

# Table of Contents

<b>Part I General</b>	<b>5</b>
1 How to save/load a report? .....	5
2 How to render a report? .....	5
3 How to bind data to a report? .....	6
4 When should I attach data - before loading a report or after it? .....	6
5 How to run a reports designer? .....	7
6 How to save/load a rendered report? .....	8
7 How to load DataSet XSD schema? .....	8
8 How to change the current script language of a report? .....	9
<b>Part II Access to data</b>	<b>9</b>
1 How to change data of connection with database? .....	9
2 How to address to the column with data directly without typical conversion? .....	10
3 How to change a text of query when report rendering? .....	10
4 All data are received by a report. Is it possible to register in a report? .....	11
5 How to add a parameter to SQL query? .....	11
6 How to render a report on the server and send to your client? .....	12
7 Is it possible to display images, both stored in a database or hosted on a server? .....	12
8 Can I change the report connection string at runtime? .....	13
9 How to send parameters for SQL query by application? .....	13
10 How to check null values? .....	14
11 How to render Master-Detail reports if two tables are located on another DataSet? .....	15
<b>Part III Formatting and converting</b>	<b>15</b>
1 How to convert coordinates of one unit into another? .....	15
2 How to convert coordinates and sizes of a report? .....	15
3 How to output the value instead of DBNull and Null values .....	16
<b>Part IV Variables</b>	<b>16</b>
1 How to add a variable in a report? .....	16
2 How to access to the value of a variable? .....	17
3 How to add system variable to the text? .....	17
<b>Part V Work with compiled report</b>	<b>18</b>
1 How to compile report to assembly? .....	18
2 How to load a report from assembly into the memory once only? .....	18
3 How to use the compiled report assembly? .....	19

- 4 How to get compatibility of versions of the report generator and compiled reports? 20
- 5 How to load a report from assembly? ..... 21

## **Part VI Export of reports 21**

- 1 How to export rendered report? ..... 22
- 2 How to export a report without using the dialog box? ..... 22
- 3 How to disable all unnecessary types of export from the Window of Preview? ..... 23
- 4 How to export a page with the specified size into the Bitmap? ..... 24
- 5 When I export a report to HTML but not all components which are crossed have been exported?
- 6 How, using the RichText, to output the text in the RTF format? ..... 24
- 7 The ExcelValue property? ..... 25

## **Part VII Printing Reports 25**

- 1 How to print a report immediately without preview? ..... 25
- 2 How to print report without dialog box? ..... 25
- 3 How to print a report with specified parameters? ..... 26
- 4 How to print a report with the specified printer? ..... 27
- 5 How to indicate the specified paper source for printing? ..... 27
- 6 The end of the page is not printed completely. What should I do? ..... 28
- 7 How to print copyright on every page of a report? ..... 28
- 8 Why the content of the Text is printed without last pixels? ..... 30

## **Part VIII Viewer 31**

- 1 How to process saving and loading of a rendered report by myself? ..... 31
- 2 How to process printing in the Window of Preview? ..... 32
- 3 How to disable buttons in the toolbar? ..... 32
- 4 How to disable the toolbar? ..... 33
- 5 How to specify to the report generator to output the result of report rendering in the StiPreviewControl?
- 6 How to specify to the report generator to use my window of report preview? ..... 34
- 7 How to set zoom of pages in the StiPreviewControl? ..... 35
- 8 How to set predefined zoom of pages in the StiPreviewControl? ..... 35
- 9 How to refresh the report preview in the report code? ..... 36
- 10 How to load a page into the rendered report from the code of the report? ..... 37
- 11 How to get access to pages of rendered report? ..... 37
- 12 How to show all components in preview but do not print them? ..... 38
- 13 How to add or change an image in the rendered report in the report code? ..... 38
- 14 How to indicate pressing the cancel button in the Window of Preview and do not show the report?
- 15 How to attach your indicator of pages rendering? ..... 40

## **Part IX Reports Designer 42**

1 Our users find the Designer too complicated. What can we do to cut off unwanted functions?	
2 How to hide the tab page with the report code? .....	42
3 How to make the Designer not to ask about saving a report before quitting? .....	42
4 What can I do something after running the Designer but before initialization? .....	42
5 How to intercept saving/loading a report in the report Designer? .....	43
6 How to hide something in the data dictionary? .....	43
7 How to change the name of the edited file in the report Designer? .....	43
8 How to hide a menu element in the designer? .....	43

## Part X Configuration 44

1 What can I do to load or save report configuration? .....	44
2 What can I do if I do not want to save configuration? .....	44
3 How to restore configuration by default? .....	44
4 How to use more then one configurations concurrently? .....	44
5 How to save configuration in database? .....	45
6 How to attach your own TraceListener? .....	45
7 How to show all exceptions which are invoked in Stimulsoft Reports.Net? .....	45
8 How to change the current localization of the report generator? .....	45
9 How, in Stimulsoft Reports.Net, to disable all dialog boxes with messages? .....	46
10 How to change the path to resources of localization? .....	46
11 How, in addition to English, to add other languages to localization? .....	46
12 How to decrease the number of levels of relations in business objects? .....	46
13 How to enable RightToLeft in the Window of Preview? .....	46
14 Which units are used to store report coordinates? .....	46
15 How to change the current unit in the report? .....	46

## Part XI Miscellaneous 47

1 How to change sorting of data? .....	47
2 How to get actual size of a component? .....	48
3 How to find a component by its name? .....	48
4 How to get or set a text to rtf component in rtf format? .....	48
5 How should I add a bookmark for a component using code? .....	48
6 What is the difference between the Text and the TextValue? .....	48
7 What should I specify in the DataColumn field of an image? .....	49
8 How to load image from the path, stored in database? .....	49
9 How to bind ComboBox on Form to Data? .....	50
10 How to get access to the text of the report code? .....	50
11 How to generate a new code of a report? .....	50
12 How to update a report code? .....	50

13	How to use custom assemblies in a report? .....	51
14	How should I get access to objects of my application from a report? .....	51
15	How to work with columns which names concur with the csharp key word? .....	53
16	How to load an image from URL? .....	53
17	How to find the name of the file from which the report was loaded? .....	54
18	How to change CheckBox value on a page in preview? .....	54
19	How to change the page number? .....	55
20	Are there any ways to print a header for a databand on the second page? .....	55
21	How to change duplicated values on a band with one? .....	56
22	How to add the event handler to events? .....	56
23	How to get access to pages of a report? .....	57
24	How to get the total of a band without its printing? .....	57
25	How to sort data on the base of the Expression? .....	57
26	Cross-report rendering by 3 tables? .....	59
27	Text formatting in the RichText component in the GetValue event handler? .....	59
	<b>Index</b>	<b>0</b>

# 1 General

## 1.1 How to save/load a report?

To save a report:

C#

```
StiReport report = new StiReport();  
report.Save("report.mrt");
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.Save("report.mrt")
```

To load a report:

C#

```
StiReport report = new StiReport();  
report.Load("report.mrt");
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.Load("report.mrt")
```

## 1.2 How to render a report?

See the following code to render a report and to show a rendered report in the Window of Preview:

C#

```
StiReport report = new StiReport();  
report.Load("report.mrt");  
report.Show();
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.Load("report.mrt")  
Report.Show()
```

## 1.3 How to bind data to a report?

It is necessary to register data in the **DataStore** to bind them to a report.  
You can do it this way:

C#

```
DataSet dataSet1 = new DataSet();  
dataSet1.ReadXmlSchema("Demo.xsd");  
dataSet1.ReadXml("Demo.xml");  
  
StiReport report = new StiReport();  
report.RegData("MyDataSet",dataSet1);
```

VB

```
Dim Data As DataSet = New DataSet()  
Data.ReadXmlSchema("Demo.xsd")  
Data.ReadXml("Demo.xml")  
  
Dim Report As StiReport = New StiReport()  
Report.RegData("MyDataSet",Data)
```

## 1.4 When should I attach data - before loading a report or after it?

It does not matter. See the example:

Example 1:

C#

```
StiReport report = new StiReport();  
report.Load("MyReport.mrt");  
report.RegData("MyDataSet",dataSet1);
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.Load("MyReport.mrt")  
Report.RegData("MyDataSet",DataSet1)
```

Example 2:

C#

```
StiReport report = new StiReport();  
report.RegData("MyDataSet",dataSet1);  
report.Load("MyReport.mrt");
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.RegData("MyDataSet",DataSet1)  
Report.Load("MyReport.mrt")
```

Both examples are equivalent.

## 1.5 How to run a reports designer?

See the following code how to do it:

C#

```
StiReport report = new StiReport();  
report.Design();
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.Design()
```

or like this:

C#

```
Stimulsoft.Report.Design.StiDesigner designer = new Stimulsoft.Report.Design.StiDesigner();  
designer.Show();
```

VB

```
Dim Designer As Stimulsoft.Report.Design.StiDesigner = New Stimulsoft.Report.Designer.StiDesigner()  
Designer.Show()
```

## 1.6 How to save/load a rendered report?

To save a rendered report:

```
C#  
  
//Render a report  
StiReport report = new StiReport();  
report.Load("report.mrt");  
report.Render();  
  
//Save a report  
report.SaveDocument("document.mdc");
```

```
VB  
  
'Render a report  
Dim Report As StiReport = New StiReport()  
Report.Load("report.mrt")  
Report.Render()  
  
'Save a report  
Report.SaveDocument("document.mdc")
```

To load previously saved rendered report:

```
C#  
  
StiReport report = new StiReport();  
report.LoadDocument("document.mdc");
```

```
VB  
  
Dim Report As StiReport = New StiReport()  
Report.LoadDocument("document.mdc")
```

## 1.7 How to load DataSet XSD schema?

To load DataSet XSD schema you may use the **ImportXMLSchema** method:

```
C#  
  
StiReport report = new StiReport();  
DataSet dataSet = new DataSet("Test");  
dataSet.ReadXmlSchema("dataset.xsd");
```

```
report.Dictionary.ImportXMLSchema(dataSet);
```

VB

```
Dim Report As StiReport = New StiReport()  
Dim Data As DataSet = New DataSet("Test")  
Data.ReadXmlSchema("dataset.xsd")  
Report.Dictionary.ImportXMLSchema(Data)
```

DataSet XSD schema is needed only for the Designer.

## 1.8 How to change the current script language of a report?

Use the **Language** property of the **StiReport** class to change the current script language of a report. For example:

C#

```
//Change the current language to VB  
StiReport report = new StiReport();  
report.ScriptLanguage = StiReportLanguageType.VB;  
  
//Generate a new report  
report.ScriptNew();
```

VB

```
'Change the current language to VB  
Dim Report As StiReport = New StiReport()  
Report.ScriptLanguage = StiReportLanguageType.VB  
  
'Generate a new report  
Report.ScriptNew()
```

## 2 Access to data

### 2.1 How to change data of connection with database?

Before report rendering you can write the following code:

C#

```
//Clear the list of databases
```

```
report.Dictionary.Databases.Clear();
```

```
//Add the database and specify its name and the connection string
```

```
report.Dictionary.Databases.Add(new StiSqlDatabase("Test", "MyDataConnectionString"));
```

```
VB
```

```
'Clear the list of databases
```

```
Report.Dictionary.Databases.Clear()
```

```
'Add the database and specify its name and the connection string
```

```
Report.Dictionary.Databases.Add(new StiSqlDatabase("Test", "MyDataConnectionString"))
```

## 2.2 How to address to the column with data directly without typical conversion?

You may use the indexer of the data source. For example:

```
C#
```

```
object data = Customers["Phone"];
```

```
VB
```

```
Dim Data As Object = Customers("Phone")
```

## 2.3 How to change a text of query when report rendering?

You can use parameters. By default, report engine does not support parameters as standard view point. For example:

```
select * from customers where code=:code
```

In this case you can't detect code. But you can use an expression to form any part in SQL query. For example:

```
select * from customers where code = {myvariable}
```

```
select * from customers where {myvariable}
```

```
select * from customers {myvariable}

select * from {myvariable} where code=1

select {myvariable} from customers where code = {myvariable}
{myvariable}

select * from customers where code = {MyStaticClass.GetCondition()}

select * from customers where {Datasource.Condition}

select {myvar+myvar2} from customers
```

## 2.4 All data are received by a report. Is it possible to register in a report?

If all data are received in a report, for example, if you use SQL queries, then there is no need to use the **RegData** method of a report.

## 2.5 How to add a parameter to SQL query?

In data source you should create a parameter. In SQL query you write:

```
select * from customers where customerid=@customerid
```

Then you need to initialize this parameter. For example, for initialization from the code you may use the following code:

C#

```
StiReport report = new StiReport();
report.RegData(myDataset);
report.Compile();
report["@customerid"] = 1;
```

VB

```
Dim Report As StiReport = New StiReport()
Report.RegData(MyDataSet)
Report.Item("@customerid") = 1
```

## 2.6 How to render a report on the server and send to your client?

First, generate a report on the server and save rendered report to the stream:

C#

```
StiReport report = new StiReport();
report.RegData(dataSet);
report.Render(false);
report.SaveDocument(stream);
```

VB

```
Dim Stream As New MemoryStream
Dim Report As New StiReport
Report.RegData(DataSet)
Report.Render(False)
Report.SaveDocument(Stream)
```

Load a rendered report on a client from the stream and set the following data:

C#

```
StiReport report = new StiReport();
report.LoadDocument(stream);
report.Show();
```

VB

```
Dim Report As New StiReport
Report.LoadDocument(stream)
Report.Show()
```

## 2.7 Is it possible to display images, both stored in a database or hosted on a server?

There are many ways how to do this. Here they are:

**With properties:**

1. The **Image.DataColumn** property - to load an image from a database.
2. The **Image.File** property - to load an image from a file.

3. The **Image.ImageURL** property - to directly specify an image url.

From the code of events:

#### 1. Load an image from a file

```
Image1.Image = Image.FromFile("Image1.gif");
```

#### 2. Load an image from a url

```
Image1.Image = Stimulsoft.Base.Drawing.StilImageFromURL.LoadBitmap(  
"http://www.domain.com/bitmap.gif");
```

## 2.8 Can I change the report connection string at runtime?

You can use the following code:

C#

```
StiReport report = new StiReport();  
report.Load("MyReport.mrt");  
report.Dictionary.Databases.Clear();  
report.Dictionary.Databases.Add(new StiSqlDatabase("MyDatabase", "new connection string"));
```

VB

```
Dim Report As New StiReport  
Report.Load("MyReport.mrt")  
Report.Dictionary.Databases.Clear()  
Report.Dictionary.Databases.Add(New StiSqlDatabase("MyDatabase", "new connection string"))
```

## 2.9 How to send parameters for SQL query by application?

1. You can use an expression to form any part in SQL query. First, you add variables to the SQL query:

```
select * from customers where code = {myvariable}
```

2. You need to create a variable in the Report Dictionary.

3. You need to initialize a variable before report running:

C#

```
StiReport report = new StiReport();
report.Load("Variables.mrt");
report.Compile();

//Set Variable
report["myvariable"] = 123;

report.Render();
```

VB

```
Dim Report As StiReport = New StiReport()
Report.Load("Variables.mrt")
Report.Compile()

'Set Variable
Report.Item("myvariable") = " Value "

Report.Render()
```

## 2.10 How to check null values?

You can use the following code in the **GetValueEvent**:

C#

```
if (Customers["Flag"] == null)e.Value = "YES";
else e.Value = "NO";
```

VB

```
If (Customers("Flag") Is Nothing) Then
e.Value = "YES"
Else
e.Value = "NO"
End If
```

Also it is possible to use the **IIF** function:

C#

```
{IIF(Customers["Flag"] == null, "YES", "NO")}
```

**VB**

```
{IIF(Customers("Flag") Is Nothing, "YES", "NO")}
```

## 2.11 How to render Master-Detail reports if two tables are located on another DataSet?

In this case you should enable caching all data in one **DataSet**. For this you should set the **CacheAllData** property to **true**. You can do this from the Report Dictionary.

## 3 Formatting and converting

### 3.1 How to convert coordinates of one unit into another?

Use the **ConvertFromHInches** and **ConvertToHInches** methods of the **StiUnit** class to convert coordinates. For example:

**C#**

```
//Converts a value from centimeters to inches  
StiUnit unitFrom = new StiCentimetersUnit();  
StiUnit unitTo = new StiInchesUnit();  
double value = 2.54;  
value = unitFrom.ConvertToHInches(value);  
value = unitFrom.ConvertFromHInches(value);
```

**VB**

```
'Converts a value from centimeters to inches  
Dim UnitFrom As StiUnit = New StiCentimetersUnit()  
Dim UnitTo As StiUnit = New StiInchesUnit()  
Dim Value As Double = 2.54  
Value = UnitFrom.ConvertToHInches(value)  
Value = UnitFrom.ConvertFromHInches(value)
```

### 3.2 How to convert coordinates and sizes of a report?

All classes which realizes the **IStiUnitConvert** interface may convert coordinates and sizes of a report

from one unit into another. The **Convert** method can be used for conversion. For example:

C#

```
//Converts coordinates and sizes of a report from the current unit into inches
StiReport report = new StiReport();
StiUnit unitTo = new StiInchesUnit();
report.Convert(report.Unit, unitTo);
```

VB

```
'Converts coordinates and sizes of a report from the current unit into inches
Dim Report As StiReport = New StiReport()
Dim UnitTo As StiUnit = New StiInchesUnit()
Report.Convert(Report.Unit, UnitTo)
```

### 3.3 How to output the value instead of DBNull and Null values

You should use text values formatting - the **TextFormat** property. Also you may disable forced conversion of null values - the report.**ConvertNulls** property.

## 4 Variables

### 4.1 How to add a variable in a report?

You can use the following code to add a variable to a report in the code:

Adds a new MyVariable variable of the **int** type:

C#

```
report.Dictionary.Variables.Add(new StiVariable("Category", "MyVariable", typeof(int), "1", false));
```

VB

```
Report.Dictionary.Variables.Add(New StiVariable("Category", "MyVariable", CType(GetType(int), Type), "1", False))
```

Adds a new MyVariable variable of the **string** type:

C#

```
report.Dictionary.Variables.Add(new StiVariable("Category", "MyVariable", typeof(string), "1", false));
```

VB

```
Report.Dictionary.Variables.Add(New StiVariable("Category", "MyVariable", CType(GetType(String), Type), ""1"", False))
```

## 4.2 How to access to the value of a variable?

To access to the value of variable, you may use this code:

C#

```
StiReport report = new StiReport();  
report.Load("Variables.mrt");  
report.Compile();  
  
//Set Variable  
report["VariableName"] = "Value";  
  
//Get Variable  
object value = report["VariableName"];
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.Load("Variables.mrt")  
Report.Compile()  
  
'Set Variable  
Report.Item("VariableName") = " Value "  
  
'Get Variable  
Dim Value As Object = Report.Item("VariableName")
```

## 4.3 How to add system variable to the text?

Use the following code:

```
text1.Text = "{PageNofM}";
```

## 5 Work with compiled report

### 5.1 How to compile report to assembly?

Use the **Compile** method:

**C#**

```
//Compile to file  
report.Compile("MyReport.dll");  
  
//Compile to stream  
report.Compile(stream);
```

**VB**

```
'Compile to file  
Report.Compile("MyReport.dll")  
'Compile to stream  
Report.Compile(stream)
```

Besides, you can save a report in assembly from the report designer.

### 5.2 How to load a report from assembly into the memory once only?

When you use the **StiReport.GetReportFromAssembly** method the report is loaded into the memory in every cases. This can be avoided if you will specify the additional parameter when loading a report from assembly:

**C#**

```
StiReport report = StiReport.GetReportFromAssembly("MyReport.dll", true);
```

VB

```
Dim Report As StiReport = StiReport.GetReportFromAssembly("MyReport.dll", True)
```

You should remember that, in this case, the .dll file will be blocked until application is running.

## 5.3 How to use the compiled report assembly?

In Reports Designer you could save you report as assembly (DLL-file). To use such reports in you application you can use the following code:

C#

```
StiReport report = StiReport.GetReportFromAssembly("MyReport.dll", true);
```

VB

```
Dim Report As StiReport = StiReport.GetReportFromAssembly("MyReport.dll")
```

Also you could compile your report on first access and after report is compiled use compiled version of report next times – it will improve performance.

C#

```
string reportName = "MyReport.mrt";  
string reportDllName = "MyReport.dll";  
  
StiReport report = null;  
  
// if report dll is not exists ...  
if (!File.Exists(reportDllName))  
{  
    // load report definition  
    report = new StiReport();  
    report.Load(reportName);  
  
    // compile report, save dll version of report  
    report.Compile(reportDllName);  
}  
else // if report assembly is available ...  
{  
    // ... use it  
    report = StiReport.GetReportFromAssembly(reportDllName);  
}
```

```

VB

Dim ReportName As String = "MyReport.mrt"
Dim ReportDllName As String = "MyReport.dll"
Dim Report As StiReport = Nothing

' if report dll is not exists ...
If Not File.Exists(ReportDllName) Then

' load report definition
Report = New StiReport
Report.Load(ReportName)

' compile report, save dll version of report
Report.Compile(ReportDllName)
Else

' if report assembly is available ...
Report = StiReport.GetReportFromAssembly(ReportName)
End If

```

## 5.4 How to get compatibility of versions of the report generator and compiled reports?

Compatibility can be taken by two ways:

1) Write **bindingRedirects** in **config**. For example:

```

<?xml version="1.0" encoding="utf-8" ?>
<configuration>
  <runtime>
    <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
      <dependentAssembly>
        <assemblyIdentity name="Stimulsoft.Report" publicKeyToken="EBE666CBA19647A" culture="neutral" />
        <bindingRedirect oldVersion="1.30.0.0" newVersion="1.31.0.0"/>
      </dependentAssembly>
      <dependentAssembly>
        <assemblyIdentity name="Stimulsoft.Report.Export.HtmlExport" publicKeyToken="EBE666CBA19647A" culture="neutral" />
        <bindingRedirect oldVersion="1.30.0.0" newVersion="1.31.0.0"/>
      </dependentAssembly>
      [... and etc. for each new assembly ...]
    </assemblyBinding>
  </runtime>
</configuration>

```

For more detail - search in MSDN by the "<runtime>" keyword.

2) Create policy publisher files for every old versions. For example:

policy.1.23.Stimulsoft.Base.dll

policy.1.30.Stimulsoft.Base.dll

policy.1.23.Stimulsoft.Report.dll

policy.1.30.Stimulsoft.Report.dll

etc.

Details - search in MSDN by "publisher policy files".

## 5.5 How to load a report from assembly?

For this purpose use the **GetReportFromAssembly** static method of the **StiReport** class. This method returns the created report. See examples of the method call:

C#

//Load report from Assembly

StiReport report = StiReport.GetReportFromAssembly(assembly);

//Load report from a file

StiReport report = StiReport.GetReportFromAssembly("MyReport.dll");

//Load report from a stream

StiReport report = StiReport.GetReportFromAssembly(stream);

VB

'Load report from Assembly

Dim Report As StiReport = StiReport.GetReportFromAssembly(assembly)

'Load report from a file

Dim Report As StiReport = StiReport.GetReportFromAssembly("MyReport.dll")

'Load report from a stream

Dim Report As StiReport = StiReport.GetReportFromAssembly(stream)

## 6 Export of reports

## 6.1 How to export rendered report?

For exporting report to **pdf** file:

**C#**

```
StiReport report = new StiReport();
report.Load("report.mrt");
report.Render();
report.ExportDocument(StiExportFormat.Pdf, "document.pdf");
```

**VB**

```
Dim Report As StiReport = New StiReport()
Report.Load("report.mrt")
Report.Render()
Report.ExportDocument(StiPdfExportFormat.Pdf, "document.pdf")
```

## 6.2 How to export a report without using the dialog box?

For exporting report to **pdf** file without using dialog box do the following:

**C#**

```
StiReport report = new StiReport();
report.Load("report.mrt");
report.Render();

//Variant 1
StiPdfExportService pdfExport = new StiPdfExportService();
pdfExport.ExportPdf(report, "document.pdf");

//Variant 2
report.ExportDocument(StiExportFormat.Pdf, "document.pdf");
```

**VB**

```
Dim Report As StiReport = New StiReport()
Report.Load("report.mrt")
Report.Render()

'Variant 1
Dim PdfExport As StiPdfExportService = New StiPdfExportService()
PdfExport.ExportPdf(Report, "document.pdf")
```

```
"Variant 2  
report.ExportDocument(StiExportFormat.Pdf, "document.pdf")
```

In this example the report is being exported to **pdf**. You can do the same to export your report to other available formats. Use the following classes for export:

**StiCsvExportService** - export to **Csv**;  
**StiExcelExportService** - export to **Excel**;  
**StiExcelXmlExportService** - export to **ExcelXml**;  
**StiExcel2007ExportService** - export to **Excel 2007**;  
**StiHtmlExportService** - export to **Html**;  
**StiImageExportService** - export to **Images**;  
**StiPdfExportService** - export to **Pdf**;  
**StiRtfExportService** - export to **Rtf**;  
**StiTxtExportService** - export to **Txt**;  
**StiXmlExportService** - export to **Xml**;

and etc.

## 6.3 How to disable all unnecessary types of export from the Window of Preview?

For this you should disable all unnecessary assemblies with exports. Also you may switch off services using the Configurator.exe application.

```
StiConfig.Load();  
  
StiServiceContainer services =  
StiConfig.Services.GetServices(typeof(StiExportService));  
  
foreach (StiService service in services)  
{  
    if (service is StiBmpExportService)service.ServiceEnabled = false;  
    if (service is StiCsvExportService)service.ServiceEnabled = false;  
    if (service is StiEmfExportService)service.ServiceEnabled = false;  
    if (service is StiGifExportService)service.ServiceEnabled = false;  
    if (service is StiHtmlExportService)service.ServiceEnabled = false;  
    if (service is StiJpegExportService)service.ServiceEnabled = false;  
    if (service is StiPdfExportService)service.ServiceEnabled = false;  
    if (service is StiRtfExportService)service.ServiceEnabled = false;  
    if (service is StiTiffExportService)service.ServiceEnabled = false;  
    if (service is StiTxtExportService)service.ServiceEnabled = false;  
    if (service is StiXmlExportService)service.ServiceEnabled = false;  
}  
  
StiConfig.Save();
```

## 6.4 How to export a page with the specified size into the Bitmap?

Use the **GetThumbnail** method of a **StiPage**:

**C#**

```
Bitmap bmp = page.GetThumbnail(200, 300);
```

**VB**

```
Dim Bmp As Bitmap = Page.GetThumbnail(200, 300)
```

## 6.5 When I export a report to HTML but not all components which are crossed have been exported?

Export to HTML can work in two modes: **Table** and **Span**. In the **Table** mode Stimulsoft Reports.Net forms a big table and write components from the page to rows of the table. But in this mode components on pages will not be crossed. In the **Span** mode the report engine forms span objects for each components. And in this case components will be crossed on a page.

## 6.6 How, using the RichText, to output the text in the RTF format?

In the **GetValueEvent** event of the **RichText** write the following code:

**C#**

```
System.IO.StreamReader reader = new System.IO.StreamReader("d:\\script.rtf");  
string str = reader.ReadToEnd();  
reader.Close();  
e.Value = System.Xml.XmlConvert.EncodeName(StiRichText.PackRtf(str));
```

**VB**

```
Dim Reader As System.IO.StreamReader = New System.IO.StreamReader("d:\\script.rtf")  
Dim Str As String = Reader.ReadToEnd()  
Reader.Close()  
e.Value = System.Xml.XmlConvert.EncodeName(StiRichText.PackRtf(Str))
```

## 6.7 The ExcelValue property?

The **ExcelValue** property is used for export numerical values to Excel. By default **StiText** components are exported to Excel with formatting as text.

The expression in the **ExcelValue** property of the **StiText** component will be sent to the Excel cell and formatted as a number.

# 7 Printing Reports

## 7.1 How to print a report immediately without preview?

For a start load of a report do as follow:

C#

```
StiReport report = new StiReport();  
report.Load("report.mrt");  
report.Print();
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.Load("report.mrt")  
Report.Print()
```

## 7.2 How to print report without dialog box?

Use overloads of the **Print** method from the **StiReport** class.

C#

```
StiReport report = new StiReport();  
report.Load("report.mrt");  
report.Render();  
PrinterSettings printerSettings = new PrinterSettings();  
printerSettings.Copies = 2;  
Report.Print(printerSettings);
```

**VB**

```
Dim Report As StiReport = New StiReport()
Report.Load("report.mrt")
Report.Render()
Dim PrinterSettings As PrinterSettings = New PrinterSettings()
PrinterSettings.Copies = 2
Report.Print(PrinterSettings)
```

## 7.3 How to print a report with specified parameters?

You may use the **Print** method. For example:

**C#**

```
StiReport report = new StiReport();
report.Load("MyReport.mrt");
report.RegData(myDataSet);
report.Render();

//Create Printer Settings
PrinterSettings printerSettings = new PrinterSettings();

printerSettings.Copies = 1;
printerSettings.FromPage = 1;
printerSettings.ToPage = report.RenderedPages.Count;

//Direct Print - Don't Show Print Dialog
report.Print(false, printerSettings);
```

**VB**

```
Dim Report As New StiReport
Report.Load("MyReport.mrt")
Report.RegData(MyDataSet)
Report.Render()

'Create Printer Settings
Dim PrinterSettings As New PrinterSettings
PrinterSettings.Copies = 1
PrinterSettings.FromPage = 1
PrinterSettings.ToPage = Report.RenderedPages.Count

'Direct Print - Don't Show Print Dialog
Report.Print(False, PrinterSettings)
```

## 7.4 How to print a report with the specified printer?

You should specify the printer name in the **PrinterName** property of the **PrinterSettings** class. For example:

C#

```
StiReport report = new StiReport();
report.Load("MyReport.mrt");
report.RegData(myDataSet);
report.Render();

//Create Printer Settings
PrinterSettings printerSettings = new PrinterSettings();
//Set Printer to Use for Printing
printerSettings.PrinterName = "MyPrinterName";
//Direct Print - Don't Show Print Dialog
report.Print(false, printerSettings);
```

VB

```
Dim Report As New StiReport
Report.Load("MyReport.mrt")
Report.RegData(MyDataSet)
Report.Render()

'Create Printer Settings
Dim PrinterSettings As New PrinterSettings

'Set Printer to Use for Printing
PrinterSettings.PrinterName = "MyPrinterName"

'Direct Print - Don't Show Print Dialog
Report.Print(False, PrinterSettings)
```

## 7.5 How to indicate the specified paper source for printing?

Use the **PrinterSettings** class:

C#

```
StiReport report = new StiReport();
report.Load("MyReport.mrt");
report.RegData(myDataSet);
report.Render();

//Create Printer Settings
```

```
PrinterSettings printerSettings = new PrinterSettings();

//Specify paper source
printerSettings.DefaultPageSettings.PaperSource = printerSettings.PaperSources[1];

//Direct Print - Don't Show Print Dialog
report.Print(false, printerSettings);
```

VB

```
Dim Report As New StiReport
Report.Load("MyReport.mrt")
Report.RegData(MyDataSet)
Report.Render()

'Create Printer Settings
Dim PrinterSettings As New PrinterSettings

'Specify paper source
PrinterSettings.DefaultPageSettings.PaperSource = PrinterSettings.PaperSources.Item(1)


'Direct Print - Don't Show Print Dialog
Report.Print(False, PrinterSettings)
```

## 7.6 The end of the page is not printed completely. What should I do?

By default, page margins are set to 1 cm from all sides. But some printers have more than 1 cm margins at the bottom (For example, if you are using DeskJet printers). Set the bottom margin to 2 centimeter.

## 7.7 How to print copyright on every page of a report?

Often you need to output copyright, system information, inscriptions, watermarks, program name, and other information which a user will not be able to delete or edit in the Designer. Stimulsoft Reports.Net contains special facilities for such an output. We are talking about two static events of a page: **PagePainting** and **PagePainted**. These two events are being called when painting of a page. **PagePainting** is called after the page has been painted but no one component will be output. This event is used for information output on the background of a page. All information that will be output after the call of this event will overlay the information being output with event handler. The second **PagePainted** property. This event is called after the page has been painted completely. So, any information being output in this event handler will overlay anything that has been output on a page before.

 **Notice.** Both events are static. Therefore, if you want to output all information on all pages of a report, it is enough to assign handlers to these events.

So then suppose that it is necessary to output the copyright of a company, what has created this program, on every page of a report. For this you should create the static method for the event service:

C#

```
private static void OnPagePainting(StiPage sender, StiPagePaintEventArgs e)
{
}
```

VB

```
Private Shared Sub OnPagePainting(ByVal sender As StiPage, ByVal e As StiPagePaintEventArgs)
End Sub
```

Then the handler assigns to the static event of a page. Besides we make assignation once because the event is static:

C#

```
StiPage.PagePainting += new StiPagePaintEventHandler(OnPagePainting);
```

VB

```
AddHandler StiPage.PagePainting, New StiPagePaintEventHandler(AddressOf Form1.OnPagePainting)
```

Now it is necessary to output an inscription. All necessary information for output is contained in arguments of a called handler. By means of the **sender** object the reference to the page which is being painted is passed. By means of the **e** object parameters of output are passed. Parameters of output are to be examined more thoroughly. Thus, this argument has the **StiPagePaintEventArgs** type. This type contains the following fields:

Name of property	Description of property
ClientRectangle	rectangle which sets size and position of the inner side of a page without page fields
FullRectangle	rectangle which sets size and position of the inner side of a page without page fields
ClipRectangle	rectangle describes size and position of range which requires to be repainted
Graphics	Graphic area on which painting occurs

IsDesigning	Boolean value. If it is true then the page is painted in the report designer
IsPrinting	Boolean value. If it is true then the page is printed

**Notice.** You should remember that there is no property for painting a page in the window of preview. But it is simple to check **IsDesigning** and **IsPrinting**. If both of these properties are **false** then the page is painted in the window of preview.

The next is the code for copyright string output:

C#

```
private static void OnPagePainting(StiPage sender, StiPagePaintEventArgs e)
{
    Font font = new Font("Arial", 20 * (float)sender.Zoom);
    e.Graphics.DrawString("(C) 2005 MyCompany", font, Brushes.Red, e.FullRectangle);
    font.Dispose();
}
```

VB

```
Private Shared Sub OnPagePainting(ByVal sender As StiPage, ByVal e As StiPagePaintEventArgs)
    Dim Font As Font = New Font("Arial", (20.0! * CType(page.Zoom, Single))
    e.Graphics.DrawString("(C) 2005 MyCompany", Font, Brushes.Red, e.FullRectangle, Format)
    Font.Dispose()
End Sub
```

(C) 2005 MyCompany

In this method the copyright string is output on the page. You should consider the scale. Therefore, if you use a new font its size is corrected considering scale.

Using these static events of a page painting you can output almost any information - images, text etc.

## 7.8 Why the content of the Text is printed without last pixels?

Set the property **TextQuality** to the **WYSIWYG** (What You See Is What You Get) or to **Typographic**.

## 8 Viewer

### 8.1 How to process saving and loading of a rendered report by myself?

You may use static **SavingDocument** and **LoadingDocument** events of the **StiViewerControl** class. The **SavingDocument** is used for saving the rendered report. **LoadingDocument** is used for loading the rendered report.

To process saving the rendered report see below:

C#

```
private static void OnSavingDocument(object sender, EventArgs e)
{
    StiReport report = sender as StiReport;
    report.SaveDocument("MyFile.mdc");
}
StiViewerControl.SavingDocument += new EventHandler(OnSavingDocument);
```

VB

```
Private Shared Sub OnSavingDocument(ByVal sender As Object, ByVal e As EventArgs)
    Dim Report As StiReport = TryCast(sender, StiReport)
    Report.SaveDocument("MyFile.mdc")
End Sub
AddHandler StiViewerControl.SavingDocument, New EventHandler(AddressOf Form1.
OnSavingDocument)
```

For processing of loading of the rendered report see below:

C#

```
private static void OnLoadingDocument(object sender, EventArgs e)
{
    StiReport report = sender as StiReport;
    report.LoadDocument("MyFile.mdc");
}
StiViewerControl.LoadingDocument += new EventHandler(OnLoadingDocument);
```

VB

```
Private Shared Sub OnLoadingDocument(ByVal sender As Object, ByVal e As EventArgs)
```

```
Dim Report As StiReport = TryCast(sender, StiReport)
Report.LoadDocument("MyFile.mdc")
End Sub
AddHandler StiViewerControl.LoadingDocument, New EventHandler(AddressOf Form1.
OnLoadingDocument)
```

## 8.2 How to process printing in the Window of Preview?

You should use the static **PrintingDocument** event of the **StiPreviewControl** class.

For processing of printing of the rendered report see below:

```
C#

private static void OnPrintingDocument(object sender, EventArgs e)
{
    StiReport report = sender as StiReport;
    report.Print();
}
StiPreviewControl.PrintingDocument += new EventHandler(OnPrintingDocument);
```

```
VB

Private Shared Sub OnPrintingDocument(ByVal sender As Object, ByVal e As EventArgs)
    Dim Report As StiReport = TryCast(sender, StiReport)
    Report.Print()
End Sub
AddHandler StiPreviewControl.PrintingDocument, New EventHandler(AddressOf Form1.
OnPrintingDocument)
```

## 8.3 How to disable buttons in the toolbar?

If you want to disable buttons in the Window of Preview you should change properties of the **StiPreviewConfig** service.

```
C#

//Do this operation once when running the program
StiConfig.Load();

//Get service
StiPreviewConfigService config = StiConfig.Services.GetService(typeof(StiPreviewConfigService)) as
StiPreviewConfigService;

//Turn off all buttons of changes of the rendered report
```

```
config.PageNewEnabled = false;  
config.PageDeleteEnabled = false;  
config.PageDesignEnabled = false;  
config.PageSizeEnabled = false;
```

```
//Save configuration if necessary  
StiConfig.Save();
```

**VB**

'Do this operation once when running the program

```
StiConfig.Load()
```

'Get service

```
Dim Config As StiPreviewConfigService = TryCast(StiConfig.Services.GetService(GetType(  
StiPreviewConfigService)), StiPreviewConfigService)
```

'Turn off all buttons of changes of the rendered report

```
Config.PageNewEnabled = False  
Config.PageDeleteEnabled = False  
Config.PageDesignEnabled = False  
Config.PageSizeEnabled = False
```

'Save configuration if necessary

```
StiConfig.Save()
```

The same result can be get using the **Configurator.exe**.

Besides you can use the **StiPreviewControl**. It contains many properties for control of visibility of various controls of the Window of Preview.

For also you can use property **PreviewSettings** of report. You can change this property from report designer.

## 8.4 How to disable the toolbar?

The toolbar can be disabled using the **StiPreviewControl**. Set the property of the **ShowToolbar** in **False**.

## 8.5 How to specify to the report generator to output the result of report rendering in the StiPreviewControl?

There are two ways of making it:

The first way:

**C#**

```
StiReport report = new StiReport();  
report.Load("MyReport.mrt");  
report.Render();  
  
myCustomPreview.Report = report;
```

**VB**

```
Dim Report As New StiReport  
Report.Load("MyReport.mrt")  
Report.Render()  
  
MyCustomPreview.Report = Report
```

The second way:

**C#**

```
StiReport report = new StiReport();  
report.PreviewControl = myCustomPreview;  
report.Load("MyReport.mrt");  
  
report.Show();
```

**VB**

```
Dim Report As New StiReport  
Report.PreviewControl = MyCustomPreview  
Report.Load("MyReport.mrt")  
  
Report.Show()
```

## 8.6 How to specify to the report generator to use my window of report preview?

Your window of the report preview needs to have the constructor which receives at the input an object of the report. After this use the **PreviewForm** property of the report class. This property has the **Type** type. In other words your window of report preview will be created first and then displayed.

**C#**

```
//Create a new window
```

```
public class Form1 : Form
{
    public Form1(StiReport report)
    {
    }
}

//Fill the PreviewForm property
report.PreviewForm = typeof(Form1);
```

VB

```
'Create a new window
Public Class Form1
    Inherits Form
    Public Sub New(ByVal report As StiReport)
        InitializeComponent()
    End Sub
End Class

'Fill the PreviewForm property
Report1.PreviewForm = CType(GetType(Form1), Type)
```

## 8.7 How to set zoom of pages in the StiPreviewControl?

Use the **SetZoom** method. For example:

C#

```
//Set zoom 100%
myPreviewControl.SetZoom(1);
```

VB

```
'Set zoom 100%
MyPreviewControl.SetZoom(1)
```

## 8.8 How to set predefined zoom of pages in the StiPreviewControl?

You should use predefined methods for setting zoom:

**C#**

//Display the page

myPreviewControl.SetZoomOnePage();

//Display two pages

myPreviewControl.SetZoomTwoPages();

//Display multiple pages

myPreviewControl.SetZoomMultiplePages();

//Display a page. The page is to be align by the width in the StiPreviewControl

myPreviewControl.SetZoomPageWidth();

**VB**

'Display the page

MyPreviewControl.SetZoomOnePage()

'Display two pages

MyPreviewControl.SetZoomTwoPages()

'Display multiple pages

MyPreviewControl.SetZoomMultiplePages()

'Display a page. The page is to be align by the width in the StiPreviewControl

MyPreviewControl.SetZoomPageWidth()

## 8.9 How to refresh the report preview in the report code?

Use the **InvokeRefreshPreview** method of the report generator:

**C#**

this.InvokeRefreshPreview();

**VB**

Me.InvokeRefreshPreview()

## 8.10 How to load a page into the rendered report from the code of the report?

Add to the component on a page the following handler of clicking on it:

```
C#  
  
//Create a page  
StiPage page = new StiPage();  
  
//Load the page from a file  
page.Load("MyPage.pg");  
  
//Add a page to the collection of rendered pages  
RenderedPages.Add(page);  
  
//Refresh the window of preview  
InvokeRefreshPreview();
```

```
VB  
  
'Create a page  
Dim Page As New StiPage  
  
'Load the page from a file  
Page.Load("MyPage.pg")  
  
'Add a page to the collection of rendered pages  
Report.RenderedPages.Add(Page)  
  
'Refresh the window of preview  
Report.InvokeRefreshPreview()
```

## 8.11 How to get access to pages of rendered report?

Use the **RenderedPages** properties of a report:

```
C#  
  
foreach (StiPage page in report.RenderedPages)  
{  
  
}
```

VB

```
Dim page As StiPage
For Each page In MyBase.RenderedPages
```

Next

## 8.12 How to show all components in preview but do not print them?

Use the **Printable** property:

**True** - component will be shown in the designer and will be printed

**False** - component will be shown in the designer and will not be printed

## 8.13 How to add or change an image in the rendered report in the report code?

Create and add a new component:

C#

```
StilImage image = new StilImage();
image.Left = 0;
image.Top = 0;
image.Width = 10;
image.Height = 10;

//An image name should be unique in your report
image.Name = "MyUniqueName";

//Assign the image
image.Image = myImage;

//Add the component with the image with the report
report.Pages[0].Components.Add(image);
```

VB

```
Dim Image As StilImage = New StilImage()
Image.Left = 0
Image.Top = 0
Image.Width = 10
Image.Height = 10
```

```
'An image name should be unique in your report
Image.Name = "MyUniqueName"

'Assign the image
Image.Image = myImage

'Add the component with the image with the report
Report.Pages(0).Components.Add(Image)
```

If the report has been compiled or loaded from assembly then, instead of the **image.Image** property, it is necessary to use the **ImageToDraw** property.

### Change images in the report

Let see two ways:

The first way - the report is not compiled

The second way - the report is compiled or loaded from assembly

#### The first way

Find the component with the image in the report:

C#

```
StilImage image = report.GetComponents()["image1"] as StilImage;
```

VB

```
Dim Image As StilImage = CType(Report.GetComponents()["image1"], StilImage)
```

Change the image:

C#

```
image.Image = myImage;
```

VB

```
Image.Image = MyImage
```

In this way your image will be converted to the code and then your report will be compiled and run.

#### The second way

Compile the report:

C#

```
report.Compile();
```

**VB**

```
Report.Compile()
```

Find the component:

**C#**

```
StilImage image = report.GetComponents()["image1"] as StilImage;
```

**VB**

```
Dim Image As StilImage = CType(Report.GetComponents()["image1"], StilImage)
```

Assign the image:

**C#**

```
image.ImageToDraw = myImage;
```

**VB**

```
Image.ImageToDraw = MyImage
```

## 8.14 How to indicate pressing the cancel button in the Window of Preview and do not show the report?

Check the **IsStopped** property of a report:

**C#**

```
if (!report.IsStopped)
```

## 8.15 How to attach your indicator of pages rendering?

For attaching your indicator of pages rendering you should use the **Rendering** event of the report. See below the example of the code:

C#

```
//Create a new report
StiReport report = new StiReport();
report.Load("report.mrt");

//Compile this report by all means
report.Compile();

//Add to the Rendering event of a compiled report
report.CompiledReport.Rendering += new EventHandler(this.OnRendering);

//Start report rendering. Attention! The Render method is called from False arguments.
//This argument indicates that there is no need to show progress of report rendering
report.Render(false);

//Show the rendered report
report.Show();

//The event which we are attaching
private void OnRendering(object sender, EventArgs e)
{
    StiReport report = sender as StiReport;
    string info = (report.PageNumber - 1).ToString();
}
```

VB

```
'Create a new report
Dim Report As New StiReport
Report.Load("report.mrt")

'Compile this report by all means
Report.Compile()

'Add to the Rendering event of a compiled report
AddHandler Report.CompiledReport.Rendering, New EventHandler(AddressOf Me.OnRendering)

'Start report rendering. Attention! The Render method is called from False arguments.
'This argument indicates that there is no need to show progress of report rendering
Report.Render(False)

'Show the rendered report
Report.Show()

'The event which we are attaching
Private Sub OnRendering(ByVal sender As Object, ByVal e As EventArgs)
    Dim Report As StiReport = CType(sender, StiReport)
    Dim Info As String = (Report.PageNumber - 1).ToString()
End Sub
```

Attention! You have to attach to the report.CompiledReport and only after this run the Compile method.

## 9 Reports Designer

### 9.1 Our users find the Designer too complicated. What can we do to cut off unwanted functions?

Most of designer elements are set in configuration. Therefore, you can disable services which you do not use or which are complicated for users.

For also you can check static options located at the StiOptions.Designer.

### 9.2 How to hide the tab page with the report code?

Set the value of the following property in **false** and the bookmark with the report code will be hidden.

```
StiOptions.Designer.CodeTabVisible = false;
```

### 9.3 How to make the Designer not to ask about saving a report before quitting?

Do as follow:

```
StiOptions.Designer.DontAskSaveReport = true;
```

### 9.4 What can I do something after running the Designer but before initialization?

Use the **StiDesigner.LoadingDesigner** static event.

## 9.5 How to intercept saving/loading a report in the report Designer?

You should use two static properties:

```
StiDesigner.SavingReport  
StiDesigner.LoadingReport
```

## 9.6 How to hide something in the data dictionary?

Use the special Restrictions class. For example:

C#

```
StiReport report = new StiReport();  
report.Dictionary.Restrictions.Add("Customers", StiDataType.DataSource, StiRestrictionTypes.  
DenyShow);  
report.Dictionary.Restrictions.Add("DataSource._ID", StiDataType.DataColumn, StiRestrictionTypes.  
DenyShow);
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.Dictionary.Restrictions.Add("Customers", StiDataType.DataSource, StiRestrictionTypes.  
DenyShow)  
Report.Dictionary.Restrictions.Add("DataSource._ID", StiDataType.DataColumn, StiRestrictionTypes.  
DenyShow)
```

## 9.7 How to change the name of the edited file in the report Designer?

Use the **ReportFile** property of the report. It is recommended if you save the report to the file you cannot use inadmissible characters in the file name. If you process saving or loading reports you may use any characters.

## 9.8 How to hide a menu element in the designer?

Use the following code to hide **Help Menu**:

C#

```
StiConfig.Load();
```

```
StiMainMenuService service =  
StiConfig.Services.GetService(typeof(StiMainMenuService)) as  
StiMainMenuService;  
service.ShowHelp = false;
```

**VB**

```
StiConfig.Load()  
Dim Service As StiMainMenuService = TryCast(StiConfig.Services.GetService(GetType  
(StiMainMenuService)), StiMainMenuService)  
Service.ShowHelp = False
```

Place this code at start of your program. Also you can check the **DesignerManagement** sample project.

## 10 Configuration

### 10.1 What can I do to load or save report configuration?

You can use the **Save** and **Load** methods of the **StiConfig** class.

### 10.2 What can I do if I do not want to save configuration?

If you do not want to save configuration set the **StiOptions.Configuration.DontSaveConfig** static property in **true**.

### 10.3 How to restore configuration by default?

Remove the **Stimulsoft.Report.config** file and rerun the application. After this Stimulsoft Reports creates file of configuration again. Also you may call the **StiConfig.Restore** method. This method restores configuration by default.

### 10.4 How to use more then one configurations concurrently?

You should switch off the automatic save of configuration and then load and save configurations you need in proper time and proper positions.

## 10.5 How to save configuration in database?

Use **Saving** and **Loading** events of the **StiConfig** class. Write handlers and attach them to these events.

## 10.6 How to attach your own TraceListener?

See the following:

```
<system.diagnostics>
  <switches>
    <add name="traceLevel" value="4" />
  </switches>
  <trace autoflush="true" indentsize="4">
    <listeners>
      <add name="myListener" type="System.Diagnostics.TextWriterTraceListener"
        initializeData="C:\inetpub\wwwroot\ambReports1_trace.log" />
      <remove type="System.Diagnostics.DefaultTraceListener"/>
    </listeners>
  </trace>
</system.diagnostics>
```

## 10.7 How to show all exceptions which are invoked in Stimulsoft Reports.Net?

Set the static **StiOptions.Engine.HideExceptions** property in **false**.

## 10.8 How to change the current localization of the report generator?

Use the following code:

```
C#
//Specify the file of localization
StiConfig.LoadLocalization("MyLocalization.xml");
```

```
VB
'Specify the file of localization
StiConfig.LoadLocalization("MyLocalization.xml")
```

## 10.9 How, in Stimulsoft Reports.Net, to disable all dialog boxes with messages?

Set the **StiOptions.Engine.HideMessages** static property in **true**.

## 10.10 How to change the path to resources of localization?

The directory in which **Stimulsoft Reports** searches resources of localization is set in the **StiOptions.Configuration.DirectoryLocalization** static property. By default this property is "**Localization**". If necessary you may change the value of this property.

## 10.11 How, in addition to English, to add other languages to localization?

Create the Localization directory in the directory where your application is located. Copy xml files which contain resources of localization. When running first Stimulsoft Reports will find this directory and, of course, find all files with localized resources.

## 10.12 How to decrease the number of levels of relations in business objects?

You can decrease max level of relations. Use this code:

```
StiOptions.Dictionary.BusinessObjects.MaxLevel = 2; //By default 10
```

## 10.13 How to enable RightToLeft in the Window of Preview?

To enable right to left mode for preview use the following code:

```
StiOptions.Window.RightToLeft = StiRightToLeftType.Yes;
```

## 10.14 Which units are used to store report coordinates?

Coordinates of components of a report are stored in the current report units. They are centimeters, millimeters, inches, and hundredths of inch. For dialogs all coordinates are stored in pixels.

## 10.15 How to change the current unit in the report?

For changing the current unit of a report you must use the **Unit** property of the **StiReport** class. For example:

C#

```
//Set centimeters
Report.Unit = new StiCentimetersUnit();

//Set millimeters
Report.Unit = new StiMillimetersUnit();

//Set inches
Report.Unit = new StiInchesUnit();

//Set hundredths of inch
Report.Unit = new StiHundredthsOfInchUnit();
```

VB

```
'Set centimeters
Report.Unit = New StiCentimetersUnit()

'Set millimeters
Report.Unit = New StiMillimetersUnit()

'Set inches
Report.Unit = New StiInchesUnit()

'Set hundredths of inch
Report.Unit = New StiHundredthsOfInchUnit()
```

After the **Unit** property has been changed the report generator automatically converts all sizes and positions of components to a new unit.

## 11 Miscellaneous

### 11.1 How to change sorting of data?

To change sorting see below:

```
DataBand1.Sort = new string[2]
{
    "ASC",
    "Name"
};
```

## 11.2 How to get actual size of a component?

Use the **StiComponent.GetActualSize** method. This method returns actual size of the component. You should remember that if you want the method to return correct data of the **CanGrow** property, the **CanShrink** and **AutoWidth** (for text) properties must be in **true**.

## 11.3 How to find a component by its name?

To find component by its name use this code:

C#

```
StiComponent component = report.GetComponentByName("ComponentName");
```

VB

```
Dim Component As StiComponent = Report.GetComponentByName("ComponentName");
```

## 11.4 How to get or set a text to rtf component in rtf format?

Use the **StiRichText.RtfText** property.

## 11.5 How should I add a bookmark for a component using code?

Use the following code:

```
component.Bookmark = "{Categories.CategoryName}";
```

## 11.6 What is the difference between the Text and the TextValue?

In the **Text** property the text expression, which will be calculated while rendering, is stored. After it will be calculated the result will be put in to the **TextValue**. In other words you can specify expressions. For example:

```
text1.Text = "Phone: {Customers.Phone}";
```

In the **TextValue** you can specify only strings:

```
text1.TextValue = "123";
```

If the **Text** and **TextValue** are specified together then for output the **TextValue** is used.

## 11.7 What should I specify in the DataColumn field of an image?

The data source and, after the point, the column with data are specified in this field. For example:

```
Customers.Photo
```

Brackets should not be put. Also you may use call through the link. For example:

```
Products.Customers.Photo
```

## 11.8 How to load image from the path, stored in database?

For this you should use the **BeforePrintEvent** event. Specify the following code in the event:

C#

```
Image1.Image = Image.FromFile(MyDataSource.ImagePath);
```

VB

```
Image1.Image = Image.FromFile(MyDataSource.ImagePath)
```

For also you can use **ImageData** property:

C#

```
{Image.FromFile(MyDataSource.ImagePath)}
```

VB

```
{Image.FromFile(MyDataSource.ImagePath)}
```

## 11.9 How to bind ComboBox on Form to Data?

1. You may specify the **DataBindings** property.
2. You may get native **ComboBox** by this code:

```
ComboBox comboBox = ReportComboBox.Control;
```

3. You may fill combo box in the **FormLoad** events:

```
ReportComboBox.Items.Add("123");
```

## 11.10 How to get access to the text of the report code?

Use the **Script** property of the **StiReport** class. This property contains a text of the report code.

## 11.11 How to generate a new code of a report?

Use the **ScriptNew** method of the **StiReport** class to generate a new code of a report. For example:

C#

```
StiReport report = new StiReport();  
report.ScriptNew();
```

VB

```
Dim Report As StiReport = New StiReport()  
Report.ScriptNew()
```

## 11.12 How to update a report code?

To update a report code you should use the **ScriptUpdate** method of the **StiReport** class. For example:

**C#**

```
StiReport report = new StiReport();  
report.ScriptUpdate();
```

**VB**

```
Dim Report As StiReport = New StiReport()  
Report.ScriptUpdate()
```

You should remember that, before report compilation, the report code is automatically updated. Therefore, there is no need to call the **ScriptUpdate** method.

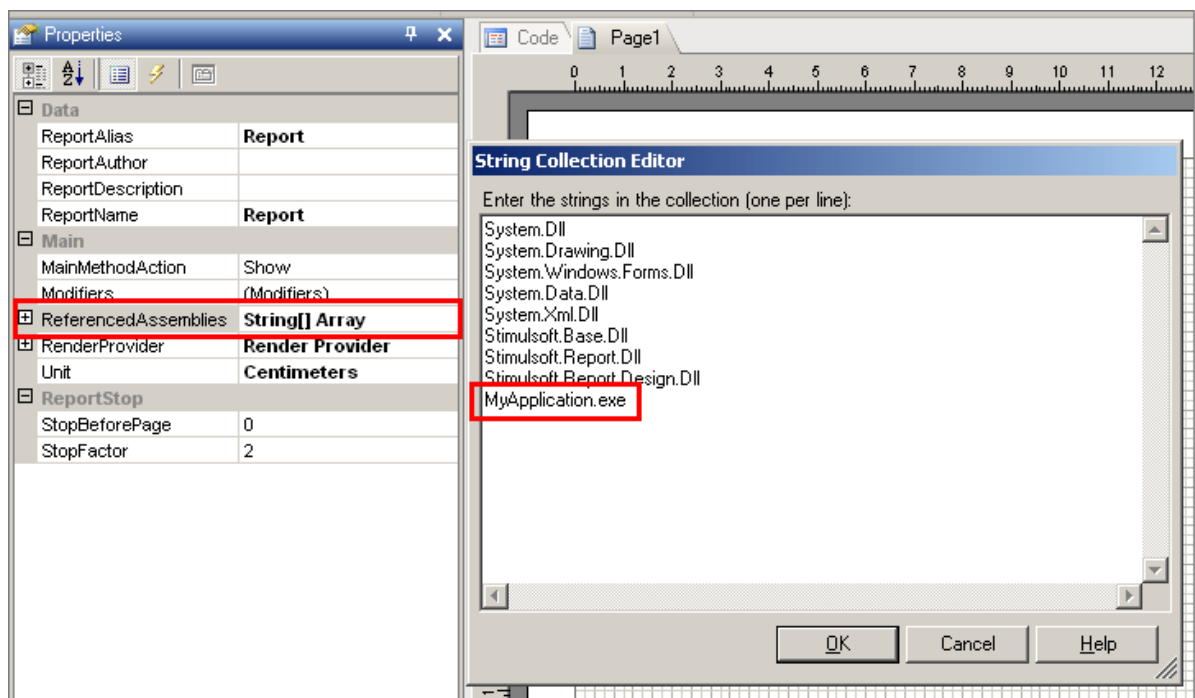
## 11.13 How to use custom assemblies in a report?

Make sure the window of properties is visible and selected (press F4 once or twice or select in menu "View" -> "Properties"). In the window of properties select top item in combo box (for example "MyReport: Report"), there will be "Referenced Assemblies" property, click [...] button to edit its value. Add your assemblies and click [OK] button. Now you could use functions from custom assemblies in reports code  
□ in report objects events handlers and etc.

## 11.14 How should I get access to objects of my application from a report?

If you want to get access to objects of your application from a report you should do the following steps:

1. You have to add a reference to assembly of your application. References are added in the ReferencedAssemblies property of a report.



2. Then describe a field which contains data in a class of a report

```
public class Report : Stimulsoft.Report.St
{
    public MyAssembly.MyClass parameters;

    public Report()
    {
        this.InitializeComponent();
    }
}
```

If you want to describe the field without complete path of this field then, in addition, you should add the namespace of your type.

```
using System;
using System.Drawing;
using System.Windows.Forms;
using System.Data;
using Stimulsoft.Base.Drawing;
using Stimulsoft.Report;
using Stimulsoft.Report.Components;
using MyApplication.MyClasses;

namespace StiReports
{
}
```

3. It is necessary to initialize the described field before report rendering.

**C#**

```
StiReport report = new StiReport();
report.Load("report.xml");

//Compile the report first
report.Compile();

//Initialize the field in a report
report.CompiledReport["Parameters"] = OurParameters;

report.Render();
```

**VB**

```
Dim Report As StiReport = New StiReport()
Report.Load("report.xml")

'Compile the report first
Report.Compile()

'Initialize the field in a report
Report.CompiledReport("Parameters") = OurParameters

Report.Render()
```

After all actions are done you can access to the field of your application from the script. See the sample:

```
{Parameters.SomeParameter}
```

## 11.15 How to work with columns which names concur with the csharp key word?

Add the @ symbol before the column name. For example - @class

## 11.16 How to load an image from URL?

Use the following code for loading an image in the Bitmap format:

```
Image1.Image = Stimulsoft.Base.Drawing.StilImageFromURL.LoadBitmap("http://www.domain.com/bitmap.gif");
```

Use the following code for loading an image in the **Metafile** format:

```
Image1.Image = Stimulsoft.Base.Drawing.StiImageFromURL.LoadMetafile("http://www.domain.com/  
bitmap.emf");
```

For also you can use property **ImageURL** of image component.

## 11.17 How to find the name of the file from which the report was loaded?

You can get previous file path from property **ReportFile**. Sample:

```
string path = report.ReportFile;
```

## 11.18 How to change CheckBox value on a page in preview?

I would like to know which function can work like a click button? I try to find some function that I can use while preview report and I can add some X mark in the preview report by click on preview report and that X mark will appear on the report

Use **CheckStyle = Cross** for "X" symbol

Please write to the **ClickEvent** event handler:

**C#**

```
Stimulsoft.Report.Components.StiCheckBox check = sender as Stimulsoft.Report.Components.  
StiCheckBox;  
  
if (check.CheckedValue == null || ((bool)check.CheckedValue) == false)check.CheckedValue = true;  
else check.CheckedValue = false;  
  
Invalidate();
```

**VB**

```
Dim box1 As Stimulsoft.Report.Components.StiCheckBox = CType(sender, Stimulsoft.Report.  
Components.StiCheckBox)
```

```
If ((box1.CheckedValue Is Nothing) OrElse Not CType(box1.CheckedValue, Boolean)) Then
    box1.CheckedValue = True
Else
    box1.CheckedValue = False
End If

MyBase.Invalidate
```

## 11.19 How to change the page number?

If you want to change the page number all you need is to assign the value to the system variable of the **PageNumber**. For example:

```
PageNumber = 1;
```

For also you can use special property **ResetPageNumber**.

## 11.20 Are there any ways to print a header for a databand on the second page?

You can use **BeforePrintEvent**. See example code:

C#

```
if (PageNumber == 1)HeaderBand1.Enabled = false;
else HeaderBand1.Enabled = true;
```

VB

```
If (MyBase.PageNumber = 1) Then
    Me.HeaderBand1.Enabled = False
Else
    Me.HeaderBand1.Enabled = True
End If
```

## 11.21 How to change duplicated values on a band with one?

**ProcessingDuplicates**

**ProcessingDuplicates=Merge**

**ProcessingDuplicates=None**

**ProcessingDuplicates=Hide**

Country	Country	Country	Company
Germany	Germany	Germany	Alfreds Futterkiste
Mexico	Mexico	Mexico	Ana Trujillo Emparedados y helados
	Mexico		Antonio Moreno Taquería
UK	UK	UK	Around the Horn

There are the following values for the **ProcessingDuplicates** property:

1. **ProcessingDuplicates=Merge** - duplicated values are merged
2. **ProcessingDuplicates=None** - duplicated values are output without changes
3. **ProcessingDuplicates=Hide** - the first string of duplicated values is output

## 11.22 How to add the event handler to events?

1. After you call **Show**, report engine automatically calls the **Compile** method and creates a new report - **report.CompiledReport**.

To add event handler use this code:

**C#**

```
report.Compile();
report.CompiledReport.GetComponents()["ComponentName"].BeforePrint += new EventHandler
(Component_BeforePrint);
report.Show();
```

**VB**

```
Report.Compile()
AddHandler Report.CompiledReport.GetComponents.Item("ComponentName").BeforePrint, New
EventHandler(AddressOf Me.Component_BeforePrint)
Report.Show()
```

In this code handler subscribe to event in compiled report

2. You can set event script directly:

C#

```
component.BeforePrintEvent.Script = "MessageBox.Show(\"test\")";
```

VB

```
Component.BeforePrintEvent.Script = "MessageBox.Show(\"test\")"
```

You can assign script to event and after compilation this script go to a handler.

## 11.23 How to get access to pages of a report?

Pages of a report are stored in the **Pages** collection of reports. See the sample:

C#

```
//Returns the first page of a report  
StiPage page = report.Pages[0];
```

VB

```
'Returns the first page of a report  
Dim Page As StiPage = Report.Pages(0)
```

## 11.24 How to get the total of a band without its printing?

You should decrease the height of the data band to 0.

## 11.25 How to sort data on the base of the Expression?

Often you need to sort data on the base of expression. The result of calculation depends on some fields in the data source. For example you have set of numbers represented as a string. If to sort this data source without converting strings to the number format, then the order of numbers in the data source will not be complied with the natural order of this numbers. Numbers have different precision and will be sorted as strings:

```
1000  
20
```

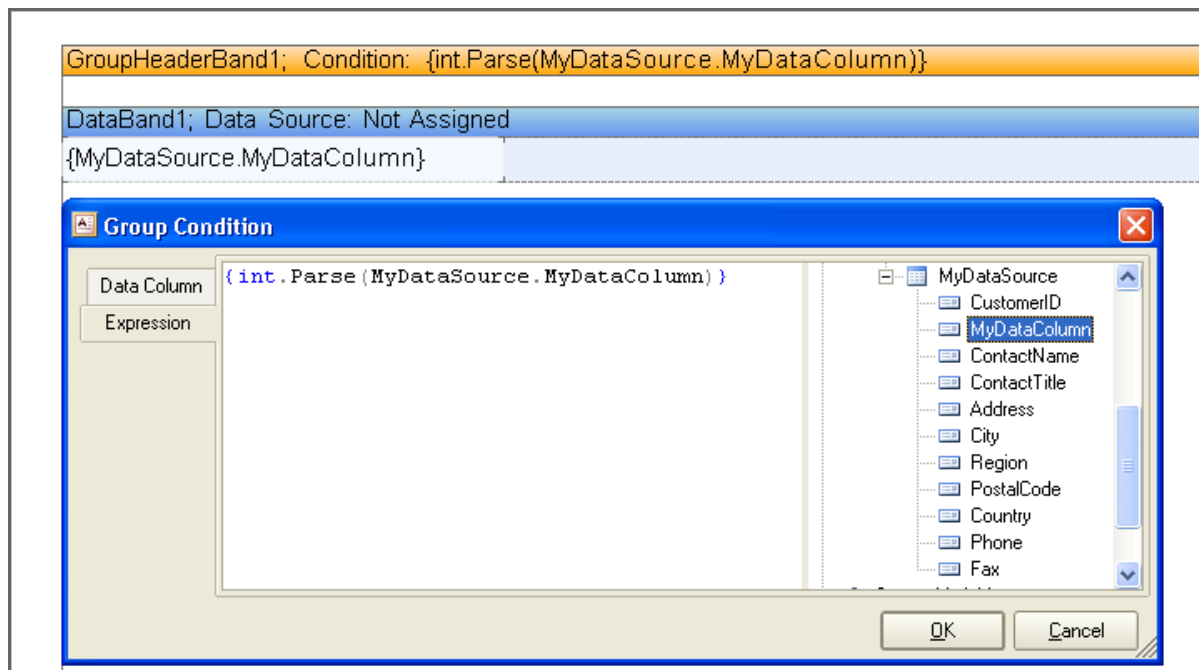
300

If to change the string type of a column to numerical, then sorting will be done correctly. But how to sort without changing the type of the data source? For this purpose you may use the **Expression** as a condition for sorting.

```
{int.Parse(MyDataSource.MyColumn)}
```


As it is impossible to specify the expression as a condition for sorting, then you need to use the following trick.

Change your sorting to grouping. Specify the expression (see below) for sorting as a condition of grouping. Set the **GroupHeaderBand** height to 0.



After that, strings will be sorted in correct order.

20  
300  
1000

 Notice. In the expression you can use any rows from the table, used for sorting.

## 11.26 Cross-report rendering by 3 tables?

Let see the following task. For example, we need render a report by 3 tables: Categories, Products, Order\_Details.

We must get the next tables in the report: - by Products strings, by Categories columns. On the row/column intersection of a report a row from the Order\_Details is to be output. Order\_Details is related to Categories and Products tables using **Relations**.

See below how to do it.

Place the **DataBand** on a page. Products data source. Place the **CrossTab** with Categories data source on the **DataBand**. Place the **StiText** with the field from the Order\_Details on the **CrossBand**.

To scroll the Order\_Details to the row you need it is necessary to add a handler into the **OnBeforePrint** of the **StiText** component which helps you in scrolling .

```
Order_Details.First();
while (!Order_Details.IsEof)
{
    if (Order_Details.OrderID == Categories.CategoryID && Order_Details.OrderID == Products.ProductID)
        break;
    Order_Details.Next();
}
```

Why the Order\_Details cannot be automatically scrolled to the row though the relation for the Products and Categories exist? Because data sources are scrolled when they are related to the **Databand**. It is impossible to scroll as in Delphi because there can be a lot of relations.

But better way in this case is - a big SQL-query and a cross table.

Or the query is a bit smaller and is placed on the **Databand**.

## 11.27 Text formatting in the RichText component in the GetValue event handler?

Sometimes you need to format the **RTF** text in the **StiRichTextBox** object.

For the text formatting you can use the **GetValue** event handler.

For this operation you need to create the **StiRichText** component. See below the example of how to use the **GetValue** event handler. The **StiRichTextBox** is used in this example. It has a difference from the standard one. It has more functionality in working with the **RTF** text.

```
C#

// Create auxiliary StiRichTextBox object
StiRichTextBox rich = new StiRichTextBox();

// rtf-text unpacking
rich.Rtf = StiRichText.UnpackRtf(System.Xml.XmlConvert.DecodeName(e.Value));

//Select rtf range
//Select area of a text for using formatting to it
```

```
rich.SelectionStart = 0;
rich.SelectionLength = 9;

//Using lowercase to selected text
rich.SelectionCharOffset = -5;

// Selected text with center alignment
rich.SelectionAlignment = StiRtfSelectionAlign.Center;

// Set the color of the selected text
rich.SelectionColor = Color.Red;

// Set the font for selected text
rich.SelectionFont = new Font("Arial", 20, FontStyle.Bold);

rich.SelectionStart = 9;
rich.SelectionLength = 3;
rich.SelectionFont = new Font("Arial", 25);
rich.SelectionColor = Color.Blue;

rich.SelectionStart = 12;
rich.SelectionLength = 11;
rich.SelectionFont = new Font("Arial", 20, FontStyle.Bold);

//Set selected text in uppercase
rich.SelectionCharOffset = 10;

// Rtf text packing
e.Value = System.Xml.XmlConvert.EncodeName(StiRichText.PackRtf(rich.Rtf));

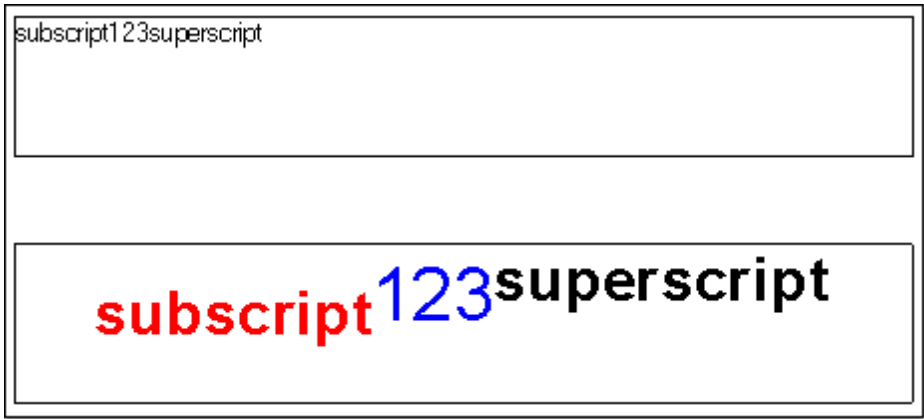
// Release of resources of additional component
rich.Dispose();
```

## VB

```
Dim box1 As New StiRichTextBox
box1.Rtf = StiRichText.UnpackRtf(System.Xml.XmlConvert.DecodeName(e.Value))
box1.SelectionStart = 0
box1.SelectionLength = 9
box1.SelectionCharOffset = -5
box1.SelectionAlignment = StiRtfSelectionAlign.Center
box1.SelectionColor = Color.Red
box1.SelectionFont = New Font("Arial", 20, FontStyle.Bold)
box1.SelectionStart = 9
box1.SelectionLength = 3
box1.SelectionFont = New Font("Arial", 25)
box1.SelectionColor = Color.Blue
box1.SelectionStart = 12
box1.SelectionLength = 11
box1.SelectionFont = New Font("Arial", 20, FontStyle.Bold)
box1.SelectionCharOffset = 10
e.Value = System.Xml.XmlConvert.EncodeName(StiRichText.PackRtf(box1.Rtf))
```

box1.Dispose

On the picture you can see the **StiRichText** component before and after setting the **GetValue** handler.



Properties of the **RichText** component

Property	Function
<b>SelectionAlignment</b>	Controls the Rtf - text alignment
<b>SelectionHangingIndent</b>	Set the SelectionHangingIndent property to an integer representing the distance in pixels between the left edge of the first line of text in the paragraph and the left edge of subsequent lines in the same paragraph. Integer value. Sets the distance in pixels between the left margin of the control and the left margin of the text.
<b>SelectionIndent</b>	Set the <b>SelectionHangingIndent</b> property to an integer representing the distance in pixels between the left edge of the first line of text in the paragraph and the left edge of subsequent lines in the same paragraph. The value of the <b>SelectionHangingIndent</b> property only applies to lines in a paragraph that have wrapped below the first line.
<b>SelectionRightIndent</b>	Set the <b>SelectionRightIndent</b> property to an integer representing the distance in pixels between the right edge of the control and the right edge of the text.