Put text components in the **DataBand** with expressions. Where the expression is a reference to the data field. Put text components with the expressions: **{Products.ProductName}**, **{Products.QuantityPerUnit}**, **{Products.UnitsInStock}**, **{Products.UnitPrice}**, and **{Products.UnitsInStock * Products.UnitPrice}**;

9. Edit **Text** and **TextBox**:

9.1. Drag the text components on the **DataBand** and **HeaderBand** to the appropriate places;

9.2. Set the font parameters: size, style and color;

9.3. Align text components by height and width;

9.4. Set the background of text components;

9.5. Align text in text components;

9.6. Set the properties of text components. For example to set the **Word Wrap** property to **true**;

9.7. If necessary, include **Borders** of text components;

9.8. Set the border color.

The picture below shows the report template:

HeaderBand1				
Unit Name	Description	Qty	Item Price	Total
DataBand1: Data Source: Products				
{Products.ProductName}	{Products.QuantityPerUnit}	{Products.UnitsInStock}	{Products.UnitPrice}	{Products.UnitsInStock * Products.UnitPrice}

10. Click on the **Preview** button or invoke the report viewer, using the **Preview** item. After rendering a report, all references to the data fields will be replaced with data from the specified fields. That data will be taken sequentially from the data source that was specified for the given band. The number of copies of the **DataBand** in the rendered report will be equal to the number of rows in the data source. The picture below shows the rendered report: