Introduction

This Quick guide will show you how to manage your Simulations and Trade terms versions.

Quick guide concept

Through a number of easy steps you learn how to use the software.

Each step is numbered and defines a phase. Each phase contains a short description and an illustration to show how to navigate or operate in the software.

On the last page it is described how to set up the Security and/or System options to activate, view and edit the described feature.

The guide *may* contain important general notices. These will be marked with an exclamation icon.

Tips and tricks are marked with an Info-icon.

Questions & Answers note relevant to the topic at hand.

Managing simulations

In BMS users can run simulations of future financials for the business based on existing units and values copied from actuals, current planning version or a stored snapshot.

The copied data can be used for simulating current year's cases or future year's cases. *See figure on the last page.*
For creating simulation for the current year, the copied actual data will stay unchanged for the simulation.
For creating a simulation with a time-shift to future year, the copied actual data will be subject to the future year as forecasted values or a stored snapshot.

Simulations run with hypothetical trade terms applied to the customers. Therefore, simulations and trade terms interact with each other with the function of trade terms "Versions".

In the end of this guide is a chapter explaining the calculation method of the simulations.

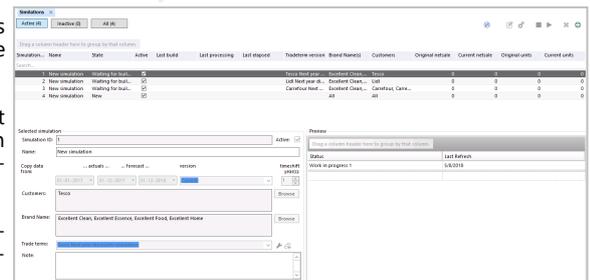## Create Simulations

1 Open Simulations

Click on the **"Simulations"** icon from the navigation ribbon to open the simulations tab.
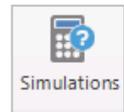
2 The Simulations window

In the corresponding window is a list of simulations that have been created. The user can see both active and inactive simulations.

When a simulation line is selected on the down left corner are displayed the details of it and on the down right corner is the preview of the financials for the selected simulation.

On the top right side of the tab are the command buttons like create, delete, run, cancel, build, edit and refresh.

3 Create new simulation

To create a new simulation click on the green plus icon on the top left corner of the tab and a new line will be created in the simulations list with name **"New simulation"**.

4 The simulation column fields

Simulation ID - a unique id number generated from the system.

Name - the name of the simulation line, can be edited.

State - the current status of the simulation e.g. new, waiting to be built, etc.

Active - indicates if the simulation is active on inactive.

Last build \ processing \ elapsed - the dates when the simulation was last time built, processed and elapsed.

Tradeterm version - the version of the trade terms user for this simulation.

Signature - the list of the group of products included in the simulation.

Customers - the list of the customers included in the simulation.

Original \ Current netsale - the original and the current simulation's net sales.

Original \ Current units - the original and the current simulation's units.

5 ## Name the simulation

Give a name to the new simulation by clicking on the cell under the column field **"Name"** or click to edit the field **"Name"** from the **"Selected simulation"** section.

Name: [New simulation]

6 ## Choose units to copy from

Select in the field of **"Copy data from:"** the from-to dates to copy the actuals and the from-to dates to copy the forecast.
The shared date is the date where the units change from actuals to be forecasted, meaning that this date's data are defined as forecast.

If only selected from-to dates for actuals, then only actual units are going to included in the simulation. This is a case where the simulation is created for the current year.

Select the **"version"** of the snapshot you want to simulate and the **"timeshift year(s):"**.

Copy data from: ... actuals ... ... forecast ...
01-01-2018 01-05-2018 31-12-2018

version | timeshift year(s):
Current | 1

7 ## Add customers

By default the system selects all customers.

If needed, select specific customers then click **"Browse"** in the **"Customers:"** field to open a list of all the customers and select the ones that will be included in the simulation.

Customers: Carrefour, Carrefour Express, Carrefour Market   [Browse]

Customers
☑ Carrefour   ☑ Carrefour Express
☑ Carrefour Market ☐ Lidl
☐ Tesco
[Select all] [Uncheck all]   [Cancel] [Ok]

8 ## Add products

By default the system selects all Signature product groups.

If needed to select specific Signatures, click **"Browse"** in the **"Signature:"** field to open a list of all the product groups and select the ones that will be included in the simulation.

Brand Name: Excellent Food   [Browse]

Brand Name
☐ Excellent Clean   ☐ Excellent Essence
☑ Excellent Food   ☐ Excellent Home
[Select all] [Uncheck all]   [Cancel] [Ok]

9 ## Select trade terms version

Click the drop down list in the **"Trade terms:"** field to open and select a trade term version. If there is not the version you want to use for this simulation then the version has to be created.

To **create a new trade term version** click on the **"green plus tabs"** icon and in the window that opens give a name to the new trade term version.
Now to edit the trade terms in that version you need to go to the **"Trade terms"** under a customer and define the discount for this version.

To edit the name of the trade term version click on the wrench.

Trade terms: Carrefour Next year discount simulation
Current
Tesco Next year discounts simulation
Carrefour Next year discount simulation
Lidl Next year discounts simulation

Name of new trade term version
[OK]
[Cancel]
Carrefour next year

Version: Carrefour next year

(i) ## Keep notes

The user can keep notes for the specific simulation in the **"Note:"** field.

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Run a simulation

1 Select a Simulation

From the list of simulations select the line you want to run the simulation.

2 Build the simulation

When simulation is defined, click on the gears icon on the top left corner to build the simulation. This will take all the data defined in the set up of the simulation and transform them to the needs of the simulation. This will create the numbers under the columns of **"Original netsale"**, **"Original units"**, **"Current netsale"** and **"Current units"**. At this point the original and current numbers will be the same.

3 Process the simulation

When simulation is built, click on the blue play icon to process the simulation. This will change the data under the columns of **"Current netsale"** and **"Current units"** in order to present the simulation results.

Edit a processed simulation

Click the edit icon on the top right corner to edit a processed simulation.

Refresh list

Click on the refresh icon on the top right corner to refresh the list of the simulations.

Delete a simulation

Select a line of simulation and click on the red X icon on the top right corner to the list of the simulations. The line will be marked as to-be-deleted and the system will delete it during the night job.

Monitor the changes

In the **"Preview"** section the user can always see the work in progress preview of the data of the selected simulation at the current status.

Snapshots and simulations require loading into the cube to reflect changes in the data. This takes a non-trival amount of time so it is typically processed overnight. When a simulation is created or changed, it is automatically flaged to be processed on the hour. This will continue throughout the day - the night job will remove the flag in the evening.

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How a simulation is calculated

In simulations, the copied **units** always stay unchanged. The Returns are discarded in Invoiced sales and the Invoiced sales value and stays unchained.

Gross sales & COGS are recalculated based on the data of the simulation's year. If a simulation is running the case of simulating data for current year, then the prices and the costs will be the same. If a simulation is running with the case of simulating data for future budget year, then the prices and costs will be recalculated based on the simulation's year prices and costs. Therefore, when a user simulates a future budget year's case then he should make sure that the prices and the costs for that year exist in the system.
NB! Make sure that you setup a working process to ensure that these prices and costs are removed later when there is going to be a replacement by the then current prices and costs.

The P&L lines from **"Kassenbuch"** (those marked as "User input" in the planning module) are kept unchanged.
This is applied both for data originating from actuals and forecast.
If the trade term version contains **%** or **pr. unit** discounts to these P&L lines it will be ignored.

Trade promotion P&L costs and costs from the **Launch module** will stay unchanged based on the copied data in from-to dates.

Trade terms entered as **%** or **Pr. unit** are calculated based on the units, gross price and associated trade term version.
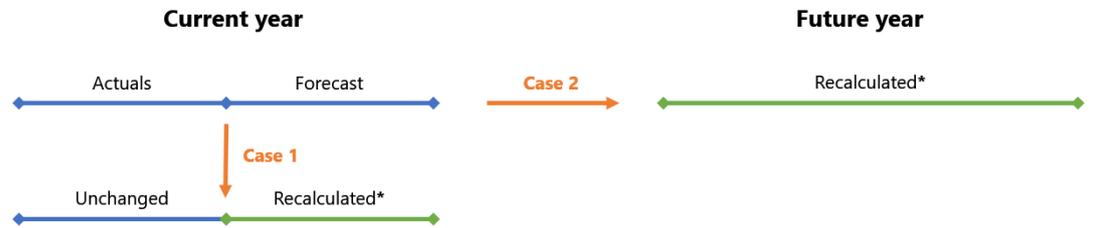
Trade terms entered as **Fixed amounts** are always reapplied. If the simulation is for the next year, then the total cost is split into the gross sales from all months. But if the simulation is within the current year and contains actuals, the remained of the total amount is split on the gross sales for the forecasted months.

Key lines	Value change	Cascading impact Off-Invoice
Units	**Unchanged**	**Yes**
Gross sales	**Recalculated**	**None**
On-invoice Promotion Variable P&L lines	Unchanged	Yes
On-invoice Promotion Fixed P&L lines	Unchanged	Yes
On-invoice "Kassenbuch" *	Unchanged	Yes
On-invoice Returns	Unchanged	Yes
On-invoice Trade terms Fixed value discounts - Total amount input	Recalculated**	Yes
On-invoice Trade terms % and pr. unit discounts	Recalculated**	Yes
Invoiced sales	**Recalculated**	**None**
Cost of Launch P&L line	Unchanged	None
Off-invoice Promotion Variable P&L lines	Unchanged	None
Off-invoice Promotion Fixed P&L lines	Unchanged	None
Off-invoice "Kassenbuch" *	Unchanged	None
Off-invoice Returns	Unchanged	None
Off-invoice Trade terms Fixed value discounts - Total amount input	Recalculated**	Yes
Off-invoice Trade terms % and pr. unit discounts	Recalculated**	Yes
Net sales	**Recalculated**	**None**
COGS	Recalculated	Affecting Sales Margin
Sales Margin	**Recalculated**	**None**

* Are an input on Planning board / TPM. Even though there are discounts that are defined as user input in planning mode, they can still be added in Trade Term Versions and get a value, but they will be copied as static.

** Based on Trade term Version input.

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Time shift figure

There are two cases of simulations. One is with a time-shift and one with no time-shift.

Case 1: No time shift – current year's data copied for simulation in current year
**Case 2:** Time shift - current year's data copied for simulation in future year

Current year   **Future year**

Actuals   Forecast   **Case 2**   Recalculated*

Case 1

Unchanged   Recalculated*

*__Recalculation:__ the recalculation depends on the stream and the user input type.

Security - User Roles

To be able for a user to view and edit the Simulations, access needs to be granted from Security settings by a super-user/admin.

🛈 Security

From **"File"** select **"Security"** and the window with all the users in the system and the roles assigned to each one will open. Select a role to open the corresponding settings.
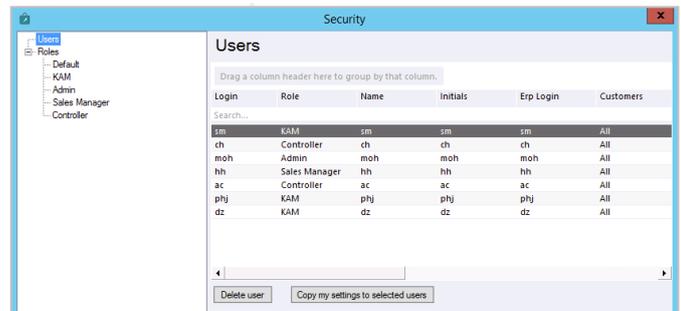
🛈 Allow View Simulations

Under the section of **"Simulations"** mark the check-box **"View"** to allow to this user-role to be able to see the Simulations tool.

🛈 Allow Edit Simulations

Under the section of **"Simulations"** mark the check-box **"Edit"** to allow to this user-role to be able to edit the Simulations tool.

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