# Report Sharp-Shooter User Guide

Last modified on: July 27, 2011



# Table of Contents

Table of Contents
Preface4
Template objects
Classification5
Bands5
Visual elements
User Guide9
Template
Page
Objects' Controls
Objects' Properties
Text Output
List
Grouping
Horizontal List and Table
SideBySide Bands 59
Pivot Table
Image 67
Using Shapes
Barcodes
Parameters
Hyperlinks and Report Navigation
Using subreports
Zip code
Master-Report
Creation of Reports Using Wizard
Interface
Tabs
Contextual Tabs110



Application Menu	120
Binding Bar	121
Quick Access Toolbar	122
Context Menu	124
Docking	129
Editors	132
Wizards	147
Status Bar	154
Hotkeys	155



# Preface

This user guide contains detailed information on how to create and design templates of the various report types using Report Sharp-Shooter. The guide also contains description of Report Designer Interface as well as information about report-elements, their properties and usage scenarios.

This user guide is prepared by Perpetuum Software team for Report Sharp-Shooter users.



# **Template objects**

## Classification

All the report elements can be divided into two types:

Bands (DataBand, PageHeader, PageFooter, Header, Footer, GroupBand, PageOverlay, CrossBand, BandContainer, SideBySide, SubReport, Content, PivotTable)

Visual elements (TextBox, AdvancedText, Picture, Shape, ZipCode, BarCode, RichText, WinFormsControl)

## **Bands**

The bands are containers for other elements; they don't have a graphical presentation in the report and serve for defining output methods of included elements. Bands are often used as containers for other bands. In this case, output methods of a contained element depend on all the container bands of the element. Band width is a permanent value and always equals page width. The location of the elements on the page is defined during report generation and depends on band order in the report, bands content and the properties of the Render group.

(More information about **band properties**)

#### **DataBand**

The band for a multiple output of embedded components. Every line corresponds to one record in the data source. Data source for DataBand is specified by the DataSource property. If the data source is not specified, a number of repetitions are set in InstanceCount property.

The following bands can be used as container for DataBand: Page, DataBand, BandContainer, GroupBand and SideBySide.

(More information about using DataBand for <u>building lists</u>)

#### Detail

The band provides access to the data from the data source of a container band and for output visual elements in various bands. It specifies the height that should be left for the output of the elements embedded into this band.

The following bands can be used as container for Detail: Page, DataBand, BandContainer, GroupBand and SideBySide.

(More information about **Detail**)

#### **PageHeader and PageFooter**

The bands are used for creating top and bottom headlines of a page. These elements are containers and the spaces before and after the embedded elements in the final report will be specified by the space between these elements and top\bottom border of a band in a template. The location of PageHeader and PageFooter does not influence the location of the elements in the final report.

Only Page can be a container for PageHeader and PageFooter.

(More information about headlines usage for page design)

#### **Header and Footer**

The bands allow creating a headline and a lower half of a page for the lists output by the DataBand and GroupBands. The contents of a Header will be displayed in the beginning of a list output by a GroupBand or in a headline of every group. The contents of Footer will be displayed at the end of a list or a group.



DataBand and GroupBand can be used as containers for Header and Footers.

(More information about the output of header and footer for the lists and grouped data)

#### GroupBand

The band is used for grouping data depending on a specified expression that is calculated during the report generation.

DataBand and GroupBand can be used as containers for GroupBand.

(More information about lists grouping)

#### **PageOverlay**

The band allows creating a bottom layer of a page. The space between the embedded elements and the beginning of a page in the final report is set by the indent of the top border of the band in the template. PageOverlay does not influence the location of other elements that allow locating elements over each other.

Only Page can be used as a container for PageOverlay.

(More information about page design using page overlay)

#### **CrossBand**

The band allows output of the embedded elements as a line LTR. The number of repetitions is specified either by the InstanceCount property or by a number of records in a DataSource. CrossBand band can be used for tables building.

The following bands can be used as containers for CrossBand: Header, Footer and Detail.

(More information about building horizontal lists and tables)

#### **BandContainer**

The band outputs its content once. Used for merging several bands in one connected SideBySide for the various variants of band merge.

The following bands can be used as containers for BandContainer: Page, DataBand, BandContainer, GroupBand and SideBySide.

#### SideBySide

The band is used for horizontal SideBySide output of the elements from different bands.

The following bands can be used as containers for SideBySide: Page, DataBand, BandContainer, GroupBand and SideBySide.

(More information about SideBySide report)

#### **SubReport**

The band allows adding embedded reports that will be generated together. Only bands (DataBand, Detail, etc.) will be added from template used as subreport.

The following bands can be used as containers for SubReport: Page, DataBand, BandContainer, GroupBand, and SideBySide. (More information about <u>building subreports</u>)

#### Content

The band used in parental reports. This element specifies the place to locate the content of filial report. The following bands can be used as containers for Content: Page, DataBand, BandContainer, GroupBand and SideBySide.

(More information about building master-reports)



#### **PivotTable**

The PivotTable band is used for creating cross reports based on static data and also for building aggregate tables. The result of using PivotTable element is a block in a report that contains visual presentation of a described cross table.

There is a special visual editor of a cross table that allows specifying data used for calculation. Scripts can be used for creating rules of calculation. This gives great opportunities for table settings starting from summing up of several fields from the data source and ending with various variants of grouping in the perspectives of required report.

The following bands can be used as containers for PivotTable: Page, DataBand, BandContainer, GroupBand and SideBySide.

(More information about building pivot tables)

#### Visual elements

The elements that have graphical presentation in a report. Its location is specified by the containing bands. Size and displaying of the elements are specified by the properties.

(More information about element properties)

#### TextBox

The element outputs textual information. The information can either be static or be generated during the generation of a report.

(More information about text output)

#### AdvancedText

The element allows output of the information as a formatted text. There are options setting paragraph and text styles and using expressions directly in the marked text. Formatted text can be set using HTML-alike markup language and the subset of RTF format. Formatted Text Editor is used for this purpose. Static RTF text can be loaded. AdvancedText supports only some subset of RTF.

(More information about formatted text output)

#### **Picture**

The element allows output of an image. The images can be loaded from a hard driver or a data source.

(More information about image output)

**Shape** 

The element allows output of various geometric figures.

More information about figures output)

#### ZipCode

The element allows output of a zip-code.

(More information about *zip-codes output*)

#### BarCode

The element allows output of barcodes of different types. There are several settings depending on a type of a used barcode.

(More information about <u>barcodes output</u>)



## RichText

The element allows output of a text in RTF format. The editor allows choosing an RTF file.

(More information about <u>RTF-text output</u>)

#### WinFormsControl

The element allows including Windows Forms control element into the report. Only the image of a control element will be included into the report; it is not available for using its functions.



# **User Guide**

## Template

Report template is a number of pages including bands and objects.

#### **Template Controls**

#### **Template Creation**

Run "File\New" command of the main menu or press "New document" button on the Toolbox to create a new template. That will open <u>Wizards Gallery</u> where user can choose the way of template creating.

🥪 Wizards Gallery	
New Saved	
Blank Report Standard Report Pivot table Report	
	Load from file OK Cancel

Items	Descriptions
Blank Report	Creates blank template
Standard Report	Opens <u>Standard Wizard</u> in order to <u>create a standard template</u> (a list
	or data cards)
Pivot table	Opens Pivotal Table Wizard in order to create a report with a Pivot
Report	<u>Table</u>

#### **Template Opening**

Run "File\Open" command of the main menu or press "Open Template" button on the Toolbox to open a dialog window. In this window one can choose a report to open. One can also double-click .rst template file that is associated with Report Design application.

#### **Template Saving**

Run "File\Save" command of the main menu or press "Save Template" button on the Toolbox to save a template. If the document has already been saved, the same file would be modified. If a new template is edited, Save Template dialog window appears to choose a folder and file name of a template. "File\Save as" command always calls Save Template dialog.

#### Template Generation

Run "File\Preview" Report command of the main menu or press "Preview Report" button on the Toolbox to generate a template.

#### **Template Properties**

Template properties can be set with the help of Property Grid. Choose Document in the Object List or click the "Document Properties" on Quick Access Toolbar to display template properties in Property Grid.

### **Graphical Settings**

GraphicsSettings group includes the following properties:



Properties	Descriptions
CompositingQuality	set quality level, using in the compositing
	process
InterpolationMode	set interpolation mode
SmoothingMode	set smoothing mode
TextRenderingHint	set text visualization mode

#### Elements Displaying and Grid

ShowObjectBounds property allows setting display elements borders in the template.

Ρι	roperty		Report Template
Ξ	Appearance		
÷	GraphicsSettings	PerpetuumSoft.Reporting.DOM.G	text 🚽 🚽 🚺
	MasterReport		
	ShowObjectBounds	True 💌	
Ξ	Appearance		
÷	GraphicsSettings	PerpetuumSoft.Reporting.DOM.G	text 😽 😽
	MasterReport		123456
	ShowObjectBounds	False 💌	

ShowGrid property defines if the Grid is displayed or not, GridStep property sets grid wideness.

Property			Report Templat	е
🗆 Grid Settings				
GridStep	0,25 cm		text 😽	
ShowGrid	False	~		123456 _
SnapToGrid	True			
🗆 Grid Settings				
GridStep	0,25 cm	text	text	123456
ShowGrid	True	<b>~</b>		
SnapToGrid	True			
🗆 Grid Settings				
GridStep	0,5 cm		text	
ShowGrid	True			123456
SnapToGrid	True			

SnapToGrid property is used for "sticking" elements to the grid when ones are created or when their sizes and location are changed.

One can use the corresponding buttons on the <u>ToolBar</u> for editing of these properties.

### Measurement Units

MetricUnit property is used for setting measurement units for the whole template.

🗆 Misc		
	DataSources	(Collection)
	Description	
	MetricUnit	Centimeter 🛛 💌
	Parameters	Inch
	Title	Millimeter
Ξ	Render	Centimeter
	StyleSheet	Pixel
Ξ	Script	Point
	CommonScript	Twip
	CompilerVersion	

#### Template Data Sources

Application can be a data source, but there is an opportunity to set the data sources for the current template in Report Designer using the collection of built-in data sources –



Document.DataSources property. In order to set this property <u>Document Data Sources</u> editor is used.

#### *Template Parameters*

Report parameters can be set with the help of Parameters collection.



## Page

Report template is a set of pages. Every page contains elements displaying information. A default empty report contains one page.

#### **Page Properties**

Page Properties can be set with the help of Property Grid. Select Page in the Object List to display template properties in Property Grid.

#### Page Size

PaperKind property is used to set page size; it allows you to choose one of the standard page formats, e.g. A4 (default size), B5, Letter, etc. Page layout can be set for those page sizes – vertical or horizontal. In this case Size and TemplateSize properties gain chosen format settings and the properties cannot be edited.

Ξ	Page Settings		
Ŧ	CustomSize	0; 0 cm	
Ŧ	Margins	1; 1,2; 1,5; 1 cm	
	Orientation	Portrait	
	PaperKind	B4	
Ŧ	TemplateSize	25; 35,3 cm	

Select "Custom" value of the PaperKind property and set page size parameters of the Custom Size property if you want to create a non-standard paper size.

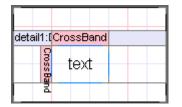
Ξ	Page Settings	
⊡	CustomSize	5; 5 cm
	Х	5 cm
	Y	5 cm
Ŧ	Margins	1; 1,2; 1,5; 1 cm
	Orientation	Portrait
	PaperKind	Custom
Ŧ	TemplateSize	5; 5 cm

### Page Margins

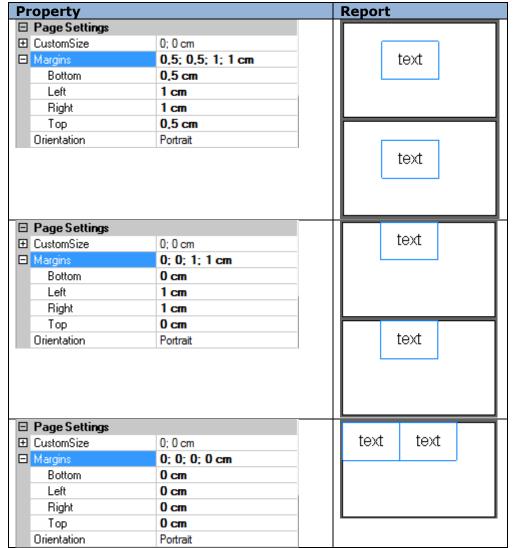
Page Margins set the indent between page limits and the elements placed in the bands – containers. Margins property sets page margins. Margins are marked with the red line in the template.

Sample demonstrating use of Page Margins:

Report template:



crossBand1.InstanceCount = 2



It is possible to change the Page Margins using the Ruler.



#### **Page Style**

StyleName property allows setting a united style for all of the elements on the page. Create a style in the <u>Style Sheet Editor</u> and choose your style as a StyleName property parameter. The chosen style will be set as default for all the elements and bands added to the page. Being edited, the style will be applied to all the page elements, if their own style is not changed separately.

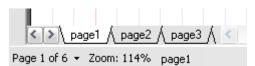
(More information about styles)

#### **Multipage Report**

You can add as many pages to your report as it is required, e.g. in the report with a cover page. The ready report is a combination of the reports formed according to the page

templates. Parts of the report will be displayed in the same order as the pages order in the template.

Click the "New Page" button on the "Insert" tab to add a page to the report. When the page is removed, all the objects contained on this page are removed too. One can switch between pages using the tabs in the bottom left corner of the Report Designer.



#### **Page Headlines**

PageHeader and PageFooter are used to set upper and the bottom headlines respectively. Band contents will be displayed in the upper and the bottom part of the page respectively, regardless of the band location on the page. Mode property sets the headliner generation mode – for every page, even\odd pages.

Sample demonstrating use of Page headlines:

Report Template:

pageHeader1:PageHeader =				
	<"Page " + Pa			
text				

textBoxPageHeader.Value = "Page " + PageNumber

Μ	ode Property		Report
Ξ	Render CanGrow	False	Page 1
	CanShrink	False	
	Mode	AllPages 💉	text
	Visible	True	
	YISIDIC	, nue	Page 2 text
Ξ	Render		
	CanGrow	False	Page 1
	CanShrink	False	text
	Mode	OddPages 💌	LEAL
	Visible	True	
			text
Ξ	Render		
	CanGrow	False	text
	CanShrink	False	
	Mode	EvenPages 🛛 💌	
	Visible	True	
			Page 2 text



## Page Numeration

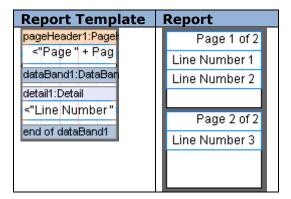
PageNumber property is used for getting the page number; PageCount property contains the total amount of the pages in a report. During the first pass, total page amount is unknown and PageCount property will be equal to PageNumber Property. Set DoublePass property of the Document object to "True" for PageCount property to keep the total amount of the pages.

Example displaying page number in the header:

dataBand1.InstanceCount = 3;

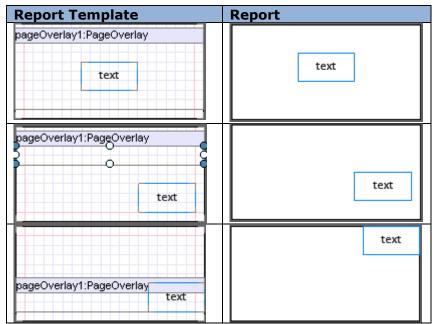
textBoxHeader.Value = "Page " + PageNumber.ToString() + " of " + PageCount.ToString();

textBoxDetail.Value = "Line Number " + dataBand1.LineNumber().ToString();



#### Page Overlay

PageOverlay is used when there is a necessity to display data on the background. Element location will be calculated according to the band location regardless of PageOverlay location on the page. The band does not affect location of the other bands; other bands contents will be displayed over the PageOverlay elements.



Mode property sets the overlay generation mode – for every page, even\odd pages.



# **Objects' Controls**

#### **Object Addition**

The "Insert" tab is used to add objects. Then set the mouse pointer on the page and leftclick to add an object. If you click on some band, the program checks if this band can contain the object you try to add (More information about available band containers). If the band can contain this object, it is added to the template, inside the band, otherwise an error message is shown.

TextBox elements for data source outlet can be added to the template by drag and drop of the appropriate element from the Data Tree of the Tool Window from the <u>Data Sources</u> tab. TextBox.Value will be set automatically.

#### **Object Deletion**

There are several ways to delete an object: left-click (or select it in the Object list or in the Document Tree in the Tool Window) and press "Delete" button on the keyboard (or use the contextual menu item). When you delete a band, all the contained objects will be deleted too.

#### **Object Properties**

Object properties can be set with the help of <u>Property Grid</u>. Select the object in the template to see its properties displayed in the Property Grid. Property Grid shows common properties of the elements when several of them are selected.

(More information about objects' properties)

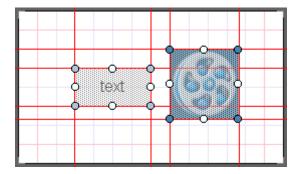
#### **Document Tree**

Document Tree contains the list of all document objects and shows its structure. One can select and delete object, change hierarchy (dragging the object to the different band) and change object order in the <u>Document Tree</u>.

#### **Objects' Location**

Objects' location in the template is set with the Size property. The higher object is displayed when two overlay each other. Click "Edit\Arrange" main menu item or use the buttons on the Toolbar to change objects order. Use <u>Align Editor</u> to align several objects relatively to each other.

One can change the location of several chosen objects included into the same container simultaneously with the mouse pointer.



It is possible to change object position with the navigation buttons on the keyboard. Pressed Ctrl key prevents objects from "sticking" to the grid.



# **Objects' Properties**

Object properties define object appearance and behavior when generating reports. Object properties can be set by <u>Property Grid</u>. To display object properties in the Property Grid one needs to select an element in a template with left mouse button click or select it in the Object List. Properties default values have regular font, edited properties values are displayed in bold. One may select several objects by pressing the Shift button. This way there are general properties of the selected objects on Property Grid. All object properties may be divided into several groups:

Groups	Descriptions
Appearance	properties defining objects display and appearance
Data	properties defining data processing
Design	properties defining objects display when editing a template in Report Designer
Layout	properties defining objects location and size
Misc	properties for objects which are built in the report
Navigation	properties which allow reports navigation creation
PageSetting	page properties
Render	properties defining rules of objects behavior during reports
	generation
Script	scripts – objects processing

#### **Angle (Appearance)**

The property is used to set a rotate angle of the contained element relative to its area. Acceptable values – 0, 90, 180 and 270. Examples of using the rotate angle for the Pictures and TextBox elements:

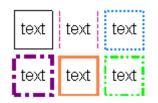
Property			Report
Ξ	Appearance		TTROP
	Angle	0	REPORT
	Border	Border	text
	Fill	[None]	St Cordes
Ŧ	Margins	0; 0; 0; 0 cm	
	StyleName		
	ToolTip		
Ξ	∃ Appearance		2
	Angle	90	e de
	Border	Border	text l
	Fill	[None]	
Ŧ	Margins	0; 0; 0; 0 cm	
	StyleName		
	ToolTip		
Ξ	Appearance		
	Angle	180	
	Border	Border	text text
	Fill	[None]	REPORT
Ŧ	Margins	0; 0; 0; 0 cm	180820
	StyleName		
	ToolTip		



## **Border (Appearance)**

The property allows setting the display of element borders and lines draw style – type, thickness and color (<u>Border Editor</u>).

Border examples for the TextBox element:

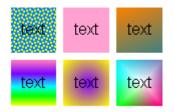


#### Fill (Appearance)

The property allows setting color and style of object area fill. In order to edit the property one may use the fill editor where one may set fill type, color, transparence and additional parameters.

		Appearance		
		Angle	0	
		Border	Border	
••••		Fill	[None]	~
Back Color				8888888888
Color 0, 128, 255 🔽 🚺				
Transparency	Ū			
	×			
Fore Color				
Color Yellow 🔽 💽				
Transparency	Π			
	~			
Style		)		
	¥			
OK Cancel				

Examples of using fill for the TextBox element:





## Font (Appearance)

The property allows setting font type for elements. There is the font editor for properties editing. One may use it to set font, font style and size.

Font		<b>—</b>
<u>Font:</u> Aria Aria Calibri Cambria Cambria Math Candara	Font style:     Size:       Regular     12       Regular     12       Italic     14       Bold     18       Bold Italic     20       Black     24	Cancel
Effects	Sample AaBbYyZz Script: Western	

Sample demonstrating use of TextBox element fonts:

<u>text</u>	text
text	text

Note: If the text that is output by the AdvancedText and its font is set in the Formatted Text Editor, Font property is ignored.



## Margins (Appearance)

Property allows setting object margins.

Example of changing margins of the Picture object:

Pr	operty		Report		
Ξ	Appearance	REPORT			
	Angle				
	Border		Fiffitte Las		
	Fill	[None]			
Ŧ	Image	🔛 System.Drawing.Bitmap			
	ImageAlign	TopLeft			
Ξ	Margins	0; 0; 0; 0 cm			
	Bottom	0 cm			
	Left	0 cm			
	Right	0 cm			
	Тор	o Ocm			
Ξ	Appearance				
	Angle	0	REPORT		
	Border		Filter-Las		
	Fill	[None]	F GOL		
Ŧ	Image	🔛 System.Drawing.Bitmap			
	ImageAlign	TopLeft			
Ξ	Margins	0,2; 0,2; 0,2; 0,2 cm			
	Bottom	0,2 cm			
	Left	0,2 cm			
	Right	0,2 cm			
	Тор	0,2 cm			



## StyleName (Appearance)

Property quickly edits object style, applying existing style to one or several objects.

"Edit Style" button on the "Home" tab opens Style Sheet Editor.

🕎 Style Sheet Editor				23
Styles			Properties	]
AaBbCcDdEe	Â	e	Appearance	
Caption			Border	
AaBbCcDdEe	ш	+ X	<ul> <li></li></ul>	LinearGradientFill Calibri; 14,25pt; Bold=
GroupCaption		1	Name TextAlign	Caption MiddleLeft
AaBbCcDdEe Header		+	⊞ TextFill	SolidFill
AaRhCcDdEe       Title       Description	Ŧ		<b>Border</b> Determines the bord	er defined by the style.
				OK Cancel

Use "Open" and "Save" buttons to open and save styles. A file has XML format and .rss filename extension. "Add Style" and "Remove Style" buttons add and remove styles.

Properties	Descriptions
Border	Element border
Font	Style of the element's text
Name	Style name
TextAlign	Alignment of the element's text
TextFill	Fill of the element's text

The following style properties are available:

Set required style name as a parameter of the StyleName property to apply this style to the element.

Example demonstrating use of StyleName property for TextBox and Shape elements.

Report Template	C	Created style		
• • • • •		Appearance		
		Border	Border	
o text oq o		Fill	LinearGradientFill	
0 0 0 0 0 0	Ŧ	Font	Calibri; 20,25pt; Bol	
		Name	New Style	
		TextAlign	MiddleCenter	
	Ŧ	TextFill	LinearGradientFill	
Property				
🗆 Appearance				
Fill [None]				
StyleName 🗸		text		
ToolTip				
	╧┼┣╸			
🗆 Appearance				
Fill     LinearGradientFill		A second		
StyleName New Style		text		

Note 1: When a style is applied to a container, it applies to all the contained objects. Appropriate properties of the objects receive the same values the style has (only if they have default value, i.e. not changed manually). The values different from the default are marked with the bold font.

Note 2: If the text that is output by the AdvancedText and its font is set in the Formatted text editor, Font property is ignored.

#### **TextAlign (Appearance)**

Property aligns text relatively to the object space.

TextBox element alignment example:

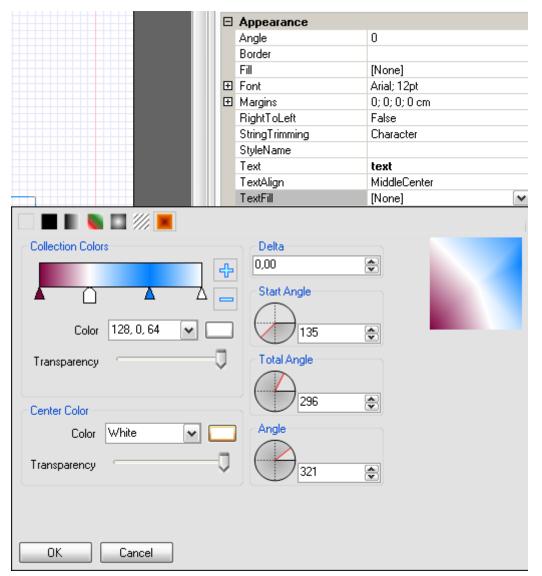
Property			Report
StyleName			text
Text	text		
TextAlign	TopLeft	~	
TextFill	[None]		
TextFormat			
ToolTip			
StyleName			
Text	text		text
TextAlign	MiddleCenter	<b>~</b>	
TextFill	[None]		
TextFormat			
ToolTip			
StyleName			
Text	text		toyt
TextAlign	BottomRight		text
TextFill	[None]		
TextFormat			
ToolTip			



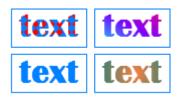
## TextFill (Appearance)

Property sets the text fill.

Fill editor helps to set the properties of the fill. Fill type, colors, transparency and additional parameters are available.



Examples demonstrating text fill for the TextBox element:



Note: If the text that is output by the AdvancedText and its font is set in the Formatted Text Editor, Font property is ignored.



### **TextFormat (Appearance)**

Property changes text in the set format: number, currency, date format, time format and percentage. Custom format can be created.

Setting text format in Format editor.

🤣 Format		×
Formats General	Sample	
Number Currency Date	Properties Format mask	
Time Percentage Custom	### ### ##0.00	-11
	g G +0 (000) 000-00-00	
	t T hh.mm	
	H.mm d D	
	f F	
	dd/MM/yy dd/MM/yyyy	
	OK Car	ncel

Example demonstrating text format applied to the TextBox element:

Ρ	roperty		Report
	StyleName		
	Text	34.5	£34.50
	TextAlign	MiddleCenter	
	TextFill	[None]	
	TextFormat	Currency	
	ToolTip		
	StyleName		47.5-1
	Text	02.17.2010	17 February 2010
	TextAlign	MiddleCenter	2010
	TextFill	[None]	
	TextFormat	Date	
	ToolTip		
	StyleName		
	Text	123456	123,456.00
	TextAlign	MiddleCenter	
	TextFill	[None]	
	TextFormat	Number 🛄	
	ToolTip		



# ToolTip (Appearance)

Property creates a hint that appears when the element if pointed at.

Examples demonstrating use of ToolTip for the Shape element.

Pr	operty	Report	
⊟	Appearance		
Ŧ	Fill	ConicalFill	
Ŧ	Line	💻 O Solid Black	
Ŧ	Shadow	Shadow	
Ŧ	ShapeStyle	StarShape	StarShape
	StyleName		
	ToolTip	StarShape 🛄	

### Tag (Data)

Property allows additional information of the object made by a user.

Tag usage example:

🗆 Data	
Tag	additional information

#### Name (Design)

Property sets the name of the object. Every object must have a unique name.

Setting name for BandContainer:

Pro	perties		•	<b>ņ</b>	×			
new	newName BandContainer							
	]2↓   💼 ▫²   📼							
۵	Appearance							
	StyleName	Nomal						
	ToolTip							
⊿	Data							
	Tag							
۵	Design							
	Name	newName						
	ShowCaption	True						

### ShowBottom (Design)

Property allows setting the bottom line of the band visible in Designer mode.

Example demonstrating use of ShowBottom property for DataBand property:

Property			Report	
🗆 Design	🗆 Design		dataBand2:DataBand -	
Name	dataBand2		00	
ShowBottom	True	<b>~</b>		
ShowCaption	True		0 0	
			end of dataBand2	
			0 0	
🗆 Design			dataBand2:DataBand	
Name	dataBand2		Ť T	
ShowBottom	False	<b>~</b>		
ShowCaption	True		0 0	
			0 0	



## ShowCaption (Design)

Property sets band header visibility in Designer mode.

Example demonstrating use of ShowCaption property for DataBand property:

Property			Report
🗆 Design	3 Design		dataBand2:DataBand -
Name	dataBand2		•
ShowBottom	True		
ShowCaption	True	~	0 0
			end of dataBand2
🗆 Design			° • • •
Name	dataBand2		
ShowBottom	False	~	o d
ShowCaption	True		
			end of dataBand2

### Location (Layout)

Property sets upper left corner of the object relatively to the container.

Element position can be changed with the mouse pointer or on the Property grid.

Example of the changing element position for Shape element:

Pr	operty		Report
	Layout		• • • •
	Location	0; 0 cm	
	Х	0 cm	
	Y	0 cm	
Ŧ	Size	2; 2 cm	
	Layout		
⊡	Location	1;1 cm	
	Х	1 cm	• • •
	Y	1 cm	
Ŧ	Size	2; 2 cm	
			• • •

Note 1: X coordinate equals 0 and cannot be changed.

Note 2: "Snap to Grid" option defines if the object "sticks" to the grid or not when its position is changed with the mouse pointer. Click the button on the Toolbar to turn on\off this option.





# Size (Layout)

Property sets object size.

Property changes when object borders are moved with the mouse pointer or from the Property grid.

Property Report 🗆 Layout 1;1 cm 🗉 Size 2; 2 cm Х 2 cm Y 2 cm 🗆 Layout 1;1 cm 🖃 Size 1; 1 cm Х 1 cm Y 1 cm

Example of changing the element size for the Shape element:

Note 1: X coordinate for band equals 0 and does not vary.

Note 2: "Snap to Grid" option defines if the object snaps to the grid when its position changes or not. Use the appropriate button to turn on off this option.

#### **CanBreak (Render)**

Property allows the object's contents to break between pages and columns in case the object exceeds page size.

Example of a CanBreak property of Detail and AdvancedText element.

Property		Report
🗆 Render		dolor sit amet, consectetuer
CanBreak	False	adipiscing elit, sed diam
CanGrow	True	nonummy nibh euismod tincidunt
CanShrink	False	ut laoreet dolore magna aliquam
GrowToBottom	False	erat volutpat. Ut wisi enim ad
Visible	True	
🗆 Render		dolor sit amet, consectetuer
CanBreak	True	adipiscing elit, sed diam
CanGrow	True	nonummy nibh euismod tincidunt
CanShrink	False	ut laoreet dolore magna aliquam
GrowToBottom	False	erat volutpat. Ut wisi enim ad
Visible	True	minim veniam, quis nostrud exerci tation ullamcorper suscipit
		lobortis nisl ut aliquip ex ea
		commodo consequat. Duis autem vel eum iriure dolor in

Note: when one sets a property CanBreak of the object that is located inside the other section, CanBreak property must be set for the container band in order for its content to break up into pages.



## **CanGrow (Render)**

Property allows increasing objects' height in case its contents do not fit size specified for the object in the template.

Example demonstrating use of CanGrow property of the TextBox element.

Report Template:



Property			Report
🗆 Render	Render		Education includes a DA in
CanGrow	False	~	Education includes a BA in
CanShrink	False		psychology from Colorado State Uni
GrowToBottom	False		
Visible	True		
Render	Render		Education includes a BA in
CanGrow	True	~	psychology from Colorado State
CanShrink	False		Úniversity in 1970. She also
GrowToBottom	False		completed The Art of the Cold Call.
Visible	True		Nancy is a member of Toastmasters International.

Note: when CanGrow property is set for an object contained in another band, the same property must be set for the container band in order for it to change its height depending on the height of the contained objects.



## **CanShrink (Render)**

Property allows decreasing objects' height in case the content inserted during the report generation has smaller size than that set for the container.

Example demonstrating use of "CanShrink" property of the TextBox element.

Report Template:

•	-	-0	-	-	
C	("E s.	Get Emp Em Nan	oloy plo	ee ye	>
0	-		<u> </u>	_	

Pr	operty			Report
Ξ	Render			
	CanGrow	False		
	CanShrink	False 🗸	•	
	GrowToBottom	False		Nancy
	Visible	True		Davolio
R	ender			
Ca	anGrow	False		Davolio
Ca	anShrink	True 💌		Barono
G	rowToBottom	False		
Vi	sible	True		

Note: when CanShrink property is set for an object contained in another band, the same property must be set for the container band in order for it to change its height depending on the height of the contained objects.



### MinSpaceAfter (Render)

The property sets minimal space between lower border of the band and lower field of the page.

Sample of using MinSpaceAfter for the Detail band displaying list.

data	aBand1:DataBand DataSource = E	n
deta	ail1:Detail	-
	<databand1< td=""><td></td></databand1<>	
	("EmployeeName")>	
end	d of dataBand1	

	Property		F	Report
	anShrink	False	ſ	
M	linSpaceAfter	0,75 cm	H	Nancy Davolio
N	ewColumnAfter	False		Andrew Fuller
				Anne Dodsworth
				Steven Buchana



## Mode (Render)

Property allows setting headlines and overlay generation and defines elements display on even, odd or all the pages.

Example demonstrating use of Mode property of the PageHeader:

page	Header1:PageHeader	
ľ	0	- Y
•	<pagenumber></pagenumber>	•
•		- 0

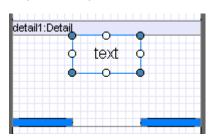
Ρι	Property			ort	
Ξ	Render				
	CanGrow	False	1	1	- 1
	CanShrink	False		·	- 1
	Mode	AllPages 💉			
	Visible	True		2	
				3	
Ξ	Render				
	CanGrow	False		1	- 1
	CanShrink	False			- 1
	Mode	OddPages 💌		·	
	Visible	True			- 1
				3	
Ξ	Render				
	CanGrow	False			
	CanShrink	False			
	Mode	EvenPages 🛛 💌			
	Visible	True		2	



## GrowToBottom (Render)

Property allows the object to stretch up to the bottom border of the band it is contained in.

Example demonstrating use of TextBox.GrowToBottom property



Property			Repor	t	
Render					
CanGrow	False			text	
CanShrink	False				
GrowToBottom	False	~			
Visible	True				
🗆 Render					
CanGrow	False				
CanShrink	False			tout	
GrowToBottom	True	~		text	
Visible	True				



# NewColumnAfter (Render)

Property sets if a new column is inserted after the band contents.

Example of adding a new column after the Detail contents:

dataBand3:DataBand	DataSource = Em
detail3:Detail	
<databand3< td=""><td></td></databand3<>	
("EmployeeNa	
me")>	
end of dataBand3	-

Property			Report	
Bender			Nancy Davolio	Steven
CanBreak	False		Andrew Fuller	Buchana
CanGrow	True		Anne	Laura Callahan
CanShrink	True		Dodsworth	Anne Yorke
MinSpaceAfter	0 cm			
NewColumnAfter	False	~		
NewColumnBefore	False			
Bender			Nancy Davolio	Andrew Fuller
CanBreak	False		l í	
CanGrow	True			
CanShrink	True			
MinSpaceAfter	0 cm		Anne	Steven
NewColumnAfter	True	~	Dodsworth	Buchana
NewColumnBefore	False			



# NewColumnBefore (Render)

Property sets if a new column is inserted before the band contents.

Example of adding a new column before the Detail contents (detail4):

dataBand3:DataBand_DataSource = En
detail4:Detail
<databand3("e< td=""></databand3("e<>
detail3:Detail
<databand3("h< td=""></databand3("h<>
end of dataBand3

Pr	operty			Report	
	Render		П	Nancy Davolio	(206) 555-9482
	CanBreak	True	н		
	CanGrow	True		(206)555-9857	Anne Dodsworth
	CanShrink	False	Н	Andrew Fuller	(71) 555-4444
	MinSpaceAfter	0 cm	Н		(,
	NewColumnAfter	False	Н	Steven	(71) 555-4444
	NewColumnBefore	False 💌	Н	Buchana	
			Н	(71) 555-4444	Anne Yorke
			н	Laura Callahan	(71) 555-4444
			Н	Eddi d Callanan	
Ξ	Render		T	Nancy Davolio	Andrew Fuller
	CanBreak	True	Н	-	
	CanGrow	True	Н	(206)555-9857	(206) 555-9482
	CanShrink	False	Н		
	MinSpaceAfter	0 cm	Н		
	NewColumnAfter	False		Anne	Steven
	NewColumnBefore	True 💌	Н	Dodsworth	Buchana
				(71) 555-4444	(71) 555-4444



# NewPageAfter (Render)

Property sets if a new page is inserted after the band contents.

Example of adding a new page after the Detail contents:

dataBand3:DataBand_DataSource = I	Ēn
detail3:Detail	
<databand3("employeena< td=""><td></td></databand3("employeena<>	
end of dataBand3	

operty			Report	
MinSpaceAfter	0 cm		Nancy Davolio	
NewColumnAfter	False		· ·	
NewColumnBefore	False		Andrew Fuller	
NewPageAfter	False	<b>v</b>		
NewPageBefore	False		Anne Dodsworth	
Visible	True		Anne Dodsworth	
			Steven Buchana	
Mic Caraca A Bas	0			
MinSpaceAfter	0 cm		Nancy Davolio	
NewColumnAfter	False			
NewColumnAfter	False	~		
NewColumnAfter NewColumnBefore	False False	~		



# NewPageBefore (Render)

Property sets if a new page is inserted before the section contents.

Example of adding a new page before the Detail contents (detail3):

dataBand3:DataBand Dat	aSource = En
detail4:Detail	
<databand3("employee< td=""><td>eName")&gt;</td></databand3("employee<>	eName")>
detail3:Detail	
<databand3("homepl< td=""><td>hone")&gt;</td></databand3("homepl<>	hone")>
end of dataBand3	

Property			Report
MinSpaceAfter	0 cm		Nancy Davolio
NewColumnAfter	False		(206)555-9857
NewColumnBefore	False		
NewPageAfter	False		Andrew Fuller
NewPageBefore	False	~	(206) 555-9482
Visible	True		Anne Dodsworth
			(71) 555-4444
MinSpaceAfter	0 cm		Nancy Davolio
NewColumnAfter	False		
NewColumnBefore	False		
NewPageAfter	False		
NewPageBefore	True	~	(206)555-9857
Visible	True		Andrew Fuller
			(206) 555-9482 Anne Dodsworth

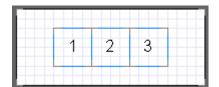


## Visible (Render)

Property sets visibility of the object in the report.

Example of visibility property of Textbox element with "2" digit:

Report Template:



Pr	Property			port			
Ξ	Render						
	CanGrow	False			-	-	
	CanShrink	False		1	2	3	
	GrowToBottom	False					
	Visible	True 💌					
Ξ	Render						
	CanGrow	False			]	_	
	CanShrink	False		1		3	
	GrowToBottom	False			]		
	Visible	False 💌					

Note: if a container section is invisible, all the containing objects are not displayed also.



## **Text Output**

The following elements are used in Report Sharp-Shooter for text input:

Elements	Descriptions
TextBox	Element allows input of simple text information and has text
	displaying adjustments.
AdvancedText	Element outputs formatted text
RichText	Element to output RTF text

#### **Static Text**

Text property is used for text input that is output in the TextBox element. This property is defined in <u>Text Editor</u>. Double-click on TextBox or press the button of the Text property on the Property grid to open the editor. One can also type the text straight into the Text cell.

Ξ	Appearance			
	Angle	0		
	Border			
	Fill	[None]		
Ŧ	Font	Arial; 12pt		
Ŧ	Margins	0; 0; 0; 0 cm		
	RightToLeft	False		
	StringTrimming	Character		
	StyleName			
	Text	text		
	TextAlign	MiddleCenter		
	TextFill	[None]		
	TextFormat			
	ToolTip			

#### **Text from the Data Source**

Set the Value property of the TextBox element that gets the value of the selected field in order to input text from the data source. One can use GetData function or use DataBand indexer.

(More information about lists building)

#### **Border, Text in Cells**

<u>Border property</u> is used for defining element borders. One can input information as a table, e.g.:

Caption				
um	Cell#1	Cell#2		
0 0	Ce	11#3		



### **Text Output LTR**

Text output direction can be changed for the text output in TextBox and AdvancedText elements. Set RightToLeft property to True to do it.

## Text property = "7 8 9 10 11"

Property			Report
RightToLeft	False	~	
StringTrimming	Character		7891011
StyleName			
Text	7891011		
RightToLeft	True	~	
StringTrimming	Character		11 10 9 8 7
StyleName			
Text	7891011		

### **Text Cutting**

One can set text cutting settings using the StringTrimming property in case output text does not fit the element area.

Property		Report			
Text is cut after the last visible symbol:					
RightToLeft	False	one two t			
StringTrimming	Character 💌				
StyleName					
Text	one two three				
Text is cut after the l	ast visible word:				
RightToLeft	False	one two			
StringTrimming	Word 💌				
StyleName					
Text	one two three				
Text is cut after the l	ast visible symbol and the	ellipsis is added:			
RightToLeft	False	one tw			
StringTrimming	EllipsisCharacter 🛛 💌				
StyleName					
Text	one two three				
Text is cut after the l	ast visible word and the el	lipsis is added:			
RightToLeft	False	one			
StringTrimming	EllipsisWord 💌	0110			
StyleName					
Text	one two three				
The text beginning and the ending is displayed, ellipsis is inserted in between:					
RightToLeft	False	onree			
StringTrimming	EllipsisWord 💌				
StyleName					
Text	one two three				



ClipText property defines how to handle text lines that don't entirely fit into TextBox element area.

Ρι	roperty		Report
	Border	Border	
	ClipText	False 💌	
	Fill	[None]	
Ŧ	Font	Calibri; 39,75pt; Bold=Off; It	
	Border	Border	ΤΡΥΤ
	ClipText	True 💌	
	Fill	[None]	
+	Font	Calibri; 39,75pt; Bold=Off; It	

#### **Managing Text Element Size**

<u>Size property</u> defines the size of an element. There is a feature to change element size right during the generation process. It is useful when element content is not available while the template is being created or the content can vary during report generation. <u>CanShrink</u> and <u>CanGrow</u> properties allow the element to grow (or does not allow, depending on the value) according to the contents. <u>GrowToBottom property</u> defines element size increase up to the bottom border of the containing element.

#### **Text Style**

There is a wide choice of instruments for report creation. <u>Fill property</u> defines the background color. <u>Font property</u> forms text features such as font type, text styles (normal, bold, italic, underlined and strikethrough). Text's align and position inside the element are defined with <u>TextAlign property</u>. One can set style and text background color using <u>TextFill</u> <u>property</u>.

Also there is an opportunity to apply one style to several elements. <u>Style Sheet Editor</u> is used as a style editor <u>StyleName</u> applies style to an element.



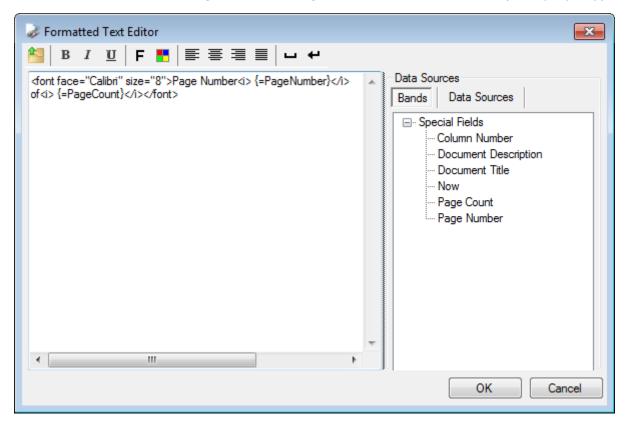
### Text Format

<u>TextFormat property</u> can be used to display text in a special format. There are several text formats available in Format editor: general, number, currency, date and time, percentage. User format is also available.

#### **Formatted Text**

AdvancedText component allows you to input information as a formatted text. There is an option of paragraph and text styles setting and statement using right in the marked text. Formatted text can be specified through HTML-like markup language (Text property) and RTF format subset (RTF property).

Text can be formatted through HTML-like tags in Formatted Text Editor (Text property)



### **Paragraph Formatting**

The couple of tags <P> and </P> forms selected text as a separate paragraph.

Align attribute specifies horizontal alignment of the text in a paragraph. Available values:

align = "left" - alignment to the left margin of the paragraph

align = "right" - alignment to the right margin of the paragraph

align = "center" - center text

align = "justify" - align text to both left and right margins

Default value of alignment is "left". Select edited text and use "Left Align", "Center Align", "Right Align" and "Justify" buttons on the toolbox to set the alignment.

#### **Text Formatting**

<Font> tag sets the output style of the following text and the closing tag </font> cancels previous settings. <font> tags enclosure is available. Text style is specified through the following attributes:

face - sets font name,



size – sets font size.

Press "Font" button to open style editor for quick style definition.

color – sets font color.

Available values: color name (e.g. color="red"), hexadecimal format of separate color components in RGB (e.g. color="#FF0000"). Press "Color" button to open ColorPicker for quick color choice.

Tag  $\langle B \rangle$  - the following text will be of a bold type. Closing tag  $\langle B \rangle$  cancels this setting. ("Bold" button).

Tag <I> - the following text will be of an italic type. Closing tag </I> cancels this setting. ("Italic" button)

Tag <U> - the following text will be underlined. Closing tag </U> cancels this setting. ("Underline" button)

Tag <BR> - lines folding in a paragraph. ("Insert line break" button).

#### Symbol Insert

" " - space ("Insert space" button),

"&" -`&' symbol,

"<" - `<' symbol,

"&#ddd;" - symbol with ddd code.

Note: If the text is not marked as a paragraph, alignment settings according to the TextAlign property are applied. If there are no evident font settings, the settings according to Font property are applied. If text color is not specified, TextFill property is applied. The following is ignored during the text handling: line breaks, several spaces, in succession and unknown tags and attributes. Case in tag names doesn't matter.

#### **Using Expressions**

One can use statements (the result of those will be inserted in the text) directly in the marked text. It is possible to use expressions which calculation result will be set into the text can be used directly inside marked up text. The expression specifies as {=<Statement>}. {=<Statement>} - expression on the set script language. All the available types and objects can be used in the expression. Formatting according to the mask specified in the Format property is applied to the expression result before it is inserted in the text. In case an error occurs, error message is inserted in the text as an expression result.

DataSources section adds special properties to the documents and Data Source fields.

#### **Using RTF Property**

RTF format subset is used for text formatting. The following constructions from the RTF format are used: font table, color table, comments, paragraph format operators ("\par", "\pard", "\ql", "\ql", "\ql", "\ql", "\line"), text format operators ("\fxx", "\fsxx", "\cfxx", "\b", "\i", "\u"). All the rest constructions and operators will be ignored. Rtf property is designed to write only. Rtf property is connected to the Text property: when Rtf property is specified, Text property value specifies automatically.

Press "Open RTF document" button to load text from the RTF file.

#### **Breaking Text between Pages**

AdvancedText element allows to output text from one element to one or more pages. <u>CanBreak property</u> is used for it.



## **RTF Text**

RichText element is used for RTF-text output. Text loads from file through <u>RichText Editor</u>.



## List

### Simple List

DataBand is used for lists building. The band repeatedly outputs elements embedded into it. Visual elements output as a list must be contained in the Detail inside DataBand. Detail sets row height. InstanceCount property sets the amount of repetitions.

Data		
DataSource		
FilterExpression		
InstanceCount	5	
Sort	(Collection)	
Tag		
Totals	(Collection)	
	FilterExpression InstanceCount Sort Tag	

<DataBand name>.LineNumber() statement is used for getting line number.

Example of a list that outputs line number in the list:

dataBand1.InstanceCount = 5;

textBox.Value = "line number = " + dataBand1.LineNumber().ToString() + " of " + dataBand1.InstanceCount.ToString();

Report Template	Report		
dataBand1:DataBand		line number: 1 of 5	
detail1:Detail		line number: 2 of 5	
<"line number: " + dataBa		line number: 3 of 5	
end of dataBand1		line number: 4 of 5	
		line number: 5 of 5	
dataBand1:DataBand		line number: 1 of 5	
detail1:Detail <"line number: " + dataBa		line number: 2 of 5	
end of dataBand1		line number: 3 of 5	

### List from the Data Source

DataBand allows building a list based on the data from the source. Data source is set in DataSource property. Note: the number of output lines depends on the amount of lines in the data source, ignoring InstanceCount property.

Ξ	Data	
	DataSource	Employees 💌
	FilterExpression	
	InstanceCount	0
	Sort	(Collection)
	Tag	
	Totals	(Collection)

In order to get access to the current element that has to be output, either GetData("<Data source name>.<Field name>") or <DataBand name>["<Field name>"] script is used. Textual information can be output by dragging the corresponding field from the document tree on the <u>Data Sources</u> tab into Detail (located in DataBand).

Example of a list that outputs employees' names:



dataBand.DataSource = Employees;

textBox.Value = dataBand["EmployeeName"];

Report Template	Report
dataBand:DataBand_DataSource = Emp	Nancy Davolio
detail:Detail	Andrew Fuller
<databand["employeena< td=""><td>Anne Dodsworth</td></databand["employeena<>	Anne Dodsworth
end of dataBand	Steven Buchana
	Laura Callahan

### List in Columns

To save report space and make report more visual, there is an option to output the list as a set number of columns. The number is set in the ColumnsCount property of the DataBand. One can also set the indent between the columns in the list, ColumnsGap property serves for it.

Example of the employee list:

dataBand.DataSource = Employees;

textBox.Value = dataBand["EmployeeName"];

Rep	ort Templat	te:
dataB	3and:DataBand	DataSource = Emp
detai	l:Detail	
	≺dataBand["	
end o	of dataBand	

Pre	operty		R	leport		
ColumnsGap Location		0 0 cm 0; 0 cm 5; 2 cm		Nancy Davolio Andrew Fuller Anne Dodsworth		
				Steven Buchana Laura Callahan Anne Yorke		
ŧ	<b>Layout</b> ColumnsCount ColumnsGap Location Size	2 0 cm 0; 0 cm 6; 1.6 cm		Nancy Davolio Andrew Fuller Anne Dodsworth	Steven Buchana Laura Callahan Anne Yorke	
 	<b>Layout</b> ColumnsCount ColumnsGap Location Size	2 0,25 cm 0; 0 cm 5; 1,5 cm		Nancy Davolio Andrew Fuller Anne Dodsworth	Steven Buchana Laura Callahan Anne Yorke	



#### List Header

Headers are used for data output once in the beginning of a list, page or column. Header is used for this purpose and it must be located inside DataBand. RepeatEveryColumn and RepeatEveryPage properties serve for the heading repetition mode.

Example of the list heading usage:

dataBand3.DataSource = Employees; textBox1.Text = "Name"; textBox2.Value =
dataBand3("EmployeeName");

Report Template:

dataBand:DataBand	DataSource = Emp
header5:Header	
Name	
detail:Detail	
<databand("e< td=""><td></td></databand("e<>	
end of dataBand	

Property			Report	
Property         NewColumnBefore         NewPageAfter         NewPageBefore         RepeatE veryColumn         RepeatE veryPage         Visible         NewColumnBefore         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         RepeatE veryColumn         RepeatE veryPage         Visible         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         NewPageAfter         NewPageBefore         RepeatE veryColumn         RepeatE veryColumn         RepeatE veryPage         Visible	False         False		Name         Nancy Davolio         Andrew Fuller         Anne         Dodsworth         Name         Nancy Davolio         Andrew Fuller         Anne         Dodsworth	Steven Buchana Laura Callahan Anne Yorke Name Steven Buchana Laura Callahan Anne Yorke
NewPageAfter NewPageBefore RepeatEveryColumn RepeatEveryPage Visible	False False False <b>True</b> True	~	Name Nancy Davolio Andrew Fuller Anne Dodsworth	
			Steven Buchana Laura Callahan Anne Yorke	



### **List Sorting**

DataBand outputs entries in the same order they are saved in the data source. Sort property of DataBand sets the special output order. <u>Collection Editor</u> is used for the property definition. Expression property is used for setting the expression of the sorting (the script must be used as an expression); Order property defines the order of the sorting (ascending or descending).

Scollection Editor			- • ×
Members		Properties	
dataBand1["BirthDate"]	<b>∔</b> ★	Misc Expression Order	dataBand1["Birth Ascending
		Expression Defines an object sorting is perform OK	

Example of a list that outputs names and birthdates of the employees according to the sorting condition:

Report Template:

dataBa	and:Dat	aBand	DataSo	urce = Emp					
detail:Detail									
<databand["em <databand["<="" td=""></databand["em>									
end of	dataBa	and							

dataBand.DataSource = Employees;

textBoxName.Value = dataBand["EmployeeName"];

textBoxDate.Value = dataBand["BirthDate"];

Sorting conditions	Report
None	Nancy Davolio 11.11.1976
	Andrew Fuller 25.02.1969
	Anne Dodswort 30.06.1981
	Steven Buchan 15.12.1984
	Laura Callahan 28.09.1987
	Andrew Fuller 25.02.1969
Expression dataBand["EmployeeName"]	Anne Dodswort 30.06.1981
Order Ascending	Anne Yorke 03.05.1969
	Laura Callahan 28.09.1987
	Nancy Davolio 11.11.1976
	Laura Callahan 28.09.1987
Expression dataBand["BirthDate"]	Steven Buchan 15.12.1984
Order Descending	Anne Dodswort 30.06.1981
	Nancy Davolio 11.11.1976
	Anne Yorke 03.05.1969

#### **List Filtering**

In case it is necessary to display the information that fulfills some conditions, one can use FilterExpression property of the DataBand. The condition is to be specified in the Script Editor.

Example of the list that displays employees' names according to the sex

Report Template:
dataBand:DataBand_DataSource = Em
detail:Detail
<databand["employeena< td=""></databand["employeena<>
end of dataBand

dataBand.DataSource = Employees;

textBoxName.Value = dataBand["EmployeeName"];

Property	Report
<pre>dataBand.FilterExpression = dataBand1["Sex"].ToString() == "f"</pre>	Nancy Davolio Anne Dodsworth Laura Callahan Anne Yorke
<pre>dataBand.FilterExpression = dataBand1["Sex"].ToString() == "m"</pre>	Andrew Fuller Steven Buchana



### **Final List Values**

One can use aggregated lists when it is necessary to count the totals of the list. The list of the aggregate functions for the data output in the DataBand can be specified in the Totals property with the help of <u>Collection Editor</u>.

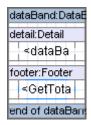
🥪 Collection Editor		
Members		Properties
Sum	+	<mark>₽</mark>
		⊿ Misc
	X	AggregateFunc Sum
	1	Expression dataBand1.DataIte
		Name Sum
	4	
		Name
		Name is total
	1	
		OK Cancel

AggregateFunction property specifies the aggregated function. The aggregated expression is set by the Expression property. The name of the function is to be specified in the Name property. GetTotal("<aggregate name>") script is used for calling the function and getting the sum; GetRunningTotal("<aggregate name>") is used in order to get current cumulative value. One can get arrogated data before the output of the aggregated values. GetTotal result does not depend on the location of the caller element: before or after. It is recommended to output GetRunningTotal value in the Detail; calling from the Header is useless because there are no accumulated values; GetRunningTotal value called from the Footer will coincide with GetTotal value.

Report generator supports 12 built-in aggregate functions.

Example of the aggregate functions operating:

Report Template:



dataBand.DataSource = Numbers; textBox1.Value = dataBand["Value"]; textBox.Value =
GetTotal("Func");

Property		Report
otal:		
3 Misc		1
AggregateFunction	Sum	13
Expression	dataBand["Value"]	
Name	Func	77
		91
Arithmetic mear		
∃ Misc	•	1
AggregateFunction		13
Expression	dataBand["Value"] -	77
Name	Func	30,33333
<u>Ainimal element</u>		4
∃ Misc		1
AggregateFunction		13
Expression	dataBand["Value"]	77
Name	Func	
Aaximal elemen	t:	
		1
AggregateFunction	Max 💌	
Expression	dataBand["Value"]	13
Name	Func	77
- Nume	Tune .	77
lomonto omour		
Elements amour	11:	
	Count	1
AggregateFunction		13
Expression	dataBand["Value"]	77
Name	Func	3
Standard Deviat	ion:	
3 Misc		1
AggregateFunction	Standard Deviatio 💌	13
Expression	dataBand["Value"]	
Name	Func	77
		33,35998
	idard Deviation:	<b></b>
B Misc		1
	E	
	Fermate of Standa Me	40
AggregateFunction		13
AggregateFunction Expression	dataBand["Value"]	77
AggregateFunction		77
AggregateFunction Expression Name	dataBand["Value"]	
AggregateFunction Expression Name /ariance:	dataBand["Value"]	77
AggregateFunction Expression Name /ariance:	dataBand["Value"] Func	77
AggregateFunction Expression Name /ariance: J Misc AggregateFunction	dataBand["Value"] Func Variance	77 40,85747
AggregateFunction Expression Name /ariance: Misc AggregateFunction Expression	dataBand["Value"] Func Variance dataBand["Value"]	77 40,85747 1 13
AggregateFunction Expression Name /ariance: J Misc AggregateFunction	dataBand["Value"] Func Variance	77 40,85747 1

Estimate of variance:

Expression Name	Estimate of varian 💌 dataBand["Value"] Func	1 13 77 1669,333
Median: AggregateFunction Expression Name	Median 💌 dataBand["Value"] Func	1 13 77 13
Skewness :		
AggregateFunction Expression	Skewness v dataBand["Value"] Func	13 77 0,639105
Kurtosis:		
Misc     AggregateFunction     Expression     Name	Kurtosis 💌 dataBand["Value"] Func	1 13 77 -1,5

#### **Entries Amount on the Page**

Total property of the DataBand can be used in order to count the entries located on the page. One can define count function in the <u>Collection Editor</u> in the following way:

🥪 Collection Editor							×
Members		Proper	ties				
Count		Den Az					
	7	⊿ M	isc				
	21		ggregate		Sum		-
. 1	•	Ð	pressior	1	1		
	- 1	N	ame		Count		
	-						
	ſ	Aggre	egateFi	unct	ion		
			_			expressior	ı.
				ОК		Cano	el

PageFooter including Textbox element is used in order to output entries amount. Text property is set in PageFooter.GenerateScript:

if (Engine.IsDoublePass) { textBoxFooter.Text = "Records " + dataBand5.GetPageTotal("Count") + " of " + dataBand5.GetTotal("Count"); }

One should set DoublePass property of the document to True in order to calculate entries.

Report Template	Report
dataBand5:DataBand DataSource = En detail6:Detail <databand5["employeenam end of dataBand5 pageFooter1:PageFooter</databand5["employeenam 	Nancy Davolio Andrew Fuller Anne Dodsworth Steven Buchana Records 4 of 6 Laura Callahan Anne Yorke Records 2 of 6



## Grouping

Data grouping according to the conditions can be used for a logic division of the lines with data and better information visualization. GroupBand is used for this. Grouping criterion is set by the GroupExpression property that is set in the Script Editor in turn.

#### **Group Headers**

Put Header into GroupBand to display group header. Use Group expression to display grouping value.

Example of an employee list grouped by the first letter of a name

Report Template:

dataBand:DataBand_DataSource = Emp
groupBand:GroupBand_Group = dataB
header:Header
<group></group>
detail7:Detail
<databand["employeena< td=""></databand["employeena<>
end of groupBand
end of dataBand

dataBand.DataSource = Employees; groupBand1.GroupExpression = dataBand6["EmployeeName"].ToString().Substring(0,1); textBoxHeader.Value = Group; textBoxDetail.Value = dataBand["EmployeeName"]

Report:

N	Noncy Doublin
A	Nancy Davolio
	Andrew Fuller Anne Dodsworth Anne Yorke
<u>s</u>	
_	Steven Buchana
	Laura Callahan



### Sorting in Groups

GroupBand outputs the entries into the report in the same order they are saved in the data source. Order property of the GroupBand sets the output order. There are 3 values of this property available: KeepOriginal – initial entries order, Ascending – the ascending sort of the entries, Descending - the descending sort of the entries.

Ξ	Data		
	GroupExpression	dataBand["EmployeeNan	ne
	Order	Ascending	~
	SortExpression		
	Tag		

SortExpression property sets sorting criterion.

Example of an ordered employee list grouped by the first letter of the name:

dataBand.DataSource = Employees; groupBand.GroupExpression =
dataBand["EmployeeName"].ToString().Substring(0,1); groupBand.Order = Ascending;
textBoxHeader.Value = Group; textBoxDetail.Value = dataBand["EmployeeName"]

Report Template	Report
dataBand:DataBand_DataSource = Emp groupBand:GroupBand_Group = dataBa header:Header <u><group></group></u> detail7:Detail <databand["employeena end of groupBand end of dataBand</databand["employeena 	A Andrew Fuller Anne Dodsworth Anne Yorke L Laura Callahan <u>N</u> Nancy Davolio
	<u>S</u> Steven Buchana



### **Cascading Grouping**

There is an option of creating a report with a complex structure of grouping. Several GroupBands nested into each other bands are used for this.

Example of an employee list grouped by countries first and then by cities:

dataBand.DataSource = Employees; groupBandCounty.GroupExpression = dataBand["Country"]; groupBandCity.GroupExpression = dataBand["City"]; textBoxDetail.Value = dataBand["EmployeeName"].

Report Template	Report
dataBand:DataBand_DataSource = Employees	
groupBandCounty:GroupBand Group = dataBand["Country"]	<u>Italy</u>
header1:Header	<u>Rome</u>
< <u> Group&gt;</u>	Nancy Davolio
groupBandCity:GroupBand Group = dataBand["City"]	<u>Milan</u>
header2:Header	Anne Dodswort
<group></group>	<u>France</u>
detail8:Detail	<u>Paris</u>
<databand["em< td=""><td>Andrew Fuller</td></databand["em<>	Andrew Fuller
end of groupBandCity	
end of groupBandCounty	
end of dataBand	England
	London
	Steven Buchan
	Liverpool
	Laura Callahan
	Anne Yorke



### **Group Totals**

One should call GetTotal inside a group to get total value result of a group. Calling GetRunningTotal inside a group gets accumulated result in the group.

Example of a grouped numbers list, every group's sum is counted down first, at the end the total result of all the groups.

dataBand1.DataSource = Numbers;

Aggregate function: AggregateFunction = Sum; Expression = dataBand1 ["Value"]; Name = SUM;

groupBand4.GroupExpression = dataBand1["Type"]; textBoxDetail.Value = dataBand1["Value"]; textBoxFooter.Value = GetTotal("SUM");

Report Template	Report
dataBand1:DataBand DataSour groupBand4:GroupBand Group detail9:Detail <data footer2:Footer group sum <get end of groupBand4 footer3:Footer total sum <get end of dataBand1</get </get </data 	1 13 12 group sum 26 -34 -56 108 group sum <u>18</u> total sum 44



# Horizontal List and Table

#### **Horizontal List**

CrossBand is used for horizontal lists building. Band repeatedly outputs included elements LTR. CrossBand must be located in Detail, Header or Footers that define CrossBand location in a report. Repetition amount is defined by the InstanceCount property.

Ξ	Data	
	DataSource	
	InstanceCount	5
	Tag	

<CrossBand name>. LineNumber() statement is used in order to get entry number. If all the entries output by CrossBand don't fit into one line, the list continues from a new page.

Example of a horizontal list that outputs an entry number:

crossBand1.InstanceCount = 4; textBox.Value = crossBand1.LineNumber().ToString + " of " + crossBand1.InstanceCount().ToString;

Report Template	Report
det( <mark>CrossBaild)</mark> <cros< th=""><th>1 of 4 2 of 4 3 of 4 4 of 4</th></cros<>	1 of 4 2 of 4 3 of 4 4 of 4
de <mark>CrossBarible Cos</mark> < cros	1 of 4 2 of 4 3 of 4
	4 of 4

#### Horizontal List from the Data Source

CrossBand allows building a horizontal list based on the data from the data source. Data source is set in the DataSource property; amount of output entries depends on a number of entries in a source and InstanceCount property is ignored.

Ξ	Data		
	DataSource	Numbers	×
	InstanceCount	0	
	Tag		

GetData("<Data source name>.<Field name>") script is used in order to get access to the current element that is to be output.

Example of a horizontal list that outputs a row of numbers:

crossBand1.DataSource = Numbers; textBox.Value = GetData("Numbers.Value")

Report Template	Report
di <mark>CrossBaniti S</mark> <get< th=""><th>1 -34 13 12 -56</th></get<>	1 -34 13 12 -56



### Table

Using CrossBand included into DataBand one can output data as a table.

Example of a calendar output:

dataBand.InstanceCount = 5; crossBand. InstanceCount = 7; textBox.Value =
(crossBand.LineNumber + ((dataBand.LineNumber - 1) \*
7))>31?"":(crossBand.LineNumber + ((dataBand.LineNumber - 1) \* 7)).ToString();

Report Template		Repo	rt					
dataBand:DataBand				Ma	rch, 2	010		
header:Header		Sun	Mon	Tue	Wed	Thu	Fri	Sat
March, 2010	Н	1	2	3	4	5	6	7
Sun Mon Tue Wed Thu Fri Sat	Н	8	9	10	11	12	13	14
de <mark>Crossee</mark> nhd	Н	15	16	17	18	19	20	21
ទ្ <del>ន</del> <(cr	Н	22	23	24	25	26	27	28
end of dataBand 칭	Н	29	30	31				
	Ш							

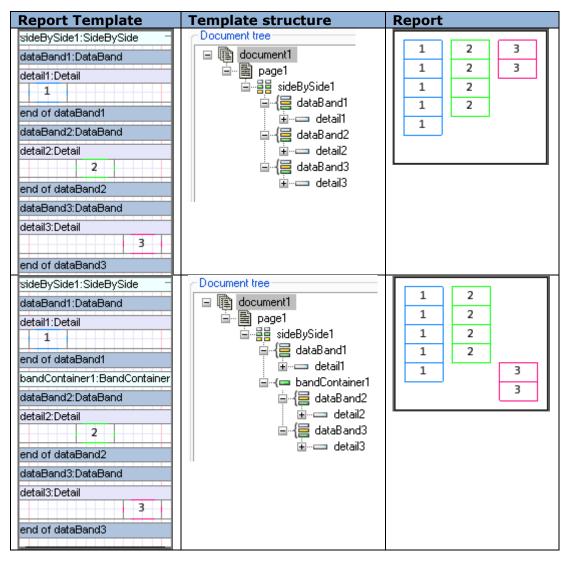


## SideBySide Bands

The SideBySide band is used for horizontal SideBySide output of the elements from different bands. All the elements, located into it, are output from the beginning of this band. The BandContainer element is used for merging several sections together.

Example of SideBySide output from the different bands:

dataBand1.InstanceCount = 5; dataBand2.InstanceCount = 4; dataBand3.InstanceCount =
2;





## **Pivot Table**

Pivot tables are used for structured data output and calculation of the total values. The PivotTable is used for the creation of pivot tables. The DataSource property sets the data source for the pivot table.

Ξ	Data	
	DataSource	Sales 💌
	Layout	
	NestedFields	(Collection)
	Tag	

The Layout property sets the rows and columns values of the result table. The property can be edited in <u>Sources Fields</u>.

📴 Source Fields							23
Data source	DataCube fields					] <b>2</b> ↓ 📼	
Sales 💌	Inactive fields	+	X dimension fields —	<b>+</b> [	⊿	Appearance	
Source Fields		x		x			Quantity
CompanyName						Format	5.1
CategoryName		Ť		1		ShowPercent ShowTotal	True
ProductName		$\mathbf{+}$		<b>†</b>		Snow Total SortOrder	Ascending
						TotalLabel	Ascending
UnitPrice						Width	100
Quantity					⊿	Data	
Discount						Aggregate	Sum
						DisplayExpres:	
			J			Expression	GetData("Sales.Qu
	Y dimension fields	+	Facts fields	╋║			
	Category	х	Quantity	x			
	Product	1		1			
		-					
		$\mathbf{+}$		†			
				lī	Ao	gregate	
							ect which creates an
					agg	pregate function	
	()						
						OK	Cancel

The list of fields from data source is displayed on the left of the Source fields' area. The DataCube fields section is intended for data assignment in the pivot table. The fields of the table horizontal headline are set in X dimension fields list. The fields of the table vertical headline are set in Y dimension fields list. The Facts fields list includes fields for the cells with data. Property Grid is located to the left. It is used to set cells properties.

Ξ	Appearance	
	Caption	ProductName
	Format	
	ShowPercent	False
	SortOrder	Ascending
	TotalLabel	
	Width	100
Ξ	Data	
	Aggregate	Sum
	DisplayExpressi	
	Expression	GetData("Sales.Pro

## **Table Titles**

The TableCaption property sets the table caption.

Pr	operty		Report				
	StyleName	New Style					
Ŧ	Styles				Con	npany	
	TableCaption		Category	Product	Futterkiste	Karkki Oy	Total
	ToolTip		_	Chai	452.63		452.63
			Bayaragas	lpoh Coffee		909.00	909.00
			Beverages	Stout	420.00		420.00
	StyleName	New Style				Sales	
Ŧ	Styles				Comp	any	
	TableCaption	Sales	Category	Product	Futterkiste	Karkki Oy	Total
	ToolTip			Chai	452.625		452.625
			Bouerages	Ipoh Coffee		909	909
			Beverages	Stout	420		420

The captions of the table rows and columns can be set in the Layout property editor of the PivotTable. The Caption property is used for this purpose. The TotalLabel sets the title for the column and row with total values. If this property is not set the total values are identified as Total.

Property		Report			
Appearance					
Caption	CompanyName		Compan	yName	
Format		Product	Futterkiste	Karkki Ov	Total
ShowPercent	False				
SortOrder	Ascending	Chai	452.63		452.63
TotalLabel		Ipoh Coffee		909.00	909.00
Width	100	Stout	420.00		420.00
		Total	872.63	909.00	1781.63
Appearance					
Caption	Company		Comp	any	
Format		Product	Futterkiste	Karkki Ov	Sum
ShowPercent	False				
SortOrder	Ascending	Chai	452.63		452.63
TotalLabel	Sum	Ipoh Coffee		909.00	909.00
Width	Width 100		420.00		420.00
		Total	872.63	909.00	1781.63

The DimensionOnEveryPage property of the PivotTable sets the output of pivot table header on each page.

Property		Report					
Appearance					Sales		
AutoColumnWidth	True			Company			
AutoRowHeight	None	Category	Product	Futterkiste	Karkki Oy	Total	
DimensionOnEveryPage	False		Chai	452.63		452.63	
RowHeight	70	Beverages	Ipoh Coffee		909.00	909.00	
			·				
		Beverages	Stout	420.00		420.00	
			Total	872.63	909.00	1781.63	
			Courdavault	890.63		890.63	
		Dairy Products	Total	890.63		890.63	
		Tota	al	1763.25	909.00	2672.25	
Appearance					Sales		
AutoColumnWidth	True				Company		
AutoRowHeight	None	Category	Product	Futterkiste	Karkki Oy	Total	
DimensionOnEveryPage	True	_	Chai	452.63		452.63	
RowHeight	70	Beverages	Ipoh Coffee		909.00	909.00	
				1			
					Sales		
				Comp	bany		
		Category	Product	Futterkiste	Karkki Oy	Total	
		Beverages	Stout	420.00		420.00	
		Develages	Total	872.63	909.00	1781.63	

It is possible to set the display of fact column title using the ShowSingleFact property.

roperty			Report			
Shift	0 cm				Sales	;
ShowRepeatText	True				Company	
ShowSingleFact	False	▼				<b>T</b> . 1
ShowTableCaption	True		Category	Product	Futterkiste	Total
		1		Chai	452.63	452.63
			Beverages	Stout	420.00	420.00
Shift	0 cm				Sales	;
ShowRepeatText	True				Company	
ShowSingleFact	True	<b>~</b>			Futterkiste	Total
ShowTableCaption	True					
			Category	Product	Price	Price
				Chai	452.63	452.63
			Beverages	Stout	420.00	420.00

It is possible to set the repetition of the text on the next page if the string doesn't fit the current page. To do this you should use the ShowRepeatText property.

Ρι	r <b>operty</b>		Report		
	RowHeight	30		Courdavault	890.63
	Shift	0 cm	Dairy Products	Flotemysost	2256.00
	ShowRepeatText	True 💌		Geitost	154.84
	ShowSingleFact	False		Gentost	134.04
			Dairy Products	Total	3301.47
	RowHeight	30		Courdavault	890.63
	Shift	0 cm	Dairy Products	Flotemysost	2256.00
	ShowRepeatText	False 💌		Geitost	154.84
	ShowSingleFact	False		Gentost	104.04
				Total	3301.47

#### **Data Format**

It is possible to define the format of the output data using the Format property of the Source Field editor.

Pr	operty		Report		-	
Ξ	Appearance		452.625		452.625	
	Caption	Price		909	909	
	Format		420		420	1
	ShowPercent	False	872.625	909	1781.625	-
	SortOrder	Ascending	890.625	505	890.625	-
						_
			890.625		890.625	
			1763.25	909	2672.25	
Ξ	Appearance		452.63		452.63	
	Caption	Price		909.00	909.00	
	Format	0.00	420.00		420.00	
	ShowPercent SortOrder	False Ascending	872.63	909.00	1781.63	
			890.63		890.63	
			890.63		890.63	
			1763.25	909.00	2672.25	
Ξ	Appearance		16.94%		16.94%	1
	Caption	Price		34.02%	34.02%	1
	Format	0.00	15.72%		15.72%	1
	ShowPercent	True 💌	32.66%	34.02%	66.67%	-
	SortOrder	Ascending	33.33%		33.33%	-
			33.33%		33.33%	-
			65.98%	34.02%	100.00%	1

The ShowZeroValues property is responsible for display of NULL values in a report.

Property			Report			
ShowSingleFact	False		452.63		452.63	
ShowTableCaption	ShowZeroValues False			909.00	909.00	
ShowZeroValues		×	420.00		420.00	
StyleName	Main		420.00		420.00	
ShowSingleFact	False		452.63	0	452.63	
ShowTableCaption	True		0	909.00	909.00	
ShowZeroValues	True	<b>~</b>	420.00	0	420.00	
StyleName	Main		420.00	0	420.00	

### Ability to hide/show Total

It is possible to hide the "Total" columns or rows of a pivot table using the ShowTotal property of the fields. The Source Field editor allows the setting of this property.

Pr	operty			Report		
4	Appearance			Category	Product	Alfreds Futterkiste
	Caption	Category			Chai	505,88
	Format			Beverages	Ipoh Coffee	
	ShowPercent	False			Steeleye Stout	525,00
	ShowTotal	True 💌			Total	1030,88
	SortOrder Ascending			Confections	Maxilaku	130,00
				Confections	Total	130,00
				Total		4509,22
4	Appearance	•		Category	Product	Alfreds Futterkiste
	Caption	Category			Chai	505,88
	Format			Beverages	Ipoh Coffee	
	ShowPercent				Steeleye Stout	525,00
	ShowTotal	False 💌		Confections	Maxilaku	130,00
	SortOrder	Ascending		Total		4509,22

### **Data Sorting**

The order of sorting is set in the SortOrder property. Ascending (direct order) and Descending (reversed order) are available.

#### **Data Filtering**

Filtering is used when you need to output data which address some specific conditions. The FilterExpression property is used to set the conditions. The expression is set by the script. The result of calculation of this expression will define data for the table.

Property	Report					
Not set			Futterkiste	Karkki Oy	Shopy	Total
	Category Product		Discount	Discount	Discount	Discount
		Chai	0.15	0.04		0.19
	Beverages	lpoh Coffee		0.1		0.1
	Deverages	Stout	0.2			0.2
		Total	0.35	0.14		0.49
FilterExpression="(double)G			Futterkiste	Karkki Oy	Total	
etData("Sales.Discount") >= 0.1"	Category	Product	Discount	Discount	Discou	nt
0.1		Chai	0.15		0.15	
	Beverages	lpoh Coffee		0.1	0.1	
	Develages	Stout	0.2		0.2	
		Total	0.35	0.1	0.45	



#### **Table Size**

The table cell size is defined automatically according to the table data size by default. The AutoColumnWidth (setting of column width) and AutoRowHeight (setting of rows height) are used for this. In order to set arbitrary row height you should select "None" value in the AutoRowHeight property and indicate the height value in pixels in the RowHeight property.

Ξ	Appearance		
	AutoColumnWidth	True	
	AutoRowHeight	None	
	DimensionOnEveryPage	False	
	RowHeight	100	

Left margins are set by the Shift property.



### Table Styles

The StyleName property sets the table style. The <u>Style Sheet Editor</u> is used for styles creation.

It is possible to set separate styles for each cell type using the Style properties group.

Sales any (arkki Oy Total 452.63 909.00 909.00 420.00 909.00 1781.63 890.63 890.63 909.00 2672.25 Sales rv 2672.25 Sales rv 100 Karkki Oy Total 909.00 909.00 909.00 1781.63
Karkki Oy       Total         452.63         909.00       909.00         909.00       1781.63         890.63       890.63         909.00       2672.25         Sales         rv       452.63         452.63       909.00         400.00       2672.25         Sales         sales       1000         452.63       909.00         909.00       909.00         452.63       909.00         909.00       909.00
452.63 909.00 909.00 420.00 909.00 1781.63 890.63 890.63 909.00 2672.25 Sales rv 2672.25 Sales rv 100 Karkki 0y 1000 452.63 909.00 909.00 420.00
909.00 909.00 420.00 909.00 1781.63 890.63 890.63 909.00 2672.25 Sales rv 2672.25 Sales rv 100 Karkki 0y 1000 452.63 909.00 909.00 420.00
420.00 909.00 1781.63 890.63 890.63 909.00 2672.25 Sales ry Karkki Oy Total 452.63 909.00 909.00 420.00
909.00 1781.63 890.63 909.00 2672.25 Sales rv Carki Oy Total 452.63 909.00 909.00 420.00
890.63           909.00         2672.25           sales           my            Karkki Oy         Total           452.63         909.00           909.00         420.00
909.00 2672.25 sales ny Exarkki Oy Total 452.63 909.00 909.00 420.00
Sales           ny         I           Karkki Oy         Total           452.63         909.00           909.00         909.00           420.00         I
ny Total Karkki Oy Total 452.63 909.00 909.00 420.00
ny Total Karkki Oy Total 452.63 909.00 909.00 420.00
ny Total Karkki Oy Total 452.63 909.00 909.00 420.00
Karkki Oy         Total           452.63         909.00           909.00         909.00           420.00         420.00
452.63 909.00 909.00 420.00
909.00 909.00 420.00
420.00
909.00 1781.63
890.63
890.63
909.00 2672.25
ales
iny
Karkki Oy Total
452.63
909.00 909.00 420.00
909.00 1781.63
890.63
890.63
909.00 2672.25
I

### **Pivot Table Saving**

The Layout property sets expressions and position of fields in pivot table. It can be saved to the file for further use and quick return to the initial pivot table form. You can use the "Save" and "Open" buttons of the Layout property editor for saving and loading of the table parameters. The file has the XML format and .dcl extension.



### Image

The Picture element is used for images display.

The Image property sets the image. In order to select file you should press the button near the Image property or double click with left mouse button on the area of Picture element. It is possible to upload the image of the following formats: \*.bmp, \*.gif, \*.jpg, \*.jpeg, \*.png, \*.ico, \*.emf, \*.wmf.

#### Size and Scale of the Image

The Size property sets the size of the Picture element. If the image size doesn't fit Picture element size during the output, you can use the SizeMode property to change sizes.

The image extension – the image changes the proportions depending on the elements sizes:

Property Report							
⊞ Margins	0; 0; 0; 0 cm	REPORT					
SizeMode	Stretch 💌	Fatrat-					
StyleName							
ToolTip							
The image cutting – the image saves its natural size and is cut according to the							
element's size:							
⊞ Margins	0; 0; 0; 0 cm						
SizeMode	Normal 🗸	REPORT					
StyleName							
ToolTip							
Auto size – the e	element's size is changed accord	ding to the image size and is not					
edited:	-						
⊞ Margins	0; 0; 0; 0 cm						
SizeMode	AutoSize 💌	REPORT					
StyleName							
ToolTip							
		THE CASE					
Uniform – the im	hage is resized to maximum siz	e inside element bounds, image's					
aspect ratio is pr	-						
⊞ Margins	0; 0; 0; 0 cm						
SizeMode	Uniform	REPORT					
StyleName		Tala H-					
ToolTip		17 GODE					



## **Image Alignment**

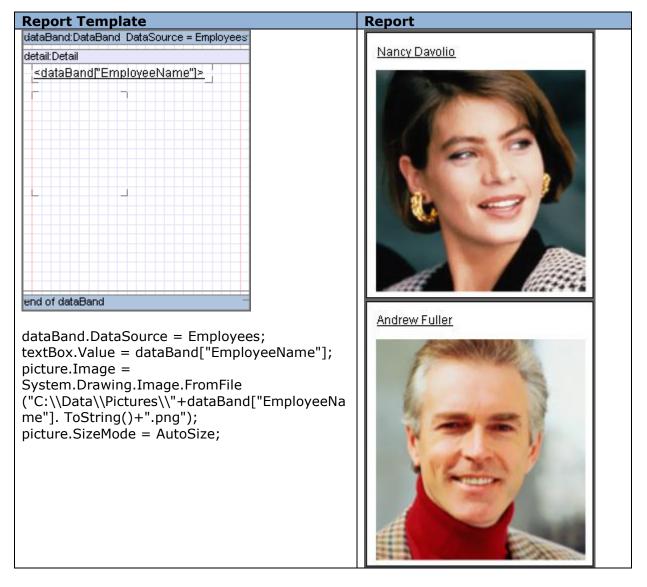
If "Normal" or "Uniform" size mode is chosen, then the ImageAlign property will define the image position within bounds of the element.

Pr	roperty			Report	
	Fill	[None]			
+	Image	🔛 System.Drawing.Bitmap			
	ImageAlign	TopLeft	<b>~</b>		
÷	Margins	0; 0; 0; 0 cm			
	SizeMode	Normal			
+	Image	🕵 System.Drawing.Bitmap			
	ImageAlign	MiddleCenter	<b>~</b>		
÷	Margins	0; 0; 0; 0 cm			
	SizeMode	Normal			
	StyleName				
+	Image System.Drawing.Bitmap				
	ImageAlign	BottomRight	~		
+	Margins	0; 0; 0; 0 cm			
	SizeMode	Normal			
	StyleName				



### **Dynamic Image Loading**

When it is needed to load the image in the process of report generation, you can open the Bindings properties and use the Image property. Use the following script when it is needed to load image from file:

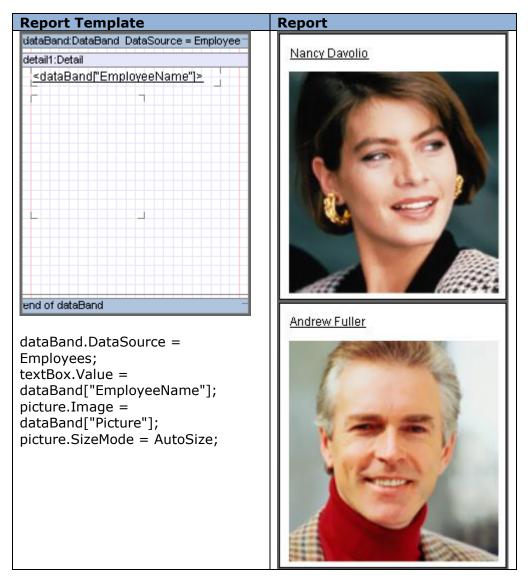


System.Drawing.Image.FromFile("<path to the file>")



### **Image from Data Source**

To output images from data source you should put the Picture element to Detail which is located in the DataBand with the set data source, and then set the Image property on the Bindings tab. In this case the images are stored in the data source in byte representation.





# **Using Shapes**

Shape element can be used to output various graphical figures.

## Shape Types

ShapeStyle property defines the type of a figure. The following types are available:

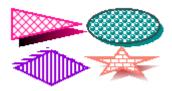
	• · ·	Report
RectangleShape –	figure draws a rectangle.	
Appearance		
🕀 Fill	HatchFill	
🕀 Line	2 Solid DodgerBlue	
🕀 Shadow	Shadow	
ShapeStyle	RectangleShape 🗸 🗸	
TriangleShape – fi	gure draws an isosceles triangle. Direction	on property sets triangle
orientation.	-	
Appearance		800 mm
∃ Fill	HatchFill	
🕀 Line	2 Solid DeepPink	Conservation of the second
∃ Shadow	Shadow	
🖂 ShapeStyle	TriangleShape	
Direction	Right 🗸	
StyleName		
CrossShape – figu	re draws a cross.	
Appearance		
E Fill	HatchFill	
⊡ Line	2 Solid DarkTurquoise	
⊡ Shadow	Shadow	
ShapeStyle	CrossShape	
	figure draws a diamond.	
Appearance	11-1-1-50	
⊞ Fill ⊞ Line	HatchFill 2 Solid DarkViolet	
🖽 Line		
⊞ Shadow	Shadow	
☑ Shadow ShapeStyle	Shadow DiamondShape	ate a radiue of an
<ul> <li>Shadow</li> <li>ShapeStyle</li> <li>StarShape - figure</li> </ul>	Shadow DiamondShape v e draws a star. InternalRadius property s	
Shadow ShapeStyle StarShape – figure inscribed circle, Ke	Shadow DiamondShape v e draws a star. InternalRadius property s eepRoundForm property defines star shap	pe – ellipse or a circle,
Shadow ShapeStyle StarShape – figure inscribed circle, Ke Points property se	Shadow DiamondShape v e draws a star. InternalRadius property s	pe – ellipse or a circle,
Shadow ShapeStyle StarShape – figure inscribed circle, Ke Points property se of a star.	Shadow DiamondShape v e draws a star. InternalRadius property s eepRoundForm property defines star shap	pe – ellipse or a circle,
<ul> <li>Shadow</li> <li>ShapeStyle</li> <li>StarShape - figure</li> <li>inscribed circle, Ke</li> <li>Points property se</li> <li>of a star.</li> <li>Appearance</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s eepRoundForm property defines star shap ts number of the rays, StartAngle proper	pe – ellipse or a circle,
<ul> <li>Shadow</li> <li>ShapeStyle</li> <li>StarShape - figure</li> <li>inscribed circle, Ke</li> <li>Points property se</li> <li>of a star.</li> <li>Appearance</li> <li>Fill</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s eepRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill	pe – ellipse or a circle,
<ul> <li>Shadow</li> <li>ShapeStyle</li> <li>StarShape – figure</li> <li>inscribed circle, Ke</li> <li>Points property se</li> <li>of a star.</li> <li>Appearance</li> <li>Fill</li> <li>Line</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s epRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon	pe – ellipse or a circle,
<ul> <li>Shadow</li> <li>ShapeStyle</li> <li>StarShape - figure</li> <li>inscribed circle, Ke</li> <li>Points property se</li> <li>of a star.</li> <li>Appearance</li> <li>Fill</li> <li>Line</li> <li>Shadow</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s eepRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow	pe – ellipse or a circle,
<ul> <li>Shadow</li> <li>ShapeStyle</li> <li>StarShape - figure</li> <li>inscribed circle, Ke</li> <li>Points property se</li> <li>of a star.</li> <li>Appearance</li> <li>Fill</li> <li>Line</li> <li>Shadow</li> <li>Shadow</li> <li>Shadow</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s eepRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow StarShape	pe – ellipse or a circle,
<ul> <li>Shadow</li> <li>ShapeStyle</li> <li>StarShape – figure</li> <li>inscribed circle, Ke</li> <li>Points property se</li> <li>of a star.</li> <li>Appearance</li> <li>Fill</li> <li>Line</li> <li>Shadow</li> <li>Shadow</li> <li>ShapeStyle</li> <li>InternalRadius</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s eepRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow StarShape 0,37999999523162842	pe – ellipse or a circle,
<ul> <li>➡ Shadow</li> <li>ShapeStyle</li> <li>StarShape - figure</li> <li>inscribed circle, Ke</li> <li>Points property se</li> <li>of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ ShapeStyle</li> <li>InternalRadius</li> <li>KeepRoundForm</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s epRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow StarShape 0,37999999523162842 False	pe – ellipse or a circle,
<ul> <li>➡ Shadow ShapeStyle</li> <li>StarShape - figure inscribed circle, Ke Points property se of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Shadow</li> <li>➡ ShapeStyle</li> <li>■ InternalRadius</li> <li>KeepRoundForm</li> <li>➡ Points</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s epRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow StarShape 0,37999999523162842 False 5	pe – ellipse or a circle,
<ul> <li>➡ Shadow ShapeStyle</li> <li>StarShape – figure inscribed circle, Ke</li> <li>Points property se of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Shadow</li> <li>➡ ShapeStyle</li> <li>■ InternalRadius</li> <li>■ KeepRoundForm</li> <li>■ Points</li> <li>■ StartAngle</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s epRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow StarShape 0,37999999523162842 False 5 0	be – ellipse or a circle, ty sets the rotation angle
<ul> <li>➡ Shadow ShapeStyle</li> <li>StarShape – figure inscribed circle, Ke Points property se of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡</li></ul>	Shadow DiamondShape e draws a star. InternalRadius property s epRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow StarShape 0,37999999523162842 False 5	be – ellipse or a circle, ty sets the rotation angle
<ul> <li>➡ Shadow</li> <li>ShapeStyle</li> <li>StarShape – figure</li> <li>inscribed circle, Ke</li> <li>Points property se</li> <li>of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Shadow</li></ul>	Shadow DiamondShape e draws a star. InternalRadius property s epRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow StarShape 0,37999999523162842 False 5 0	be – ellipse or a circle, ty sets the rotation angle
<ul> <li>➡ Shadow ShapeStyle</li> <li>StarShape – figure inscribed circle, Ke</li> <li>Points property se of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Shadow</li> <li>➡ ShapeStyle</li> <li>■ InternalRadius</li> <li>KeepRoundForm Points</li> <li>➡ StartAngle</li> <li>ArrowShape – figure</li> <li>arrow.</li> <li>➡ Appearance</li> </ul>	Shadow   DiamondShape   e draws a star. InternalRadius property s   epRoundForm property defines star shap   ts number of the rays, StartAngle proper   HatchFill   2 Solid Salmon   Shadow   StarShape   0,37999999523162842   False   5   0   re draws an arrow. Direction property set	be – ellipse or a circle, ty sets the rotation angle
<ul> <li>➡ Shadow ShapeStyle</li> <li>StarShape - figure inscribed circle, Ke</li> <li>Points property se of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Shadow<td>Shadow   DiamondShape   e draws a star. InternalRadius property s   epRoundForm property defines star shap   ts number of the rays, StartAngle proper   HatchFill   2 Solid Salmon   Shadow   StarShape   0,37999999523162842   False   5   0   Irre draws an arrow. Direction property set</td><td>be – ellipse or a circle, ty sets the rotation angle</td></li></ul>	Shadow   DiamondShape   e draws a star. InternalRadius property s   epRoundForm property defines star shap   ts number of the rays, StartAngle proper   HatchFill   2 Solid Salmon   Shadow   StarShape   0,37999999523162842   False   5   0   Irre draws an arrow. Direction property set	be – ellipse or a circle, ty sets the rotation angle
<ul> <li>➡ Shadow ShapeStyle</li> <li>StarShape – figure inscribed circle, Ke</li> <li>Points property se of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Shadow<td>Shadow   DiamondShape   e draws a star. InternalRadius property s   epRoundForm property defines star shap   ts number of the rays, StartAngle proper   HatchFill   2 Solid Salmon   Shadow   StarShape   0,37999999523162842   False   5   0   Irre draws an arrow. Direction property set   HatchFill   2 Solid SpringGreen</td><td>be – ellipse or a circle, ty sets the rotation angle</td></li></ul>	Shadow   DiamondShape   e draws a star. InternalRadius property s   epRoundForm property defines star shap   ts number of the rays, StartAngle proper   HatchFill   2 Solid Salmon   Shadow   StarShape   0,37999999523162842   False   5   0   Irre draws an arrow. Direction property set   HatchFill   2 Solid SpringGreen	be – ellipse or a circle, ty sets the rotation angle
<ul> <li>Shadow ShapeStyle</li> <li>StarShape - figure inscribed circle, Ke</li> <li>Points property se of a star.</li> <li>Appearance</li> <li>Fill</li> <li>Line</li> <li>Shadow</li> <li>ShapeStyle</li> <li>InternalRadius</li> <li>KeepRoundForm</li> <li>Points</li> <li>StartAngle</li> <li>ArrowShape - figure</li> <li>Fill</li> <li>Line</li> <li>Shadow</li> <li>Shatarance</li> <li>Fill</li> <li>Line</li> <li>Shadow</li> <li>Shadow</li> <li>ShapeStyle</li> <li>InternalRadius</li> <li>KeepRoundForm</li> <li>Points</li> <li>StartAngle</li> <li>ArrowShape - figure</li> <li>Fill</li> <li>Line</li> <li>Shadow</li> </ul>	Shadow   DiamondShape   e draws a star. InternalRadius property s   epRoundForm property defines star shap   ts number of the rays, StartAngle proper   HatchFill   2 Solid Salmon   Shadow   StarShape   0,37999999523162842   False   5   0   Irre draws an arrow. Direction property set   HatchFill   2 Solid SpringGreen   Shadow	be – ellipse or a circle, ty sets the rotation angle
<ul> <li>➡ Shadow ShapeStyle</li> <li>StarShape – figure inscribed circle, Ke Points property set of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Shadow</li> <li>➡ ShapeStyle</li> <li>■ InternalRadius</li> <li>■ KeepRoundForm</li> <li>■ Points</li> <li>■ StartAngle</li> <li>ArrowShape – figure arrow.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> </ul>	Shadow DiamondShape e draws a star. InternalRadius property s epRoundForm property defines star shap ts number of the rays, StartAngle proper HatchFill 2 Solid Salmon Shadow StarShape 0,37999999523162842 False 5 0 ure draws an arrow. Direction property se HatchFill 2 Solid SpringGreen Shadow ArrowShape	be – ellipse or a circle, ty sets the rotation angle
<ul> <li>➡ Shadow ShapeStyle</li> <li>StarShape – figure inscribed circle, Ke Points property set of a star.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Shadow</li> <li>➡ ShapeStyle</li> <li>■ InternalRadius</li> <li>■ KeepRoundForm</li> <li>■ Points</li> <li>■ StartAngle</li> <li>ArrowShape – figure arrow.</li> <li>➡ Appearance</li> <li>➡ Fill</li> <li>➡ Line</li> <li>➡ Shadow</li> <li>➡ Direction</li> </ul>	Shadow   DiamondShape   e draws a star. InternalRadius property s   epRoundForm property defines star shap   ts number of the rays, StartAngle proper   HatchFill   2 Solid Salmon   Shadow   StarShape   0,37999999523162842   False   5   0   Irre draws an arrow. Direction property set   HatchFill   2 Solid SpringGreen   Shadow	ets the direction of an

🗆 Арр	earance					
🛨 Fill		HatchFill				
🕀 Line		😑 2 Solid DarkOrange				
🕀 Shac	dow	Shadow				
🖂 Shap	peStyle	RectTriangleShape 🛛 💌				
	irection	Up				
	eShape – figure	draws ellipse.				
	earance					
⊞ Fill		HatchFill				
⊡ Line		🔁 2 Solid DarkCyan				
⊡ Shad		Shadow				
Shap	peStyle	EllipseShape 💌				
Round	RectangleShape	e – figure draws a rectan	gle with truncated cor	ners. Round		
proper	rty sets truncation	on radius.				
🗆 Арр	earance					
🛨 Fill		HatchFill				
🗉 Line		2 Solid DarkSlateBlue		Nannanan /		
🕀 Shac	dow	Shadow				
🖃 Shap	peStyle	RoundRectangleShape 💌				
R	ound	0,4				
		figure draws a parallelo	gram. Angle property	sets a rotation		
angle	of a parallelogra	am.				
	earance					
⊞ Fill		HatchFill				
⊡ Line		📃 2 Solid DarkMagenta				
⊡ Shad		Shadow				
🗆 Shap	peStyle	ParallelogramShape 🛛 💌				
A	ngle	45				
LineSt	LineShape – figure draws a line. LineKind property sets a rotation angle of a line.					
🗆 Арр	earance					
Fill		[None]				
🖽 Line		🔁 2 Solid Red				
⊞ Shad		Shadow				
🗆 Shap	peStyle	LineShape 🛛 💌				
Li	ineKind	BackSlash				

#### **Shape Shadow**

Figure shadows sets by a Shadow property. DX and DY values set the shadow offset, Fill property sets the fill. Adding a shadow leaves the size of an element the same while the size of a figure decreases.

Example of a figure shadow usage:



### **Shape Border**

Figure border is defined by the Line property. Color property sets the color of a line, Style property sets line style, and Width property sets line width.

Examples of figure lines:





# **Barcodes**

BarCode element is used to create barcodes. Code for barcode is set in the Code property. Digits can be used for the most types of barcodes; Latin symbols can be used for some advanced barcode types.

Ρ	roperty		Report	
	CalcCheckSumm	False		
	Code	123456	 123456	
	CodeType	Code39	120400	
	CalcCheckSumm	False		
	Code	Code 123456	 Code 123456	
	CodeType	Code39Extended	0006 120400	

Barcode ratio is set in the BarRatio property.

#### **Barcode Types**

Type of the code is set in the CodeType property. The following linear barcode types are available: Code\_2\_5\_interleaved, Code\_2\_5\_industrial, Code\_2\_5\_matrix, Code39 (default value), Code39Extended, Code128A, Code128B, Code128C, Code93, Code93Extended, CodeMSI, CodePostNet, CodeCodabar, CodeEAN8, CodeJAN8, CodeEAN13, CodeJAN13, CodeUPC\_A, CodeUPC\_E0, CodeUPC\_E1, CodeUPC\_Supp2, CodeUPC\_Supp5, CodeEAN128A, CodeEAN128B, CodeEAN128C.

2D barcodes are use with additional settings:

PDF417, PDF417Compact. Settings for these barcode types are in the Pdf417Settings properties group:

	CodeType	PDF417
	Fill	[None]
Ŧ	Font	Arial; 12pt
	LabelPosition	BottomCenter
Ŧ	Margins	0; 0; 0; 0 cm
Ŧ	MicroQRCodeSettings	PerpetuumSoft.Framework.Drawir
Ξ	Pdf417Settings	3; 0; 5; TextMode
	ColumnsCount	3
	ErrorLevel	0
	RowsCount	5
	Туре	TextMode

QRCode. QRCodeSettings property group:

	CodeType	QRCode
	Fill	[None]
Ŧ	Font	Arial; 12pt
	LabelPosition	BottomCenter
ŧ	Margins	0; 0; 0; 0 cm
ŧ	MicroQRCodeSettings	PerpetuumSoft.Framework.Drawir
Ŧ	Pdf417Settings	3; 0; 5; TextMode
	QRCodeSettings	PerpetuumSoft.Framework.Drawi
	ErrorCorrectionLevel	L
	Mask	Mask000
	MirrorImaging	False
	ReflectanceReversal	False
	Version	4



### MicroQRCode. MicroQRCodeSettings property group:

	CodeType	MicroQRCode
	Fill	[None]
Ŧ	Font	Arial; 12pt
	LabelPosition	BottomCenter
Ð	Margins	0; 0; 0; 0 cm
	MicroQRCodeSettings	PerpetuumSoft.Framework.Drawi
	ErrorCorrectionLevel	L
	Mask	Mask00
	MirrorImaging	False
	ReflectanceReversal	False
	Version	4

Japan\_Postal barcode type should be mentioned separately. Amount of points for the Japan\_Postal barcode is set in the BarPoint property. Size of the barcode is standard and it depends on the BarPoint property.

Property		Report
BarPoint	10	ի ինդերերերին ներերերերերերերերերերերերերեր
BarRatio	2	
Border		
CalcCheckSumm	False	
Code	123456	
CodeType	Japan_Postal	

### **Barcode Style**

To create background color of the barcode BackColor property is used. It is possible to set color of the barcode itself in the BarColor property.

Property			Report
BackColor	Transparent	~	
BarColor	Black		123456
			120400
BackColor	DodgerBlue	<b>~</b>	
BarColor	DeepPink		123456
			125450

ShowLabel property defines displaying of the Label in the barcode. It is possible to set font (Font property), color (TextColor property) and position of the label (LabelPosition property).

Ρ	roperty		Report
+	Font	Calibri; 9pt; Bold=Off; Italic=Off; U	123456
	LabelPosition	TopLeft 🛛 💌	
+	Margins	0; 0; 0; 0 cm	
	ShowCheckDigit	False	
	ShowLabel	False 💌	
	StyleName		

CalcCheckSumm and ShowCheckDigit Properties TDB



# **Parameters**

Parameters property is used to set report parameters. <u>Collection Editor</u> is an editor of this property.

🥔 Collection Editor	
Members	Properties
Parameter	A     Misc       DefaultValu       Name       Parameter       ParameterT       System.String
	Default Value Determines the parameter default value. Used when parameter val
	OK Cancel

DefaulValue property sets parameter value. Name property sets name to refer to parameter value in subreport. ParameterType property sets type of the parameter (string type is used by default for all parameters).

To get parameter value in subreport the following expression is used: GetParameter("<ParameterName>")

TBD



# **Hyperlinks and Report Navigation**

Hyperlink property of the objects is used to set hyperlinks.

# **Calling External Applications**

Hyperlink property can be used to call external applications.

Here is the sample of using TextBox element property to call application:

Property textBox.Hyperlink = "C:\Program Files\Perpetuum Software\Net ModelKit Suite\Bin\ReportSharpShooterSamplesCenter.exe".

🗆 Navigation			
	Bookmark		
	Hyperlink	C:\Program Files\Perpetuu	

Report:

ReportSharp-ShooterSamples Center

Now when you click TextBox area, Report Sharp-Shooter Samples Center will run.

### **Opening Files**

Files to which links are set in the Hyperlink property are opened with the help of programs associated with the file type.

Sample of setting links to files:

Hyperlink property is set by the script that forms file address in the process of report generation.

Report Template:

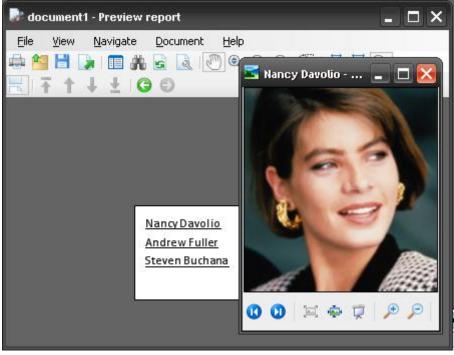
d	ataBand:DataBand_DataSource = Employees
d	etail:Detail
	<databand["employeename"]></databand["employeename"]>
e	nd of dataBand

dataBand.DataSource = Employees;

textBox.Value = dataBand["EmployeeName"]; textBox.Hyperlink =
"C:\\Data\\Pictures\\"+dataBand["EmployeeName"].ToString()+".png"

Report:

When you click on the TextBox element area the corresponding picture is opened with the help of picture viewer:



### **Hyperlinks to Internet Resources and Emails**

To get hyperlinks to Internet resources in the Hyperlink property it is necessary to set URL. For example, textBox.Hyperlink = "http://www.perpetuumsoft.com/"

🗆 Navigation		
	Bookmark	
	Hyperlink	http://www.perpetuumsoft.com/

When you click on the TextBox element area in the final document, hyperlink is opened with the help of browser.

To make email client open when you click the link, Hyperlink property should contain mailto hyperlink, for example, textBox.Hyperlink = "mailto:sales@perpetuumsoft.com". Then click on the element will open email client to send message to the set address. The same with the parameters (subject, body, cc, bcc,); it is possible to set subject, content of the message, emails to send CC and BCC. For example, hyperlink

"mailto:sales@perpetuumsoft.com?subject=Suggestion&Body=Hello!%0DI%20have%20so me%20ideas%20for%20you.&bcc=support@perpetuumsoft.com" opens email client with the following data:

🛄 То	sales@perpetuumsoft.com	
🛄 Cc		
🛄 Bcc	support@perpetuumsoft.com	
Subject:	Suggestion	
i 🔒 🎒 i 🐰	🐚 👔 🛛 Times New Roman	

Hello!

I have some ideas for you.

#### **Bookmarks**

To make navigation through the report easier, it is possible to use Bookmark property. This property creates a bookmark that allows you to go to this object from any place of the

report with the help of Content tree in Report Viewer. Name of the bookmark should start with # symbol, otherwise Bookmark property value will be ignored.

Report Template:

dataBand1:DataBand_DataSource = En			
header1:Header			
Employee Name			
detail1:Detail Suatabance			
["EmployeeName"]>			
end of dataBand1			
detail4:Detail			
<b>S</b>			

textBoxHeader.Bookmark = #Begin;

picture.Bookmark = #logo;

Ξ	Navigation	
	Bookmark	#logo
	Hyperlink	

Report in the Report Viewer:

🧈 document1 - Preview report				
	gate Document Help 🗐 👬 🗟 🗟 💯 🔍 🔍 🔍 🅰 🎁 📅 🎧 150 % Ł 😋 🖘	-		
e Begin	Anne Dodsworth Steven Buchana			
	Laura Callahan Anne Yorke			

Bookmark tree is located on the left. "Show content" button is used to display/hide the tree. When you select some item in the Content area, report area containing element for which the corresponding bookmark is set will be opened.



# Joint Use of Hyperlinks and Bookmarks for Report Navigation

Bookmarks can be used as to go to them via hyperlinks. It is necessary to set bookmark name in the Hyperlink property.

Report Template:

detail5:Detail –		
Tologo		
dataBand1:DataBand_DataSource = Em		
header1:Header		
Employee Name		
detail1:Detail		
f"EmployeeName">		
end of dataBand1 detail4:Detail		
<b>\$</b>		

picture.Bookmark = #logo;

textBoxToLogo.Hyperlink = #logo

Ξ	Navigation	
	Bookmark	
	Hyperlink	#logo

Report in the Report Viewer:

😺 doc	🎤 document1 - Preview report 📃 🗖 🔀				
File	1	gate Documer	nt <u>H</u> elp 1 🕖 🔍 🗨 🗨 🥰   [[	100 %	
	·Begin ·logo		Employee Name Nancy Davolio Andrew Fuller Anne Dodsworth Steven Buchana Laura Callahan Anne Yorke	<u>Tologo</u>	
				<b>\$</b>	

When you click on the TextBox element area with the text "To logo" report part containing logo will open.

To get back to the previous report area, it is possible to use "Back" hyperlink.



# **Using subreports**

Mechanism of using subreports is used when it is necessary to join several reports in a single one. SubReport is used for this purpose. It defines included subreport and its location in the template. Subreport template should be located in the ReportManager current template is located in.

To set subreport template, TemplateName property of the SubReport is used. Property combo box contains report names contained in the current ReportManager (if ReportName property for ReportSlot is not set in the ReportManager, template is not displayed in the list).

⊡	Misc	
	Parameters	(Collection)
	Shift	0 cm
	TemplateName	~
Ξ	Navigation	List
	Bookmark	Properties
	Hyperlink	Report1
Bender Report2		Report2
	CanGrow	
	CanShrink	
	NewColumnAfter	False

Template of master report	Subreport template	Report
Main Report Report 1		Main Report
subReport1:SubReport		Report 1
Report1	detail:Detail	11 1
	Report 1	
•••••••••••••••		41 1
Property		
<pre>subReport.TemplateName = Report1</pre>		

Final report contains only those elements that are located inside bands (DataBand, Detail etc.). If style is not set for subreport elements, style of the master template or SubReport band is applied to them.

In order to set shift from the left report border Shift property of the SubReport is used.

Report Template:

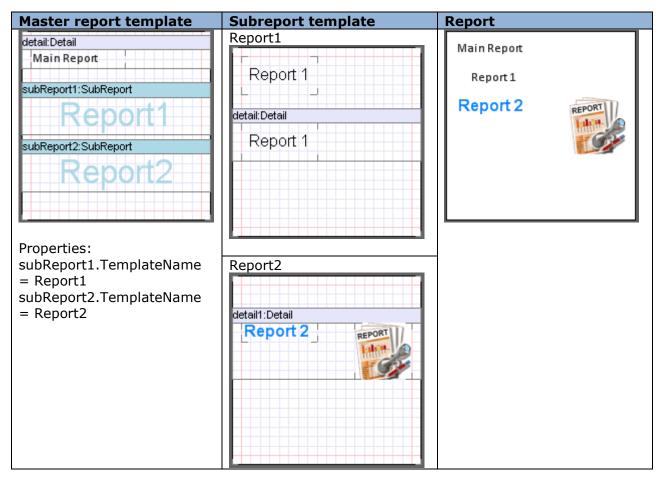
detail:Detail
Main Report
subReport1:SubReport
Report1
subReport2:SubReport
Report2

Property	Report	
🗆 Misc		
Parameters	(Collection)	Main Report
Shift	0 cm	Report 1
TemplateName	Report1	Kepolei
🗆 Misc		
Parameters	(Collection)	Main Report
Shift	2 cm	Depend 1
TemplateName	Report1	Report 1



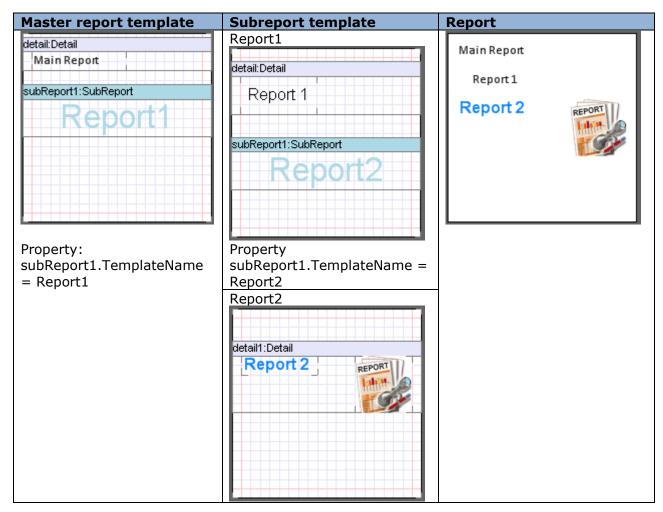
# **Complex Report**

Any amount of subreports can be added to a single report.





It is possible to use nested reports.





# www.perpetuumsoft.com

# **Passing Parameters to Subreport**

Parameters property of the SubReport can be used to pass parameters from master report to subreport. Collection Editor is editor of this property.

🔛 Collection editor		_ 🗆 🔀
Members Number EmployeeName	Properties ▲↓ □ ■ Misc Expression Name	dataBand1.Li Number
	OK	Cancel

Expression property sets expression which calculation result will be passed as a parameter. Name property sets name used to refer to parameter value in subreport.

To get parameter value in subreport GetParameter("<ParameterName>") expression is used.

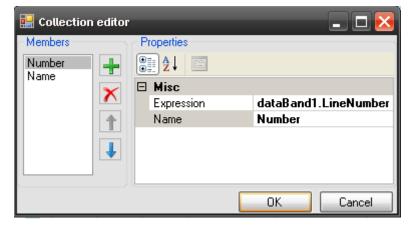
Sample of a template displaying employees list. Names and sequence numbers are displayed in subreport

Master Report Template:

detail:Detail
Employees list
dataBand1:DataBand_DataSource = E
subReport1:SubReport
Report1
end of dataBand1

Property subReport1.TemplateName = Report1

Two parameters are added to the subReport1.Parameters collection. First parameter: Expression = dataBand1.LineNumber, Name = Number. Second parameter: Expression = dataBand1["EmployeeName"]. Name = Name.



Subreport Template:

detail:Detail <G <GetParameter(''N

textBox1.Value = GetParameter("Number");

textBox2.Value = GetParameter("Name")

Report:

Emplo	oyees list
1	Nancy Davolio
2	Andrew Fuller
3	Anne Dodsworth
4	Steven Buchana
5	Laura Callahan
6	Anne Yorke



# Zip code

To display zip code ZipCode element is used. Code is set in the Code property.

Ξ	Appearance	
	Angle	0
	Border	
	Code	22550
	Color	Black

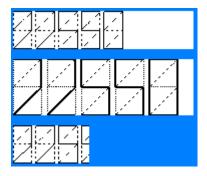
Code color is set in the Color property.

Ξ	Appearance	
	Angle	0
	Border	
	Code	22550
	Color	📃 DodgerBlue 🛛 💌
	Fill	[None]

Element in the template:



Size of the element is set in the Size property. It is necessary to consider that proportion of zip code is constant. Height of the code label depends on the element height; if label doesn't fit element width, code is cut.





# **Master-Report**

There is an ability to use master report. When the document using master template is generated, final document includes results of rendering of master template and document template. It allows you to create group of homogeneous reports.

To set master report, it is necessary to set its name in the Document.MasterReport property.

Ξ	Appearance	
Ŧ	GraphicsSettings	PerpetuumSoft.Reporting.D(
	MasterReport	Master 💌
	ShowObjectBounds	True

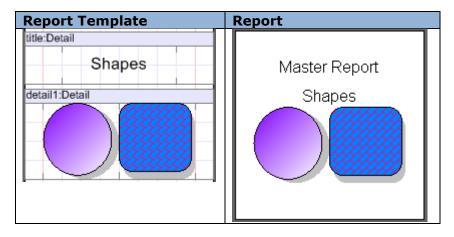
During rendering, template with the set name will be got through the IResolveSubReport interface. For example, master template with necessary name can be added to the same ReportManager initial template is added to.

When you create template used as a master one, it is necessary to add Content element to this template.

#### Master report template:

detail1:I	Deta	il					
	М	asi	ter	Re	рс	rt	
content	1:Co	onter	nt				

Generation of a document using master template is executed in the following way. Resulting report includes result of rendering of master template and Content element is substituted by the result of the initial report.





# **Creation of Reports Using Wizard**

There is an easy way to create simple report templates - Wizards. They allow the setting of report parameters: appearance, data sources; and then the building of the report template by set parameters automatically.

It is possible to save all settings made in Wizard to the .rsw file into the xml format.

#### **Creation of simple reports (Standard Wizard)**

Standard Wizard allows the creation of report template in which the data from the data source is output as a list or cards.

It is possible to open <u>Standard Wizard</u> in the <u>Wizards Gallery</u> dialog.

Wizards gallery	$\mathbf{X}$
New Saved	
Blank Report Standard Report	
Pivot table Report	
	Load from file OK Cancel

🛷 Standard Wizard		×
Pages	Common	
4 - 🗄 🗟 🗅	Report template properties	
Common	Show title Report title	
Employees	Measure unit Centimeter	~
	Style sheet None	~
	Script language VisualBasicNET	~
	Page properties Size Drientation Page nur	nbers
	Paper kind Custom 💌 💿 Portrait Position	None
	Page size 7; 7 O Landscape Align	Right 💌
	Columns layout	
	Columns count	
	Columns gap 0,000 🚖	
	Save Preview template Preview document OK	Cancel



# **Report Properties in Standard Wizard**

It is possible to set template common properties, which define the report appearance, in the Common section.

The report name, set in the Title field using the Document.Title property, will be displayed in the report header:

Title	Report Template	Report
Report template properties	reportTitle:Detail	
Show title Employees	o <document.title> o</document.title>	Employees
Measure unit Centimeter	o dataBand1:DataBand DataSource = Employees	Name Phone Nancy (206)555

The report measure units are set with Measure unit field (the Document.MetricUnit property).

Report style can be set in the Style sheet (the Document.StyleSheet property).

Style sheet	Property	Report
Style sheet Modern1 Script Language VisualBasicNET	☐ Render StyleSheet Modern1 ☐ Script	EmployeesNamePhoneNancy Davolio(206)555-9857Andrew Fuller(206) 555-9482Anne Dodsworth(71) 555-4444Steven Buchana(71) 555-4444Laura Callahan(71) 555-4444Anne Yorke(71) 555-4444
Measure unit Centimeter Style sheet Modern Script language VisualBasicNET	<ul> <li>□ Render</li> <li>StyleSheet Modern</li> <li>□ Script</li> </ul>	EmployeesNamePhoneNancy Davolio(206)555-9857Andrew Fuller(206) 555-9482Anne Dodsworth(71) 555-4444Steven Buchana(71) 555-4444Laura Callahan(71) 555-4444Anne Yorke(71) 555-4444

The Script Language field allows the selection of script language. Script language is set using the Document.ScriptLanguage property.

### Page Properties in Standard Wizard

The Page Properties section allows the setting of page properties. Paper format is selected from Paper kind list and is set by the Page.PaperKind property. In order to set arbitrary page size you should select Custom in Paper kind combo box and set the value to the Page size field.

Size	
Paper kind	Custom 💌
Page size	7;7

It is possible to set landscape or portrait page orientation in the Orientation section.



Headlines are used to output page numbers. It is possible to set display mode and text alignment of headliners in the Page Number section.

-Page num	nbers	
Position	Both	~
Align	Right	~

Report:

Empl	<sup>7</sup> oyees
Name	Phone
Nancy Davolio Andrew Fuller Anne Dodsworth Steven Buchana Laura Callahan	(206)555-9857 (206) 555-9482 (71) 555-4444 (71) 555-4444 (71) 555-4444
	7

It is possible to create multicolumn reports using Standard Wizard. To do this you should use Custom layout settings. Columns count defines the columns number, Columns gap defines the gap between columns (it is set with the DataBand.ColumnsCount and DataBand.ColumnsGap properties).

- Columns layout-	
Columns count	2
Columns gap	0,5

Report:



# Report Data for Simple List

The data for the report creation should be provided by the application, from which Report Designer is invoked. To add data you should press the "Add data" button. After this a new record in the template structure tree will appear and the section for data source setting and data display will open.

6

Pages       Customers         Common       Customers         Customers       Field layout         List       All fields         All fields       Image: State Stat	•
Customers     Field layout List     All fields     Visible fields Groups	~
<ul> <li>□ Customers</li> <li>□ City</li> <li>□ CompanyName</li> <li>□ CustomersOrder</li> <li>□ CustomersOrder</li> <li>□ Orders</li> </ul>	
Caption CompanyName Width 100 Aggregate None	incel

Data source is set in the Data Source field.

(DataSection)	
Data source	
Field layout	Card
All fields	Visible fields Groups
	rm (none)
	Sales
	ProductName
	Quantity

The fields of the data source, which is selected in the Data Source field, are displayed in All Fields list. It is possible to add field from the list to the table on the Visible tab using control buttons. It is possible to edit title, width and set aggregation function for each field.

Sales		
Data source Sales		
Field layout List		~
All fields	Visible fields Groups	
CategoryName	Field name Caption	Width Aggregate
CompanyName Discount ProductName Quantity UnitPrice	Product UnitPrice Price	100 None 100 Sum
	Caption Price	
	Width 100 Aggregate Sum	~

Report Template		Report	
dataBand1:DataBand_DataSourc	e = Sales	Product	Price
header1:Header		Chai	35,5 105
Product F	Price	Stout Maxilaku	2,6
detail1:Detail		Geitost	15,8
CletData	GetData 'Sales UnitPri	Flotemysost Courdavault	240 62,5
footer1:Footer		Chai	35,5
	Getlotal "Sales UnitP	Ipoh Coffee Filo Mix Filo Mix	50,5 14 14 <b>575.4</b>

Field layout list allows the selection of data view in the report: in the form of a list or cards.

Field layout	Report Template	Report
List Field layout List	dataBand1:DataBand_DataSource = Employees         header1:Header         Employee       Phone         detail1:Detail         I <letdata< td="">       I<letdata< td="">         IL'Employees       Employees         end of dataBand1       I<letdata< td=""></letdata<></letdata<></letdata<>	EmployeePhoneNancy Davolio(206)555-9857Andrew Fuller(206) 555-9482Anne Dodsworth(71) 555-4444Steven Buchana(71) 555-4444Laura Callahan(71) 555-4444Anne Yorke(71) 555-4444
Cards Field layout Card	dataBand1:DataBand DataSource = Employees         detail1_Employees_EmployeeName:Detail         Employee       I <uetdata< td="">         detail1_Employees_HomePhone:Detail         detail1_Employees_HomePhone:Detail         Phone       I<uetdata< td="">         U'Employees_HomePhone:Detail         end of dataBand1</uetdata<></uetdata<>	EmployeeNancy DavolioPhone(206)555-9857EmployeeAndrew FullerPhone(206) 555-9482EmployeeAnne DodsworthPhone(71) 555-4444EmployeeSteven BuchanaPhone(71) 555-4444EmployeeLaura CallahanPhone(71) 555-4444

# Grouping data

For creation of reports with grouping it is needed to transfer the grouping field to the table on the Groups tab from All fields tree.

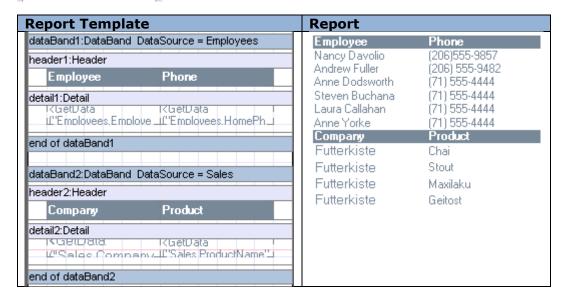
All fields	) 🕳	Visible fields	Groups	
🖃 Sales		Sales.Categ	kl	
CategoryName	<	Sales.Lated	oryivame	
CompanyName				
Discount	-			
ProductName	Î			
Quantity	Ť			
UnitPrice				

Report Template	Report	
dataBand1:DataBand_DataSource = Sales	Product	Price
header1:Header	Beverages	05.5
Product Price	Chai Stout	35,5 105
groupBand1:GroupBand Group = GetData("Sales.CategoryName")	Chai	35,5
header11:Header	Ipoh Coffee	50,5 <b>226,5</b>
<getdata("sales.categoryname")></getdata("sales.categoryname")>	Confections Maxilaku	26
detail1:Detail <pre>KtpetData ("Sales:ProductName")&gt; ("Sales:UnitPri </pre>	Maxilaku Dairy Products	2,6 <b>2,6</b>
footer1:Footer	Geitost Flotemysost Courdavault	15,8 240 62,5
end of groupBand1	o : 10 I	318,3
footer11:Footer <pre> </pre> <pre>       <pre>      <pre>        <pre>      <pre>       <pre>      <pre>      <pre>       <pre>      <pre< th=""><th><b>Grains/Cereals</b> Filo Mix Filo Mix</th><th>14 14 28 575,4</th></pre<></pre></pre></pre></pre></pre></pre></pre></pre></pre>	<b>Grains/Cereals</b> Filo Mix Filo Mix	14 14 28 575,4

#### Several Data Sources

Data from several data sources can be output in the report sequentially. To do this you should add data source to the template structure tree and transfer the needed fields to Visible fields.







### Master Detail Report

To create Master Detail reports it is necessary to add data source with details to the list of the other data source in the template structure tree.

Pages
수 🗕 🗟 🗋
Common
E Customers. Customers
Customers.Customers.CustomersOrder

Report Template	Report	
dataBand1:DataBand DataSource = Customers.Customers	Company	Bon App'
detail1_Customers_Customers_CompanyName:Detail Company KGetData 	<i>Date</i> 21.03.10 15.02.10	<i>Sum</i> 50.00 14.50 <i>64,5</i>
header1_1:Header	Company Date	Chop-suey Chinese Sum
Date Sum	03.04.10	134.00 45.45
detail1_1:Detail KGetData KGetData If Customers Cult Customers Custome	01.02.10	500.00 6.03
footer1_1:Footer	Company <i>Date</i>	<i>685,48</i> Maison Dewey <i>Sum</i>
end of dataBand1_1	06.06.10	66.66 <i>66.66</i>
end of dataBand1		

### **Creation of Report with Pivot Table (Pivot Table Wizard)**

Pivot Table Wizard allows the creation of report template which outputs data from the data source in the form of pivot table.

It is possible to open <u>Pivot Table Wizard</u> in the <u>Wizards Gallery</u> dialog.

Wia	zards	gallery				×
N	ew	Saved				
B	llank F	Report				
I S	itanda	rd Report				
F	<sup>p</sup> ivot ta	able Report				
				Load from file	OK	Cancel

🦨 Pivot table wiza	ard	$\mathbf{\overline{\mathbf{N}}}$
🗄 🗟 🗟		
Common settings	Pivot table settings	
Report template	properties	
🗹 Show title	Report title	
Measure unit	Centimeter	~
Style sheet	None	~
Script language	VisualBasicNET	~
Page properties Size Standard A4 Custom 0; 0	Orientation   Page numbers   Position   Header   Align   Right	
ОК	Cancel Save Preview template Preview document	

# Report Properties in Pivot Table Wizard

It is possible to set template common properties, which define the report appearance, on the Common settings tab.



The report name, set in the Title field using the Document.Title property, will be displayed in the report header:

Title	Report Template	Report
Report template properties	reportTitle:Detail	
Show title Sales	<document.title></document.title>	Sales
Massure unit Centimeter		

The report measure units are set with Measure unit field (the Document.MetricUnit property).

Report style can be set in the Style field:

Style Sheet	<b>Report Ten</b>	plate			Report					
	reportTitle:Detail		Sales							
Style sheet Modern1		<document.title></document.title>					Company			
	Cocoment. Inte>				Futterkiste	Karkki Oy	Shopy			
					Category	Product	Unit	Unit	Unit	
						Chai	35.5	35.5		
pivotTable1:PivotTable			Beverages	lpoh Coffee		50.5				
				pany	Develoyes	Stout 105				
						Total	140.5	86		
			Item	Total	Confections	Maxilaku	2.6			
	Category	Product	Unit	Unit	Confections	Total	2.6			
	outogoly					Courdavault	62.5			
		ltem 1	0.0	0.0	and frading	Flotemysost	240			
	Group	Item 2	0.0	0.0		Geitost	15.8			
	Group	116/11/2	0.0	0.0		Total	318.3			
		Total	0.0	0.0						
	То	tal	0.0	0.0						

The Script Language field allows the selection of the script language using the Document.ScriptLanguage property.

#### Page Properties in Pivot Table Wizard

The Page Properties section allows the setting of page properties. Paper format is selected from Paper kind list and is set with the Page.PaperKind property. In order to set arbitrary page size you should select Custom in Paper kind combo box and set the value to the Page size field.

Size		
Paper kind	A4	~
Page size	0; 0	

It is possible to set landscape or portrait page orientation in the Orientation section.

- Orientation					
<ul> <li>Portrait</li> </ul>					
🔘 Landscape					

Headlines are used to output page numbers. It is possible to set display mode and text alignment of headliners in the Page Number section.

Page numbers							
Position	Header	~					
Align	Right	~					



# Data for the Table

The data and table appearance are defined with the settings on the Pivotal table settings tab.

🛷 Pivot table wizard 🔀
Common settings Pivot table settings
Layout
Data source Sales
Nested fields
Add
Remove
Configure layout
Display
Table caption Pivot table
Rendering
Save table wizard Show repeat text
Show single fact 🔽 Dimension on every page
Formatting
✓ Auto column width Row height 60
Auto row height mode Dissimilar
OK Cancel Save Preview template Preview document

The data source is set in the Data source field. To adjust the pivot table cells you should open <u>Source Fields</u> editor with the "Configure layout" button. (More information about <u>data</u> in the pivot table)

It is possible to set pivot table caption in the Table caption field.

Display	
Table caption	Company Sales

		ouipany ouioo				
	Com					
		Futterkiste	Karkki Oy	Shopy	Total	
Category	Product	Price	Price	Price	Price	
	Chai	35.5	35.5		71	
0	lpoh Coffee		50.5		50.5	
Beverages	Stout	105			105	
	Total	140.5	86		226.5	
Confections	Maxilaku	2.6			2.6	
Comecaons	Total	2.6			2.6	
	Courdavault	62.5			62.5	
Dairy Products	Flotemysost	240			240	
Dany - Tooucas	Geitost	15.8			15.8	
	Total	318.3			318.3	

# **Company Sales**



The Rendering group of properties allows the setting of such properties of the PivotTable as: ShowRepeatText, ShowSingleFact, and DementionOnEveryPage.

Rendering	
🔽 Save table wizard	Show repeat text
🗹 Show single fact	Dimension on every page

The size of cells of the pivot table can be set in the Formatting section. It is possible to set the PivotTable.AutoColumnWidth, PivotTable.RowHeight and PivotTable.AutoRowHeight properties.

Formatting			
Auto column width	Row height	60	-
Auto row height mode	Dissimilar		<b>~</b>

(More information about pivot table properties)



# **Creation of Report using Table Wizard**

Table Wizard allows a user to create different tables in a few clicks.

Open a report template and press "Table" button on the Insert tab in the Tables Container.



# Selecting fields in Table Wizard

🕎 Table Wizard		23
Data source 🚺		
Employee		
Available fields 2	Selected field	ds 3
Title	FirstName	
BirthDate	LastName	
Address	Phone	
	(	8 Next > 9 Cancel

- 1 Data source contains the list of available data sources in the document.
- 2 Available fields contains the list of fields from the selected data source.
- 3 Selected fields contains the list of selected fields from the selected data source.
- **4** ">" adds selected field to the Selected fields list.
- **5** ">>" adds all available fields to the Selected fields list.
- 6 "<" removes the selected field from the Selected fields list.
- 7 "<<" removes all available fields from the Selected fields list.
- 8 "Next >" opens the next window of the Table Wizard.
- 9 "Cancel" closes the Table Wizard and cancels the adding of a new table.

📴 Table Wizard				23
Data source: Employee	1			
Field name 2	Field title	Width (cm)	4 Aggregate funct	ion (5
FirstName	First Name	4.00		
LastName	Last Name	4.00		
Phone	Phone	6.17		6
		13		<ul> <li>♪</li> <li>↓</li> <li>⑦</li> </ul>
Column count 1	8 Layout type	t 🔽 🧐		
		< Back	Next >	Cancel 12

# Properties of the selected fields in Table Wizard

**1** – **Data Source** grid displays all the fields that were selected on the previous Table Wizard step.

- **2 Field name** name of the field from the data source.
- **3 Field title** title for the field that will be displayed in the report.
- **4 Width** width of the field in the metric units used in the Document.
- **5 Aggregate function** report generator supports 12 built-in <u>aggregate functions</u>.
- **6 Move row up** moves the selected row up in the order of displayed fields.
- 7 **Move row down** moves the selected row down in the order of displayed fields.
- **8 Column count** sets the number of columns of a new table.

**9** – **Layout type** – sets the selection of data view in the report: in the form of a list or cards. (More information in <u>Page Properties in Standard Wizard</u>)

10 – "< Back" opens the previous window of the Table Wizard without losing the changes on the current window.

**11** – **"Next >"** opens the next window of the Table Wizard.

12 – "Cancel" closes the Table Wizard and cancels the adding of a new table.

**13** – **Editable area** – the field properties can be changed by double-click on the cell area or a single click on cell content.

# Sorting in Table Wizard

🕎 Table Wizard				23
Data source: Employee Available fields	Sort by fields	2		
Title	Field name	3 Sort direction	4	
Phone	FirstName	Ascending		
BirthDate	LastName	Ascending		
Address	>>			
		< Back 1	Cancel 1	3

- **1 Available fields** contains the list of fields from the selected data source.
- 2 **Sort by fields** contains the list of filelds by which the table will be sorted.
- **3 Field name** name of the selected field from the data source.
- 4 **Sort direction** defines the sorting order (ascending or descending).
- **5** ">" adds the selected field to the sorting list.
- **6** ">>" adds all available fields to the sorting list.
- 7 "<" removes the selected field from the sorting list.
- 8 "<<" removes all available fields from the sorting list.
- 9 Move row up moves the selected row up in the sorting order.
- **10 Move row down** moves the selected row down in the sorting order.

**11** – "< **Back**" opens the previous window of the Table Wizard without losing the changes on the current window.

- 12 "Finish" closes the Table Wizard and adds generated table to the report.
- **13 "Cancel"** closes the Table Wizard and cancels the adding of a new table.



# Interface

This chapter describes Ribbon Report Designer Interface.

Tabs

# **Home Tab**

This tab contains the most frequently used commands.



# **Clipboard Group**

This group contains buttons for working with the clipboard.



The "Paste Objects" button pastes the contents of the Clipboard into the selected area.

The "Cut Objects" button cuts the selected objects and put it on the Clipboard.

The "Copy Objects" button copies the selected objects and put it on the Clipboard.

The "Delete Objects" button deletes the selected objects.

# Font Group

This group contains controls for working with Font property.

Aria	il				•	9,75	•
B	I	U	Â	Ă	4	<u>+</u> -	<u>A</u>
			Font	t			- Fai

The "Font Name" list contains available styles (sets the Font.FamilyName property).

The "Font Size" list contains size values and allows the setting of arbitrary size (sets the Font.Size property).

The "Bold" button sets bold font for the text (sets the Font.Bold property).

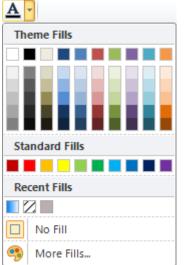
The "Italic" button sets italic font for the text (sets the Font.Italic property).

The "Underline" button sets underlined font for the text (sets the Font.Underline property).

The "Increase Font Size" button increase font size (sets the Font.Size property).

The "Decrease Font Size" button decrease font size (sets the Font.Size property).

The "Text Fill" button sets color and fill for text (sets the TextFill property of the selected object).



The "Theme Fills" and "Standard Fills" sections contain color pallete.

The "Recent Fills" section contains fills, which were recently used.

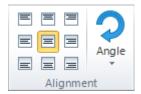
The "No Fill" menu item cancels all fill settings and sets TextFill property to "[None]".

The "More Fills..." menu item opens "Fill Editor" for creating custom fill.

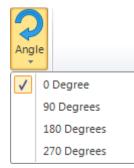
The "Use Style Only" button sets the style settings. These settings correspond to the selected style and remove all changes.

#### Alignment group

The "Alignment" table allows setting <u>TextAlign</u> and <u>ImageAlign</u> properties.



The "Angle" button sets Angle property, opens the list of allowed property values.







The "Fill" button sets color and fill for background (sets the Fill property).



The "Theme Fills" and "Standard Fills" sections contain color pallete.

The "Recent Fills" section contains fills, which were recently used.

The "No Fill" menu item cancels all fill settings and sets Fill property to "[None]".

The "More Fills..." menu item opens "Fill Editor" for creating custom fill.

The "Border" button sets border (sets the **Border property**).

Bord	er	
	Bottom Border	
	To <u>p</u> Border	
	Left Border	
	<u>R</u> ight Border	1
	<u>N</u> o Border	
	<u>All Borders</u>	1
1	L <u>i</u> ne Color	•
—	Line St <u>v</u> le	2
ß	More Borders	3

1 – This menu items set borders lines location.

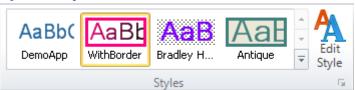
**2** – This submenu items set border lines style and color: the "Line Color" submenu contains color palette; the "Line Style" submenu contains line types.

3 – The "More Borders..." menu item opens "Border Editor".

The "Margins" button opens "Margins Editor" for setting Margins property.



# Styles Group



The "Styles Gallery" includes preview of the template's styles. Click on style's preview applies this style to the selected object (sets <u>StyleName property</u>).

AaBb( DemoApp	AaBt WithBorder	AaB Bradley H	Aae Antique
AaBbCc.			
Pink & Blue			
Save Sel	ection as a N	ew Style	
Select Controls with Similar Style			

The "Save Selection as a New Style" menu Item opens "Create New Style from Formatting" dialog for setting name of new style and saves the style of selected object.

The "Select Controls with Similar Style" menu item selects all objects on the current page, which StyleName property is set to the style of selected object.

The "Edit Style" button opens "Style Sheet Editor".

#### Select Group

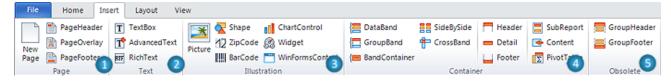
The "Select" button switches the Select Mode on.





# Insert Tab

This tab allows adding objects to a template. Buttons are divided into groups.



1 – The "Page" group contains buttons, which allow adding new pages, PageHeader, Page Overlay and PageFooter bands.

2 – The "Text" group contains buttons, which allow adding text output elements: TextBox, AdvancedText and RichText.

**3** – The "Illustration" group contains buttons, which allow adding various visual elements: Picture, Shape, ZipCode, BarCode, ChartControl, Widget and WinFormsControl.

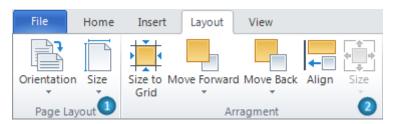
**4** – The "Container" group contains buttons, which allow adding various bands: DataBand, GroupBand, BandContainer, SideBySide, CrossBand, Header, Detail, Footer, SubReport, Content and PivotTable bands.

**5** – The "Obsolete" group contains buttons, which allow adding GroupHeader and GroupFooter bands, which are obsolete and needed for backward versions compatibility. But it is not recommended to use these components to create new reports. GroupBand together with Header and Footers should be used.

(Read more about Template Objects)

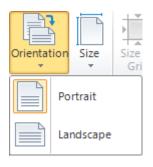
# Layout Tab

This tab contains controls that affect the page layout, spacing and positioning objects.

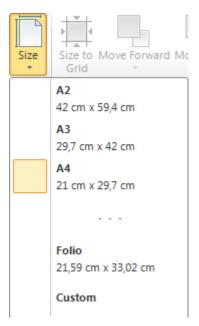


**1** – The "Page Layout" group contains buttons, which allow setting page properties:

The "Orientation" button sets Page.Orientation property. It opens the list of property's values.



The "Size" button sets Page.PaperKind property. It opens the list of property's values. The "Custom" menu item opens "Paper Size Editor" to set custom page size.

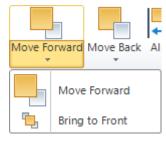


**2** – The "Arrangement" group allows management of object size and position:

The "Size to Grid" button changes size of selected object to snap it to grid.

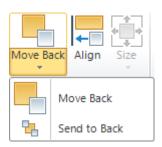
The "Align" button opens the "Align" Editor for objects alignment setting.





The "Move Forward" menu item brings the selected object forward so that it is hidden by fewer objects that are in front of it in the current container.

The "Bring to Front" menu item brings the selected objects in front of all other objects so that no part of it is hidden behind another object in the current container.



The "Move Back" menu item sends the selected objects backward so that it is hidden by the objects that are in front of it in the current container.

The "Send to Back" menu item sends the selected objects behind all other objects in the current container.

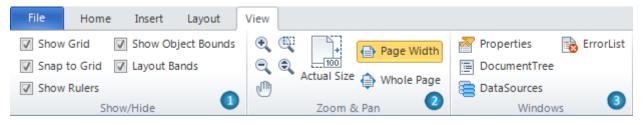
The "Size" button changes sizes of the selected objects. Menu items set the parameter as main selected object.

Size		
	Same Width as advancedText2	
ŧI	Same Height as advancedText2	
<b>E</b>	Same Size as advancedText2	



# View Tab

This tab contains controls that affect the template view, including view mode, show/hide options, zooming and window management.



1 – The "Show/Hide" group allows setting designer view:

The "Show Grid" checkbox switches on/off the display of a grid (sets the <u>Document.ShowGrid property</u>).

The "Snap to Grid" checkbox switches on/off the option of binding to a grid (sets the <u>Document.SnapToGrid property</u>).

The "Show Rulers" checkbox switches on/off the display of a rule.

The "Show Object Bounds" checkbox switches on/off the display of objects bounds (sets the <u>Document.ShowObjectBounds property</u>).

The "Layout Bands" checkbox switches on/off the option of automatic layout of the bands.

2 – The "Zoom & Pan" group allows setting zoom and Pan Mode.

**3** – The "Windows" group contains buttons allows open Properties, Document Tree, Data Sources and Error List windows.



# **Contextual Tabs**

Contextual tabs are used to display a collection of commands that are relevant only when particular object is selected.

### **TextBox Tab Set**

The <u>TextBox</u> tab set includes "Format" tab.

<b>≤7</b> (≃ [d] []	Report Sharp-Shor	ster Designer	
File Home Insert Layout View	Format		
CanGrow Visible General General	• Arial •	🗉 - 555 🔿 🗔 🖄 📺	
FrowToBottom	📇 I 🛛 🗛 🖉		ScortTitle HeaderTitle PageHead PageNum PageFoote v Edit
Render Sext Format	ra 🕑 Font	G Synment Appearance	Styles G

The "Format" tab for TextBox includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, GrowToBottom and Visible.

**2** – The "TextFormat" group sets TextFormat property. The list contains available property's values. The buttons allow set Currency, Percentage and Number format quickly.

**3** – The "Font" group allows setting Font property.

**4** – The "Alignment" group allows setting TextAlign property.

5 – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill and Margins.

6 – The "Styles" group allows setting StyleName property.

### **AdvancedText Tab Set**

The <u>AdvancedText</u> tab set includes "Format" tab.

♥ C A B ▼	Minne	Report Sharp-Shooter Designer					
Re Home Insert Layout View	Format						
CanBreak GrowToBottom General	٠	Arial • 9.75 •		🔈 🗔 🖄 🔟	AaBbCcD	AsBbCcD AsBbCct AsBbCct	AsBeCcc : A
CanGrow Visible	2	<b>▶</b> 7 및 A A' A · A.		Angle Border Fill Margins	Normal		- E.G.
Render Sext Form	at 6	Font G	Ament	Appearance	•	Styles	9

The "Format" tab for AdvancedText includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanBreak, CanGrow, CanShrink, GrowToBottom and Visible.

2 – The "TextFormat" group sets TextFormat property. The list contains available property's values. The buttons allow set Currency, Percentage and Number format quickly.

**3** – The "Font" group allows setting Font property.

**4** – The "Alignment" group allows setting TextAlign property.

**5** – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill and Margins.

**6** – The "Styles" group allows setting StyleName property.



# **RichText Tab Set**

The <u>RichText</u> tab set includes "Format" tab.

🖬 🖓 🕞 🛐 🖬				Ridiller	- Report Sharp-Shooter Designer								
File Home	Insert	Layout	View	Format									
<ul> <li>CanGrow</li> <li>CanShrink</li> <li>GrowToBottom</li> </ul>	✓ Visible		Border	Fill Margi	AaBbCcD AaBbCcD AaBbCcC AaBbCcC AaBbCcC · · ·	Edit Edit							
1 Render		2	Appea	rance	3 Styles	- Gi							

The "Format" tab for RichText includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, GrowToBottom and Visible.

**2** – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill and Margins.

3 – The "Styles" group allows setting StyleName property.

### **Picture Tab Set**

The <u>Picture</u> tab set includes "Format" tab.

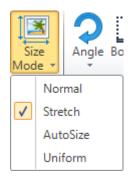
K	2 (2) [2	l 😼 =				Ricture	- Report Sharp	-Shooter Desig	ner					
	File	Home	Insert La	iyout Vie	ew	Format								
[	Grow Visible	ToBottom e		Size Mode *	Ang	le Border	Fill Margins	AaBbCcD Normal	AaBbCcD Hightlight	AaBbCcD HeaderFo	AaBbCcE HeaderFo	AaBbCcE HeaderFo	A A Edit Edit Style	t
	Rer	nder	<b>O</b> gnment	Olings	•	Appe	arance	5		Styles				5

The "Format" tab for Picture includes following groups:

**1** – The "Render" group contains Checkboxes for setting Render properties: GrowToBottom and Visible.

2 – The "Alignment" group sets ImageAlign property.

**3** – The "Settings" group contains the "Size Mode" button, which sets SizeMode property, opens the list of allowed property values.



**4** – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill and Margins.

**5** – The "Styles" group allows setting StyleName property.

# Shape Tab Set

The <u>Shape</u> tab set includes "Format" tab.

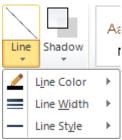


The "Format" tab for Shape includes following groups:

**1** – The "Render" group contains Checkboxes for setting Render properties: GrowToBottom and Visible.

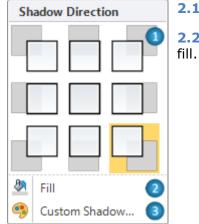
**2** – The "Appearance" group contains buttons for setting Appearance properties: Fill, Line and Shadow.

The "Line" button allows setting the line of shape: Line Color, Width and Style.



The "Line Color" menu item contains color palette; the "Line Style" As submenu contains line types.

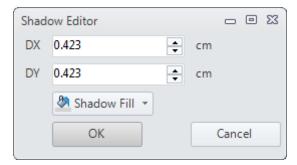
The "Shadow" button sets the shadow of shape.



**2.1** – The area for setting shadow location.

**2.2** – The "Fill" menu item opens color palette for setting shadow fill.

**2.3** – The "Custom Shadow" menu item opens Shadow Editor for setting shadow properties.



3 – The "Styles" group allows setting StyleName property.

# ZipCode Tab Set

The <u>ZipCode</u> tab set includes "Format" tab.

🗳 🖓 🕞 🖓 📼		ZipCode	- Report Sharp-Shooter Designer								
File Home	Insert Layout View	Format									
GrowToBottom	Angle Border Color Fill	Margins	AaBbCcD     AaBbCcD     AaBbCcC     AaBbCcC     AaBbCcC     AaBbCcC     AaBbCcC     Edit       Normal     Hightlight     HeaderFo     HeaderFo     HeaderFo     HeaderFo     HeaderFo								
1 Render	2 Appearance		3 Styles 🖙								

The "Format" tab for ZipCode includes following groups:

**1** – The "Render" group contains Checkboxes for setting Render properties: GrowToBottom and Visible.

**2** – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill, Margins and Color, which sets ZipCode.Color property.

**3** – The "Styles" group allows setting StyleName property.

## BarCode Tab Set

The <u>BarCode</u> tab set includes "Format" tab.

500	à 😼 🔹				bachad.	document1 - Report Sharp-Shooter (	Designer							
File	Home	Insert	Layout	View	Format									
Grow	Te8ettom	Arial		- 12	Lab		2		$[\mathbf{T}]$	AaBbCcD	AaBbCcD	AaBbCcC	AaBbCcE	AaBbCcE
	c	5	u  ₄	. <u>A</u> ·	Ac ot	tomCenter • Z Bar Color • Z Text Color •	Angle Bo	order Fill	Margins	Normal	Highklight			HeaderFo + Edit Styles
- No	nder	9	Font		- n 🔍	BarCode Settings	•	Appearance				Styles		6

The "Format" tab for BarCode includes following groups:

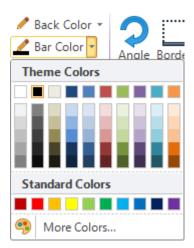
**1** – The "Render" group contains Checkboxes for setting Render properties: GrowToBottom and Visible.

- 2 The "Font" group allows setting Font property.
- **3** The "BarCode Settings" group contains is for setting special BarCode's properties:

The "Label" list contains LabelPosition property values and "None" value for setting ShowLabel property to "False".

Label
-
None
BottomLeft
BottomCenter
BottomRight
TopLeft
TopCenter
TopRight

The "Back Color", "Bar Color" and "Text Color" buttons set BackColor, BarColor and TextColor properties.

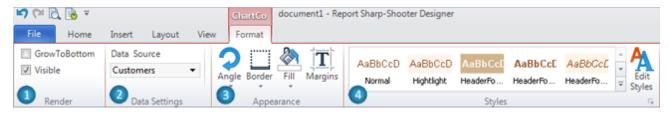


4 – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill and Margins.

5 – The "Styles" group allows setting StyleName property.

### **ChartControl Tab Set**

The ChartControl tab set includes "Format" tab.



The "Format" tab for ChartControl includes following groups:

**1** – The "Render" group contains Checkboxes for setting Render properties: GrowToBottom and Visible.

2 – The "Data Settings" group contains control for setting DataSource property.

**3** – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill and Margins.

5 – The "Styles" group allows setting StyleName property.

### Widget Tab Set

The Widget tab set includes "Format" tab.

🗗 (?) 😼 🔂 🗉		White - Report Sharp-Shooter Designer							
File Home	Insert Layout View	Format							
GrowToBottom	Angle Border Fill Margin	AaBbCcD AaBbCcD AaBbCcC AaBbCcC AaBbCcC · AaBbCcC · · · · · · · · · · · · · · · · · ·	Edit Styles						
<ol> <li>Render</li> </ol>	2 Appearance	3 Styles							

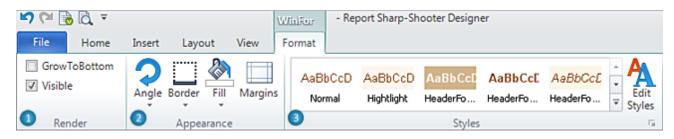
The "Format" tab for Widget includes following groups:

 The "Render" group contains Checkboxes for setting Render properties: GrowToBottom and Visible.

2 – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill and Margins. 3 – The "Styles" group allows setting StyleName property.

## WinFormsControl Tab Set

The <u>WinFormsControl</u> tab set includes "Format" tab.



The "Format" tab for WinFormsControl includes following groups:

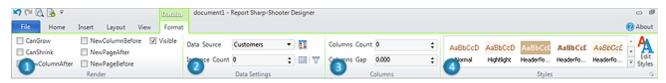
**1** – The "Render" group contains Checkboxes for setting Render properties: GrowToBottom and Visible.

**2** – The "Appearance" group contains buttons for setting Appearance properties: Angle, Border, Fill and Margins.

3 – The "Styles" group allows setting StyleName property.

### **DataBand Tab Set**

The DataBand tab set includes "Format" tab.



The "Format" tab for DataBand includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore and Visible.

**2** – The "Data Settings" group contains controls for setting following properties: DataSource, InstanceCount, Sort, Totals and FilterExpression.

**3** – The "Columns" group contains controls for setting following properties: ColumnsCount and ColumnsGap.

**4** – The "Styles" group allows setting StyleName property.

### **GroupBand Tab Set**

The GroupBand tab set includes "Format" tab.

500	l 😼 🗉 👘				للرجمية	document1 - Report S	harp-Shooter Design	ner					
File	Home	Insert	Layout	View	Format								
CanG	row	🗌 Nev	vColumn8ef	fore 🔽	Visible		Columns Count	• •					· A
CanSt	hrink	🔲 Nev	vPageAfter			Group AI A-21			AaBbCcD	AsBbCcD	AaBbCcL	AaBbCcE	AaBbCcE
( eve	olumnAfter	🗌 Nev	vPageBefore	e		Group 🛃 🎊	Commis Gap 0	0.000 :	Normal	Hightlight	HeaderFo	Headerfo	Headerfo V Styles
		Rend	er			Data Settings	Col	lumns	•		Styles		6

The "Format" tab for GroupBand includes following groups:

 The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore and Visible.

**2** – The "Data Settings" group contains controls for setting following properties: GroupExpression, SortExpression and Order.

**3** – The "Columns" group contains controls for setting following properties: ColumnsCount and ColumnsGap.

4 – The "Styles" group allows setting StyleName property.

### **BandContainer Tab Set**

The BandContainer tab set includes "Format" tab.

🖬 🕼 😰 🛋 🗉		BandCo	- Report Sharp-Shooter Designer								
File Home	Insert Layout View	Format									
CanGrow	🔲 NewColumnBefore 🛛 📝	Visible							A		
CanShrink	NewPageAfter		AaBbCcD	AaBbCcD		AaBbCcE		Ψ.	A		
NewColumnAfter	NewPageBefore		Normal	Hightlight	HeaderFo	HeaderFo	HeaderFo	Ŧ	Styles		
	Render		Styles								

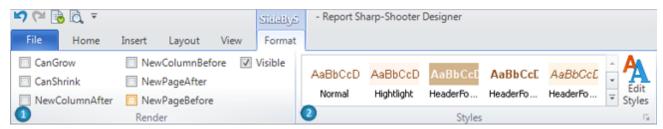
The "Format" tab for BandContainer includes following groups:

 The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore and Visible.

2 – The "Styles" group allows setting StyleName property.

### SideBySide Tab Set

The SideBySide tab set includes "Format" tab.



The "Format" tab for SideBySide includes following groups:

 The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore and Visible.

2 – The "Styles" group allows setting StyleName property.

### **CrossBand Tab Set**

The <u>CrossBand</u> tab set includes "Format" tab.

🔊 (°' 🗋 😼	Ŧ			Greadba	docume	document1 - Report Sharp-Shooter Designer								
File Ho	me Insert	Layout	View	Format										
CanGrow CanShrink	Data Source Instance Count	Custom 0	iers	•	AaBbCcD Normal	AaBbCcD Hightlight	AaBbCcD HeaderFo	AaBbCcE HeaderFo	AaBbCcE HeaderFo	÷ A Edit Styles				
Render	2 Dat	a Setting	s	3			Styles			Styles				

The "Format" tab for CrossBand includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink and Visible.

**2** – The "Data Settings" group contains controls for setting following properties: DataSource and InstanceCount.

**3** – The "Styles" group allows setting StyleName property.



# Header Tab Set

The <u>Header</u> tab set includes "Format" tab.

<b>N</b> (5) 🕞	₫ =				Hender	- Report Sharp	- Report Sharp-Shooter Designer								
File	Home	Insert	Layout	View	Format										
CanBrea	ek 🔲 N	ewColum	After	NewPa	geBefore	Visible	MinSpaceAfter	0.000	:	Auptoup	ALPHOLD	A - DL C - D	Aughter	4.010.0	·A
CanGrow				Repeate	EveryColum	'n				Aabbucu			AaBbCcE		·
anShri	ink 🔲 N	ewPageAf	ter	Repeate	EveryPage					Normal	Hightlight	HeaderFo	HeaderFo	HeaderFo	▼ Edit ▼ Styles
•				R	ender					•		Styles			G.

The "Format" tab for Header includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanBreak, CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore, RepeatEveryColumn, RepeatEveryPage and Visible; counter MinSpaceAfter sets MinSpaceAfter property.

2 – The "Styles" group allows setting StyleName property.

Footer Tab Set

The <u>Footer</u> tab set includes "Format" tab.

5 (2)	🔊 🍽 🐻 🗟 🔻 🛛 footer				Footer	- Report Sharp	-Shooter	Desig	gner					
File	Ho	me Inser	t Layou	t View	Format									
🔲 Can	Break	NewCol	umnAfter	🗌 NewPa	geBefore	MinSpaceAfter	0.000	\$	AsPhCaD	AsPhCaD	AsPhCaP	AaBbCcE	As PhC of	- A
🔲 Can	Grow	NewCol	umnBefore	PlaceIn	Bottom				Aabbocob	Aabbeeb	Aabbeet	Adducct	ABDOUCE	· 🙃
Can	Shrink	NewPag	eAfter	Visible					Normal	Hightlight	HeaderFo	HeaderFo	HeaderFo	₹ Edit Styles
•				Render					•		Styles			G.

The "Format" tab for Footer includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanBreak, CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore, PlaceInBottom and Visible; counter MinSpaceAfter sets MinSpaceAfter property.

2 – The "Styles" group allows setting StyleName property.

### **Detail Tab Set**

The <u>Detail</u> tab set includes "Format" tab.

🖌 🔄 🖗 🗹 🛛	7 🖓 🔂 🔻 🚺 🖓				- Report Sharp-	Shooter	Desi	gner					
File Hom	e Insert	Layout	View	Format									
CanBreak [	NewColumn	After	🔲 NewPa	geBefore	MinSpaceAfter	0.000	0	4.010.0		A - DL C - D	A	4-0-0-0	- A
CanGrow [	NewColumn	Before	Visible									AaBbCcE	- Edit
CanShrink [	NewPageAf	ter						Normal	Hightlight	HeaderFo	HeaderFo	HeaderFo	▼ Edit ▼ Styles
•			Render					•		Styles			5

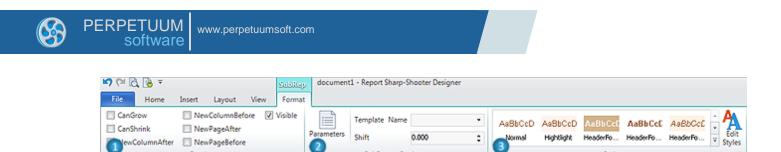
The "Format" tab for Detail includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanBreak, CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore and Visible; counter MinSpaceAfter sets MinSpaceAfter property.

2 – The "Styles" group allows setting StyleName property.

### SubReport Tab Set

The <u>SubReport</u> tab set includes "Format" tab.



SubReport Settings

The "Format" tab for SubReport includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore and Visible.

Styles

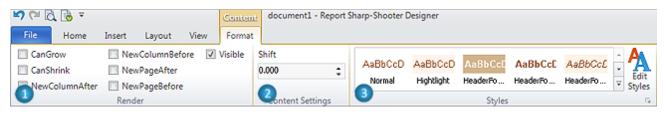
2 – The "SubReport Settings" group contains controls for setting following properties: Parameters, TemplateName and Shift.

3 – The "Styles" group allows setting StyleName property.

#### **Content Tab Set**

Render

The <u>Content</u> tab set includes "Format" tab.



The "Format" tab for Content includes following groups:

 The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore and Visible.

2 – The "Content Settings" group contains control for setting Shift property.

**3** – The "Styles" group allows setting StyleName property.

#### **PivotTable Tab Set**

The <u>PivotTable</u> tab set includes "Format" tab.

🖬 🖓 🖉 🖉 🗸		Hiseeffa	document1 - Report	Sharp-	Shooter Design	er				
File Home	Insert Layout View	Format	]							
CanGrow	NewColumnBefore	Visible	Data Source		ALPHO-P	4-8-C-8	A-DLC-D	A-PLC-F	4-060-0	A
CanShrink	NewPageAfter		Customers 🔹 💌	_	AaBbCcD					
	NewPageBefore				Normal	Hightlight	HeaderFo	HeaderFo	HeaderFo 👳	Edit Styles
•	Render		Data Settings		3		Styles			G.

The "Format" tab for PivotTable includes following groups:

 The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, NewColumnAfter, NewColumnBefore, NewPageAfter, NewPageBefore and Visible.

 2 – The "Data Settings" group contains controls for setting following properties: DataSource, FilterExpression and Layout.

3 – The "Styles" group allows setting StyleName property.

# PageHeader Tab Set

The <u>PageHeader</u> tab set includes "Format" tab.

🖬 🕼 🖗 🛓		فلتلفرينها	- Repor	- Report Sharp-Shooter Designer					
File Hom	e Insert	Layout	View	Format					
CanGrow CanShrink	Mode AllPag	jes 🔻		BbCcD ormal	AaBbCcD Hightlight	AaBbCcE HeaderFo	AaBbCcE HeaderFo	AaBbCcE HeaderFo	<ul> <li>▲</li> <li>Edit</li> <li>Tyles</li> </ul>
	Render		2			Styles			E.

The "Format" tab for PageHeader includes following groups:

**1** – The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, Visible and list Mode, which contains Mode property value.

2 – The "Styles" group allows setting StyleName property.

### PageFooter Tab Set

The <u>PageFooter</u> tab set includes "Format" tab.

🖍 🖓 🖓	فالعربيط	- Repor	- Report Sharp-Shooter Designer							
File Hor	ne Insert	Layout	View	Format						
CanGrow CanShrink	Mode AllPa	ges 🔹	AaB		AaBbCcD Hightlight	AaBbCcD HeaderFo	AaBbCcE HeaderFo	AaBbCcE HeaderFo	Ť	Edit Styles
	Render		2			Styles				- Gi

The "Format" tab for PageFooter includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, Visible and list Mode, which contains Mode property value.

2 – The "Styles" group allows setting StyleName property.

## PageOverlay Tab Set

The <u>PageOverlay</u> tab set includes "Format" tab.

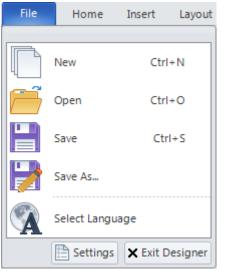
🖍 (m P 🦉	Ŧ		PageOv	- Repor	t Sharp-Shoo	ter Designer		
File Hon	ne Insert Layout	View	Format					
CanGrow CanShrink	Mode AllPages			AaBbCcD Hightlight	AaBbCcD HeaderFo	AaBbCcE HeaderFo	AaBbCcE HeaderFo	<ul> <li>▲</li> <li>▲</li> <li>Edit</li> <li>Styles</li> </ul>
1	Render	2			Styles			G

The "Format" tab for PageOverlay includes following groups:

1 – The "Render" group contains Checkboxes for setting Render properties: CanGrow, CanShrink, Visible and list Mode, which contains Mode property value.

2 – The "Styles" group allows setting StyleName property.

# Application Menu



The "New" menu item opens Wizards Gallery dialog for the creation of a new template.

The "Open" menu item opens "Open Template" window for opening template or document.

The "Save" menu item saves changes in the edited template or document. If the template or document is not saved, opens the "Save Template" window for selection of folder for saving and file name.

The "Save As..." menu item opens the "Save Template" window for selection of folder and file name to save a report or document.

The "Select Language" menu item opens the "Select Language" window for the selection of localization language.

The "Settings" button opens "Palette Settings" window for selection of Theme and Color scheme of the Designer.

The "Exit Designer" button closes Report Designer.



# **Binding Bar**

Binding Bar allows to set binding objects' properties quickly.

Name page1	Binding StyleName	2 • fz 3	4
------------	-------------------	----------	---

1 – Name – This field sets the name of the selected object.

**2** – Binding – This is a list of dynamic properties of the selected object. It allows the selection of the property for a value setting.

Binding		StyleName 🔽
	_	Bookmark
		Hyperlink
	Г	Location
	L	Size
	L	StyleName
1	L	Tag
-	Ŀ	ToolTip
2	Ŀ	Visible

**3** – Script Editor – This button opens the <u>Script Editor</u> for setting the expression of the selected object.

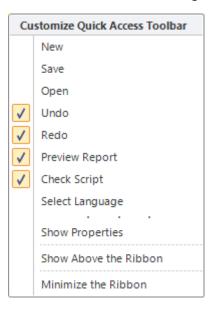
4 – F(x) – This field sets the expression to set dynamic property for selected object.

# **Quick Access Toolbar**

The Quick Access Toolbar is used to provide access to frequently used commands.



Customization allows adding necessary commands.



### The next command can be added to Quick Access Toolbar:

Button	Action
New Document	Create a new template
Save	Save changes in a template
Open	Load a template or document from file
Select Language	Open "Select Language" dialog
Font	Open "Font" dialog
Use Style Only	Set the style settings
Fill	Open "Fill Editor" to set Fill property
Text Fill	Open "Fill Editor" to set TextFill property
Border	Open "Border Editor"
Margins	Open "Margins Editor"
Text Format	Open "Format Editor"
Style Sheet Editor	Open "Style Sheet Editor"
Align	Open "Align" dialog
Actual Size	Set zoom to 100%
Page Width	Fit to page width
Whole Page	Fit to whole page
Properties	Open "Properties" window
Document Tree	Open "Document Tree" window
Data Source	Open "Data Source" window
Error List	Open "Error List" window
Show Grid	Switch on/off the display of a grid



Snap to Grid	Switch on/off the option of binding to a grid
Show Rulers	Switch on/off the display of a rule
Show Objects Bounds	Switch on/off the display of objects bounds
Layout Bands	Switch on/off the option of automatic layout of the bands
Template Properties	Open template properties



# **Context Menu**

Context menu contains most frequently used items. List of menu items depends on currently selected report objects.

## **Common Actions**



#### selected objects.

Editin	g and Positioning	
	Edit	1
T.	Clean	2
	Arrange	3 ▶

**1** Cut Objects – This menu item cuts the selected objects and put it on the Clipboard.

**2** Copy Objects – This menu item copies the selected objects and put it on the Clipboard.

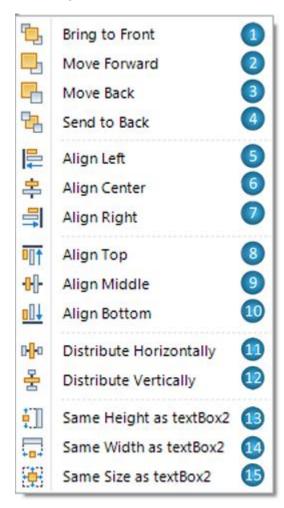
**3** Paste – This menu item pastes the contents of the Clipboard into the selected area.

4 Delete Objects - This menu item deletes the

**1** Edit – This menu item opens an editor:

- Text Editor for TextBox element to set TextBox.Text property;
- Formatted Text Editor for AdvancedText element to set AdvancedText.Text property;
- RichText Editor for RichText element to set RichText.RTFtext property;
- Open file dialog to choose image and to set Picture.Image property;
- Text Editor for BarCode element to set BarCode.Code property;
- Chart ModelKit designer for ChartControl element to set ChartControl.Chart property;
- Instrument Designer for Widget element to set Widget.Instrument property;
- Source Fields for PivotTable section to set PivotTable.Layout property.
- 2 Clean This menu item cleans the content:
  - TextBox.Text property for TextBox element;
  - AdvancedText.Text property for AdvancedText element;
  - RichText.RTFtext property for RichText element;
  - Picture.Image property for Picture element;
  - BarCode.Code property for BarCode element;
  - ChartControl.Chart property for ChartControl;
  - Widget.Instrument property for Widget element.

**3** Arrange – This submenu contains items for managing objects order, position and size.



**3.1** Bring to Front - This menu item brings the selected objects in front of all other objects so that no part of it is hidden behind another object in the current container.

**3.2** Move Forward - This menu item brings the selected object forward so that it is hidden by fewer objects that are in front of it in the current container.

**3.3** Move Back - This menu item sends the selected objects backward so that it is hidden by the objects that are in front of it in the current container.

**3.4** Send to Back - This menu item sends the selected objects behind all other objects in the current container.

The following items are available only if multiple objects are selected:

**3.5** Align Left – This menu item aligns lefts of the selected objects by the left border of the most left object.

**3.6** Align Center - This menu item aligns centers of the selected objects by the center between the most left and the most right objects.

**3.7** Align Right - This menu item aligns rights of the selected objects by the right border of the most

right object.

**3.8** Align Top - This menu item aligns tops of the selected objects by the top border of the most top object.

**3.9** Align Middle - This menu item aligns middles of the selected objects by the middle between the most top and the most bottom objects.

**3.10** Align Bottom - This menu item aligns bottoms of the selected objects by the bottom border of the most bottom object.

**3.11** Distribute Horizontally – This menu item distributes selected objects horizontally making horizontal spaces between them equal to each other.

**3.12** Distribute Vertically – This menu item distributes selected objects vertically making vertical spaces between them equal to each other.

**3.13** Same Height as <main selected object\*> - This menu item sets height of every selected object as the main selected object's height.

**3.14** Same Width as <main selected object> - This menu item sets width of every selected object as the main selected object's width.

**3.15** Same Size as <main selected object> - This menu item sets size of every selected object as the main selected object's size.

\* Main selected object – object, which was last selected at current selected objects. This object is marked in a darker blue.



# **Element-dependent Menu Items**

Here are menu items used for setting unique objects' properties.

SizeMode – This is for setting Picture.SizeMode property; the submenu under it contains the list of SizeMode property values.

SizeMode 🕨 🕨		Normal
	<ul> <li>Image: A start of the start of</li></ul>	Stretch
		AutoSize
		Uniform

ShapeStyle – This menu item is for setting Shape.ShapeStyle property; the submenu under it contains the list of ShapeStyle property values.

ShapeStyle	[None]
	RectangleShape
	LineShape
	EllipseShape
	RoundRectangleShape
	TriangleShape

CodeType – This menu item is for setting BarCode.CodeType property; the submenu under it contains the list of CodeType property values.

		Code128A
		Code128B
CodeType +	<ul> <li>Image: A start of the start of</li></ul>	Code128C
		Code128
		Code93
		Code93Extended
		CodeMSI

DataSource – This menu item is for setting DataSource property of DataBand, PivotTable and CrossBand sections; the submenu under it contains the list of data sources of the template.

DataSource 🕨	<ul> <li>Image: A start of the start of</li></ul>	Employees
		Customers

GroupExpression – This menu item opens Script Editor for setting GroupBand.GroupExpression property.

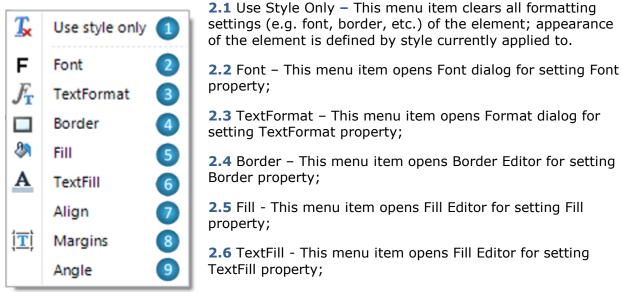


SubReport – This menu item is for setting SubReport.TemplateName property; the submenu under it contains the list of Report Names contained in the current ReportManager.

	SubReport	•	CustomersSubreport EmployeesSubreport
Editin	g Elements Styles StyleName	•	

**1** StyleName – This submenu is for setting StyleName property of the objects; contains the list of styles defined in the template.

**2** Style – This submenu contains the following items:



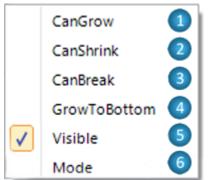
**2.7** Align – This menu item is for setting TextAlign or ImageAlign properties; submenu under it contains align options;

2.8 Margins - This menu item opens Margins Editor for setting Margins property;

**2.9** Angle – This menu item is for setting Angle property; contains the list of allowed property values;

## **Render Submenu**

This submenu provides ability to set elements' properties that affect their rendering.



or False.

1 CanGrow – This menu item sets CanGrow property to True

**2** CanShrink – This menu item sets CanShrink property to True or False.



- **3** CanBreak This menu item sets CanBreak property to True or False.
- **4** GrowToBottom This menu item sets GrowToBottom property to True or False.
- **5** Visible This menu item sets Visible property to True or False.

**6** Mode – This menu item sets Mode property; submenu under it contains the list of allowed property values.

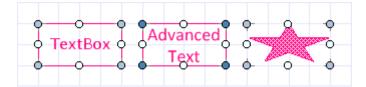
<b>Misc</b>	Items
2	Show Properties

Show Properties – The menu item shows Property Grid with the selected objects' properties.

#### **Group selection**

When multiple objects are selected, context menu contains items which are common for all selected objects. Commands are applied to each selected object.

AdvancedText element is selected objects main at the following picture:





# Docking

The new Report Designer with ribbon interface supports dockable windows. Properties, DataSource, Document Tree and Error List windows are dockable. It means that windows can be attached, or docked, to any side of the designer window, or it can be detached, or floated, in its own mini-frame window.

### **Properties**

- -

Property Grid is intended to display and edit properties of the selected element.

		•	23	1 – Object List – This is a list of template objects which displays all template
Pr	operties	•	×	objects. Property Grid displays the object
te	xtBox1 TextBox	1	-	properties selected in Object List. The first
	<b>₽</b> ↓   <b>□</b> ■ <sub>2</sub>   <b>□</b>			word is an object name, the second – an object type.
2	43 aa 4 ci 5 6			2 – Categorized – This button switches on
	Angle	0 0		the mode of properties display by
	Border			categories.
	ClipText	False		
	Fill	[None]	_	3 – Alphabetical – This button switches on
_	Font	Arial; 15pt	_	the mode of properties display in
Ŧ	Margins	0; 0; 0; 0 cm		alphabetic order.
	RightToLeft	False	=	
	StringTrimming	Character	=	4 – Properties – This button switches on
	StyleName	DemoApp (9		the mode of static properties display.
	Text	New designer demo applic	2	
	TextAlign	MiddleCenter		5 – Bindings – This button switches on the
Đ	TextFill	SolidFill		mode of dynamic properties display.
	TextFormat			, , , , , , , , , , , , , , , , , , , ,
	ToolTip			6 – Property Pages. This button is not
Ξ	Data			used.
	Tag			
Ξ	Design			<b>7</b> – Property Grid – Object property grid.
	Name	textBox1		Crown of proportion
	Layout			8 – Group of properties.
Ŧ	Location	2.5; 2 cm		9 – Properties: name and value.
Ŧ	Size	11.5; 1 cm		
Ξ	Navigation			<b>10</b> – Description – Description of the
	tyleName		10	selected property.
D	etermines the name of the	e style applied to the control.		
-			-	

Different methods are used for properties setting:

Ξ	Design		
	Name	dataBand1	1
	ShowBottom	True	
	ShowCaption	True	
Ξ	Data		
	DataSource		
	FilterExpression		2
	InstanceCount	0	-
Ξ	Data		
	DataSource	UserDayaSource	3 🖵
	FilterExpression		
	InstanceCount	0	

- **1** Field for input of text and numeric values.
- **2** This button opens the property editor.
- 3 List of values.

### **Data Sources**

			▣	23
DataSour	rces		•	×
Bands	Data Sources		1	
		tion	2	• E
	Page Number			-

 Switching between Bands and Data Sources parts. Data from report bands and special fields are displayed in Band part. Data from report data sources are displayed in Data Sources part.

**2** –The tree of fields from data source allows the creation of TextBox objects for information output from data source by dragging the fields.



# **Document Tree**

The document tree represents a set of objects ordered according to the report structure. It allows the selection of the object for properties editing, the deletion of objects, changing the template structure.

		23
DocumentTree	-	×
Document tree		
⊡- 🕞 document 1		
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □		
dataBand1		
header1		
textBox4		
textBox5		
📄 ··· 📻 pageHeader1		
textBox1		
picture1		
detail1		
A <sup>+</sup> advancedText1		
detail3		
A textBox2		
····A <sup>+</sup> advancedText2		
shape1		
🖮 🔔 pageFooter1		
textBox3		
picture3		

### **Error List**

The list of scripts errors includes band name where the error was made and also a description of an error. It is possible to open the <u>Script Editor</u> for expression or script editing by double click with a left mouse button.

			23
ErrorLis	t	-	×
Error Lis	st		
Error	Waming		
	Band1.GroupExpression line: 1 column: 0 Expression expected. x8.DataBindings['Value'].Expression line: 1 column: 0 Expression expected.		



# **Editors**

# **Text Editor**

This editor is for input of text values. It allows the input of simple text.

The editor is opened by double click on the TextBox element area, hotkeys Enter or Ctrl + Enter, when TextBox element is selected, or by button, which is located near the property on Property Grid.

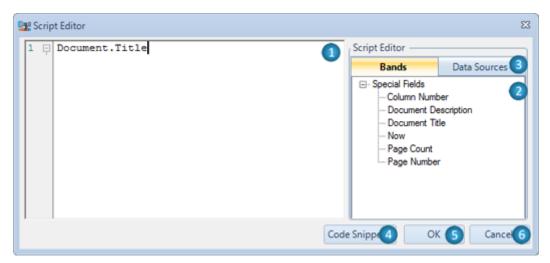
🥔 Text Editor	<b>—</b>
Text Editor	*
4	
	OK (2) Cancel (3)

- 1 Area for text input.
- 2 OK This button applies changes, closes the editor.
- 3 Cancel This button cancels changes, closes the editor.

### **Script Editor**

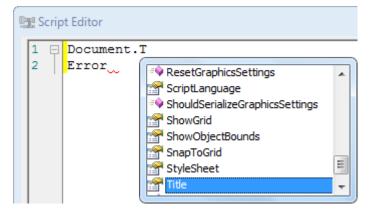
This editor is for input of scripts and expression of various destinations.

The editor is opened by the button, which is located near the property on the Property Grid or by the "Script Editor" button on the Binding bar.



1 – Area for script input.

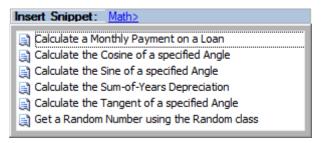
Script Editor provides syntax highlighting, changes selection and code auto-completing.



**2** – Fields' tree displays the fields from the data source (the Data Sources part), from the bands and displays special fields (the Bands part). The quick input of expressions can be executed by dragging the fields from the fields' tree to the area for script input or by double click on the field in the tree.

3 – Switching between Bands and Data Sources parts.

**4** – Code Snippets – This button opens a list for templates selection to insert the code fragment.



- 5 OK This button applies changes, closes the editor.
- 6 Cancel This button cancels the made changes, closes the editor.



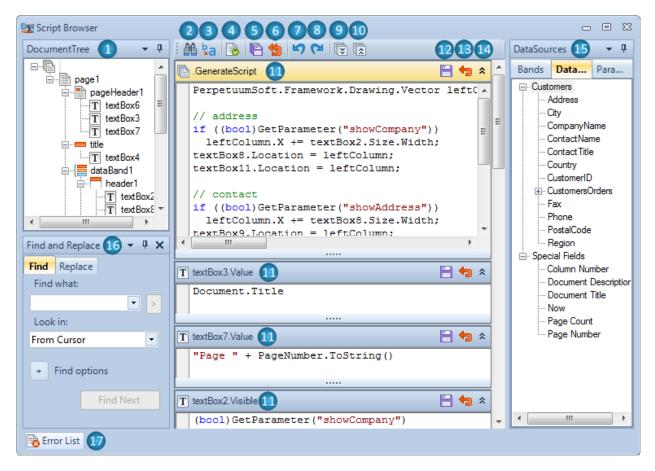
# **Script Browser**

Script Browser displays all the scripts of a report and allows a user to easily work with scripts.

The Browser is opened with the button which is located on the right side of the Ribbon bar's



Home tab.



**1** – **Document Tree** contains the list of all document objects and shows its structure. The context menu of an object in the Document Tree allows a user to create a new script or navigate to the existing one. 0

Create / Navigate to	
GenerateScript	
Bindings 🔹 🕨	Angle
	Bookmark
	Border
	CanGrow
	CanShrink
	Fill
	Font
	GrowToBottom
	Hyperlink
	Location
	Margins
	Size
	StyleName
	Tag
	TextAlign
	TextFill
	ToolTip
	Value
	Visible

- 2 **Search** activates the Find and Replace window with the active Find tab.
- 3 **Replace** activates the Find and Replace window with the active Replace tab.
- 4 **Check script** checks all the scripts in the whole document.
- 5 **Save all –** saves the changes made in all scripts.
- 6 **Revert all changes** reverts the changes made in all scripts.
- **7 Undo** removes pending changes from the scripts.
- 8 **Redo** reverses the undo or advances the buffer to a more current state.
- 9 **Expand all** expands the content of all scripts.
- **10 Collapse all** collapses the content of all scripts.
- **11 Script Area** for script input.
- **12 Save** saves the changes of the selected script.
- **13 Revert changes** reverts the changes of the selected script.
- **14 Expand/collapse content** expands/collapses the content of the selected script.

**15** – **Data Sources fields' tree** – Fields' tree displays the fields from the data source (the Data Sources part), from the bands and displays special fields (the Bands part) and

Parameters. The quick input of expressions can be executed by dragging the fields from the fields' tree to the area for script input or by double click on the field in the tree.

## 16 – Find and Replace

**Find Tab** allows a user to locate the position of the first occurrence of a specified string in the "Find what" field in a range that is specified in the "Look in" field.

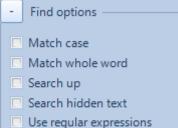
Find and	d Replace	2	•	<sup>1</sup> ×
Find	Replace			
Find w	/hat:			
			-	>
Look i	n:			
From C	Cursor			•
+ Find options				
Find Next				

**Replace Tab** allow a user to replace all occurrences of a specified string in the "Find what" field value with another string value from the "Replace with" field in a range that is specified in the "Look in" field.

Find and Replace	<b>-</b> ₽ ×					
Find Replace						
Find what:						
Text1						
Replace with:						
Text2 >						
Look in:						
From Cursor 🔹						
+ Find options						
Find Next	Replace					
	Replace All					

- Find Next continues search and finds the next string that matches those same conditions.
- *Replace* replaces all occurrences of a specified string value with another string value.
- *Replace All* replaces all occurrences of a specified string value in a specified range.

## Find options

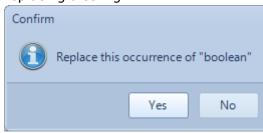


- Prompt on replace
- Match case when selected, Find search will be case-sensitive. -
- *Match whole word* when selected, Find search will only return whole word matches. \_
- Search up specifies the search direction. -
- Search hidden text searches the hidden text. \_
- Use regular expressions when selected, enables the Expression Builder button -



Find more information about the Expression Builder on Microsoft Library page.

Prompt on replace - when selected, notifies a user with the confirmation window of replacing a string.



17 – Error list – opens the "Error list" window.

🖳 Script Browser 🗖 🖻 🔀						
DocumentTree 💌 🗸	🗄 🗄 🍡 🖻 🧌 🐿 🔽 🖾 🖾	DataSources 🝷 🖡				
page 1	GenerateScript	Bands Data Para Bands Data Para Customers Customers City City CompanyName				
If ((boolean)GetParameter("showCompany]     CompanyName       If ((boolean)GetParameter("showCompany]     CompanyName       If (companyName     If (companyName)       If (companyName)     If (companyNam						
Errors Warnings						
.GenerateScript line: 4 column: 6 The type or namespace name 'boolean' could not be found (are you missing a using directive or an						
Error List						

Yellow color in this default Palette indicates current active elements.



## **Formatted Text Editor**

This editor is for input of formatted text in the form of HTML, similar markup language and for RTF-text loading.

The editor is opened by double click on the AdvancedText element area, by hotkeys Enter or Ctrl + Enter, when AdvancedText element is selected, or by the button, which is located near the Text property on Property Grid for AdvancedText element.

➢ Formatted text editor	<b>•••</b>
🛀 B I <u>U</u> F 🖪 통 통 클 🗏 나 🕶	
4567890000800	Data Sources           Bands         Data Sources         3
{=Document.Title}	Special Fields Column Number Document Description Document Title Now Page Count Page Number
	OK 16 Cancel 17

**1** – Area for text input.

2 – The fields' tree displays fields from the data sources (the Data Sources part), from bands and displays special fields (the Bands part). The quick input of expressions can be executed by dragging the fields from the fields' tree to the area for script input or by double click on the field in the tree.

3 – Switching between Bands and Data Sources parts.

4 – Open RTF Document – This button opens the Open dialog for the selection of RTF file.

**5** – Bold – This button inserts <b></b> tags into the text for setting the bold font of the selected text.

**6** – Italic – This button inserts  $\langle i \rangle \langle i \rangle$  tags into the text for setting the italic font of the selected text.

**7** – Underline – This button inserts  $\langle u \rangle \langle /u \rangle$  tags into the text for setting the underline font of the selected text.

**8** – Font – This button opens the Font editor for setting the style and font of the selected text, inserts <font=></font> tags into text.

**9** – Color – This button opens the Color editor for setting the color of the selected text, inserts <font color=></font> tags into text.

**10** – Left Align – This button inserts  $\langle p \rangle \langle /p \rangle$  tags into text for setting the left alignment of selected text.



**11** – Center Align – This button inserts tags into text for setting the center alignment of selected text.

**12** – Right Align – This button inserts tags into text for setting the right alignment of selected text.

**13** – Justify – This button inserts < p align="justify"> tags into text for setting the justify alignment of selected text.

14 – Insert Space – This button inserts & nbsp tag into text to display a space.

**15** – Insert Line Break – This button inserts <br/> tag into text for text breaking into strings.

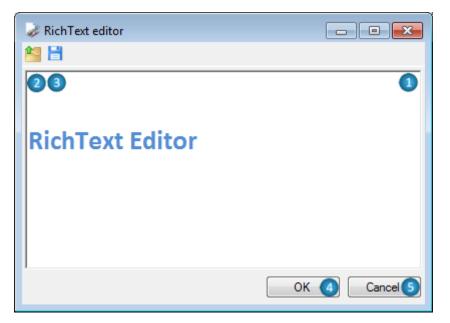
**16** – OK – This button applies changes, closes the editor.

**17** – Cancel – This button cancels changes, closes the editor.

#### **RichText Editor**

The editor for loading and editing RTF text.

The editor is opened by double click on the RichText element area, by hotkeys Enter or Ctrl + Enter, when RichText element is selected, or by the button, which is located near the RTFText property on Property Grid for RichText element.

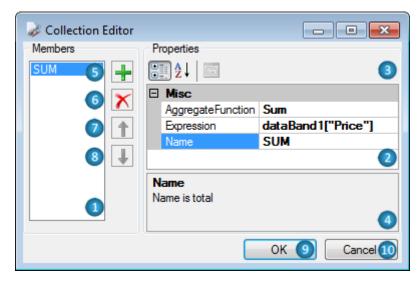


- **1** The area for the text input.
- 2 Open File This button opens the Open dialog for selecting the RTF file.
- 3 Save to File This button opens the Save As dialog for text saving into the RTF file.
- 4 OK This button applies changes, closes the editor.
- **5** Cancel This button cancels the changes, closes the editor.



# **Collection Editor**

The collection editor is intended for input of members into collection and setting their properties. The editor is opened with the button, which is located near the property on the Property Grid.



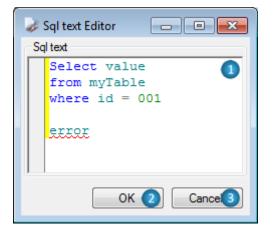
**1** – A list of collection members. The Name property is displaying in the list.

**2** – Property Grid –The table of collection members' properties. It allows the properties editing.

- **3** Switching the properties display mode in Property Grid.
- 4 This area displays the description of the selected text.
- **5** This button adds a new member to the collection.
- 6 This button deletes the selected member from the collection.
- 7 This button moves the member upwards through the list.
- 8 This button moves the member downwards through the list.
- 9 OK This button applies changes, closes the editor.
- **10** Cancel This button cancels the changes, closes the editor.

### **SQL Text Editor**

This editor is for SQL commands input. The editor is opened with the button from the Document Data Sources editor for data source setting. This button is located near the SelectQuery property on Property Grid.

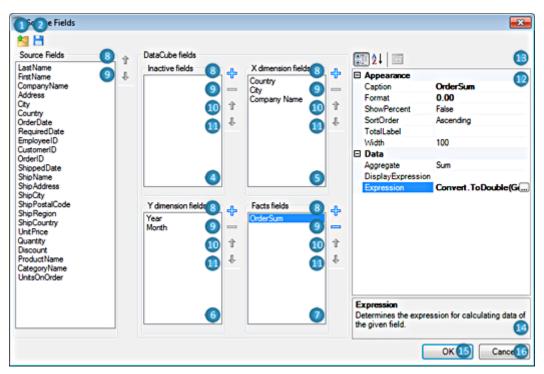


**1** – The area for the text output. The SQL scripts commands editor provides the highlighting of syntax and changes selection.

- 2 OK This button applies changes, closes the editor.
- 3 Cancel This button cancels the changes, closes the editor.

#### **Source Fields**

The Pivot Table data editor allows the setting of the format and layout of data. The editor is opened with the button, which is located near the Layout property of the PivotTable or by the Configure Layout button on the Pivot Table Wizard form.



**1** – Open – This button opens the "Open" window for selection of the Data cube layout file (.dcl) for loading the data settings.

- **2** Save This button opens the "Save As" window for saving the data settings.
- **3** Source fields The list of fields form the data source.
- **5** X dimension fields The list of fields for horizontal headline of the table.
- **6** Y dimension fields The list of fields for vertical headline of the table.
- 7 Facts fields The list of fields for table data.

- 8 New field This button adds a new empty field to the list.
- 9 Remove This button deletes the selected field from the list.
- **10** Up This button moves the field upwards in the list.
- **11** Down This button moves the field downwards in the list.
- **12** Property Grid –The field properties grid which allows the editing of properties.
- **13** Switching the properties display mode in Property Grid.
- 14 Description This area displays the description of the selected property.
- **15** OK This button applies changes, closes the editor.
- 16 Cancel This button cancels the changes, closes the editor.

### **Style Sheet Editor**

The styles editor allows the creation and editing of the template styles. The editor is opened by the "Edit Style" button on the "Home" and "Format" ribbon tabs.

🕎 Style Sheet Editor			23	
Styles		Properties —		
AaBbCcDdEe	<b>4</b> <b>6</b> <b>1</b>	<ul> <li>Appearance</li> </ul>		
Caption	6+	Border		
AaBbCcDdEe	0 X		LinearGradientFill Calibri; 14,25pt; Bol	
GroupCaption	8	Name	Caption	
	0 i	TextAlign	MiddleLeft	
AaBbCcDdEe	•	⊞ TextFill	SolidFill	
Header 🚺	-			
Title 2				
Description				
3				
		Border Determines the border defined by the style.		
			OK 🚯 Cancel 🚺	

- 1 Style List of styles.
- 2 Title Name of styles set.
- **3** Description This area displays the description of styles set.

4 – Open – This button opens the Load Style Sheet dialog for selection of the StyleSheet file (.rss) for styles loading.

- **5** Save This button opens the Save Style Sheet dialog for saving the styles set.
- 6 Add Style This button adds a new style to the set.
- **7** Remove Style This button deletes the selected style from the set.

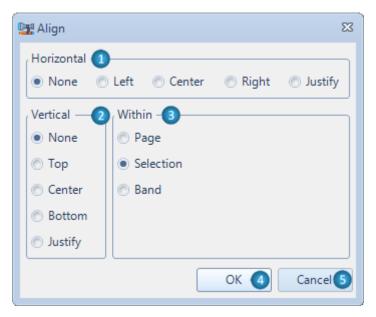
- 8 Move Up Style This button moves the selected style upwards in the list.
- 9 Move Down Style This button moves the selected style downwards through the list.
- **10** Switching the properties display mode in Property Grid.

**11** – Property Grid – The style property grid which allows the editing of properties: Border, Fill, Font, Name, TextAlign, TextFill.

- 12 Description This area displays the description of the selected property.
- 13 OK This button applies changes, closes the editor.
- **14** Cancel This button cancels the changes, closes the editor.

### **Align Editor**

The editor allows the setting of the elements alignment in a template. The editor is opened with the "Align" button on the "Layout" ribbon tab.



**1** – Horizontal – The settings of horizontal alignment allow the changing of location and size of the selected objects.

None – Without alignment;

Left – Alignment by the left border of the most left object (sets the Location property);

Center – Alignment by center between the most right and the most left objects (sets the Location property);

Right – Alignment by the right border of the most right object (sets the Location property);

Justify – Alignment by width on the gap between the right and left objects (sets the Size and Location properties).

**2** – Vertical – The settings of vertical alignment allows the changing of location and size of the selected elements:

None - Without alignment;

Top – Alignment by the top border of the most top object (sets the Location property);

Center – Alignment by center between the most top and the most bottom object (sets the Location property);



Bottom – Alignment by the bottom border of the most bottom object (sets the Location property);

Justify – Alignment by height on the gap between the top and bottom objects (sets the Size and Location properties).

**3** – Within – The setting of center alignment allow the changing of location of the selected elements:

Page – Alignment by center of the page on which the selected objects are located (sets the Location property);

Selection – Alignment by center of the area occupied by the selected objects (sets the Location property);

Band – Alignment by center of the band-container in which the selected objects are located (sets the Location property);

- 4 Apply This button applies changes.
- **5** Close This button closes the editor.



### **Border Editor**

This editor is for setting elements' border. The editor is opened with the button, which is located near the Border property on Property Grid or by the "More Borders..." menu item (the "Border" button on the "Home" and some contextual tabs.

Bord	<b>T</b> er Margin	AaBbCc Normal
	Bottom Bord	ler
	To <u>p</u> Border	
[]]]	<u>L</u> eft Border	8
	<u>R</u> ight Border	r í
	<u>N</u> o Border	_
	<u>A</u> ll Borders	
_	L <u>i</u> ne Color	•
—	Line St <u>y</u> le	►
D	More Border	·S
	Develop editor	

🤣 Border editor	<b>—X</b> —
Line drawing 2	Line type 1
	None
3	
	Color
	Width 5 1.5 🚔
	OK 6 Cancel

- **1** Line Type A list of line types which allows the selection of the line type for the border.
- 2 Line Drawing The area for selection of borders lines location.
- **3** The display area of set borders.

**4** – Color – This button opens the Color editor for selection of the border color and displays current color.

- **5** Width Counter sets the width of the border line.
- 6 OK This button applies changes, closes the editor.
- 7 Cancel –This button cancels changes, closes the editor.



#### **Document Data Sources**

The editor of the embed data sources collection. It allows the setting of data sources for the template (the Document.DataSources property). The editor is opened with the button, which is located near the DataSource property of the Document object on Property.

🥔 Document Data Source Edito	or 🗾
Document Data Sources	
OdbcDataSource	[ <u>₹</u> ↓ [] 5
Data Source Name =	🗆 Data 🛛 🕢
	ConnectionStri
	Name DataSource1
	SelectQuery
	Connection String
	ConnectionString
	Information used to connect to a data
0	_
Add 2 Delete 3	Information used to connect to a data source.
	Information used to connect to a data source.
Add 2 Delete 3	Information used to connect to a data source.

1 – Document Data Sources – A list of data sources for the document.

2 – Add – This button opens a list of data source types for addition to a template: SqlDataSource,
 OdbcDataSource, and XmlDataSource.

- 3 Delete This button deletes the selected data source.
- 4 Property Grid Data source property grid which allows the property editing.
- 5 Switching the property display mode in Property Grid.
- 6 Description This area displays the description of the selected text.
- 7 OK This button applies changes, closes the editor.
- 8 Cancel This button cancels changes, closes the editor.



# Wizards

Wizards are used for creation of simple reports on the fly.

#### **Wizards Gallery**

It allows the selection of a method that will be used to create a simple report. It is invoked with "New" item of Application menu command or with the key combination (Ctrl + N).

🤣 Wizards	s Gallery	<b>—</b>
New S	Saved 1	
Blank Rep	port	
Standard Pivot table	Report e Report	
		2
	3ad from file	OK     SCancel
🤯 Wizards		<b>—</b>
	s Gallery Gaved 1	<b>×</b>
	Saved 1	Brow 6
New So Location Cards	Saved 1	
New S	Saved 1	
New Si Location Cards List	Saved 1	
New Si Location Cards List	Saved 1	7 Brow 6
New Si Location Cards List	Saved 1	

1 –Switching between "New" and "Saved" tabs.

2 – A list of methods for a new report creation:

- Blank Report Creates a new empty report;
- Standard Report –Invokes Standard Wizard;
- Pivot Table Report Invokes Pivot Table Wizard.

**3** – Load from file – This button invokes the "Open Wizard File" dialog window to open the Wizard file.

**4** – OK – This button creates a new empty template or opens Wizard depending on the selected parameters.

5 – Cancel – This button closes Wizard Gallery.

**6** – Browse – This button invokes the Browse for Folder dialog window to select the folder with saved Wizard files.

**7** – Location – This field displays/sets the address of the folder with saved Wizard files.

8 – A list of Wizard files which are located in the folder specified in the Location field.

#### **Standard Wizard**

It allows the creation of standard reports which include lists and groups. It is invoked from the <u>Wizards Gallery</u> dialog.

23450		
🖉 Standard Wizard		X
Proes Common Employees (DataSection) (DataSection)	Common         Report template properties         Style sheet       None         Style sheet       None         Script language       VisualBasicNET         Page properties       Orientation       Page numbers         Size       0 Portrait       Position       Header         Page size       0:0       13       Clandscape       Align       Right         Columns count         1       17         Columns gap       0,000       18	
0	19 20 21 22 Save Preview template Preview document OK	
	Save Preview template Preview document OK	Cancel

Image: Common Employees         Image: Common Employees	Employees Data source Employees Field layout List All fields Employees BirthDate City Country Department EmployeeName HomePhone Note Sex	20       ↓         20       ↓         20       ↓         20       ↓         30       ↓         30       ↓         31       ↓	
0		Caption EmployeeName Width 100 (35) Aggregate None (19 (20 (2) (2) Save Preview template Preview document OK	39 69 ▼ 23 Cancel

All fields  Employees BithDate City Country Department EmployeeName HomePhone Note Sex		Visible fields Groups 32 Employees.City Employees.Country
	20	<b>Ø</b>

**1** – The data tree displays a report common settings part and added data sections. It allows the switching of the settings modes.

2 – Add Data – This button adds a data section.

3 – Remove Data – This button deletes a data section.

**4**, **19** – Save Wizard – These buttons invoke the Save Wizard File dialog window for selection of the folder and file name to save Wizard settings.

**5**, **20** – Preview Template – These buttons create the template with set parameters, open it in Report Designer.

**6**, **21** – Preview Document – These button launches generation of a report with set parameters, open final document in Report Viewer.

**7** – Show Title – Check for switching on/off report title in the report.

**8** – Report Title – This field sets report name (sets the Document.Title property).

**9** – Measure Unit – A list of measure units which allows the selection of measure unit for the template (sets the Document.MetricUnit).

**10** – Style Sheet – A list of styles which allows the selection of style for the report (sets the Document.StyleSheet property).

**11** – Script Language – A list of supported programming languages which allows the selection of language for scripts writing in the report (sets the Document.ScriptLanguage property).

**12** – Standard – A list of page formats which allows the selection of the page format for the report (sets the Page.PaperKind property).

**13** – Custom – This field sets the page size for the report (sets the Page.CustomSize property).

**14** – Orientation – Radio buttons set the page orientation for the report (sets the Page.Orientation property).

**15** – Position – A list of values of headlines positions which allows the selection of the position in the template for headlines display with page numbers (top, bottom headlines).

**16** – Align – A list of alignment values allows the selection of number text alignment for display in headlines.

**17** – Columns Count – The counter which sets the columns number in the list in the report (sets the DataBand.ColumnsCount property).



**18** – Columns Gap – The counter which sets the gap between columns in the list in the report (sets the DataBand.ColumnsCount property).

**22** – OK – This button shut downs Wizard work, creates a template with selected parameters, and opens it with Report Designer.

**23** – Cancel – This buttons completes Wizard work.

**24** – Data Source – This button opens the data sources tree for selection of a data source. The field displays the name of the selected data source.

**25** – Field Layout – This list allows the selection of data display method.

26 – All Fields – Data sources fields' tree.

**27** – Move Right – This button adds the selected field from data sources tree to the Groups list or the Visible Fields table. At this, the values of the Caption, Width, and Aggregate properties are set by default.

**28** – Move Left – This button deletes the selected field from the Visible Fields table or the Groups list.

**29** – Add Blank – This button adds a field with empty properties to the Visible Fields table.

**30** – Move Up – This button moves the selected field upwards in the Visible Fields Table or the Group list.

**31** – Move Down – This button moves the selected field downwards in the Visible Fields table or the Group list.

**32** – Switching between the Visible Fields table and the Groups list.

**33** – Visible Fields – This is a table of fields for report creation. It displays the added fields and their properties. The fields can be added from the data source or it can be new fields. The FieldName property displays the field name. The Caption property displays the title of the visible field. The Width property sets the column width. The Aggregates property sets the aggregation functions.

**34** – Caption – This field sets the Caption property for record from the Visible Fields table. It sets the Textbox.Text property for the element which sets the title for field output in the report.

**35** – Width – This field sets the Width property for record from the Visible Fields table, defines the list column width in percent.

**36** – Aggregate – This is a list of aggregation functions which allows the selection of the function for calculation of aggregate value by field. The value will be output at the end of the list.

**37** – Groups – This is a list of fields from data source for the list grouping.

#### **Pivot Table Wizard**

Pivot Table Wizard allows the creation of reports which include pivot table. It invokes from <u>Wizards Gallery</u> dialog.

1 2 3	wizard	N N N N N N N N N N N N N N N N N N N
	Pivot table settings	
	late properties	
	S Report title	6
	unit Centimeter	 ⊘∨
Style sh	eet None	<u> </u>
Script langu	age CSharp	<u>9</u> ~
Page proper	Corientation	Page numbers
Standard	A4 (1) V O Portrait (12	Position Header
Custom	0; 0 (1) C Landscape	Align Right
(15)	16 17 13 (	19
ОК	Cancel Save Preview template Preview	document

0 00

🧭 Pivot table wizard	
Common settings Pivot table settings 20	
Layout	
Data source Sales	2)
Nested fields	
CompanyName CategoryName	Add 📀
11-30	emove 24
Configure layout 25	
Display	
Table caption Pivot table 26	
Rendering	
27 🗹 Save table wizard 🗹 Show repeat text 29	
28 Show single fact V Dimension on every page 30	
Formatting	
31 I Auto column width Row height 60 32 €	
Auto row height mode Dissimilar 33 🗸	
OK Cancel Save Preview template Preview document	

**1**, **17** – Save Wizard – These buttons invoke Save As dialog window for selection of the folder and file name for saving Wizard settings.

2, 18 – Preview Template – These buttons create a template with selected parameters, open it in Report Designer.

**3**, **19** – Preview Document – These buttons launch report generation with selected parameters, open the result document in Report Viewer.

- 4 Common Settings Report common settings tab.
- **5** Show Title Check for switching on/off report title in the report.
- **6** Report Title This field sets report name (sets the Document.Title property).

**7** – Measure Unit – A list of measure units which allows the selection of measure unit for the template (sets the Document.MetricUnit).

**8** – Style Sheet – A list of styles which allows the selection of style for the report (sets the Document.StyleSheet property).

**9** – Script Language – A list of supported programming languages which allows the selection of language for scripts writing in the report (sets the Document.ScriptLAnguage property).

**10** – Standard – A list of page formats which allows the selection of the page format for the report (sets the Page.PaperKind property).

**11** – Custom – This field sets the page size for the report (sets the Page.CustomSize property).



**12** – Orientation – Radio buttons set the page orientation for the report (sets the Page.Orientation property).

**13** – Position – A list of values of headlines positions which allows the selection of the position in the template for headlines display with page numbers (top, bottom headlines).

**14** – Align – A list of alignment values allows the selection of number text alignment for display in headlines.

**15** – OK – This button shut downs Wizard work, creates a template with selected parameters, and opens it in Report Designer.

16 – Cancel – This buttons completes Wizard work.

20 – Pivot Table Settings – Pivot table settings tab.

**21** – Data source – This button opens the tree for data source selection for pivot table, the field displays the selected data source.

23 – Add – This button adds a new field to the Nested fields list.

24 - Remove - This button removes the selected field from the Nested fields list.

**25** – Configure layout – This button opens <u>Source Fields</u> editor for editing of pivot table data.

**26** – Table Caption – This field sets the table title (sets PivotTable.TableCaption property).

**28** – Show Single Fact – A flag which sets the display of fact column title (sets the PivotTable.ShowSingleFact property).

**29** – Show Repeat Text – A flag which sets the repetition of the text on a new page (sets the PivotTable.ShowRepeatText property).

**30** – Dimension Every Page – A flag which sets the headline output on each page (sets the PivotTable.DimensionOnEveryPage property).

**31** – Auto Column Width – A flag which sets the default column width (sets the PivotTable.AutoColumnWidth property).

**32** – Row Height – A counter which sets the row height (sets the PivotTable.RowHeight property).

**33** – Auto Row Height Mode – A list which sets the auto height mode of the row (sets the PivotTable.AutoRowHeight property).



## **Status Bar**

pivotTable1	Units = Centimeter +	100%		-• .
0	2	3		

- 1 The Name of object, which is currently located under cursor.
- 2 The control for setting Metric Unit.

	Twip
	Point
	Pixel
✓	Centimeter
	Millimeter
	Inch
Unit	s = Centimeter 👻

**5** – The button opens "Zoom" dialog to manually input Zoom value.

Zoom	23
Zoom	
200%	
100%	
75%	
50%	
25%	
🔘 page width	
🔘 whole page	
© custom 100 %	
OK Cancel	

The Zoom slider sets zoom values.

# Hotkeys

Hotkey	Description
Designer	
F2	Switch the Select Mode on/off
F3	Switch the Pan Mode on/off
F4	Switch the Zoom In Mode on/off
F5	Switch the Zoom Out Mode on/off
F6	Switch the Zoom in Rectangle Mode on/off
F7	Switch the Dynamic Zoom Mode on/off
F10	Switch the Menu Mode on/off
Space + Drag Mouse	Switch the Pan Mode on/off
Ctrl + Mouse Wheel	Zoom
Clipboard	
Ctrl + Insert	Copy the selection and put it on the clipboard
Ctrl + C	
Shift + Insert	Paste the contents of the clipboard
Ctrl + V	
Shift + Delete	Cut the selection and put it on the clipboard
Ctrl + X	
Ctrl + Drag Mouse	Copy the selection
Ctrl + Alt + V	Paste the contents of the clipboard to the new page
Template	
Ctrl + N	Create a new template
Ctrl + O	Load a template or document from file
Ctrl + S	Save changes in a template
Pages	
Ctrl + Page Up	Show next page
Ctrl+ Page Down	Show previous page
Selecting	
Ctrl + A	Select all
Ctrl + Shift + A	<ol> <li>Select all elements in the current container (and child elements)</li> <li>press A – add parent container</li> <li>press A – add all brothers of the parent (and their child elements)</li> <li>press A – add parent of the parent</li> <li></li> </ol>
Ctrl + Shift + Mouse (Drag Move)	Select all elements that are at least 50% covered by the selection rectangle
Shift + Mouse Click Ctrl +Mouse Click	Add to selection/ remove selection
Objects managem	ent
Ctrl + Enter	
Enter	Call an Editor for selected element (applicable to TextBox, AdvancedText, RichText, Picture, Chart, Widget)
Ctrl + Enter	
	Close an Editor, applying changes

Repeated Click	If many elements are overlapped, then when you click the overlapping area repeatedly the element with lower z-index will be selected (after the last element is selected the most top element will be selected again)
<b>Objects properti</b>	es
Ctrl + B	Set Font.Bold property (applicable to TextBox, AdvancedText, BarCode)
Ctrl + I	Set Font.Italic property (applicable to TextBox, AdvancedText, BarCode)
Ctrl + U	Set Font.Underline property (applicable to TextBox, AdvancedText, BarCode)
Ctrl + Shift + >	Increase font size (applicable to TextBox, AdvancedText, BarCode)
Ctrl + Shift + <	Decrease font size (applicable to TextBox, AdvancedText, BarCode)
Ctrl + ]	Increase font size of a point (applicable to TextBox, AdvancedText, BarCode)
Ctrl + [	Decrease font size of a point (applicable to TextBox, AdvancedText, BarCode)
Ctrl + L	Align text to the left (applicable to TextBox, AdvancedText)
Ctrl + R	Align text to the right (applicable to TextBox, AdvancedText)
Ctrl + E	Center text (applicable to TextBox, AdvancedText)
Ctrl + Shift + F	Call Font dialog for setting Font property (applicable to TextBox, AdvancedText, BarCode)
Ctrl + Shift + B	Call Border Editor for setting Border property (applicable to objects, which have Border property)
Ctrl + Shift + M	Call Margins Editor for setting Margins property (applicable to objects which have Margins property)
Ctrl + Shift + L	Call Fill Editor for setting Fill property (applicable to objects, which have Fill property)
Ctrl + Shift + T	Call Format Editor for setting Format property (applicable to TextBox, AdvancedText)
Ctrl + Shift + ]	Set Angle property, clockwise rotation (applicable to objects, which have Angle property)
Ctrl + Shift + [	Set Angle property, counterclockwise rotation (applicable to objects, which have Angle property)
Ctrl + Alt + F	Bring to front
Ctrl + Alt + B	Send to back