BSC Designer

Strategy Execution
Software

For video tutorials, please check out web manual at:
https://bscdesigner.com/support

Introduction to BSC Designer PRO

BSC Designer PRO is a strategy execution software which business professionals use to manage their scorecards, KPIs, and strategy maps.

Use BSC Designer PRO to:

- Describe business goals and connections between them on a **strategy map**
- Track strategy execution with **leading** and **lagging** indicators
- Do a quick **analysis** of the indicators, forecast their values
- Visualize performance data on **dashboards**
- Keep the team **informed** about important changes of KPIs

Below is a review of the most important functions of BSC Designer PRO.

Track KPIs. Manage the most important performance indicators. Define the relative weight of the metrics. Track leading and lagging performance of business goals. Read more...

Strategy maps. Create visually appealing strategy maps. Show the cause and effect logic between the goals. Visualize aligned initiatives and indicators. Use strategy maps to discuss new ideas with your team. Read more...

Reports. Create performance reports. Calculate the total cost of all initiatives. Prepare an action plan report. Share your findings on the presentation slides. Read more...

Import data for KPI. Import performance data from a spreadsheet or SQL database. Cascade scorecards by linking goals and indicators. Read more...

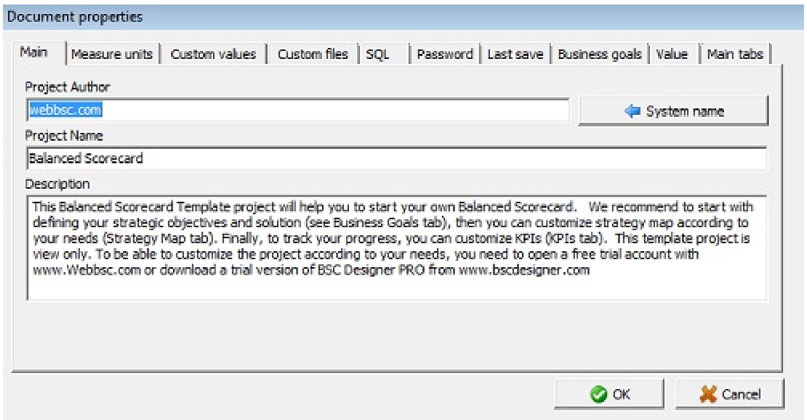
Alerts. Keep your team informed. Setup alerts for the most important indicators. Track new initiatives added or indicators that have gotten into a red zone. Read more...

More features:

- Analyze performance of the indicators
- Connect to BSC Designer Online
- Survey experts about KPIs

Scorecard Properties in BSC Designer

Use the Document properties command in the File menu to access additional scorecard customization settings.



Main Tab

The **Main** tab contains information about the scorecard:

- Author name
- Scorecard name
- Description

Measure Units Tab

- **Set default** measure units used for the new indicators
- **Import** measure units from other scorecards
- **Export** measure units
- **Add** new measure unit
- Use **Custom text fields** to define qualitative measurements

Custom Values & Files Tabs

These two tabs help to customize reports:

- Use **Custom Values** to insert text into the report
- Use **Custom Files** to add some files into the report

SQL Tab

The SQL tab presents settings for SQL indicators.

Password Tab

Use text fields on the **Password** tab to assign a password for reading and writing.

Value

Define on this tab:

- How the baseline is updated in BSC Designer
- Display settings for leading and lagging indicators
- The default value for the inheritance

Seamless Integration with BSC Designer Online

Facilitate team work and permission management by integrating BSC Designer PRO with cloud-based BSC Designer Online.

Please note: the subscription for BSC Designer Online is sold separately.

First Time Setup

1. Go to the menu **Tools** > **Application options** > **Teamwork** tab
2. Enter data into **BSC Online credentials**
3. Click on **Log into existing account**

Access Scorecards

The **File** menu allows accessing scorecards from BSC Designer Online:

- Open the scorecard from the cloud using **Check in project** command
- Save the scorecard back to the cloud account using **Check out project** command

Automate Scorecard Reporting with Command Line Interface in BSC Designer PRO

Use the command line interface to automate scorecard reporting and integrate BSC Designer PRO with another business application.

The interface for the command line is:

```
[filename] [-export filename] [-overwrite]
```

Goals and KPIs Report

```
scorecard_file.bsc -export report.html -goalsandkpis -report-profile %profile_name_or_index%
```

Where %profile_name_or_index% is 0, 1, 2, or "Custom report name" (with quotes).

Scorecard Performance Report

Specify the start and end date for the report, add -html option:

```
bsc_designer.exe scorecard-file.bsc -date1 01.01.%last-year% -date2 01.11.%last-year% -html -export
report.html -overwrite
```

Export to Excel

```
"scorecard-file.bsc" -export "report.xls" -overwrite
```

Export to Excel for Specific Date

To generate a report for a certain date, use this syntax:

```
"scorecard-file.bsc" -export "report.xls" -overwrite -date 01.24.%last-year%
```

Note: the date must be according to Windows settings (for example, DD.MM.YYYY or MM.DD.YYYY).

PowerPoint Report

Use the **-powerpoint** option to generate a PowerPoint report:

```
bsc_designer.exe scorecard-file.bsc -powerpoint -export report.ppt -overwrite
```

Strategy Map Report

Below is a command line syntax for strategy maps.

```
bsc_designer.exe scorecard-file.bsc -export PictureFileName -StrategyMap [-StrategyMapPlacement ] [-StrategyMapLevel ]
```

```
bsc_designer.exe scorecard-file.bsc -export REPORTFILE -allmaps
```

Export of an existing map:

```
bsc_designer.exe scorecard-file.bsc -export "C:\output-file.jpg" -StrategyMap
```

Use the **-overview** option to generate overview report:

```
bsc_designer.exe scorecard-file.bsc -html -export report.html -overwrite -overview
```

Export of a "snowflake" map:

```
bsc_designer.exe scorecard-file.bsc -export
"C:\output-file.jpg" -StrategyMap -StrategyMapPlacement SnowFlake -StrategyMapLevel 1
```

Export all supported strategy maps:

```
bsc_designer.exe scorecard-file.bsc -export C:\report.html -allmaps
```

Updating SQL indicators

To update SQL indicators via the command line, use this syntax:

```
bsc_designer.exe scorecard-with-sql-indicators.bsc -silentsqlupdate
```

Manage Goals and KPIs in BSC Designer PRO

Manage the KPI scorecard in BSC Designer. Automate all of the calculations taking into account targets, leading and lagging indicators.

Create a New Indicator/Goal

1. Go to the **KPI** tab
2. Select a parent item
3. Click on the **New Item** button on the toolbar
4. Use the tabs below to adjust the created item

General Tab

- **Name -** the name of the indicator
- **Description -** a short description of the indicator
- **Measure -** measure units that correspond to the indicator
- **Initiatives -** action plans for the item

Data Tab

- A **stop-light** is linked to the performance (click to customize)
- **Value** field - the value for the indicator associated with the date selected in the internal calendar
- **Data source** button - access data sources for an indicator

- **Baseline** and **Target** - a scale for the **progress*** calculation
- **Min** and **Max** - a scale for the **performance*** calculation
- **Simple mode** - a checkbox to hide/show the min and max fields

* The calculations of the performance and weight are explained in Scorecard and KPIs 101.

The **Value** drop list defines how the value of the goal is calculated; for example, it can be:

- **Weighted average** of the values of the child indicators, or
- **Self-standing** when the software won't take into account child indicators

Performance Tab

- **Weight -** importance of the indicators compared to other indicators aligned with the same goal
- **Optimization -** the mathematical function that BSC Designer uses to calculate the performance
- **Raw data -** disables performance calculation for the indicator

The **Performance** drop list defines how the performance of the goal is calculated. For example, it can be:

- **Weighted average** of the performance of the child indicators, or
- **Self-standing** when the software won't take into account child indicators

The software calculates **leading** and **lagging** performance of the goal using the data of the aligned indicators.

Context Tab

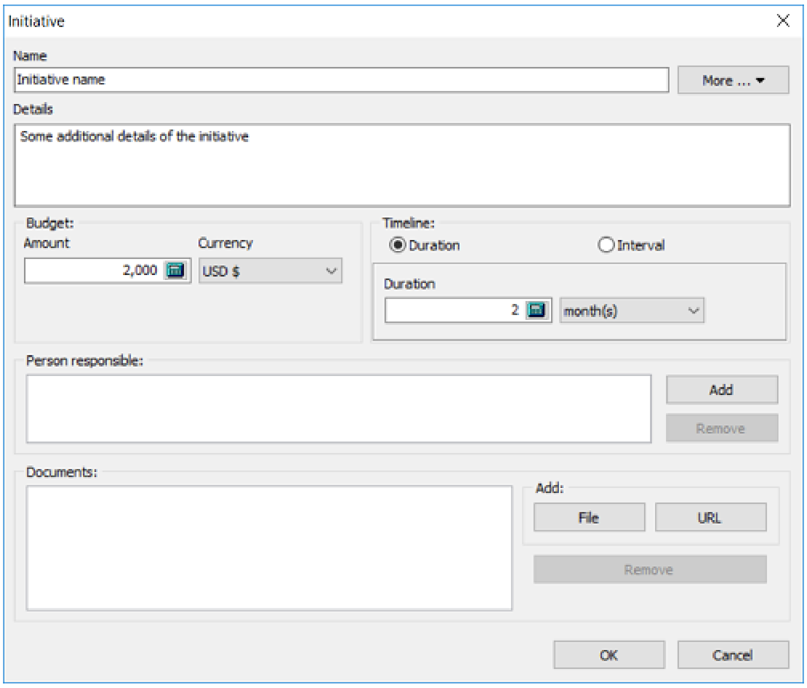
- **Glyph 1** and **Glyph 2 -** select a glyph for the indicators on the strategy map
- **Indicator type -** select whether the indicator is a **Leading** or **Lagging** one in the context of the business goal
- **Strategic theme -** changes the color of the goal on the map

Initiatives in BSC Designer PRO

Use initiatives to describe action plans for the goals and KPIs; include data for budget, timeline and the person responsible.

To access initiatives:

1. Go to the **KPI** tab
2. Select any indicator or goal
3. Switch to the **General** tab below
4. Click on the **Initiatives** button



The settings for an initiative:

- **Name** of the initiative
- **Date** to visualize initiative on the **Time** chart
- **Details -** additional information about the initiative
- **Budget** associated with the initiative
- **Timeline -** start date, deadline, and duration for an initiative
- **Person responsible** for the initiative; this is used on strategy maps and for the alerts
- **Documents -** a link to the external documents

BSC Designer can generate an **Action plan** report that will include all the initiatives.

Update Interval for KPIs

Learn to keep the data for the KPIs organized, specify required update interval, and let BSC Designer PRO help your team to follow it.

Assign an update interval:

1. Go to the **KPI** tab, select an indicator
2. Select **Edit value** command in the **KPIs** menu
3. Use the controls from the **Update** group
4. Select reporting period
5. Select reporting date in the period

Value Inheritance for KPIs in BSC Designer PRO

Define indicators that should inherit their values from the historical data and those that should use specifically entered values.

Change the inheritance setting:

1. Go to the **KPI** tab
2. Select any indicator
3. Go to the menu KPIs > Edit Values
4. Use the **Values inheritance** option

Change the default inheritance in the menu File > Document properties > Value tab > **Use inherited values for indicator**.

Data Grouping in BSC Designer PRO

Report aggregated values of indicators, group performance data as average or sum of changed.

Select a grouping type for an indicator:

1. Go to the **KPI** tab
2. Select any indicator
3. Select the **Edit values** command in **KPIs** menu
4. Use the **Group by** drop list

To change the grouping period, use the **Group by** control:

- In the report dialog
- Under the charts

Data Source for KPIs in BSC Designer PRO

Learn how to power KPIs with different data sources including Excel spreadsheets, other scorecards, databases, and user surveys.

Access Data Sources

- Switch to the **KPI** tab
- Select any indicator
- Switch to the **Data** tab
- Click on the **Data source** button

Import Values for Indicators From Spreadsheet or CSV

Learn how to import data from an Excel spreadsheet into the performance indicators in BSC Designer PRO.

Prepare a Template (optional)

1. Create a scorecard with a KPI structure
2. Select the **Export values** command in KPIs menu
3. Follow the steps of the export master

Import From Spreadsheet or CSV

1. Select the **Import values** command in KPIs menu
2. Select the source for the data
3. Click **Next**
4. Preview data
5. Click **Next** and if needed:
   - Click on the column name to associate it with the correct KPI property
   - Use swap columns and the rows button
   - Change settings in the **Date** group
6. Click **Next**
7. Change import settings if needed
8. Click **Next**
9. Preview recognized data
10. Click **Finish**

GUID Property

- GUID stands for Globally Unique Identifier
- GUID helps to match the indicator in BSC Designer with the indicator in a spreadsheet
- When importing, GUID has priority over a parent field

Link KPI Value to a Certain Cell in an Excel File

An alternative to importing from a spreadsheet is linking the KPI value to a certain cell in an Excel file:

1. Go to the **KPI** tab
2. Select any indicator
3. Switch to the **Data** tab below
4. Click the **Data Source** button
5. Select the **Link to MS Excel**
6. Follow the steps of the import master

What is a Named Range?

Name range is a more reliable alternative to addressing cells by their coordinates. More in Excel manual.

Additional Tips

- The value will be imported into the date selected in the internal calendar
- Use **Update imported indicators** in the Tools menu to repeat import

Importing vs. Linking

- **Import** data to load scorecard with many values for many indicators
- **Link** to the specific cell to update a few important values regularly

Cascading Scorecards in BSC Designer PRO

Ensure business scorecards are connected. Learn how to cascade scorecards by indicators or business goals in BSC Designer PRO.

Create Imported Indicator

1. Go to the **KPI** tab
2. Select any indicator
3. Switch to the **Data** tab below
4. Click the **Data source** button
5. Select the **Link to BSC Designer project** option
6. Select one of the importing options:

    - From file - connect to the locally stored scorecard
    - BSC Online - connect to the scorecard stored in BSC Designer Online (**recommended**)
    - Local - connect to the indicator in the current scorecard

7. Click the **Select** button
8. Select the name of the indicator to import
9. Click **OK** to finish

Useful Tips

- Use **Update imported indicators** in the Tools menu to update imported values
- The **name** and the **weight** of the imported can be customized in the recipient scorecard
- The **value** of the imported indicator can be changed in the source scorecard only

Import Data from External Database with SQL Query

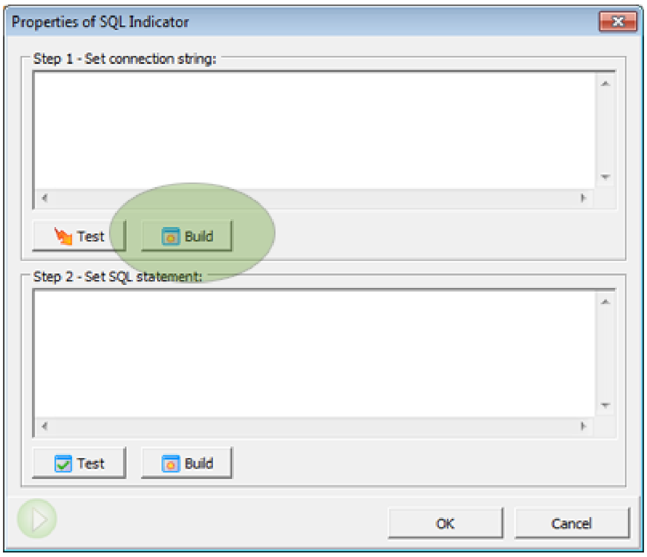
Learn how to power performance metrics on the scorecard by connecting to a database using SQL indicators.

Creating SQL Indicator

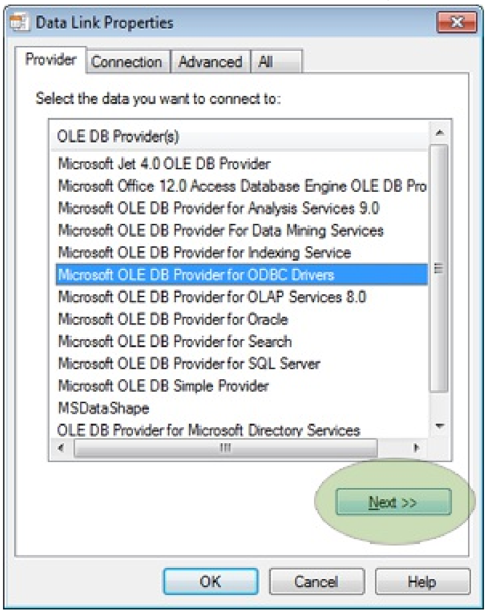
1. Go to the **KPI** tab
2. Select any indicator
3. Switch to the **Data** tab below
4. Click the **KPI Data Source** button
5. Select **Link to SQL Database**
6. Select a database with local or web access

Creating Connection String

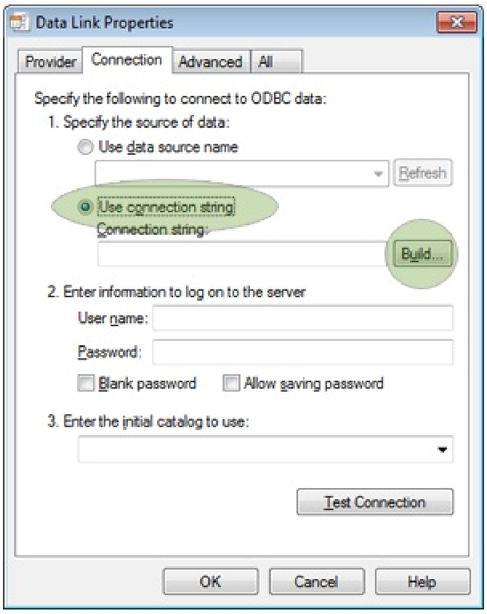
1. Click the **Build** button to create a connection string



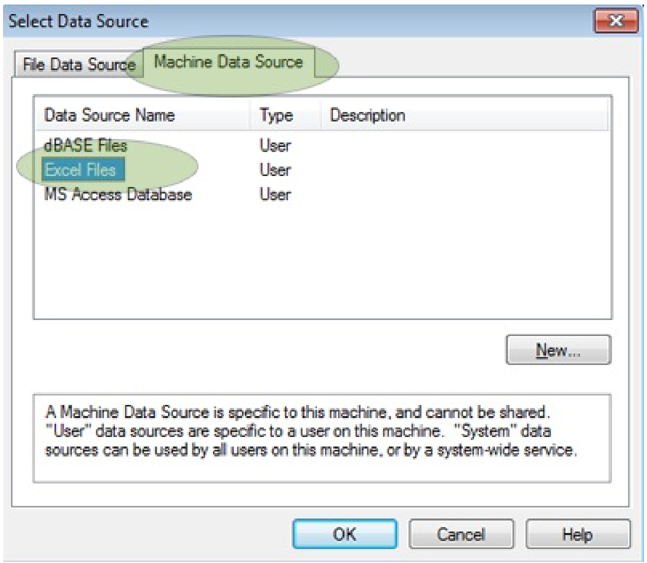
2. Select a data source (available data sources depend on the ADO drivers installed), for example ODBC drivers:



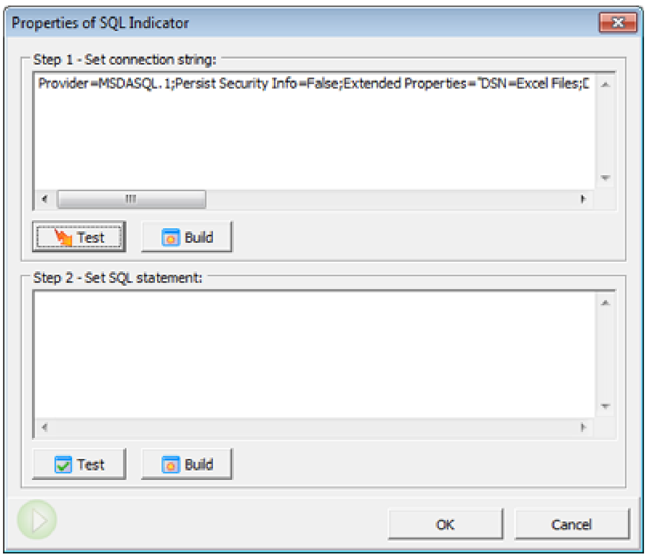
3. Click **Next**
4. Switch to **Use connection string** in **Specify the source of data** section



5. Click the **Build** button
6. Go to the **Machine data source** tab
7. Select data source (for example, "Excel Files")



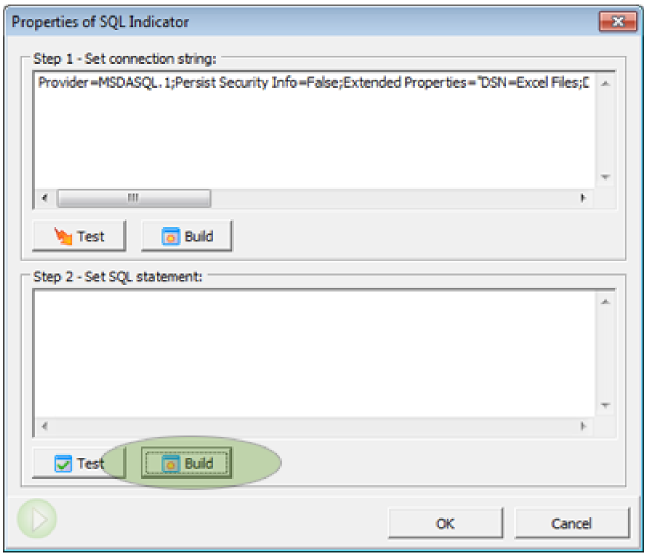
8. Double-click on it
9. Select an MS Excel file, click OK



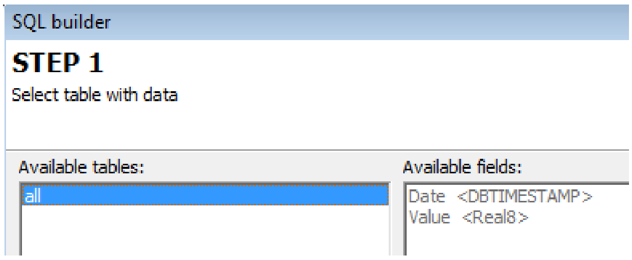
10. Click the **Test** button

Creating SQL Query

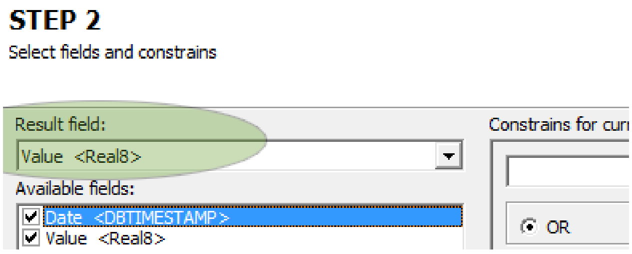
1. Click the **Build** button for **SQL statement**



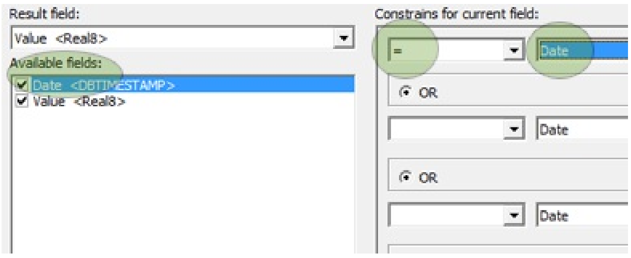
2. Select a table and click the **Next** button



3. Select a column from the **Result field** drop list



4. Select "Date" from the available field list, select "=" as a condition, and "Date" in the drop list



5. Click "Finish" to apply changes

The example SQL query:

```
SELECT `Value`,`Date`
FROM `all`
WHERE
 ( `Date` = :Date )
```

Parameters Supported in Request

- **:Date -** the date selected in BSC Designer
- **:UpdatePeriodStart -** the first date of the current update interval
- **:UpdatePeriodEnd** - the last date of the current update interval
- **:ItemName -** the name of indicator
- **:Max -** MAX value of indicator
- **:Min -** MIN value of indicator
- **:FileName -** the file name of the current scorecard

Getting Aggregated Values from a Data Source

1. Specify update interval for an indicator
2. Replace **:Date** parameter in SQL query with **:UpdatePeriodStart** and **:UpdatePeriodEnd** parameters

The example SQL query that aggregates data:

```
SELECT sum(Value) as AggregatedValue,`Date`
FROM `all`
WHERE
 ( `Date` BETWEEN :UpdatePeriodStart and :UpdatePeriodEnd )
```

Additional ideas

- Use the File > Document Properties > **SQL** tab to find additional settings for SQL indicators
- Find the **Data via SQL** scorecard in the samples folder as an example of SQL indicator setup

Build a KPI Using an External Data Source in XML or JSON Formats

Learn how to power KPIs on the scorecard with data generated by external web scripts in XML or JSON formats.

Create HTTP Indicator

1. Go to the **KPI** tab
2. Select any indicator
3. Switch to the **Data** tab
4. Click the KPI Data Source button
5. Select **Link to a web-based script** option
6. Specify the access URL and necessary parameters

Script Parameters

- **%%name%%** - the name of the indicator
- **%%date%%** - date selected in internal calendar

Script Response

BSC Designer PRO will search for a **value** field in the response. The server response should be in XML or JSON format, for example:

```
20.1My indicator
```

Response in JSON format:

```
{"value":20.1,"name":"My indicator"}
```

Data Series in BSC Designer PRO

A value of the KPI can be defined by the opinions of several experts. Learn how to manage with data series in BSC Designer.

Enable Data series

1. Go to the **KPI** tab
2. Select any indicator
3. Switch to the **Data** tab below
4. Click the **Data source** button
5. Select the **Data Series** option
6. The **Data series** tab will appear

Data Series and Surveys

Following analogy with surveys:

- **Group name** is a name of the survey
- **Series** are the names of the experts
- **KPIs** are the questions asked
- **Group results** are the results of the survey

Entering Data

- Enter the data for the KPI directly in the **Data series** table or
- Make a required series active (via **Active** column) and enter data on the **KPI** tab

Useful Tips

- To calculate the group value, the software uses the indicator's **grouping type**
- There is a data series "Series" report in menu Reports > KPI Reports

Strategy Maps in BSC Designer PRO

Describe a strategy of the organization on the strategy map; explain how goals are connected, align indicators, and action plans.

Create a New Strategy Map

1. Go to the **Strategy Map** tab
2. Click the **Add strategy map** button
3. The Placement Wizard will be started
4. Select one of the map types
5. Click the **Execute** button
6. Click **Cancel** to create an empty map

Adding New Items

1. Select any perspective
2. Click on the **Align with** button, select **New...** option
3. Fill in the required settings
4. Click **Add new item**

Export Map

Click the **Export** button on the toolbar to access the map export dialog.

- Increase **Export resolution** to prepare a map for printing
- Use **Export without background** to export map with transparent background

Change Mission Statement

1. Go to the **KPI** tab
2. Select root element
3. Enter the text in the **Mission** field below

Creating Map with KPIs

1. Go to the **Strategy Map** tab
2. Create a new map
3. Select **Map with KPIs** in the Placement Wizard

To link a KPI to a map area:

1. Go to the **KPI** tab
2. Right-click on any KPI
3. Select the **Link item to the map** option

Dashboards in BSC Designer PRO

Learn how to present the most important information about KPIs and their trends on the BI dashboard in BSC Designer PRO.

Adding Charts to the Dashboard

1. Go to the **Dashboard** tab
2. Create a new dashboard if necessary
3. Select the **Chart** option in the **Add...** menu
4. Select the data source indicator
5. Select the type of the chart
6. Select the data to visualize (e.g. value, progress, or performance)
7. Click **OK** to finish

Additional Controls

Some charts have additional controls ; use them to:

- Add more indicators to the chart
- Change time period for the chart

Export Chart

Use the **Export to image** button to save the dashboard as an image file.

Analysis in BSC Designer

Forecast the value of an indicator or find worthwhile performing indicators over a period of time with Analysis function in BSC Designer PRO.

Performance / Progress

Find top performing indicators, or indicators that were underperforming over a period of time.

- Use the time controls at the bottom to change the time period
- Change the sorting order by clicking on the **Performance** or **Progress** columns

Absolute Weight

The **weight** property of the indicator defines its relevant importance. Absolute weight analysis helps to find indicators that impact the scorecard the most.

Forecast

The forecast analysis uses historical data and does a linear estimation for an indicator's value.

1. Go to the **Analysis** tab
2. Select the **Forecast** analysis
3. Select any indicator below
4. Enter a date in the **Target date** field
5. Check the **Forecast value** column for the forecasted value
6. Enter a value into the **Target value** field
7. Check the **Forecast date** column for the date when the entered value is expected

Value

Select an interval using the time controls. BSC Designer PRO will show:

- The minimum and maximum value of an indicator
- The average value over the period
- The current value

Update Time

- **Update in** shows when an indicator needs to be updated
- **Last updated** shows the date when an indicator was updated the last time
- **Update each** summarizes information about a required update interval

Biggest Gain/Loss

Find indicators that changed significantly in terms of:

- Performance,
- Progress, or
- Value.

Click on the **Gain/Loss** column to sort results.

Performance Reports in BSC Designer PRO

Support presentations with performance data from business scorecard - create reports for goal performance and KPIs data.

Scorecard Performance Report

This report focuses on KPIs, their data, initiatives, and charts. Select in the report dialog:

- The time period to report
- Grouping settings for indicators
- The level of the reporting details

Understanding Reports

- **Start** and **End** are the value/performance for the start and end points of the report interval
- **Dynamic** is the difference between the End value and Start value.
- **Max, Min, Average** are respectively maximum, minimum or average performance/progress over the reporting period
- **Current** is the value for the date selected in the internal calendar

Goals and KPIs Report

- **Cost of Strategy** - a summary of all initiatives with budget and duration data
- **Efforts vs. Results** - a report with leading and lagging data for the goals
- **Action Plan** - a report with goals, initiatives, and persons responsible

KPI Report

- **KPI Structure Report** - a copy of the KPI tree from the KPI tab
- **Values Report** - includes all values for indicators and stop lights
- **Key Risk Indicators Report** - summarizes the estimation of the risk impact and probability
- **Data Series Report** - shows the details for the indicators powered by data series

Other Reports

- Strategy Map Report
- Dashboard report
- Analysis Report
- MS Excel Report
- MS PowerPoint Report

Customizing Reports

- Change report charts using the **Tools > Application Options > Reports tab**
- Add logo using the **Tools > Application Options > Company Info tab**
- Change charts colors using the **Tools > Application Options > Chart colors tab**

Reports in PDF

1. Generate any report
2. Click the **Print** button on the **Report** tab
3. Use any PDF printer

Alerts in BSC Designer

Keep your team informed about new initiatives added, performance changes, or approaching update interval.

Teamwork Settings

There are two ways BSC Designer PRO can send out alerts:

- **BSC Designer Online** (recommended) - get user list and send notifications via BSC Designer Online
- **Private mail server** - provide your own mail server and manually introduce emails

Change teamwork settings in the menu **Tools > Application Options > Teamwork > Provide teamwork functionality**.

Creating a New Alert

Go to the **Alerts** tab and click the **Add alert** button.

- On the **General settings** tab, select the application area
- On the **Event** tab, select the trigger event
- On the **Notification** tab, select the recipient