

# **BSC Designer**

## **Strategy Execution Software**

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

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# 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...](#)



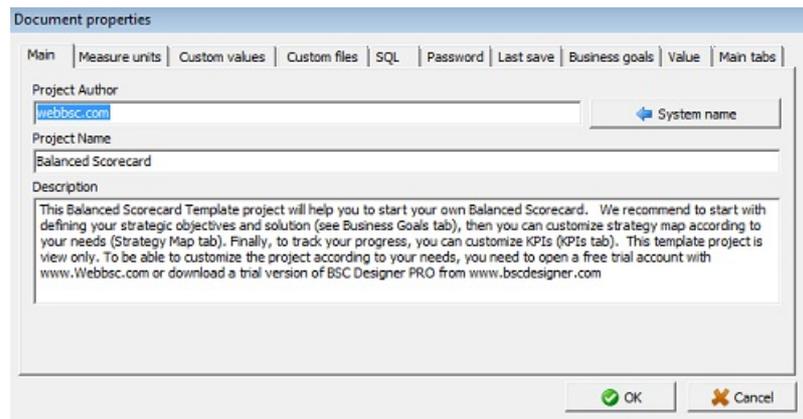
**Import data for KPI.** Import performance data from a spreadsheet or SQL database. Cascade scorecards by linking goals and indicators. [Read more...](#)

## 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
- **Owner** - the users responsible for this business goal or indicator

## 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

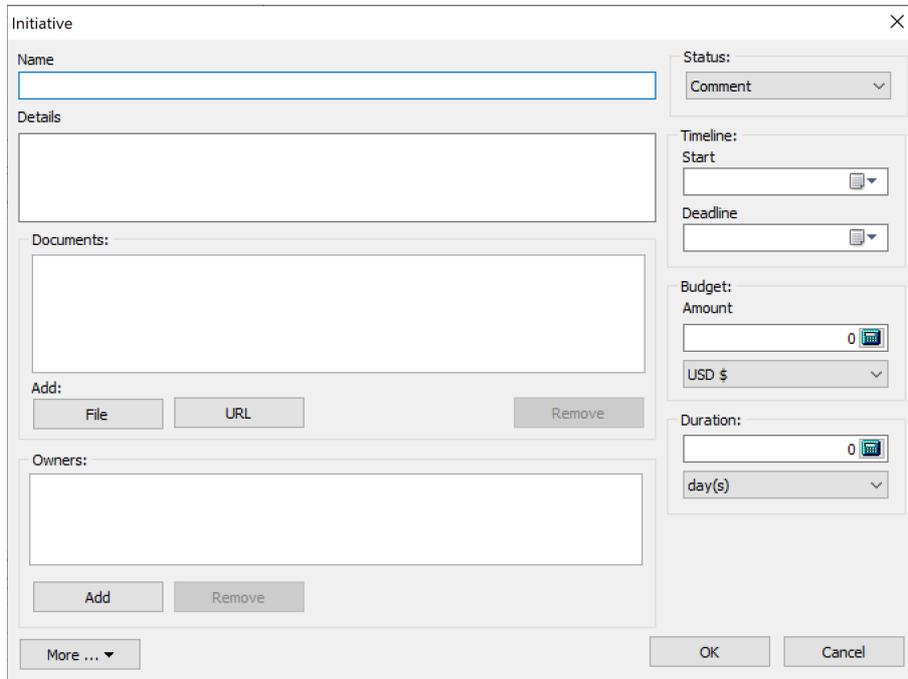
- **Glyph 1** and **Glyph 2** - select a glyph for the indicators on the strategy map
- **Indicator type** - select whether the indicator is a **Leading** or **Lagging** one in the context of the business goal
- **Strategic theme** - changes the color of the goal on the map

# 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
- **Details** - additional information about the initiative
- **Status** of the initiative (statuses are defined in menu Tools > Application Options > Workflow tab)
- **Timeline** - start date, deadline, and duration for an initiative
- **Budget** associated with the initiative
- **Duration** of the initiative
- **Documents** - a link to the external documents
- **Owners** for the initiative; this is used on strategy maps and for the alerts

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

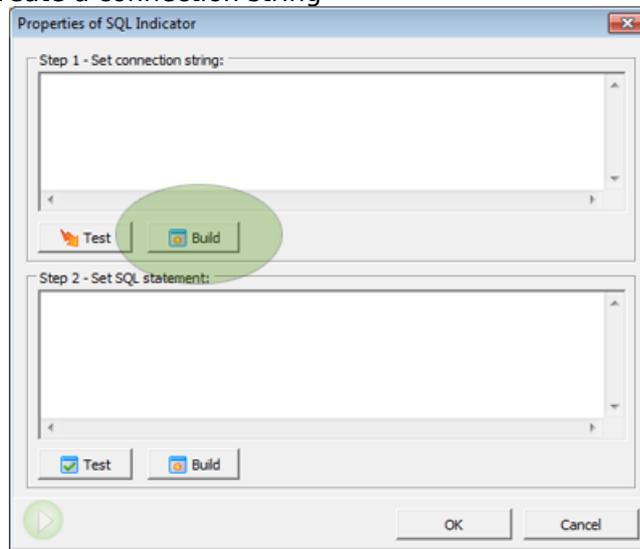
Learn how to power performance metrics on the scorecard by connecting to a database using SQL indicators.

## Creating SQL Indicator

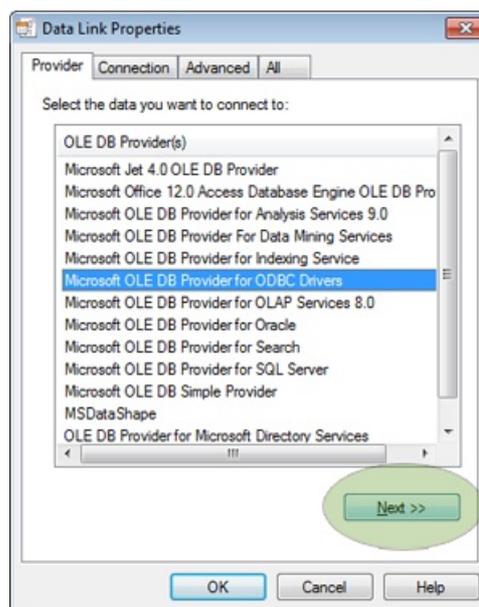
1. Go to the **KPI** tab
2. Select any indicator
3. Switch to the **Data** tab below
4. Click the  **KPI Data Source** button
5. Select **Link to SQL Database**
6. Select a database with local or web access

## Creating Connection String

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



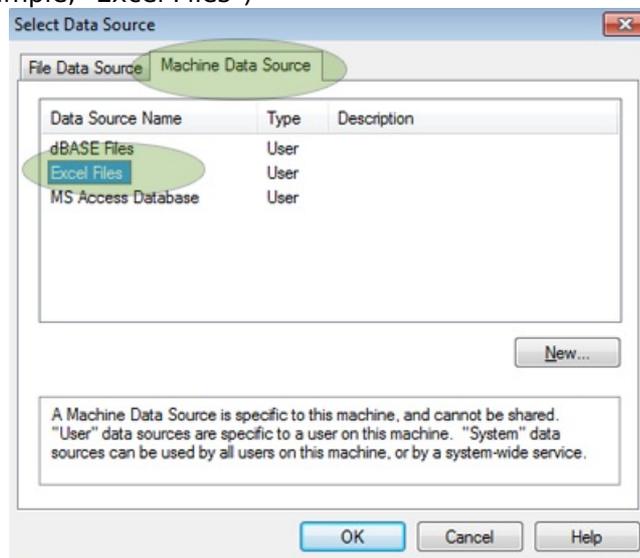
2. Select a data source (available data sources depend on the ADO drivers installed), for example ODBC drivers:



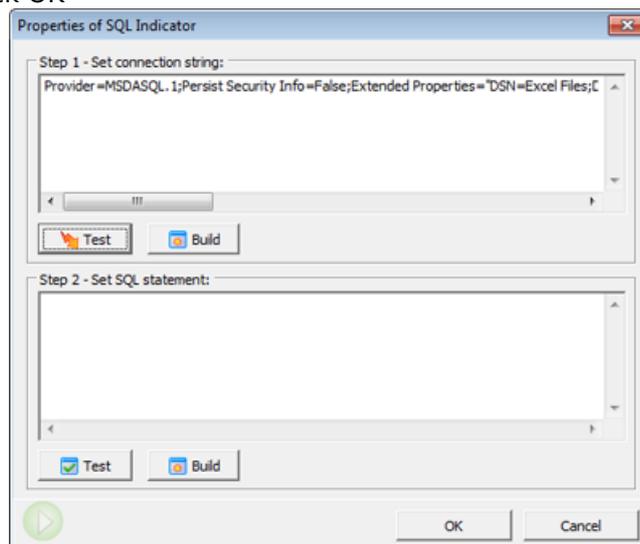
3. Click **Next**
4. Switch to **Use connection string** in **Specify the source of data** section



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



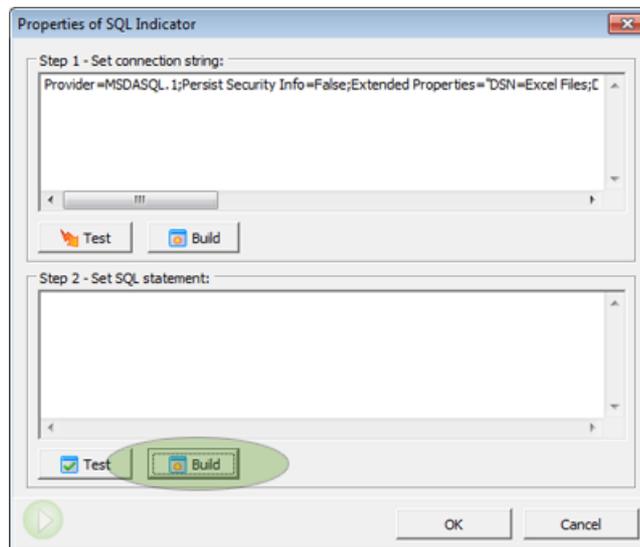
8. Double-click on it
9. Select an MS Excel file, click OK



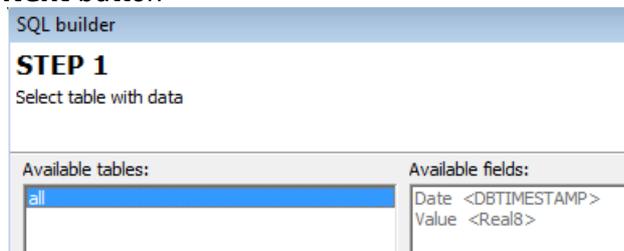
10. Click the **Test** button

## Creating SQL Query

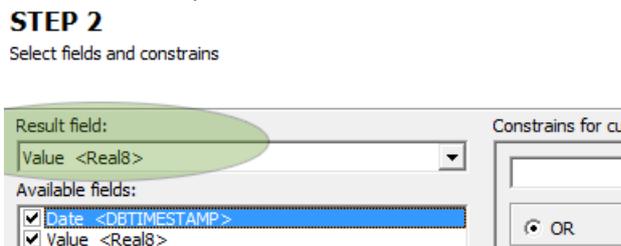
1. Click the **Build** button for **SQL statement**



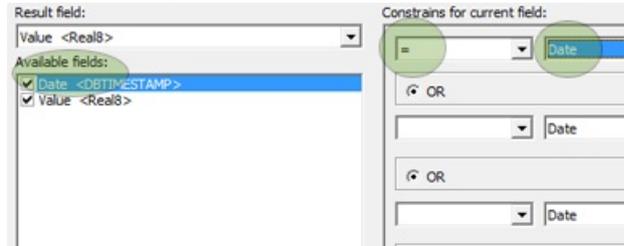
2. Select a table and click the **Next** button



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