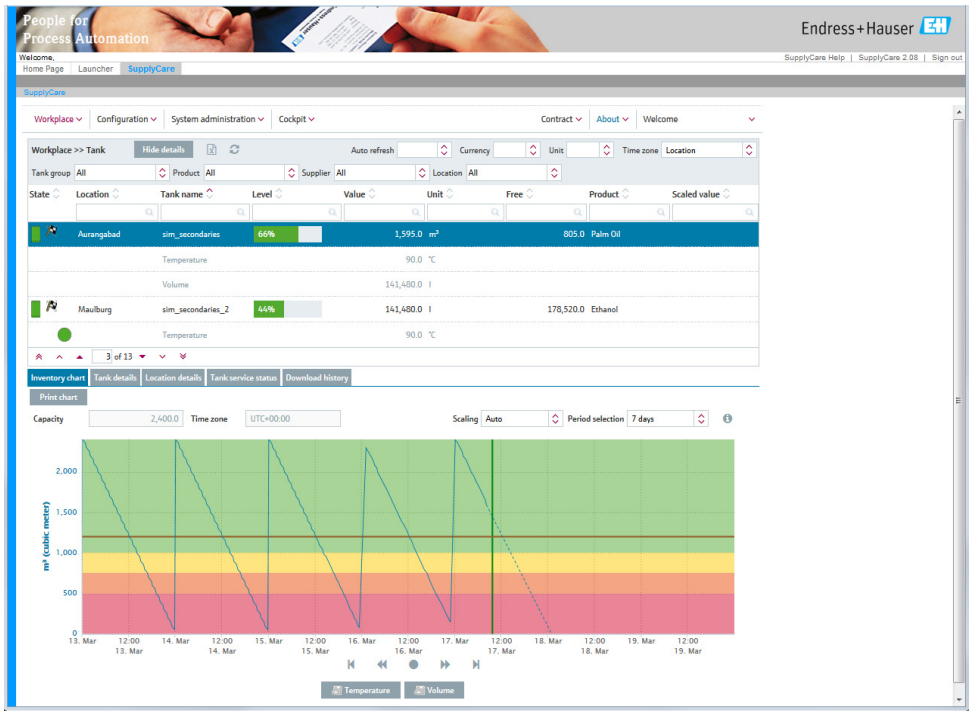
BA00050S/00/EN/24.22-00
71587317
2022-09-27

Valid as of software version:
3.6

Operating Instructions
SupplyCare Hosting SCH30

Operating program for the coordination of material and information flow along the supply chain



Endress+Hauser
People for Process Automation

Change history

Document version	Valid for SW version	Changes to the previous version
BA00050S/00/EN/16.14	2.09.xx	**User role** implemented: Product-Tank-Assignment. **Figure** added: Shape for tanks/objects. **Function** implemented: Auto refresh feature; Manual data insertion. **Picklist** for listing of groups in My tank view.
BA00050S/00/EN/17.15	2.12.xx	**Functions** implemented: New forecast line (short term forecasting); new format for CSV download history; secondary values as separate e-mail; display tank limits as mass.
BA00050S/00/EN/18.16	3.0.xx	**User Interface** updated. **Span limits** for secondary values, with tolerance; **Multiple disposals/deliveries** per day manageable.
BA00050S/00/EN/19.16	3.1.xx	**Tankfreeze** augmented and **Tank holdup** implemented. **User preferences** augmented: Level can now be displayed in millimeters. **Report template** Secondary report implemented.
BA00050S/00/EN/20.17	3.2.xx	**Reconciliation Report** and **Measure point monitoring** implemented. Data Protocol **IMAP** available as an option for incoming e-mails.
BA00050S/00/EN/21.18	3.3.xx	**Automatic update of GPS coordinates (Geopositioning)** implemented.
BA00050S/00/EN/22.19	3.4.xx	**SSL / TLS encryption** for e-mail data exchange implemented. **FTP Data transfer options** augmented.
BA00050S/00/EN/23.21	3.4.xx	**Linearization function** augmented. **Template type Silo** added.
BA00050S/00/EN/24.22-00	3.6.xx	Users with role **Master data** can perform device mapping.

Table of Contents

1 Document information

1.1 Document function

This document should support you during the configuration and operation of SupplyCare Hosting.

1.2 Target audience

Beside basic PC operating knowledge no special training is needed to perform the Supply Chain Management software operations. Nevertheless it is recommended receiving a training on the system by Endress+Hauser.

1.3 Symbols and conventions

1.3.1 Used symbols

Safety symbols

Symbol	Meaning
 A0011189-EN	**DANGER!** This symbol alerts you to a dangerous situation. Failure to avoid this situation will result in serious or fatal injury.
 A0011190-EN	**WARNING!** This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in serious or fatal injury.
 A0011191-EN	**CAUTION!** This symbol alerts you to a dangerous situation. Failure to avoid this situation can result in minor or medium injury.
 A0011192-EN	**NOTICE!** This symbol contains information on procedures and other facts which do not result in personal injury.

Symbols for certain types of information

Symbol	Meaning
 A0011193	**Tip** Indicates additional information.
 A0011195	**Reference to page** Refers to the corresponding page number.
1. , 2. , 3. ...	Series of steps
 A0018373	Result of a sequence of actions

Symbols in graphics

Symbol	Meaning
1, 2, 3 ...	Item numbers
1. , 2. , 3. ...	Series of steps
A, **B**, **C** ...	Views
 A0011187	**Hazardous area** Indicates a hazardous area.
 A0011188	**Indicates a non-hazardous location** Safe area (non-hazardous area)

1.3.2 Conventions used in this manual

Typographical emphasis and particular symbols have been used to provide a clear structure for this manual and highlight important information.

Emphasizing text

The following table provides you with a brief overview of conventions used to highlight and emphasize text in this manual.

Text emphasis	Meaning	Example
Bold	Keyboard entry, button, tab, menu, instruction, directory path, commands	Select the **Event Details** tab. Click the **Event** menu items.

1.4 Documentation

1.4.1 Operating instructions

Document number	Product	Type of Document
SH00001S	SupplyCare Hosting SCH30	Service Manual
TI01229S	SupplyCare Hosting SCH30	Technical Information

2 Basic safety instructions

2.1 Requirements for the personnel

The personnel for installation, commissioning, diagnostics and maintenance must fulfill the following requirements:

- Trained, qualified specialists: must have a relevant qualification for this specific function and task
- Are authorized by the plant operator
- Are familiar with federal/national regulations
- Before beginning work, the specialist staff must have read and understood the instructions in the Operating Instructions and supplementary documentation as well as in the certificates (depending on the application)
- Following instructions and basic conditions

The operating personnel must fulfill the following requirements:

- Being instructed and authorized according to the requirements of the task by the facility's owner operator
- Following the instructions in these Operating Instructions

2.2 IT security

We only provide a warranty if the operating program is installed and used as described in the Operating Instructions.

IT security measures in line with operators' security standards and designed to provide additional protection for the operating program and operating program data transfer must be implemented by the operators themselves.

2.3 Designated use

SupplyCare Hosting is a web-based operating program for coordinating the flow of material and information along the supply chain.

SupplyCare Hosting gives you complete transparency over inventory levels in tanks and silos, anytime, anywhere and even at remote locations.
Based on the measuring and transmission technology installed on site, the current inventories are recorded and transmitted to SupplyCare.
With SupplyCare, you have a constant overview of all the current inventories. Critical levels are clearly indicated and you can also receive active information on these levels if required. Calculated prognosis gives additional security for replenishment planning.

2.4 Technical improvement

Endress+Hauser reserves the right to make technical improvements to the hardware and software without prior notice. Such improvements are not documented if they do not affect the operating functions of the software. A new version of the Operating Instructions is created if the improvement noticeably affects operation. See the change history in this manual.

2.5 This document

The screen views illustrated in this manual are sample views and can deviate from the views you see on your screen. The screen views depend on personal settings and on the application.

3 Identification

3.1 Product identification

The following options are available for identification of the software:

- Order code with breakdown of the software features on the delivery note
- Enter serial number in W@M Device Viewer. All information about the software is displayed. Link: www.endress.com/deviceviewer.

3.2 Order code and software type

To find out the version of your software, enter your software's order code in the search screen at the following address: www.products.endress.com/order-ident

3.3 System requirements

Internet browser:
- Microsoft® Edge 93 (or later)
- Mozilla Firefox 92 (or later)
- Google Chrome™ 93 (or later)

Mobile devices:
- Apple® iPhone® with Safari® on iOS 15 (or later)
- Apple® iPad® with Safari® on iOS 15 (or later)

Browser configuration:
- Active Scripting enabled
- JavaScript enabled
- Allow cookies

These are the official supported browsers that we recommend to use our SupplyCare Hosting application. The use of any other browser version or technology may lead to limited functionality and display.

3.4 Registered trademarks

The following trademarks are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries:
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Windows Server®

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Google Chrome™
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Safari®, iPhone® and iPad® are trademarks of Apple® Inc., registered in the United States and other countries.

3.4.1 Legal notice concerning trademarks

All company/product names and/or all company logos may be trade names, trademarks and/or registered trademarks of Endress+Hauser, its affiliates or of their respective owners with which they are associated.

4 System description

4.1 Inventory Control with SupplyCare

SupplyCare Hosting comprises software components and information within the field of Inventory Control.
SupplyCare can collect and visualize inventory, availability, consumption and needs of the tanks and silos online. This allows the rationalization of business and logistic processes and the reduction of inventory and stockout. From onsite measurement and global remote data transmission and visualization to integration in ERP systems, SupplyCare offers a universal, standards-based solution. SupplyCare is modular in design.

4.2 SupplyCare Hosting

SupplyCare Hosting is a web-based operating program for the indication and monitoring of levels of e.g. tanks and silos spread all over the world.

4.3 Indication of inventory data

The tank and silo inventories are regularly collected by SupplyCare. The current and previous inventory data can be indicated at any time → 📄 35 and → 📄 87.

4.4 Management of master data

With SupplyCare you can create and manage master data of locations, companies, tanks, products and users → 📄 90 and→ 📄 143.

4.5 Automatic update of GPS coordinates

By means of a GPS tracker fixed to the tank and transmitting data to the gateway, the up to date location of the tank can be determined anytime and be displayed in SupplyCare. The GPS coordinates are updated automatically in SupplyCare like other measurement data. Updating the GPS coordinates automatically is especially useful for mobile tanks.

The GPS coordinates of a location address, which is assigned to a tank, are separate properties of the location. They are not altered if GPS data that come from a GPS tracker are used optionally as tank location.

Use GPS data as location
Existing tanks → 📄 28
New tanks → 📄 97

4.6 Reports and connection to ERP systems

With SupplyCare you can create Excel reports about the measured value history or provide current level and master data via CIDX-Report to an ERP system such as SAP → 📄 143.

4.7 Event management

An event management system is integrated into SupplyCare. It shows events like the fall below safety stocks or plan points. Additionally, notification e-mails can be sent to predetermined users → 📄 59 and → 📄 156.

4.8 Alarm messages

Whenever there is a technical problem e.g. connection problems, alarm messages are generated and alarm e-mails are sent to the System Administrator.

4.9 Retrieval of measured values

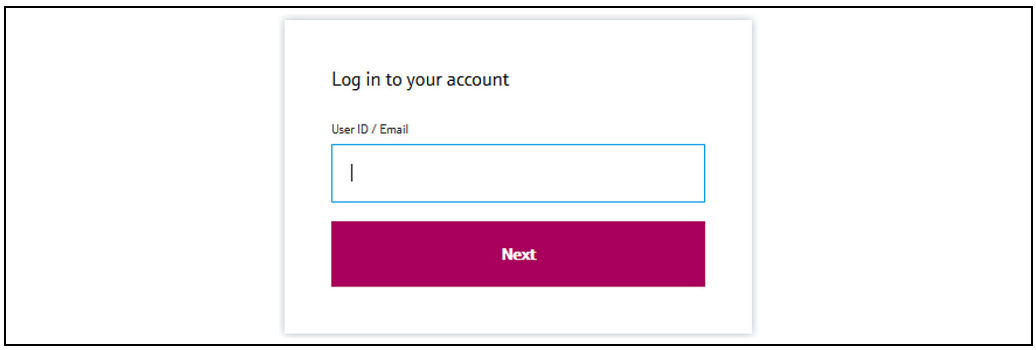
The inventories of the tanks and silos are retrieved by measuring devices on site. By the means of gateways, the measuring values are sent to the hosting environment of Endress+Hauser and are thus available for the application SupplyCare.

5 User interface

5.1 Programm starten

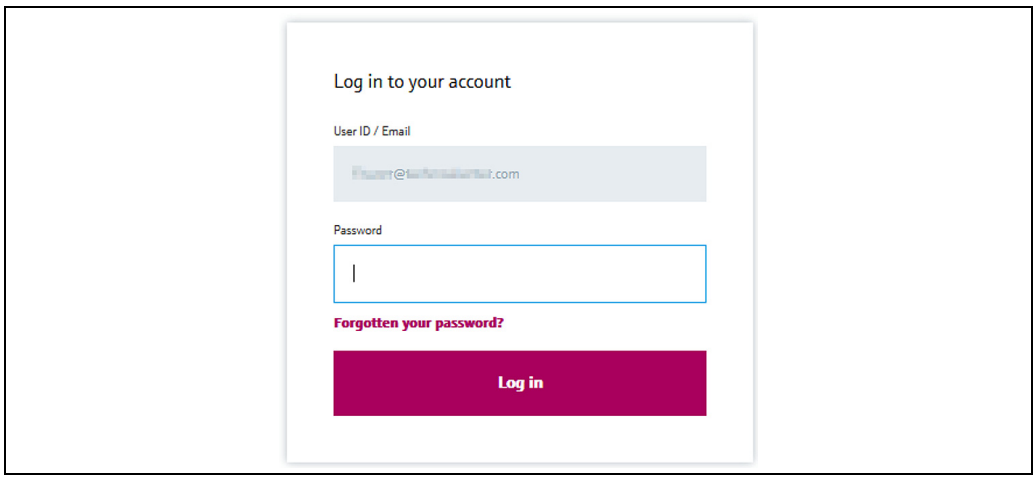
1. Start your Web browser.
2. Specify the URL for the Field Information Server. The URL is: https://portal.endress.com

The following screen appears:



PS0000736aen_30

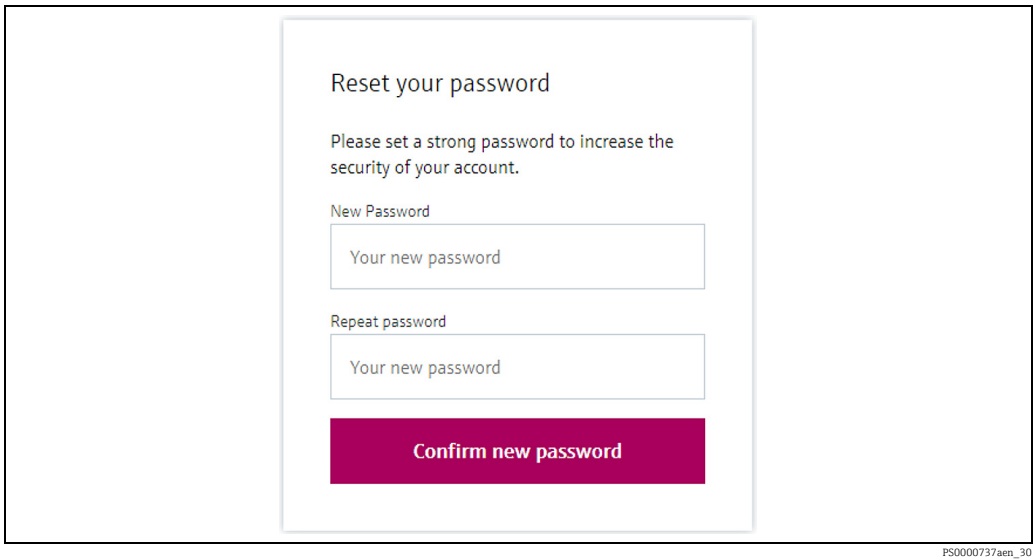
3. Enter your **E-mail address** or **User ID** and click **Next**.



Logon_en_2

4. Enter your **Password** and click **Log in**.

The first time you log on, you are asked to reset your password.

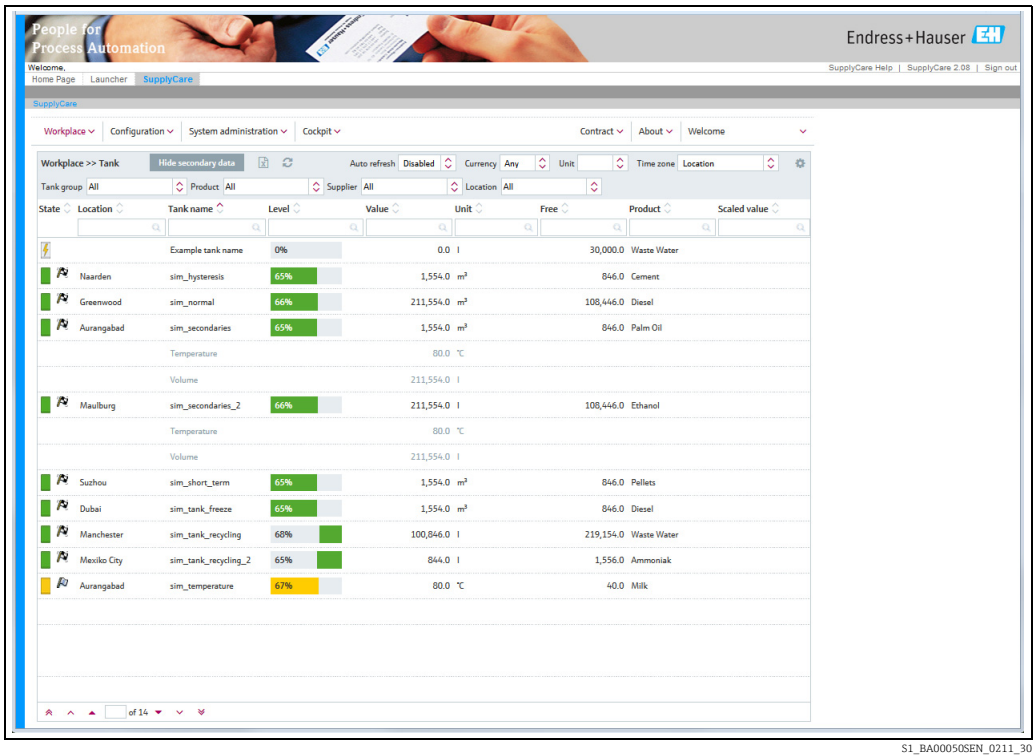


PS0000737aen_30

5. Enter your new password in the **New Password** and **Repeat password** fields.
6. Click **Confirm new password** to save the new password.
7. Select the **SupplyCare** menu.

PS0000738aen_30

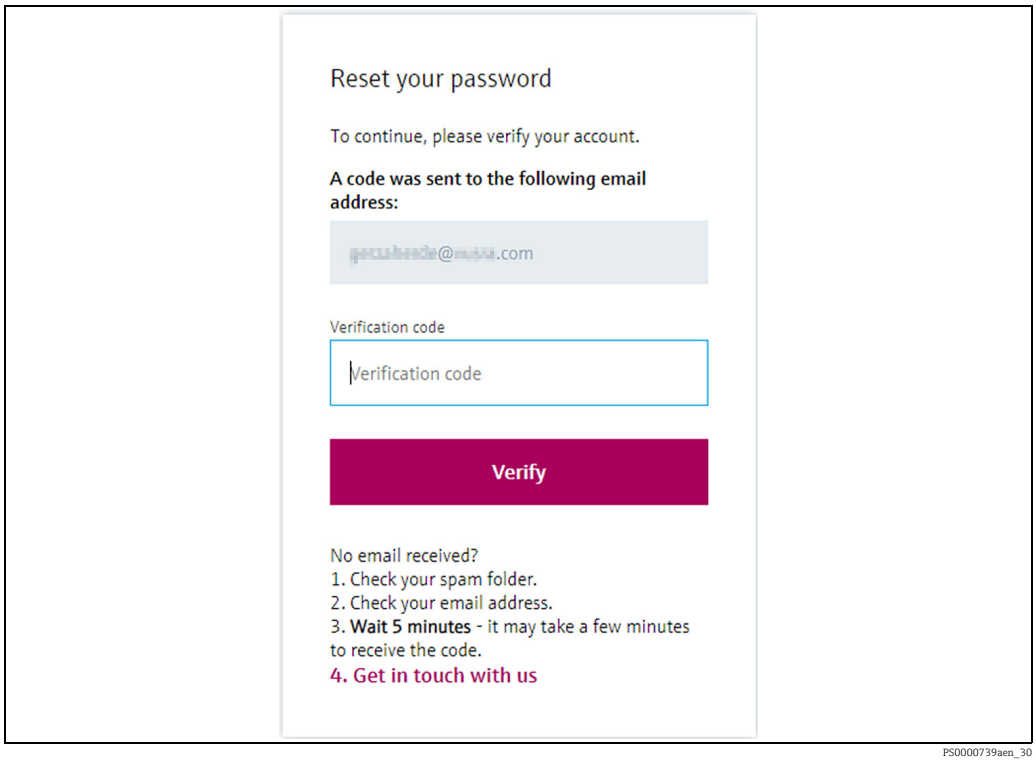
8. The portal window is displayed within the browser window. The view depends on the user role you have been assigned.



S1_BA00050SEN_0211_30

5.1.1 Forgotten password

If you have forgotten or want to reset your password, use the link **Forgotten your password?** and follow the instructions.

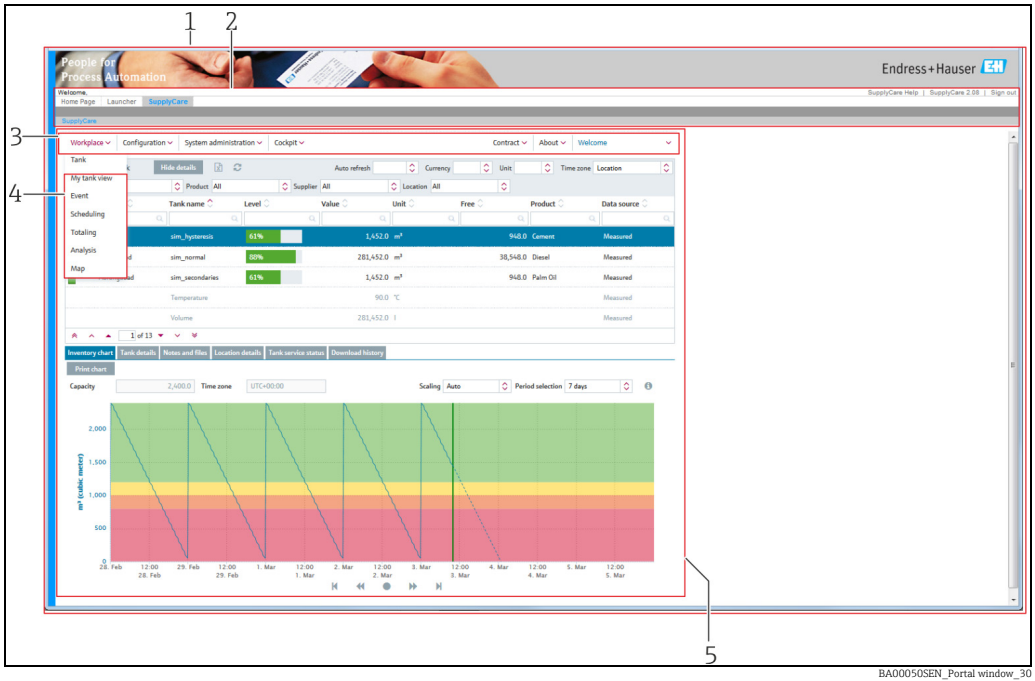


PS0000739aen_30

5.2 Page structure

5.2.1 Portal window

You can see the arrangement of the individual objects in the portal window in the graphic below.



BA00050SEN_Portal window_30

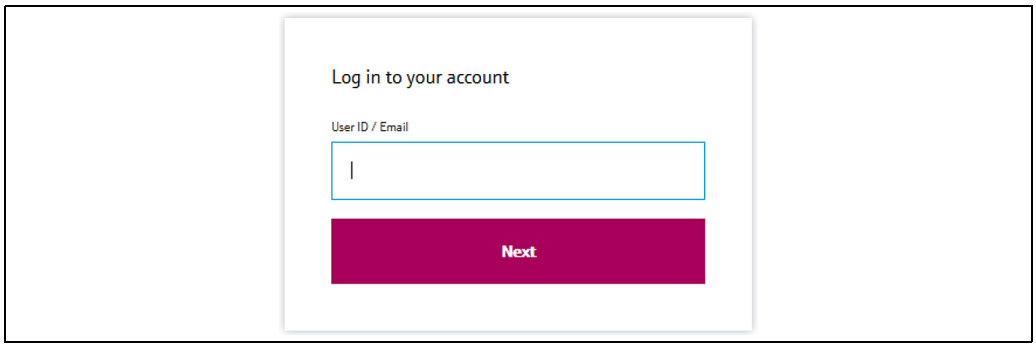
1 *Portal window*
2 *Header*
3 *Menues*
4 *Menue items*
5 *Application window*

The menu and the appropriate menu items vary depending on the user role and thus also changes the Portal Window (→ 17).

SupplyCare is modular in design. The menu items differ for this reason. Furthermore, the contents of the application window can also differ as well as the contents of the dialog windows.

5.2.2 Header

Logging out
You can find the link to log off in the right-hand side of the header.
Clicking **Log off** takes you back to the **Login** screen:



PS0000736aen_30

5.2.3 Navigation window

Menus

Depending on the user role, the menus Workplace, Configuration, and Profile appear.

Multiple user roles can be assigned to a user at the same time. The menu tree is then made up of the menus for the user roles in question.

Navigation window

Clicking a menu expands or collapses this menu. The active menu is highlighted in blue.

Menu items

The menu is made up of various menu items depending on the user role in question. The following table lists the menu items depending on the user role selected:

The menu items in the **Workplace**, **Configuration** and **Profile** menus differ as a result of SupplyCare's modular design

	Menus		
User Role	**Workplace**	**Configuration**	**Profile**
Read only	▪ Tank [1)] ▪ My tank view ▪ Event [2)] ▪ Totaling ▪ Map	–	▪ User Profile ▪ User Preferences
Operator	▪ Tank [1)] ▪ My tank view ▪ Event [2)] ▪ Totaling ▪ Analysis ▪ Map	–	▪ User Profile ▪ User Preferences
Scheduler	▪ Tank [1)] ▪ My tank view ▪ Event [2)] ▪ Scheduling ▪ Totaling ▪ Analysis ▪ Map	–	▪ User Profile ▪ User Preferences
Master data	–	▪ User ▪ Tank ▪ Aggregated tank ▪ Tank type ▪ Tank Group ▪ Location ▪ Company ▪ Product ▪ Linearization ▪ Unit ▪ Report	▪ User Profile
1) Only users with the **Operator** user role can change the tank service status. 2) Only users with the **Scheduler** or **Operator** user role can change the status of an event.			

5.2.4 Application window

The content of the Application window varies depending on the menu item selected. The active menu item is highlighted in blue.

As a result of SupplyCare's modular design, the contents of "Overview" and of "Detailed view" can differ as can the contents of the dialog windows.

Most of the Application windows contain the following view:
- Overview
- Detailed view

BA00050SEN_Application window_30

1 Overview
2 Detailed view

Overview

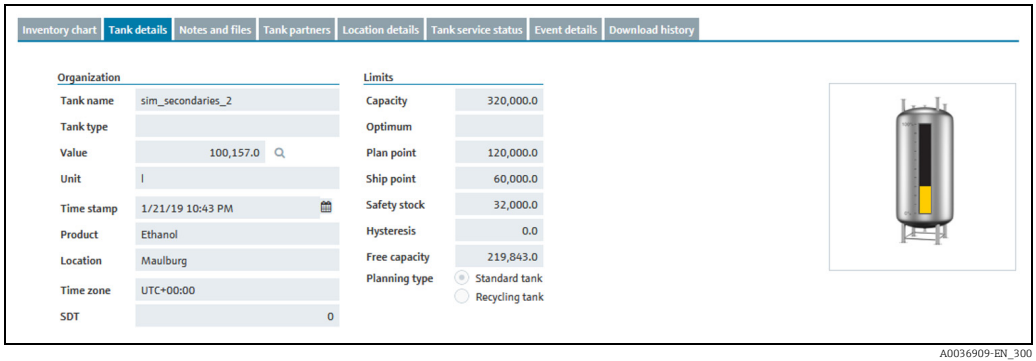
The users or data are listed in tabular form in the overview.

Detailed view

Detailed information on the line selected in the table is displayed in the lower section. Left-clicking another line in the **Overview** opens up the detailed view of the information. Where necessary, the information in the detailed view is split even further into tabs.

Tabs

Using the tabs, you can create, change and delete new objects. Forms or tables are displayed in the tab.



A0036909-EN_300

5.3 Elements

The following elements are available in the individual views:

Button	Function
Input fields	One-line input fields to enter a value (text or digits). Multiline input fields to enter a long text.
Output fields	One-line output fields to display a value (text or digits). Multiline output fields to display a long text.
Tables	Multicolumn tables in which individual rows can be selected.
Picklists	These allow the user to select from specified values.
Check boxes	These allow the user activate and deactivate certain functions.

5.4 Icons

5.4.1 Standard buttons

The following standard buttons are used to edit and process individual objects:

Button	Function
	**New** – creates a new object that can be saved with Save  .
	**Edit** – allows the user change the displayed contents of an object (depends on role).
	**Delete** – deletes the content of an object. A dialog box appears for the user to confirm the deletion.
	**Save** – saves altered contents and newly created objects.
	**Cancel** – undo
	**Copy** – copies the data for the user, tank, aggregated tank, location, company, product, tank group, report, a disposal or a delivery.
	**Select tank picture** – select a tank picture for tanks and aggregated tanks in the **Tank details** tab.
	**Update view** – updates contents.
	**Configure my tank view** – opens a popup window to configure the **My tank view / My object view** screen.
	**Calendar** – Button for selecting a period of time (e.g. resubmission date, start and end date for a history).
	**Excel-Export** – Button for downloading data such as measured values to an Excel spreadsheet.
	**PDF-Export** – Button for downloading data such as the system settings as a PDF file.
	**Print** – button for printing charts.
	**Show** – shows contents.
	**Cancel** – undo.

5.4.2 Buttons in tables

You can navigate through the table via the following buttons at the bottom of the table:

Button	Function
⏫	Goes to the start of the table.
⌃	Scrolls back one page.
▲	Moves the table up one line. The element selected remains unchanged.
▼	Moves the table down one line. The element selected remains unchanged.
⌄	Scrolls forward one page.
⏬	Goes to the end of the table.
⇕	Opens a pick list.

5.4.3 Symbols for events

Status display

Symbol	Meaning
	**Open** - the event was triggered.
	**Acknowledged** - the event was acknowledged but no action has yet been taken.
	**In process** - measures have been initiated to replenish material.
	**Done** - recorded by measurement. Replenishment process completed successfully.

Priority (weight)

Symbol	Meaning
	**Plan point** (GREEN)
	**Ship point** (YELLOW)
	**Safety stock** (RED)
	**Freeze event** (Eye-symbol with tooltip "Check")

5.4.4 Icons for tanks

SupplyCare allows users to select between the template types "Tank", "Silo" and "Object". These template types have the exact same functionality. However, depending on your selection, the descriptions in the menu, in **Overview** and in **Detailed view** change as well as the symbols and tool tips that appear when you move the cursor over a symbol.

The symbols for tanks, silos and objects are shown in the following tables. The descriptions that are different are listed after this (→ 25). Please note that the template type "Tank" is used in all remaining sections of these Operating Instructions.

Status display

Symbol		Meaning
Tank/Silo	Object	
		**OK (GREEN)** Standard tank/silo/object: the current (last measured) inventory level of the tank/ silo/object in question is above the plan point/observance limit. Recycling tank/silo/object: the current (last measured) inventory level of the container question is below the plan point/observance limit.
		**OK (GREEN)** Aggregated standard tanks/silos/objects: the current (last measured) inventory level of the aggregated container in question is above the plan point/observance limit. Aggregated recycling tanks/silos/objects: the current (last measured) inventory level of the aggregated container in question is below the plan point/observance limit.
		**Plan point/Observance limit reached (YELLOW)** Standard tank/silo/object: the current (last measured) inventory level of the container in question is below the plan point/observance limit. Recycling tank/silo/object: the current (last measured) inventory level of the container in question is above the plan point/observance limit.
		**Plan point/Observance limit reached (YELLOW)** Aggregated standard tanks/silos/objects: the current (last measured) inventory level of the aggregated container in question is below the plan point/observance limit. Aggregated recycling tanks/silos/objects: the current (last measured) inventory level of the aggregated container in question is above the plan point/observance limit.
		**Ship point/Point of action reached (ORANGE)** Standard tank/silo/object: the current (last measured) inventory level of the container in question is below the ship point/point of action.
		**Ship point/Point of action reached (ORANGE)** Aggregated standard tanks/silos/objects: the current (last measured) inventory level of the container in question is below the ship point/point of action.
		**Safety stock/Critical limit (RED)** Standard tank/silo/object: the current (last measured) inventory level of the container in question is below the safety stock/critical limit. Recycling tank/Recycling silo/Recycling object: the current (last measured) inventory level of the container in question is above the safety stock/critical limit.
		**Safety stock/Critical limit (RED)** Aggregated standard tanks/silos/objects: the current (last measured) inventory level of the aggregated container in question is below the safety stock/critical limit. Aggregated recycling tanks/silos/objects: the current (last measured) inventory level of the aggregated container in question is above the safety stock/critical limit.
		**Bad measured data** - communication error. No measured data are available for the container in question. The state is also shown for displayed secondary data if the container is not out of order.
		**Bad measured data** - communication error. No measured data are available for the aggregated container in question.
		**Out of service** - the tank/silo/object is not available (e.g. due to overhaul). The time when the container is out of order is marked in gray in the inventory chart.
		**Out of service** - the aggregated tank/silo/object is not available (e.g. due to overhaul). The time when an associated container is out of order is marked in gray in the inventory chart.
		**Overfilled** - the measured value is higher than the tank's /silo's capacity or the object's maximum.
		**Overfilled** - the measured value is higher than the aggregated tank's /silo's capacity or the aggregated object's maximum.
		**Bad measured data** - the measured value is lower than the tank's /silo's /object's zero.
		**Bad measured data** - the measured value is lower than the aggregated tank's /silo's / object's zero.

Status display for secondary values

Symbol	Meaning
	**Upper span limit exceeded (RED)** The actual (last measured) secondary value lies **above** the set span limits and outside of the tolerance.
	**In tolerance range(GREEN)** The actual (last measured) secondary value lies **inside** the set span limits and inside of the tolerance.
	**Lower span limit undercut (RED)** The actual (last measured) secondary value lies **below** the set span limits and outside of the tolerance.

5.4.5 Icons for tanks ("Map workplace")

Symbol		Meaning
Tank/Silo	Object	
		**OK (GREEN)** - no delivery/disposal planned.
		**OK (GREEN)** - planned delivery/disposal.
		**OK (GREEN)** - aggregated tank/silo/object: no delivery/disposal planned.
		**OK (GREEN)** - aggregated tank/silo/object: planned delivery/disposal.
		**OK (GREEN)** - several tanks/silos/objects available at the location. All the containers have the OK status. The containers can have different scheduling statuses (delivery/disposal planned or not planned).
		**Plan point/Observance limit reached (YELLOW)** - no delivery/disposal planned.
		**Plan point/Observance limit reached (YELLOW)** - planned delivery/disposal.
		**Plan point/Observance limit reached (YELLOW)** - aggregated tank/silo/object: no delivery/disposal planned.
		**Plan point/Observance limit reached (YELLOW)** - aggregated tank/silo/object: planned delivery/disposal.
		**Ship point/Point of action reached (ORANGE)** - no delivery/disposal planned.
		**Ship point/Point of action reached (ORANGE)** - planned delivery/disposal.
		**Ship point/Point of action reached (ORANGE)** - aggregated tank/silo/object: no delivery/disposal planned.
		**Ship point/Point of action reached (ORANGE)** - aggregated tank/silo/object: planned delivery/disposal.
		**Safety stock/Critical limit reached (RED)** - no delivery/disposal planned.
		**Safety stock/Critical limit reached (RED)** - planned delivery/disposal.
		**Safety stock/Critical limit reached (RED)** - aggregated tank/silo/object: no delivery/disposal planned.
		**Safety stock/Critical limit reached (RED)** - aggregated tank/silo/object: planned delivery/disposal.
		**Bad measurement data** - no delivery/disposal planned.
		**Bad measurement data** - planned delivery/disposal.
		**Bad measurement data** - aggregated tank/silo/object: no delivery/disposal planned.
		**Bad measurement data** - aggregated tank/silo/object: planned delivery/disposal.
		**Out of order** - no delivery/disposal planned.
		**Out of order** - planned delivery/disposal.
		**Out of order** - aggregated tank/silo/object: no delivery/disposal planned.

Symbol		Meaning
Tank/Silo	Object	
		**Out of order** - aggregated tank/silo/object: planned delivery/disposal.
		**Diverse** - several tanks/silos/objects with different statuses displayed are available at the location. The containers can have different scheduling statuses (delivery/ disposal planned or not planned).
		**Overfilled** - no delivery/disposal planned.
		**Overfilled** - planned delivery/disposal.
		**Overfilled** - aggregated tank/silo/object: no delivery/disposal planned.
		**Overfilled** - aggregated tank/silo/object: planned delivery/disposal.
		**Bad measured data** - no delivery/disposal planned.
		**Bad measured data** - planned delivery/disposal.
		**Bad measured data** - aggregated tank/silo/object: no delivery/disposal planned.
		**Bad measured data** - aggregated tank/silo/object: planned delivery/disposal.

5.4.6 Icons for scheduling

Symbol		Meaning
Tank/Silo	Object	
		**Planned delivery/Planned disposal** - a planned delivery or disposal is indicated in the inventory chart and the calendar by a delivery van icon.
		**Standard tank/silo/object** - how a standard tank/silo/object is indicated in the **Scheduling** menu item.
		**Aggregated standard tanks/silos/objects** - how aggregated containers are indicated in the **Scheduling** menu item.
		**Recycling tank/silo/object** - how a container is indicated in the **Scheduling** menu item.
		**Aggregated recycling tanks/silos/objects** - how aggregated recycling containers are indicated in the **Scheduling** menu item.

5.4.7 Icons for disposal and delivery status

Symbol	Meaning
	**Detected** - the **Detected** status is displayed in the following situations: ▪ The system has detected a delivery or disposal which has been scheduled too early or too late. You can process this delivery or disposal in the **Details** tab using the **Confirm** button. ▪ The system has detected a missing delivery or disposal. You can process this delivery or disposal in the **Details** tab using the **Mark as fulfilled** button. ▪ The system has detected that measured data are missing. You can process this delivery or disposal in the **Details** tab using the **Mark as fulfilled** button.
	**Confirmed** - the **Confirmed** status is displayed in the following situations: ▪ A delivery or disposal which has been scheduled too early or too late was confirmed when the delivery/disposal was created. ▪ A delivery or disposal which has been scheduled too early or too late has been confirmed in the **Details** tab.
	**Deleted** - a planned delivery or disposal has been deleted.
	**New** - a new delivery or disposal has been planned.
	**Fulfilled** - a new delivery or disposal has been fulfilled. If a delivery and disposal is made, this is flagged by SupplyCare as **Delivery made (detected)/Disposal made (detected)**. If the system has detected a missing delivery/disposal or missing measured data, you can process this delivery/disposal in the **Details** tab using the **Mark as fulfilled** button. The delivery/disposal is displayed as **Delivery fulfilled (confirmed)/Disposal fulfilled (confirmed)**.

5.4.8 Icons for analysis

Symbol		Meaning
Tank / Silo	Object	
		**Standard tank/silo/object** - how a standard container is indicated in the **Analysis** menu item.
		**Aggregated standard tanks/silos/objects** - how aggregated standard comtainers are indicated in the "**Analysis** menu item.
		**Recycling tank/silo/object** - how a recycling container is indicated in the **Analysis** menu item.
		**Aggregated recycling tanks/silos/objects** - how aggregated recycling containers are indicated in the **Analysis** menu item.

5.5 Descriptions

Depending on whether "Tank" or "Silo" or "Object" was selected as the template type, the descriptions in the menu, in "Overview" and in "Detailed view" change as well as the symbols and tool tips that appear when you move the cursor over a symbol.

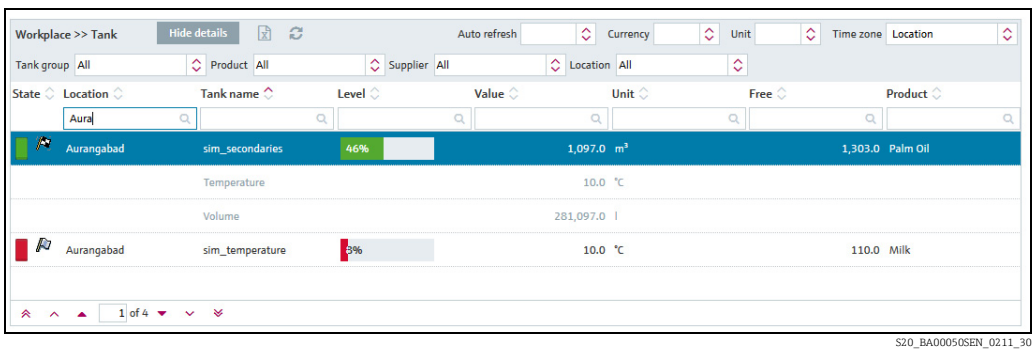
The following are the differences in the descriptions that involve more than simply replacing the word "Tank" or "Silo" with "Object":

Standard template type "Tank" / "Silo"	Standard template type "Object"
Tank name / Silo name	Object
Tank details / Silo details	Details
Tank partners / Silo partners	Partners
Tank service status / Silo service status	Service status
PP (Plan point)	OL (Observance limit)
SP (Ship point)	POA (Point of action)
SST (Safety stock)	CL (Critical limit)
DSST (Day(s) until reaching the safety stock	DCL (Day(s) until reaching critical limit
Capacity	Maximum
Free capacity	Free space
Inventory chart	Chart
Inventory	Received value
Outflow	Decrease
Inflow	Increase
DO (Daily outflow)	DD (Daily decrease)
ADO (Average daily outflow)	ADD (Average daily decrease)
DI (Daily inflow)	DI (Daily increase)
ADI (Average daily inflow)	ADI (Average daily increase)
Average inventory level	Average level

5.6 General processing functions

5.6.1 Using filter functions in tables (searching)

You can use the filter function to reduce the number of data sets displayed for a table. You enter the filter functions in the top line of the table.



S20_BA00050SEN_0211_30

1. In the top table line, enter a complete designation or just the first few letters in the desired field.

2. Press **Enter**.
3. Only the matching table entries are now displayed.
   In order to display the entire table contents again, delete your entries and press **Enter**.

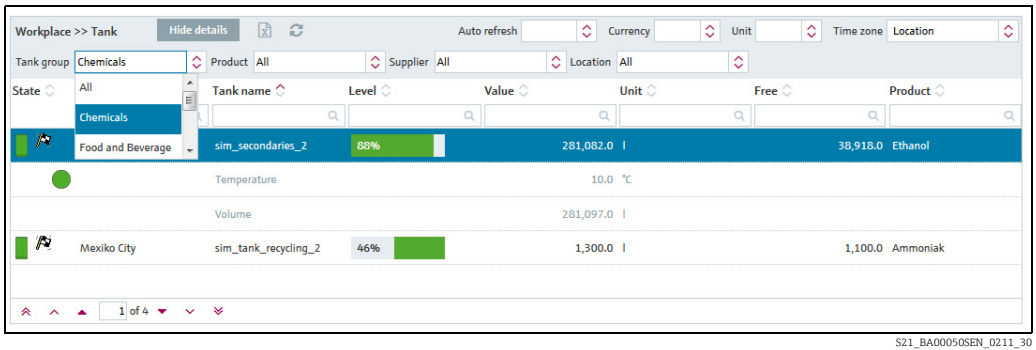
You can always use the following filter functions for the individual fields:

Description		Example	
Group	**Function**	**User entry**	**Result (data displayed)**
Character string	* (wildcard)	Tank0*	All entries that start with "Tank0", e.g. "Tank01", "Tank02-special" etc.
		Tank0	All entries that contain "Tank0", e.g. Frankfurt_Tank0-mp1 etc.
Integers	Integer	8	All rows with the value 8
	=integer	=8	
	>integer	>8	All rows with values greater than 8
	>=integer	>=8	All rows with values greater than or equal to 8
	<integer	<8	All rows with values less than 8
	<=integer	<=8	All rows with values less than or equal to 8
	Integer-integer	8-100	All rows with values between 8 and 100
	<>integer	<>8	All rows with values not equal to 8
	!integer	!8	
	Integer*	8*	All rows with values that start with "8"
Floating point numbers	>floating point number	>8.0	All rows with values greater than 8
	<floating point number	<8.0	All rows with values less than 8
	Floating point number-floating point number	8.0-100.50	All rows with values between 8.0 and 100.50
	Floating point number* (wildcard)	8*	All rows with values that start with "8"

Date columns are converted for display purposes so they can be filtered like a string column.

5.6.2 Filtering the data records displayed (picklist)

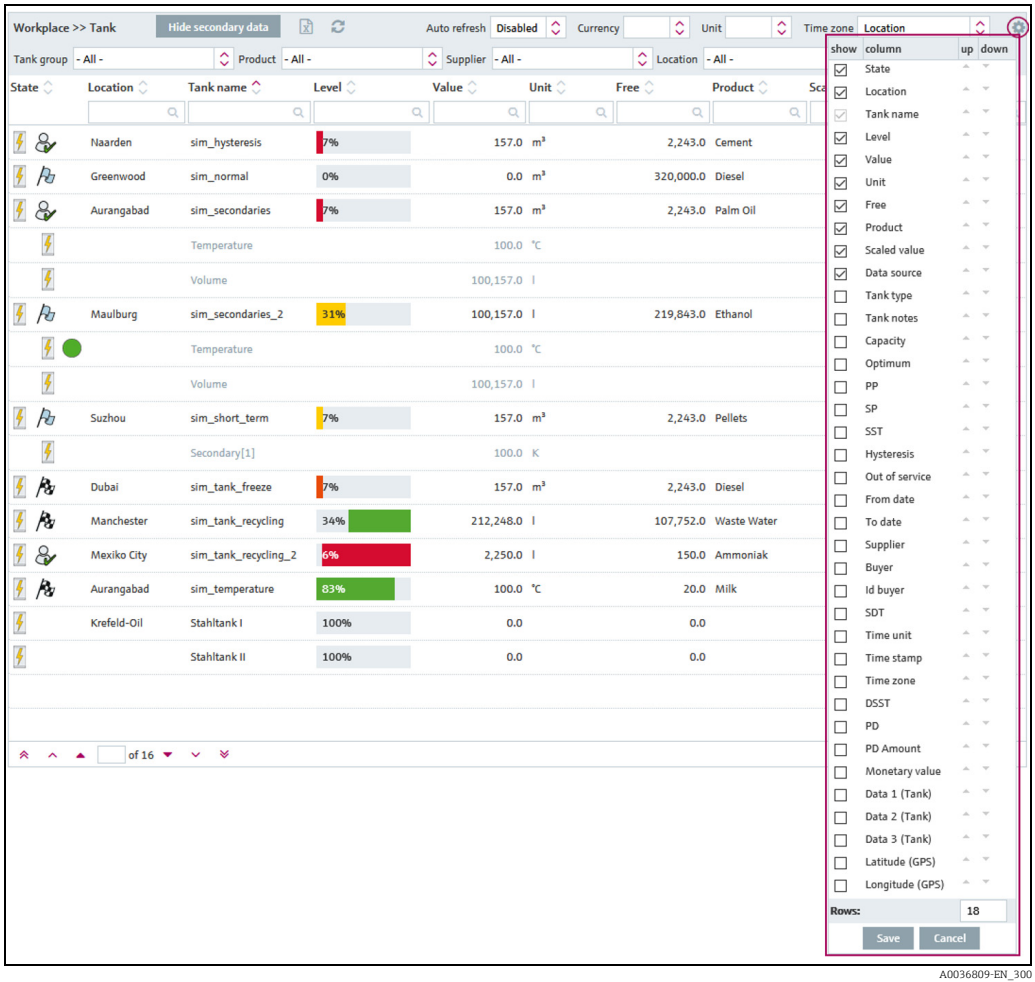
You can use picklists to filter the data records displayed, such as for **Unit**, **Time zone**, **Tank group**, **Product**, **Supplier** or **Location**.
If you have selected a value from the picklist, the data records that match the filter criteria are automatically displayed. The content of the picklists is reset to the default values when you leave the overview.



S21_BA00050SEN_0211_30

5.6.3 Changing the column display (fields) in the overview table

Pressing the button in the table header in the overview opens a context menu. Via this context menu, you can show and hide columns or change the column order.



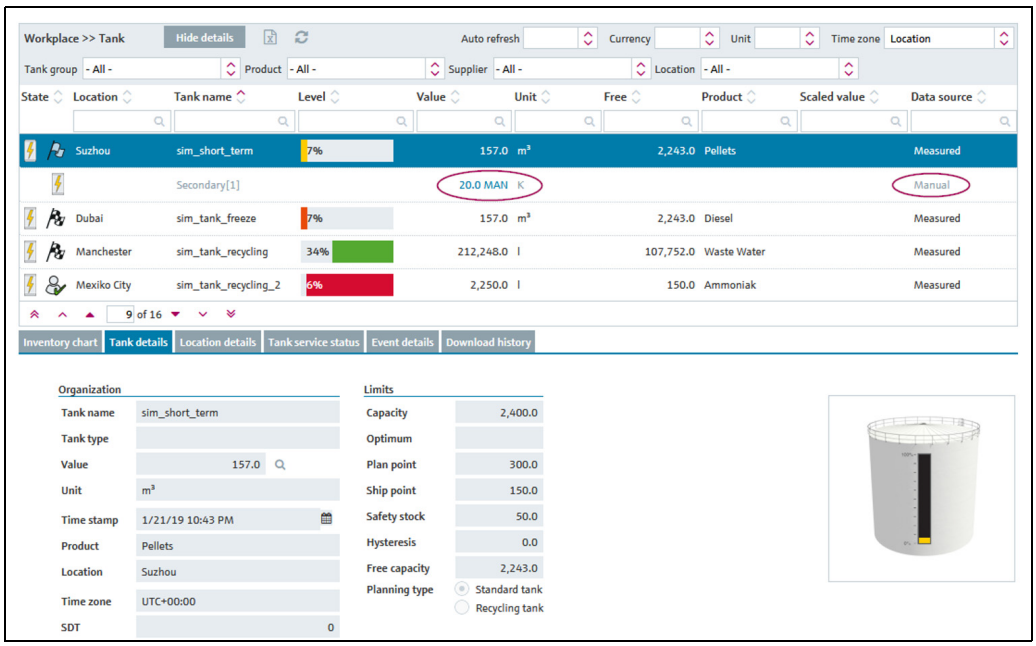
A0036809-EN_300

In the menu Workplace, menu item Tank, the button is not visible, if you selected a tank from the list.

1. Click on the button Hide details, then the button is visible again.

5.6.4 Viewing numerical values (master data)

Numerical values above 1000 are displayed with a thousand separator. This is **only** the case within the **Workplace** menu, however.
In contrast to **Measured values**, **Manual values** are displayed in blue color followed by the text **MAN**. The column **Data source** provides information on where the data comes from: measured or manually entered (for more details see Service Manual).



Arbeitsplatz_Tank_BA00050SEN_30

The character the system uses as the thousand separator depends on the language setting selected in the browser, e.g.:

German (Germany) de-DE	1.234,78
German (Switzerland) de-CH	1'234.78
English (US) en-US	1,234.78

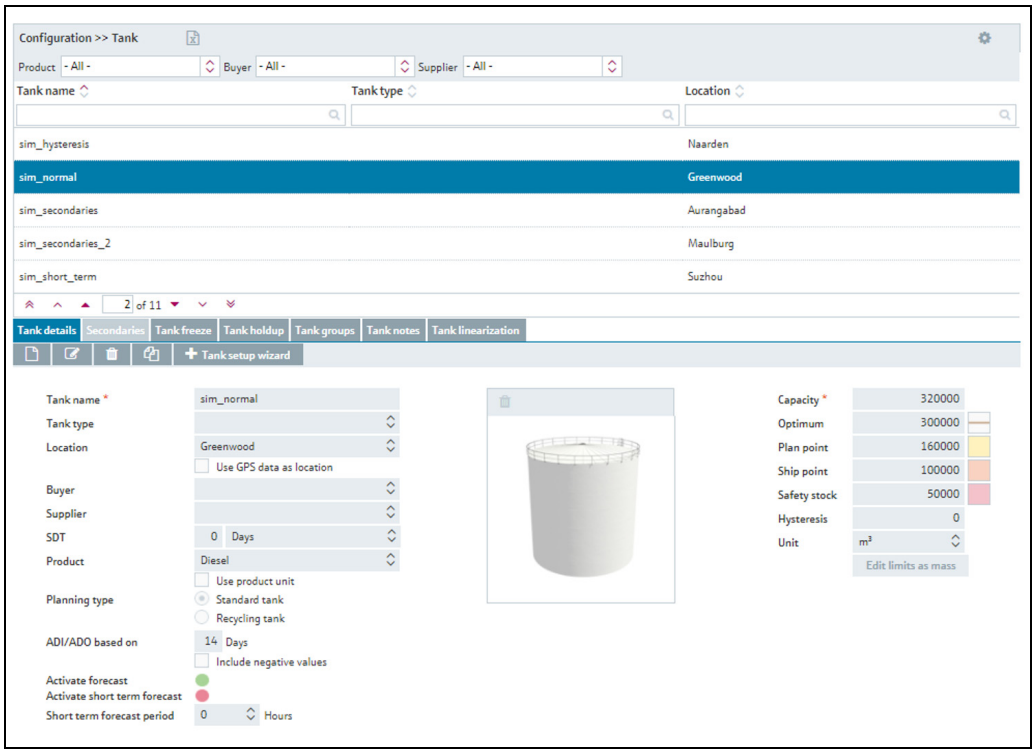
No thousand separator is used for numerical values that appear in views, histories or reports that are downloaded, sent or printed out.

The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item. Only people whose user role is configured as **Master Data** can change the number of places after the decimal point for the units.

5.6.5 Changing master data

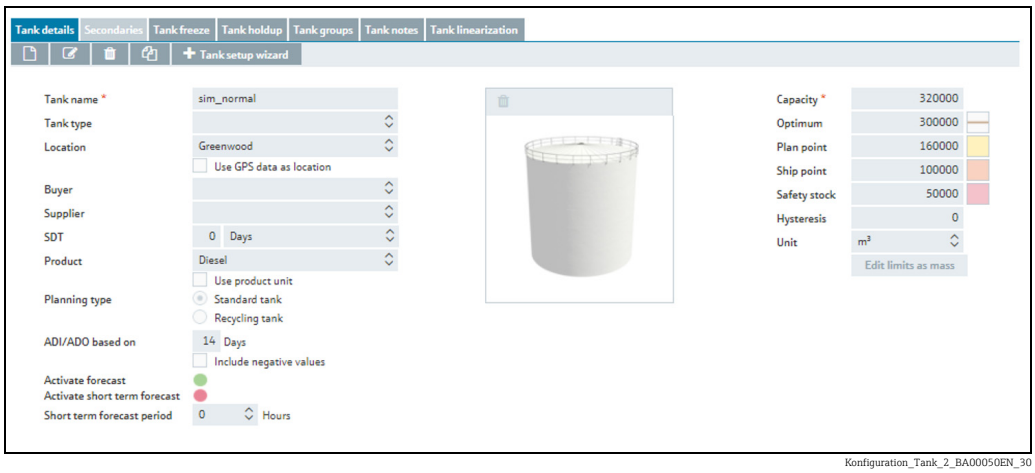
Depending on your particular user role, you can change data records in the "Company", "User", "Tank", "Aggregated tank", "Tank type", "Location", "Product" and "Tank groups" master data. The data for a tank are changed in the following example. Proceed in the same way for other master data.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. The following detail view is displayed in the Application window:



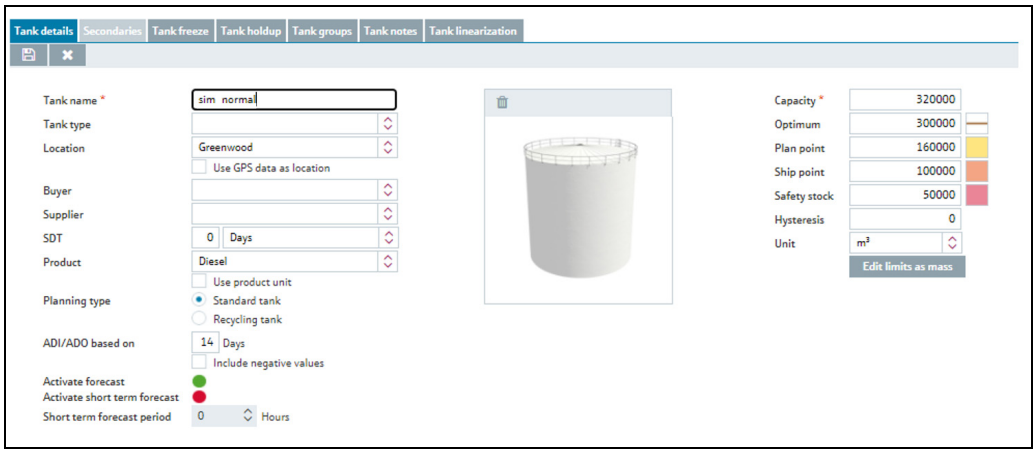
Konfiguration_Tank_4_BA00050EN_30

4. In the table, click the tank for which you want to make changes.
5. Select the **Tank details** tab.
6. The related tab is displayed in the lower section of the Application window:



Konfiguration_Tank_2_BA00050EN_30

7. Click the button.
8. The tab is displayed in the edit mode.

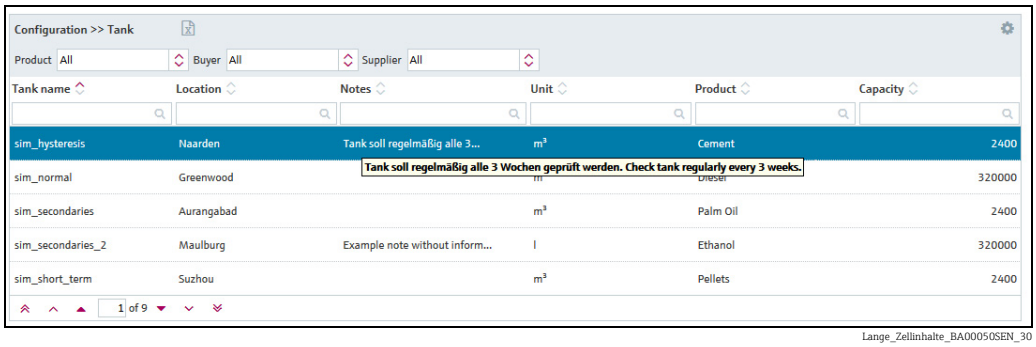


Konfiguration_Tank_3_BA00050EN_30

9. Make your changes.
10. Click 💾 to save your changes. Click ✖ to abort the process.
11. If you want to make changes to the **Tank groups** tab, proceed as described for the **Tank details** tab.

5.6.6 Displaying modified master data in full

If a text that has been entered in an input box is too long to be displayed in full in a table column, it is truncated. However, if you hover the cursor over the text, the text is displayed in full in a separate info box.

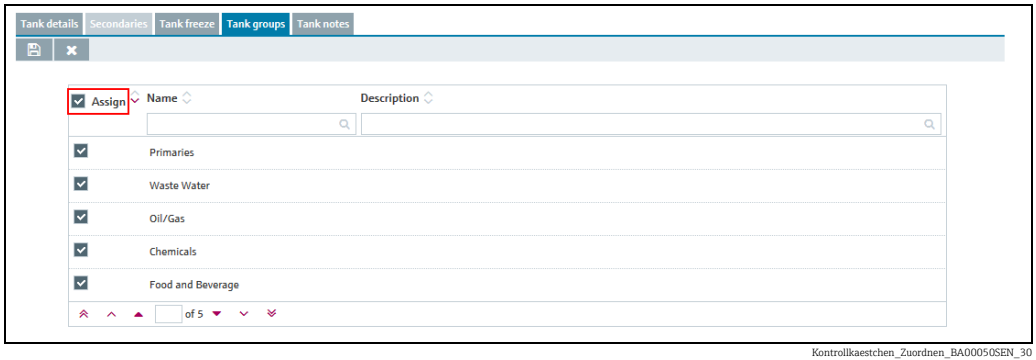


Lange_Zellinhalte_BA00050SEN_30

5.6.7 Selecting all the rows in a table

By activating the **Assign** check box you can select all the rows in a table.

1. Click the button ✎.
2. The specific tab is displayed in the edit mode:



Kontrollkaestchen_Zuordnen_BA00050SEN_30

3. Activate the **Assign** check box.
4. Click to save your selection. Click to abort the process.

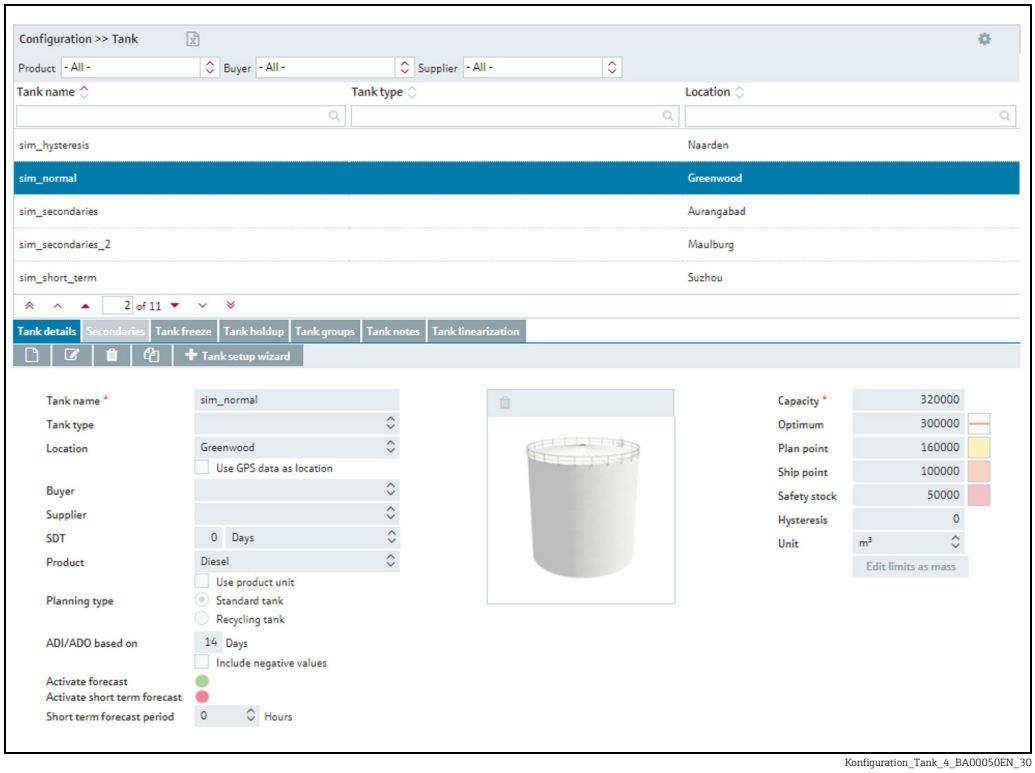
5.6.8 Deleting master data

Depending on your particular user role, you can delete data records in the "Company", "User", "Tank", Aggregated tank", "Location", "Product" and "Tank groups" master data.

A data record can only be deleted if the symbol is displayed in the tab. If the symbol is not displayed, the record is linked to other information. These links must be disabled before the data record can be deleted.

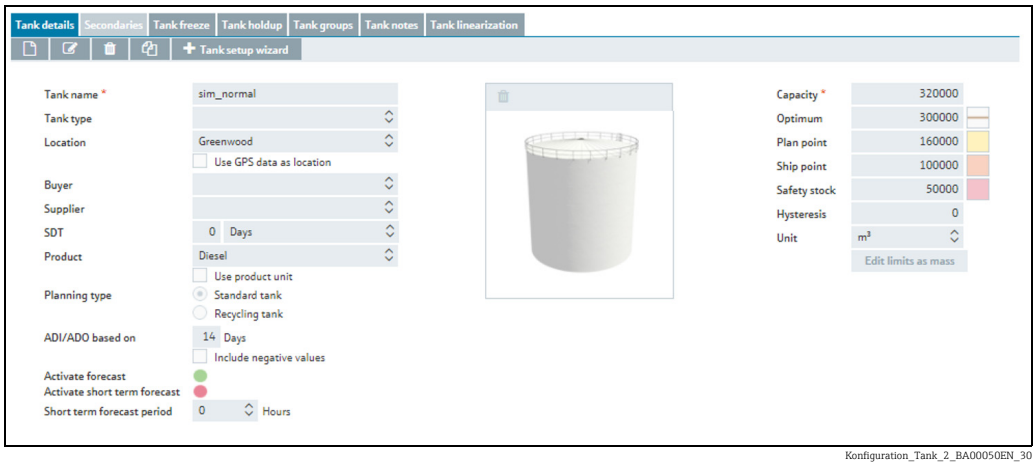
The data for a tank are deleted in the following example. Proceed in the same way for other master data.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. The following detail view is displayed in the Application window:



Konfiguration_Tank_4_BA00050EN_30

4. In the overview table, click the tank you want to delete.
5. The related tab is displayed in the lower section of the Application window:



Konfiguration_Tank_2_BA00050EN_30

6. Click  to delete the tank.
7. The prompt "Do you really want to delete?" is displayed.
8. Click **OK** to delete the tank. Click **Cancel** to abort the process.

5.6.9 Copying and changing a data record

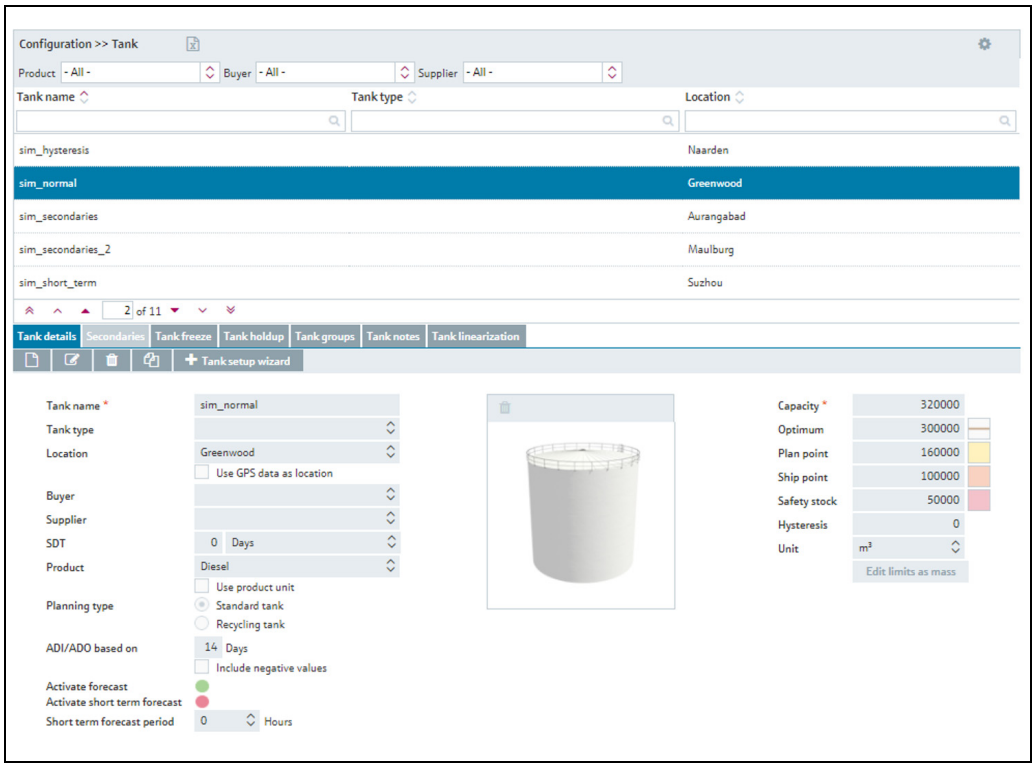
Depending on your user role, you can copy a data record in the following menu items: User, Tank, Aggregated tank, Location, Company, Product, Tank group and Report.

Data (fields) that belong specifically to the data record are not copied. These fields remain empty in the copied data record.

If the function is available, the following button  is displayed.

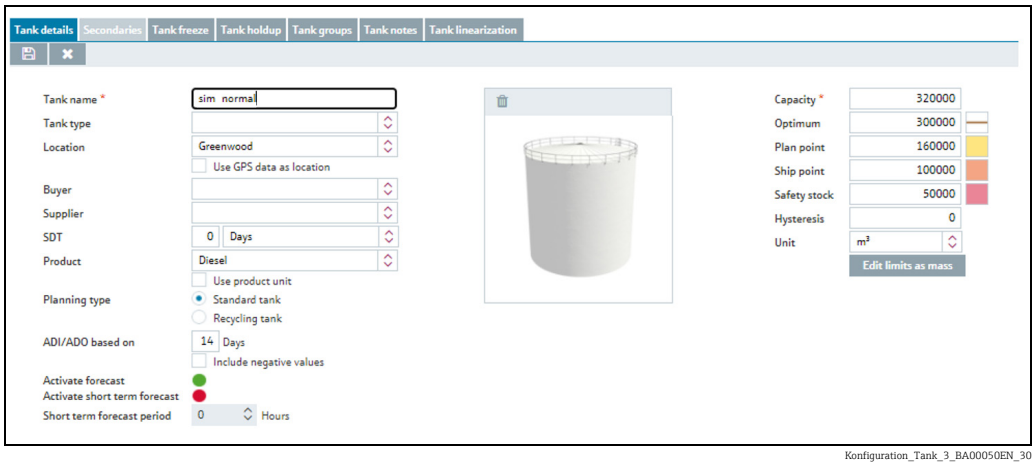
The data record of a tank is copied in the following example. The same procedure applies if you want to copy other data records.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the overview table, click the tank you want to copy.
4. The following detail view is displayed in the Application window:



Konfiguration_Tank_4_BA00050EN_30

5. Click the button. The data record is displayed in the editing mode.

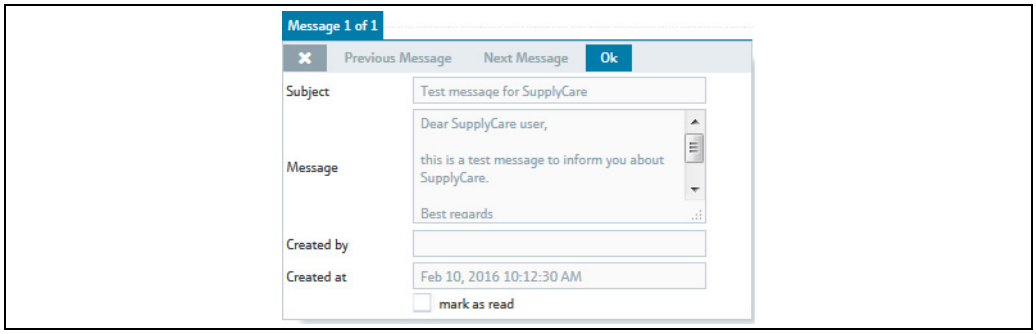


Konfiguration_Tank_3_BA00050EN_30

5.7 Receiving messages (messaging)

Everyone can receive a notification message.

A message from the system administrator is displayed the next time the user logs on.



PS0000954en_30

The following options are available:

Button/field	Meaning
Previous message	This button is displayed if several messages are available. Click the **Previous message** button to view and process previous messages.
Next message	This button is displayed if several messages are available. Click the **Next message** button to view and process subsequent messages.
OK	This button is displayed for the last message. Click **OK** to exit the dialog.
Mark as red	Mark the message as read using the **mark as read** field.

6 Monitoring tanks - "Tank" workplace

6.1 Viewing tanks and associated information

The **Tank** menu item is available to people with **Read only**, **Scheduler** or **Operator** configured as their user role.

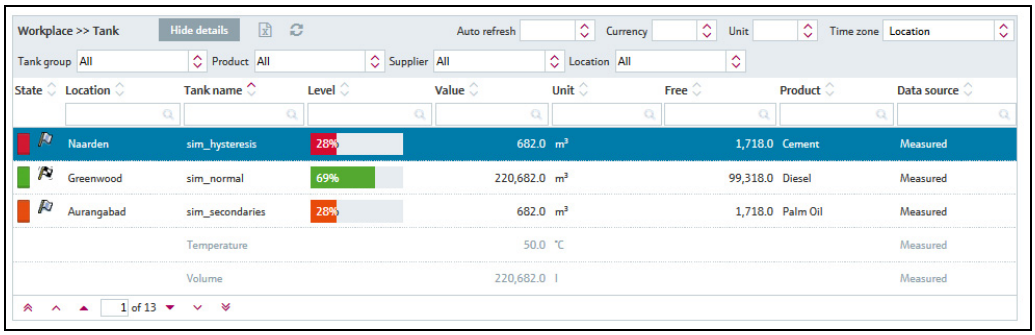
The **Notes and Files**, **Tank Partners**, **Location Details**, **Event Details** and **Freeze Event Details** tabs are displayed only if they contain at least one piece of information.

The time zone configured for the location is used for the **Tank** menu item (→ 128). "UTC+00:00" is the default value.

Depending on your configuration, **Objects** or **Silos** are displayed instead of **Tanks**. For more information refer to the appropriate chapter in the Service Manual for System administration.

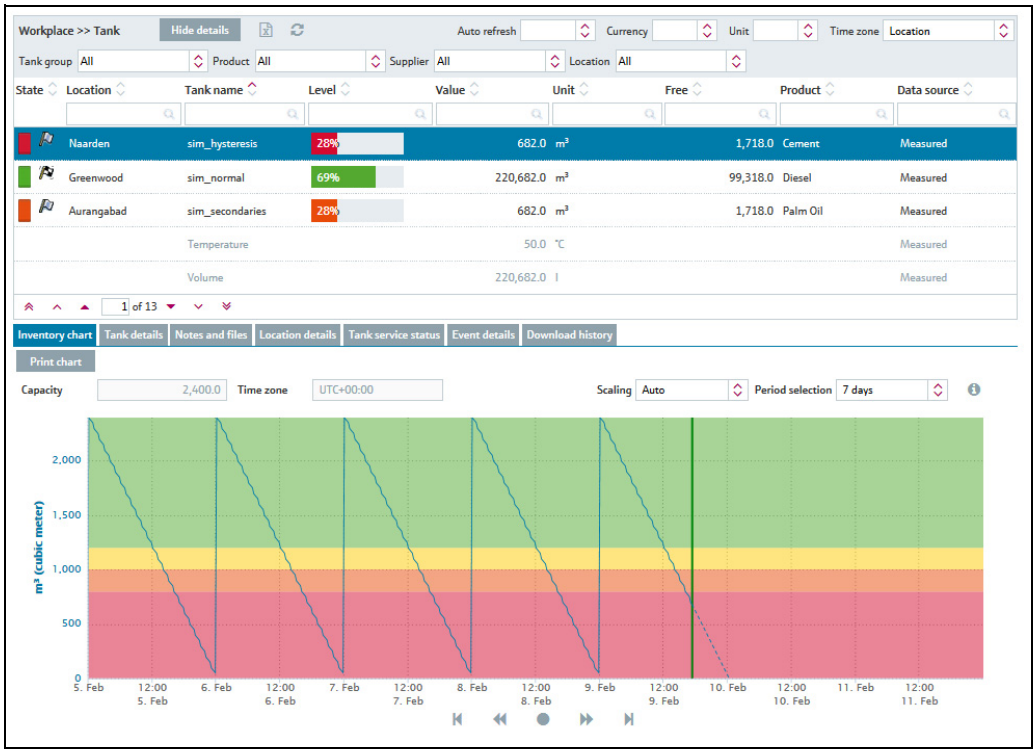
Manual values are displayed in blue color followed by the text **MAN**. The column **Data source** provides information on where the data comes from: measured or manually entered.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item. A list of the tanks assigned to you is displayed.



Arbeitsplatz_Tank2_BA00050SEN_30

3. In the table, click the tank you want to view in greater detail.
4. The details of the selected tank are displayed in the application window:



Tank_Bestandsdiagramm_BA00050SEN_30

5. If you click on another line, the details of the newly selected tank are displayed. Click the **Hide details** button when you want to hide the details again.

6. You can choose the following tabs in the lower part of the application window: Inventory chart, Tank details, Notes and files, Location details, Tank service status, Event details and Download history.

SupplyCare distinguishes between standard tanks and recycling tanks. From a standard tank, the product is withdrawn. For a recycling tank, the tank is filled with the product (→ 100).
In the "Workplace – Tank" view, the current level/available capacity are displayed in graphic form in the **Level** column. For standard tanks, the colored bar drifts from left to right with increasing level. The percentage specified corresponds to the current level. For recycling tanks, the colored bar drifts from right to left with increasing level. The percentage specified corresponds to the currently available capacity.

6.1.1 "Tank" overview table

Pressing the button in the table header in the overview opens a context menu. Via this context menu, you can show, hide and move table columns.

The following columns are available for the overview table:

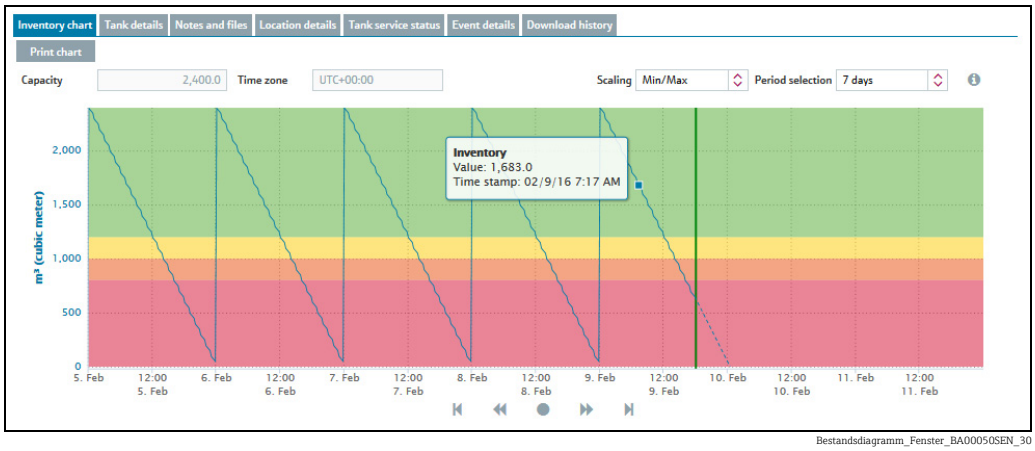
Columns	Description
Status	The symbol for the current tank status is shown on the display. See also the "Icons for tanks" chapter, "Status display" section.
Location	Indicates the tank location. The location is the name of the location. The name is selected in the **Configuration** menu in menu item **Tank**, field **Location**. The location is specified in the **Location** menu item.
Tank name	Indicates the tank name. The field can also be displayed for existing secondary values. ▪ Primary value: The tank name for the primary value is entered in the **Tank name** field. Path: Configuration →Tank → Tank details → Tank name ▪ Secondary value: The tank names for the secondary values are entered in the **Configuration** menu, **Tank** menu item, **Secondaries** tab, **Name** field.
Tank type	Indicates the tank type name. The name of the tank type describes a configured tank type. Tank types are selected in the **Configuration** menu in menu item **Tank**, field **Tank type**. The tank type is specified in the **Tank type** menu item.
Level	The current level is indicated as a symbol and a percentage.
Value	Displays the last valid primary value. The field can also be displayed for existing secondary values. ▪ The Value field indicates the last valid measured value. ▪ For aggregated tanks, the sum of the valid measured values for the associated tanks is displayed. Tanks with status "Out of service" are not included. If all associated tanks are "Out of service", "0" is displayed as the value. ▪ The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item. ▪ **Manual values** are displayed in blue color followed by the text **MAN**, even if a manual value is used for a tank which is part of an aggregated tank.
Unit	Indicates the unit. The field can also be displayed for existing secondary values. ▪ The unit for the primary value is selected via the Unit field in the **Tank details** tab. The units for the other measured values (secondary) are selected in the **Profile** menu in the **User preferences** tab. ▪ In the case of mass units, volume units and units of length, the selection for the field **Unit mass**, **Unit volume** and **Unit of length** in the **User preferences** menu item has priority over the setting in the **Tank** menu item.
Data Source	Provides information on the data and displays wether the data comes from a measured source or manually entered.
Free	The free capacity of the tank is calculated. The calculation is based on maximum operating volume and product density.
Product	The product name is selected in the **Configuration** menu in menu item **Tank**, field **Product**. The product is specified in the **Product**menu item.
Notes	Indicates whether tank and/or location notes are available.
Optimum	The optimum capacity of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Optimum**. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Capacity	The capacity of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Capacity**. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
PP (plan point)	Tank plan point. The field can also be displayed for existing secondary values. The plan point of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Plan point**. The value entered in the **Secondaries** tab is used here for secondary values. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
SP (Ship point)	The ship point of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Ship point**. If the **Recycling**check box is enabled, the ship point is not displayed. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
SST (Safety stock)	Tank safety stock. The field can also be displayed for existing secondary values. The safety stock of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Safety stock**. The value entered in the **Secondaries** tab is used here for secondary values. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.

Columns	Description
Hysteresis	The hysteresis serves to prevent constant event messages, e.g. due to a fluctuating level. The field can also be displayed for existing secondary values. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Out of service	The field is activated if the tank is currently "Out of service".
From date	Indicates the date as of which a tank was, is or will be "Out of service".
To date	Indicates the date until which a tank was, is or will be "Out of service".
Supplier	Indicates the responsible supplier. The supplier is created as a company.
Buyer	Indicates the buyer. The buyer is created as a company.
Buyer ID	Is equivalent to the **ID** field in the **Company details**tab in the **Company** menu item.
SDT (standard delivery time/standard disposal time)	Standard tanks: The standard delivery time for the tank is specified in the **Configuration** menu in menu item **Tank**, field **Standard delivery time**. Recycling tank: The standard disposal time for the tank is specified in the **Configuration** menu in menu item **Tank**, field **Standard disposal time**.
Time unit	Time unit used for the **SDT** field (standard delivery/disposal time).
Time stamp	Time stamp for the last measured value. The field can also be displayed for existing secondary values. ▪ The time stamp of the time zone for the last valid measured value is used. Also see **Time zone** field. ▪ In the case of aggregated tanks, the time stamp from the associated tank which supplied the most recent measured value is used.
Time zone	Time zone of time stamp. The field can also be displayed for existing secondary values. The time zone of the location is used.
DSST (days until safety stock is reached)	Indicates the estimated number of days remaining until the safety stock is reached. The value is calculated with the average quantity per day. The calculated average quantity is based on the "Forecast based on" value.
PD (planned delivery/planned disposal)	The date and time for the next planned delivery are displayed for standard tanks. The date and time for the next disposal are displayed for recycling tanks. The field is empty if no delivery or disposal has been planned. The time zone of the location is used.
PD amount (amount for planned delivery/amount for planned disposal)	Amount for the planned delivery and disposal. The unit corresponds to the unit in the **Unit** column.
Scaled value	Level measurement values can be displayed in the tank overview in scaled mode (with units).
Monetary value	Monetary value of the tank content, calculated based on the price information in the **Configuration** menu, menu item **Product**, **Product details** tab. **Important**: The tank content must be measured in a volume unit, too, if the unit in the price per unit (e.g. l in €/l) is a volume unit. Example: Price in €/l, tank content measured in m^3. This is valid for mass units respectively: Price in €/kg, tank content measured in t.
Data 1 (Tank) ... Data 3 (Tank)	Supplementary information to tanks, which can be edited by the user on the **Tank notes** tab. The **Tank notes** tab with the input fields is located in the **Configuration** menu, menu item **Tank**.
Latitude (GPS)	Geographic coordinate of the tank, silos or object, displayed in degrees **latitude** (decimal degrees, GPS).
Longitude (GPS)	Geographic coordinate of the tank, silos or object, displayed in degrees **longitude** (decimal degrees, GPS).

6.1.2 Inventory chart

The historical and expected pattern for the inventory is displayed in the diagram for the period selected. The distribution is 2/3 for the history (measured values) and 1/3 for extrapolation (calculated values).

If the tank is out of service, only the historic pattern of the inventory is displayed. The expected pattern for the inventory is not displayed.
Manual values are displayed in blue color followed by the text **MAN**.



Bestandsdiagramm_Fenster_BA00050SEN_30

Via the **Scaling** field, choose between the minimum/maximum scaling and automatic scaling. If "Min/Max" is chosen, the inventory is displayed between "0" and "Capacity". "Auto" displays the inventory between the smallest and largest displayable value - including forecast values.
Select the period of time for the inventory chart via the **Period selection** field.
The current **limit values** are specified as horizontal lines in various colors

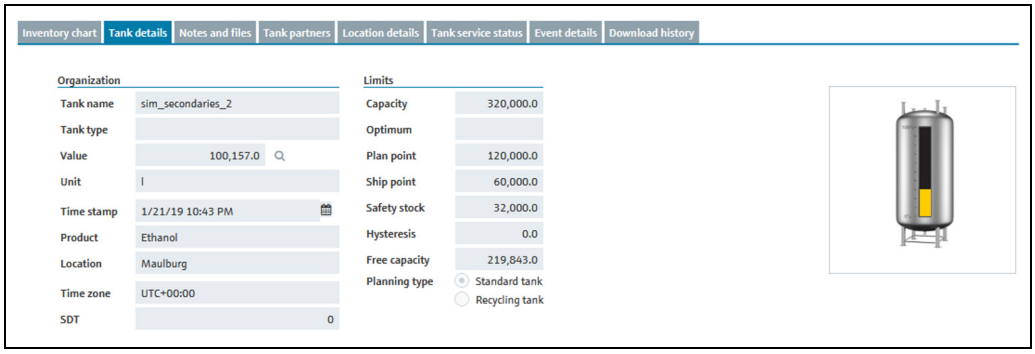
Color	Standard tanks	Recycling tanks
green	Range between the Optimum and Plan point limit values	Range between Empty (value 0) and the Plan point limit value
yellow	Range between the Plan point and Ship point limit values	Range between the Plan point and Safety stock limit values
orange	Range between the Ship point and Safety stock limit values	not present
red	Range between the Safety stock limit value and Empty (value 0)	Range between the Safety stock and Capacity limit values

Click the button **Print chart** to print the inventory chart.

If you want to zoom into a specific period (→ 54).

6.1.3 Tank details

The tab displays information on the tank and limit values.



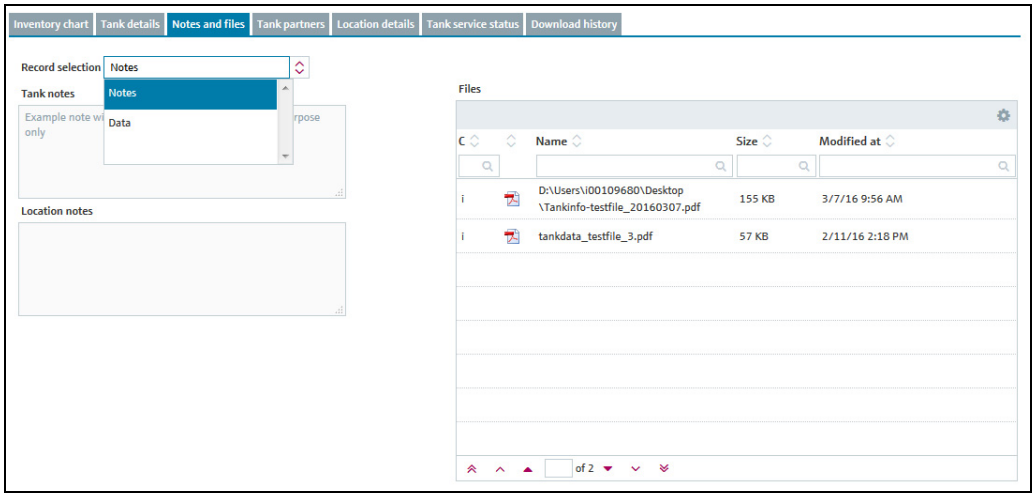
A0036909-EN_300

Description of fields

Field	Description
Tank name	The tank name is selected in the **Configuration** menu in menu item **Tank**, field **Tank name**.
Tank type	The tank type is selected in the **Configuration** menu in menu item **Tank**, field **Tank type**. Tank types are configured in the **Configuration** menu in menu item **Tank type**.
Value	Last primary value ▪ The Value field indicates the last valid measured value. ▪ For aggregated tanks, the sum of the valid measured values for the associated tanks is displayed. Tanks with status "Out of service" are not included. If all associated tanks are "Out of service", "0" is displayed as the value. ▪ The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Unit	Last unit of primary value ▪ The unit is specified in the **Tank** menu item. ▪ In the case of mass units, volume units and units of length, the selection for the field **Unit mass**, **Unit volume** and **Unit of length** in the **User preferences** menu item has priority over the setting in the **Tank** menu item.
Time stamp	Time stamp of last primary value ▪ The time stamp of the time zone for the last valid measured value is used. Also see **Time zone** field. ▪ In the case of aggregated tanks, the time stamp from the associated tank which supplied the most recent measured value is used.
Product	The product name is selected in the **Configuration** menu in menu item **Tank**, field **Product**. The product is specified in the **Product** menu item.
Location	The location is selected in the **Configuration** menu in menu item **Tank**, field **Location**. The location is specified in the **Location** menu item.
Lat./Long. (GPS)	GPS coordinates of the tank, expressed in decimal degrees. The fields are only displayed, if the check box **Use GPS data as location** is activated in the **Configuration** menu in menu item **Tank**, tab **Tank details**.
Time zone	Time zone of time stamp. The time zone of the location is used.
SDT (Standard delivery time in days or hours)	The standard delivery time for the tank is specified in the **Configuration** menu in menu item **Tank**, field **Standard delivery time**.
Capacity	The capacity of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Capacity**. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Optimum	The optimum capacity of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Optimum**. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Plan point	The plan point of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Plan point**. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Ship point	The ship point of the tank is specified in the **Configuration**"menu in menu item **Tank**, field **Ship point**. If the **Recycling** check box is enabled, the ship point is not displayed. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Safety stock	The safety stock of the tank is specified in the **Configuration** menu in menu item **Tank**, field **Safety stock**. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Hysteresis	The hysteresis serves to prevent constant event messages, e.g. due to a fluctuating level (→ 101. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Free capacity	The free capacity of the tank is calculated.
Planning type	The planning type is displayed: "Standard tank" or "Recycling tank"
Constituent tanks	This field is displayed for aggregated tanks only. All corresponding tanks are displayed in this list.
Value (aggregated tanks)	This field is displayed for aggregated tanks only. The **Value** field shows the last valid measured value for the tank selected in the "Constituent tanks" list. The number of places after the decimal point is defined in the **Configuration** menu, **Unit** menu item.
Out of service	This field is displayed for aggregated tanks only. The field is activated if the tank selected in the "Constituent tanks" list is out of service.
Bad measurement(s)	This field is displayed for aggregated tanks only. The field is activated if the tank selected in the "Constituent tanks" list returns bad measurement data.

6.1.4 Notes and files

Notes, data and files pertaining to the tank and location are displayed in this tab.



S33_BA00050SEN_0211_30

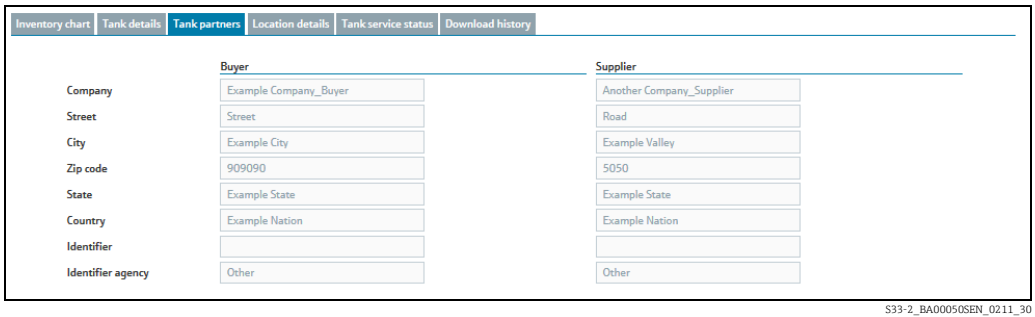
Via the **Record selection** field, choose whether the **Notes** or **Data should be displayed**.

Via the **Files** table, you can open the files and save them locally as follows:

1. Click the **File name** (hyperlink) in the **Name** column in the table.
2. A dialog box opens. Here you can choose whether you want to open the file or save it.
3. Click **OK** to open or save the file. Click **Cancel** to abort the process.

6.1.5 Tank partners

Information on the buyer and supplier is displayed in this tab. If no buyer/supplier is currently assigned to the selected tank, this tab is not visible.

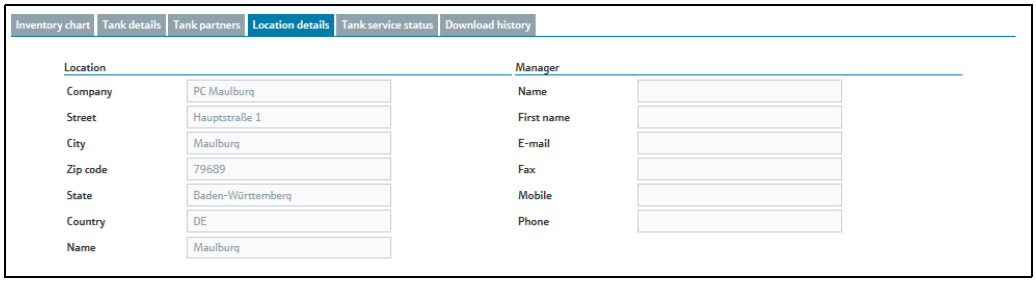


S33-2_BA00050SEN_0211_30

The tank partner, buyer and supplier are assigned to the tank via the **Configuration** menu in the **Tank** menu item, **Tank details** tab (→ 95).

6.1.6 Location details

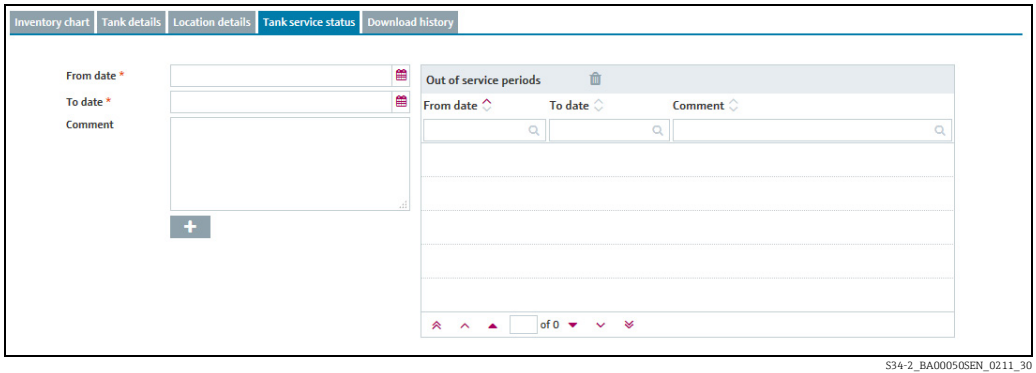
Information on the tank location is displayed in this tab.



S34-1_BA00050SEN_0211_30

6.1.7 Tank service status

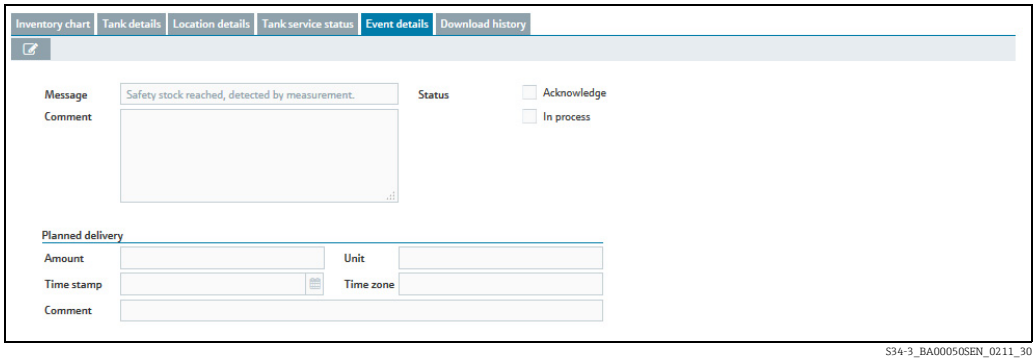
Information on the tank service is displayed in this tab.



S34-2_BA00050SEN_0211_30

6.1.8 Event details

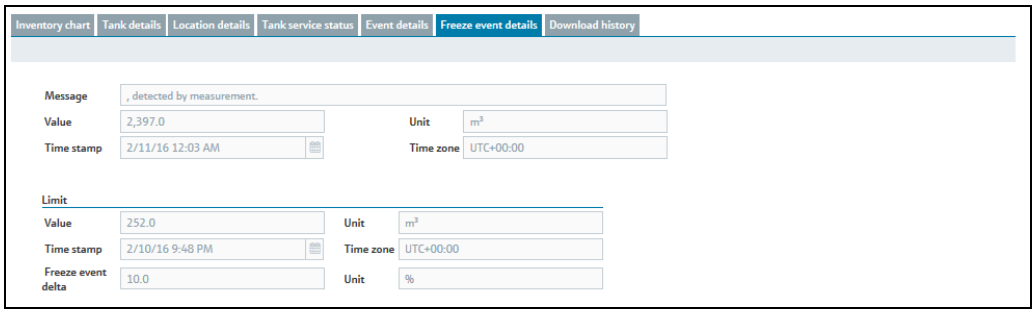
The event details for the currently applicable event, e.g. "Safety stock reached", for the selected tank are shown in this tab. If no event is currently applicable for the selected tank, this tab is not visible. For a description of the **Event details** tab (→ 61).



S34-3_BA00050SEN_0211_30

6.1.9 Freeze event details

The event details for the currently applicable freeze event for the selected tank, are shown in this tab. If no freeze event is currently applicable for the selected tank, this tab is not visible.
For a description of the **Freeze event details** tab → 61.



Arbeitsplatz_Tank_Freeze-Ereignis_BA00050SEN_30

6.2 Editing tank service status

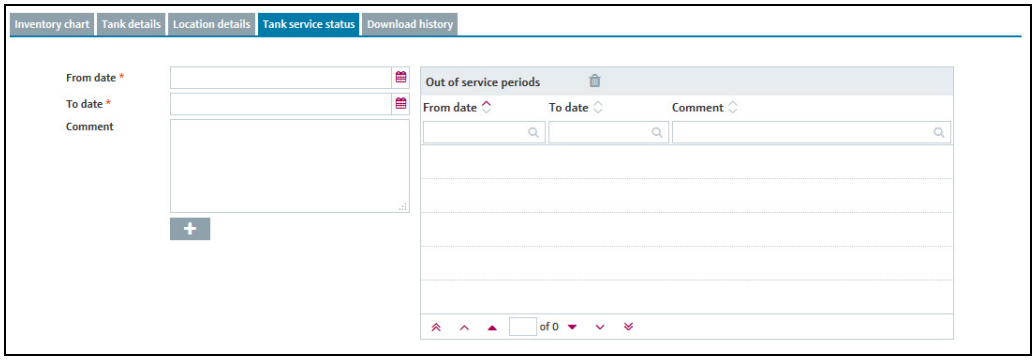
Only users with the **Operator** user role can specify or change the service status of a tank. All other user roles can only read this tab.

Users can enter several Out of service periods, but only one per day. The Out of service periods are not allowed to overlap. A new Out of service period can only begin on a date, which has not been entered as an End date of a preceding Out of service period.

Past, present or future Out of service periods are shown in the **Inventory chart** tab in the **Tank** menu item. During Out of service periods, the tank level is shown as a horizontal line. The background of the inventory chart is shaded where Out of service periods are displayed → 45.

If a tank is out of order for a service, this is shown in the tank overview table by the ✖ symbol for individual tanks and the ✖✖ symbol for aggregated tanks. Measured values are no longer updated. Notifications of tank events are no longer produced.

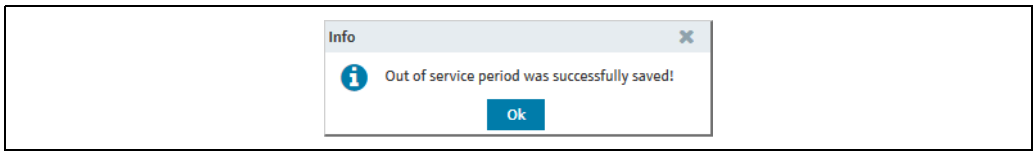
1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item. A list of the tanks assigned to you is displayed.
3. In the overview table, select the tank whose service status you want to edit.
4. In the lower section of the application window, select the **Tank service status** tab.



S34-2_BA00050SEN_0211_30

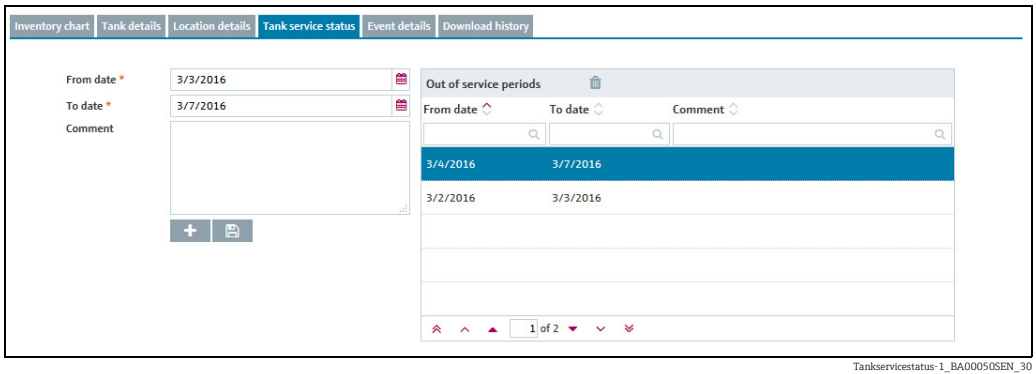
5. Select a time in the future when you want to put the tank out of service. You can either enter the date directly in the **Start date** and **End date** fields or use the button. When entering the date directly use the dd.mm.yy format.
6. If necessary, enter a comment in the **Comment** field.

7. Click + to save the Out of service period in the list.
8. SupplyCare reports that the Out of service period has been saved successfully. Click the **OK** button to confirm.



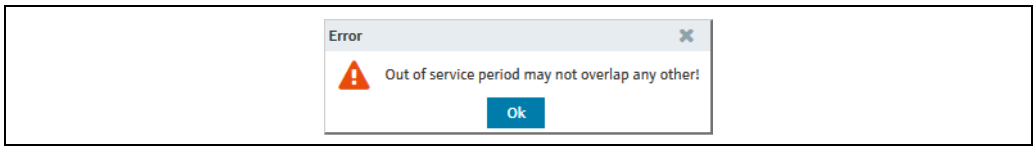
Tankservicestatus-3_BA00050SEN_30

9. Editing the Out of service period: Select the relevant Out of order period from the list and type in the desired dates in the fields **From date** and/or **To date**. Pay attention to not overlap with Out of order periods already typed in.



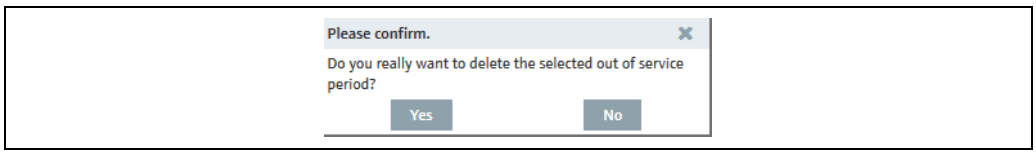
Tankservicestatus-1_BA00050SEN_30

10. Click 💾 to save your changes. If Out of order periods overlap, SupplyCare displays an error message. In this case, SupplyCare does not save your changes.



Tankservicestatus-2_BA00050SEN_30

11. Click the **OK** button to confirm the error message. Edit the dates in the fields **From date** and/or **To date** again, as described above.
12. Deleting Out of order periods: Select the relevant Out of order period from the list, click the 🗑 button and, in the following safety request, confirm the delete command with **Yes** or abort by clicking **No**.



Tankservicestatus-5_BA00050SEN_30

6.2.1 Showing Out of order periods in the inventory chart

Past, present or future Out of service periods are shown in the **Inventory chart** tab in the **Tank** menu item. During Out of service periods, the tank level is shown as a horizontal line. The background of the inventory chart is shaded where Out of service periods are displayed → 45.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the table, click the tank whose secondary data you want to display in the **Inventory chart** tab.
4. Click the **Inventory chart** tab. The following detail view is displayed in the **Inventory chart** tab:

Tankservicestatus-4_BA00050SEN_30

The inventory chart displays 2 out of order periods in the future.

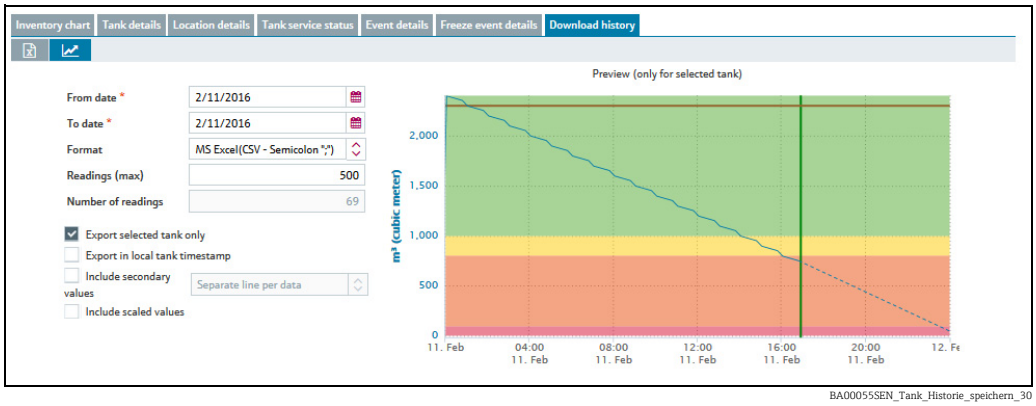
Click the button **Print chart** to print the inventory chart.

6.3 Download history

The following options are available via the **Download history** tab:
- Save measured value history for all tanks shown in the overview or for one tank selected in the overview in CSV format.
- Display measured value history for one tank selected in the overview in a diagram.

The CSV file contains the following data: Tank name, Time stamp, Value, Unit, Optimum, Plan point, Ship point, Safety stock and Measure point (→ 46). If a value is manually configured it is marked with the suffix **MAN**.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item. A list of the tanks assigned to you is displayed.
3. In the overview table, select the tank whose history you want to view as a chart or save as a CSV file.
4. In the lower section of the application window, select the **Download history** tab. On the right hand side a preview for the selected tank is displayed, if you click the button.



BA00055SEN_Tank_Historie_speichern_30

5. Select a time in the past for which you want to download data. You can either enter the date directly in the **Start date** and **End date** fields or use the button. When entering the date directly use the dd.mm.yy format. The "UTC+00:00" time zone is used for the start and end date.
6. If you want to download the measured value history as a file, MS Excel (CSV - Semicolon or CSV - Comma) is available as the **Format**.
7. Activate the check box **Export selected tank only**, if you only want to download the data from the selected tank. Deactivate the check box if you want to download the data from all of the tanks shown in the table.
8. Activate the check box **Include secondary values**, if you also want to download the secondary values. This information is only relevant when downloading the data as an Excel file. From the drop down list select between the options **Seperate line per data** or **Single line full Data**
9. Activate the check box **Include scaled values**, if you also want to download the scaled values.
10. Activate the check box **Export in Local Tank Timestamp**, if you want to display the export timestamp in the local time of the tank location. If the local time of the tank location is not available it will be exported in UTC.
11. Via the field **Readings (max.)**, specify the maximum number of primary values per tank.
12. Click the buttons to display the measured value history in a diagram. If the selected tank is out of service, only the historic pattern of the inventory is displayed. The expected pattern for the inventory is not displayed.
13. Click the button to download the measured values as an Excel spreadsheet

The CSV file has the following structure:

Tank name	Time stamp	Value	Unit	Optimum	Plan point	Ship point	Safety stock	R (Recycling tank)	Recycling tank Plan point	Recycling tank Safety stock	Measure point
TANK_01	1/13/10 6:40 AM	1.76	l	0	0	0	0	1	7.0	3.0	1
TANK_01	1/13/10 6:49 AM	5	A	0	0	0	0	1	7.0	3.0	2
TANK_01	1/13/10 6:58 AM	1	V	0	0	0	0	1	7.0	3.0	3

Tank name	Time stamp	Value	Unit	Optimum	Plan point	Ship point	Safety stock	R (Recycling tank)	Recycling tank Plan point	Recycling tank Safety stock	Measure point
TANK_01	1/13/10 7:07 AM	28	°C	0	0	0	0	1	7.0	3.0	4
TANK_01	1/14/10 6:43 AM	1.757	l	0	0	0	0	1	7.0	3.0	1
TANK_01	1/14/10 6:52 AM	6	A	0	0	0	0	1	7.0	3.0	2
TANK_01	1/14/10 7:01 AM	2	V	0	0	0	0	1	7.0	3.0	3
TANK_01	1/14/10 7:10 AM	29	°C	0	0	0	0	1	7.0	3.0	4
TANK_01	1/15/10 6:46 AM	1.754	l	0	0	0	0	1	7.0	3.0	1
TANK_01	1/15/10 6:55 AM	7	A	0	0	0	0	1	7.0	3.0	2
TANK_01	1/15/10 7:04 AM	3	V	0	0	0	0	1	7.0	3.0	3
TANK_01	1/15/10 7:13 AM	30	°C	0	0	0	0	1	7.0	3.0	4
TANK_02	1/13/10 6:40 AM	2.76	l	10.0	8.0	7.0	3.0	0	0	0	1
TANK_02	1/13/10 6:49 AM	2.5	A	10.0	8.0	7.0	3.0	0	0	0	2
TANK_02	1/13/10 6:58 AM	31	V	10.0	8.0	7.0	3.0	0	0	0	3
TANK_02	1/13/10 7:07AM	2.8	°C	10.0	8.0	7.0	3.0	0	0	0	4
TANK_02	1/14/10 6:43 AM	2.757	l	10.0	8.0	7.0	3.0	0	0	0	1
TANK_02	1/14/10 6:52 AM	2.6	A	10.0	7.0	7.0	3.0	0	0	0	2
TANK_02	1/14/10 7:01 AM	32	V	10.0	7.0	7.0	3.0	0	0	0	3
TANK_02	1/14/10 7:10 AM	2.9	°C	10.0	7.0	7.0	3.0	0	0	0	4
TANK_02	1/15/10 6:46 AM	2.754	l	10.0	8.0	7.0	3.0	0	0	0	1
TANK_02	1/15/10 6:55 AM	2.7	A	10.0	8.0	7.0	3.0	0	0	0	2
TANK_02	1/15/10 7:04 AM	33	V	10.0	8.0	7.0	3.0	0	0	0	3
TANK_02	1/15/10 7:13 AM	3.0	°C	10.0	8.0	7.0	3.0	0	0	0	4

The language of the header of the CSV file depends on the language setting in the browser.

The table is sorted first by tank name, then by time stamp. The "UTC+00:00" time zone is always used for the time stamp.

The column **R** provides information about the planning type. "0" stands for standard tank. "1" stands for recycling tank.

The date and time are displayed as follows in the standard factory setting: yyyy-MM-dd, HH:mm:ss

Manual values are marked with the suffix **MAN**.

6.4 Viewing secondaries

A range of measuring devices allows additional measured variables (secondary) to be recorded in addition to the primary variable.

If secondary values have also been assigned to a tank, you can view these values in the "Workplace – Tank" view in the overview table, in the **Inventory chart** tab and in the

Tank details tab. A maximum of one primary value and eight secondary values can be assigned to a tank.

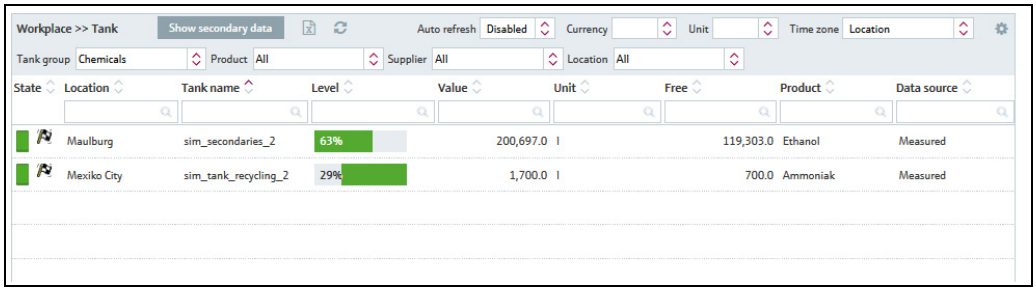
The unit for the primary value is specified via the **Unit** field in the **Tank details** tab. In the case of mass units and volume units, priority is given to your settings for the **Mass unit** or **Volume unit** fields in the **User preferences** menu item.

The units for the secondary values are specified in the **Measure point details** tab in the **Engineering unit (for application)** field.

6.4.1 Viewing secondaries in the overview table in the "Tank" menu item

The secondary values are hidden or displayed as standard depending on the system settings for your contract. The secondary values are hidden in the default standard setting.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item.
3. The following detail view is displayed in the Application window:



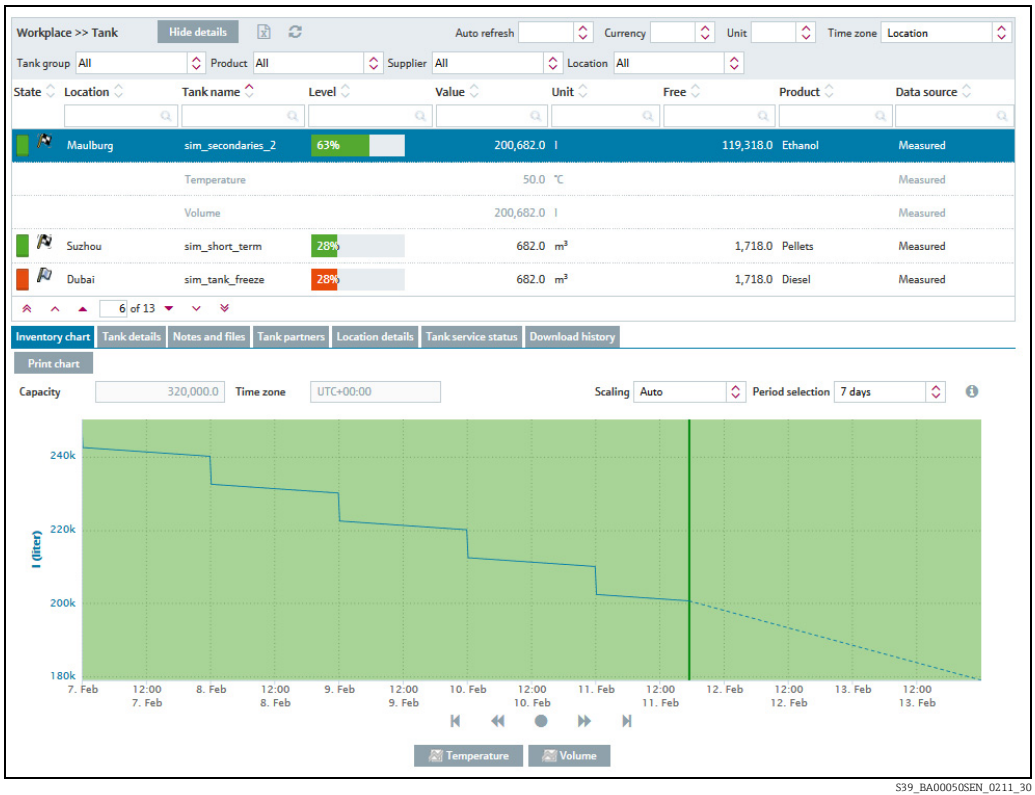
S38_BA00050SEN_0211_30

4. Click the **Show secondary** data button.
5. All the associated secondary data are shown underneath the specific tanks. Of the secondary data, the following data are shown if available: Tank name, Value, Unit, Hysteresis, Limit 1 and Limit 2. The tank name corresponds to the **Name** field in the **Secondaries** tab in the **Tank** menu item.
6. Click the **Hide secondary data** button to hide the secondary data.

6.4.2 Viewing secondaries in the inventory chart

Users with the **Master Data** user role can specify a name via the **Secondaries** tab in the **Tank** menu item. This name is used in the overview table for the button and the graph. If no name has been entered, the secondary values are given the default names Secondary[1], Secondary[2], Secondary[3], Secondary[4], Secondary[5], Secondary[6], Secondary[7] and Secondary[8].

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the table, click the tank whose secondary data you want to display in the **Inventory chart** tab.
4. The following detail view is displayed in the Application window:



S39_BA00050SEN_0211_30

The inventory chart displays the graph for the primary value.

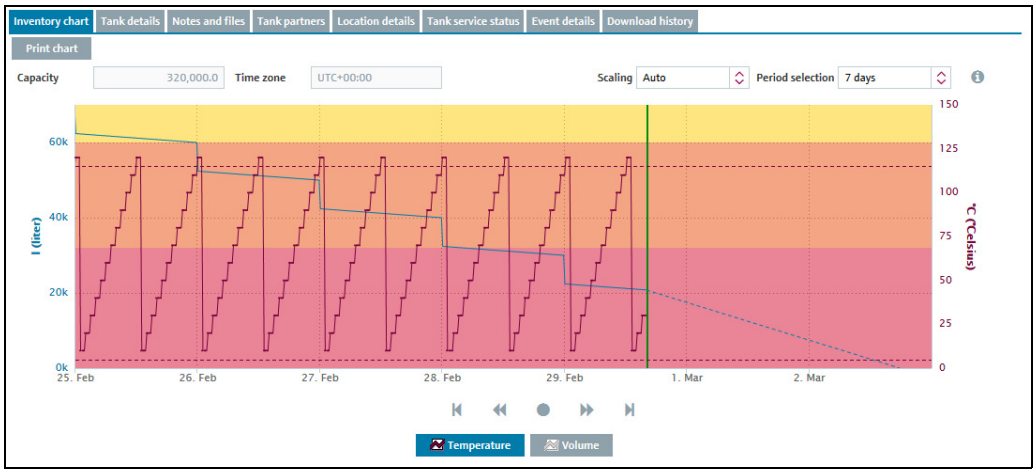
5. Click the **[Secondary value name]** button beneath the chart.
   Depending on the number of secondary values that have been assigned to the tank, the appropriate number of **[Secondary value name [1 to 8]]** buttons are displayed beneath the inventory chart.
6. Click the **[Secondary value name]** button to hide the specific graph.

Click the button **Print chart** to print the inventory chart.

If you move the cursor over the graph, the specific value and time stamp are displayed for the individual point in the graph.

6.4.3 Limits or span limits of secondary values

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the table, click the tank for which you want to display secondary data.



Bestandsdiagramm_Sekundaerwert_BA00050SEN_30

In addition to the primary value graph, the inventory chart shows the secondary value graph and the span limits.

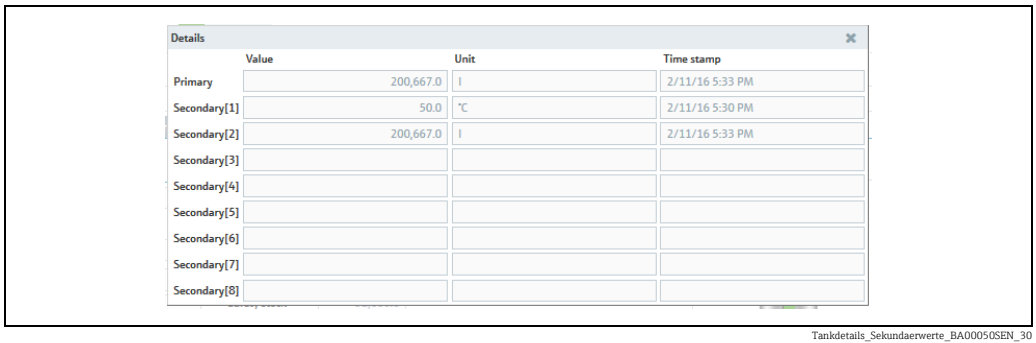
4. Click the button **[Secondary value name]** below the inventory chart. Below the inventory chart, a number of buttons **[Secondary value name [1 to 8]]** is present, which corresponds to the number of secondary values assigned.
5. Click the button [Secondary value name] to hide the respective graph.

Click the button **Print chart** to print the inventory chart.

If you move the cursor over the graph, the specific value and time stamp are displayed for the individual point in the graph.

6.4.4 Viewing secondary data via the "Tank details" tab

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the table, click the tank for which you want to display secondary data.
4. Select the **Tank details** tab.
5. Click the button beside the Value field.
6. The following screen appears:



Tankdetails_Sekundaerwerte_BA00050SEN_30

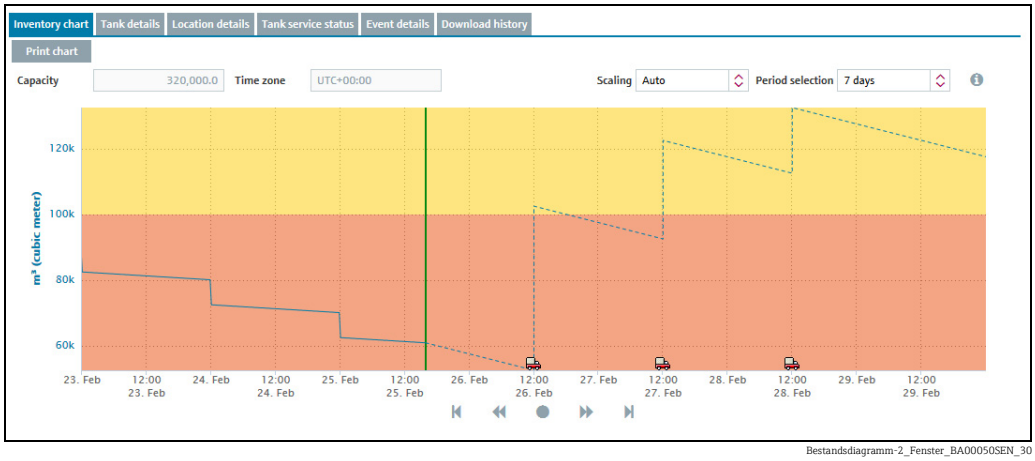
The magnifying glass cannot be selected in the following cases:
- No secondary values are assigned to the selected tank.
- The tank supplies a bad measured value.
- The tank is out of service.
- The tank is assigned to an aggregated tank.

6.5 Viewing historical values and forecast values in the inventory chart

The inventory chart displays the values measured up to the present date with a continuous line and the values calculated from the present date with a broken line. No forecast values are available for secondary values.

In the case of standard tanks, the forecast values are calculated from the "Average daily outflow" value. In the case of recycling tanks, the forecast values are calculated from the "Average daily inflow" value.

Also, several planned deliveries (recycling tanks: disposals) located in the future are integrated into the calculated value (forecast) and displayed.

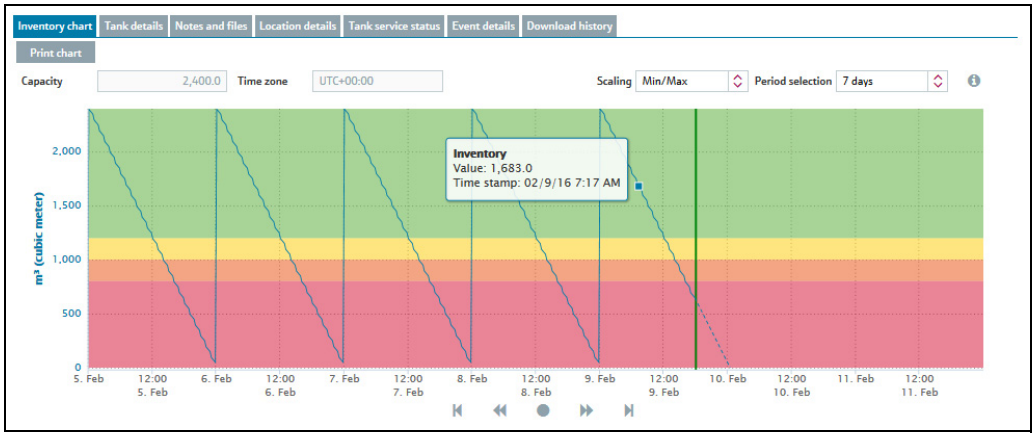


Bestandsdiagramm-2_Fenster_BA00050SEN_30

The inventory chart offers the following additional functionalities:

Mouseover function

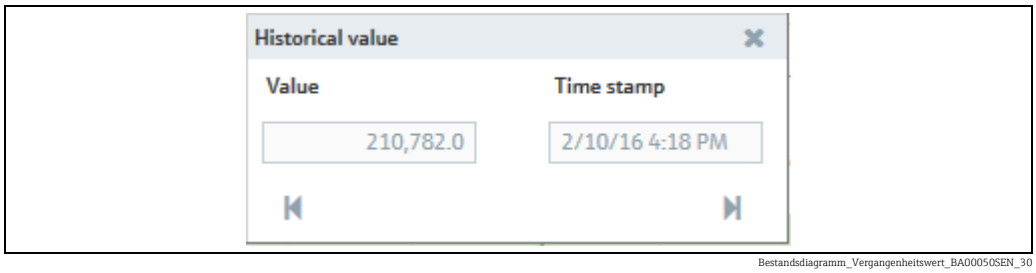
Additional information is displayed if you move the cursor over a graph in the inventory chart. If the point in the graph is in the past, the "Inventory" window appears with information on the measured value and the time stamp. If the point in the graph is in the future, the "Forecast" window appears with information on the calculated value and the time stamp.



Bestandsdiagramm_Fenster_BA00050SEN_30

Clicking on a point in the graph
A dialog box appears if you click on a point in the graph with the cursor. The **Historical value** dialog box appears for the values measured in the past. The **Forecast value** dialog box

appears for the calculated values in the future. The **Current value** dialog box appears for the last measured value received.



Bestandsdiagramm_Vergangenheitswert_BA00050SEN_30

Navigating via the dialog box
The **Value** field in the dialog box displays the measured value for the past and the calculated value for the future. The **Time stamp** field displays the associated date and time. Click the button to view the older measure points. Click the button to view the more recent measure points. If you want to view points that are further back in time, change the number of displayed days in the **Period selection** field.

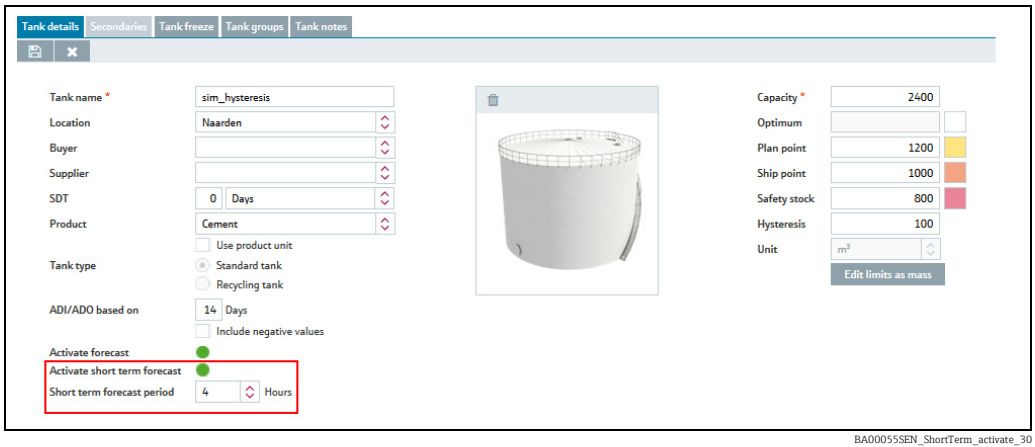
6.5.1 Short term forecasting

The short term forecasting is a second forecast line in the inventory chart, which is calculated based on the data of the past hours. The period of time can be defined individually between 1 to 12 hours (settings see parameters table in the service manual).
The short term forecast line displays the values measured between the last hours (1 to 12, according to the individual settings) up to the present time with a red dotted line.
The short term forecast line is also available for aggregated tanks.

The visualization of the short term forecast is disabled by default. For details see parameters table in the service manual. To display the short term forecast, you need to additionally **activate** the **short term forecast** in the **Tank details** tab.

Activating short term forecast for a tank

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the table, click the tank for which you want to activate short term forecasting.
4. Select the **Tank details** tab.
5. Click the button.
6. The tab is displayed in the edit mode.
7. Click the red dot beside the indication **Activate short term forecast**. The dot turns green , the short term forecast is now activated.



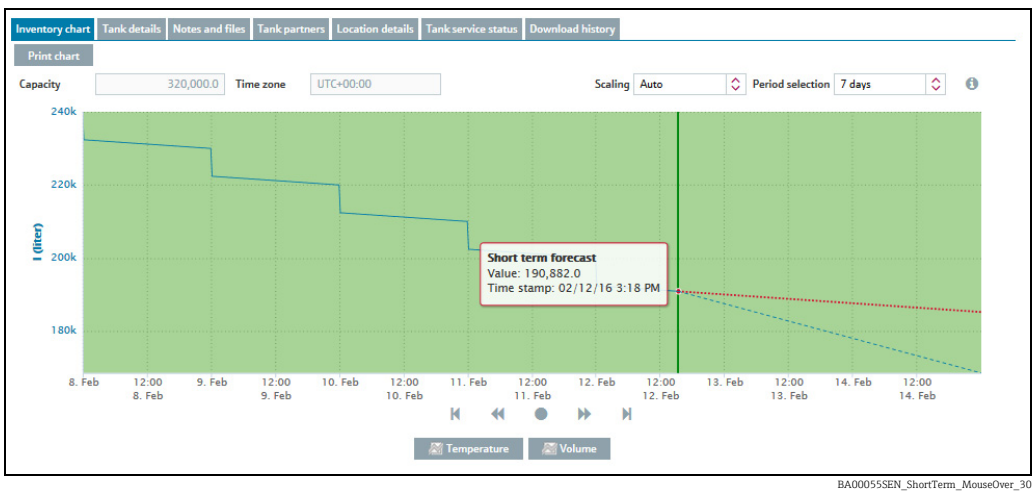
BA00055SEN_ShortTerm_activate_30

8. Enter the number of hours into the field **Short term forecast period**, which shall be used to calculate the short term forecast from.
9. Click  to save your changes. Click  to abort the process.

BA00055SEN_ShortTerm_DE_30

The short term forecast line offers the following additional functionality:

Mouseover function
Additional information is displayed if you move the cursor over a graph in the inventory chart.



BA00055SEN_ShortTerm_MouseOver_30

6.6 Zoom functions in the inventory chart

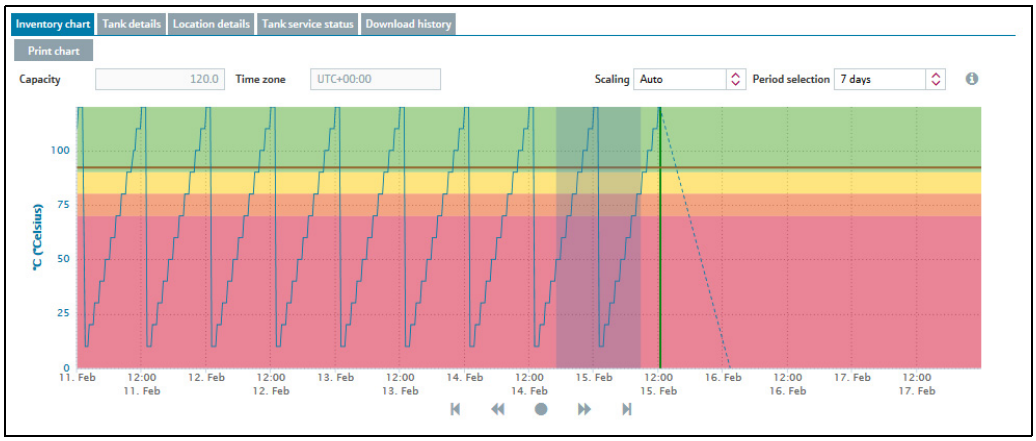
You can use the zoom function to enlarge a maximum section of 12 hours in the inventory chart to get a closer look at the data.

1. Set the start of the zoom-in zone.

   Proceed as follows:

– Using the left mouse button, click the desired starting point.
– While holding the left mouse button, drag the mouse to the left or right.
– The selected zone is marked with a dark background. You can move the zone to the left or right by dragging the mouse.

2. Release the left mouse button to select the end of the zoom-in zone.
3. The inventory chart with the selected zone is loaded.
4. Click **Reset zoom** to zoom out again.



Bestandsdiagramm_Zoom_BA00050SEN_30

6.7 Planning delivery and disposal via the inventory chart

Only users with the **Scheduler** user role can plan deliveries for standard tanks and disposals for recycling tanks.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the overview table, select the tank for which you want to plan a delivery or disposal.
4. In the lower section of the application window, select the **Inventory chart** tab.
5. Click the graph in the inventory chart for the date you are planning a delivery or disposal. The planned date must be in the future.
6. The **Forecast value** dialog box is displayed.
7. Click the **Plan delivery** (standard tanks) or **Plan disposal** (recycling tanks) button.
8. The **Plan delivery** dialog box appears for standard tanks. The **Plan disposal** dialog box appears for recycling tanks.
9. Click the button.
10. The dialog box appears in the editing mode.
11. You can view and enter the following data here:

- **Value**: Displays the project level
- **Delivery date and time**:The day selected in the calendar is used for the date. The time is predefined.
- **Amount**: Enter the planned amount.
- **Range**: This field shows the number of days before the safety stock is reached for the amount entered. In the case of standard tanks, the number of days is calculated from the "Average daily outflow" value. In the case of recycling tanks, the number of days is calculated from the "Average daily inflow" value.
- **Refresh range**: Via the button, the **Range** field is updated for the amount entered.
- **Comment**: Enter a comment or note.

12. Click to save your changes. Click to abort the process.
13. A delivery van icon indicates the delivery and disposal in the inventory chart. If you move the cursor over the delivery van field, information on the planned delivery or disposal is displayed along with the delivery date and time.

7 Viewing personalized tank view - "My tank view" workplace

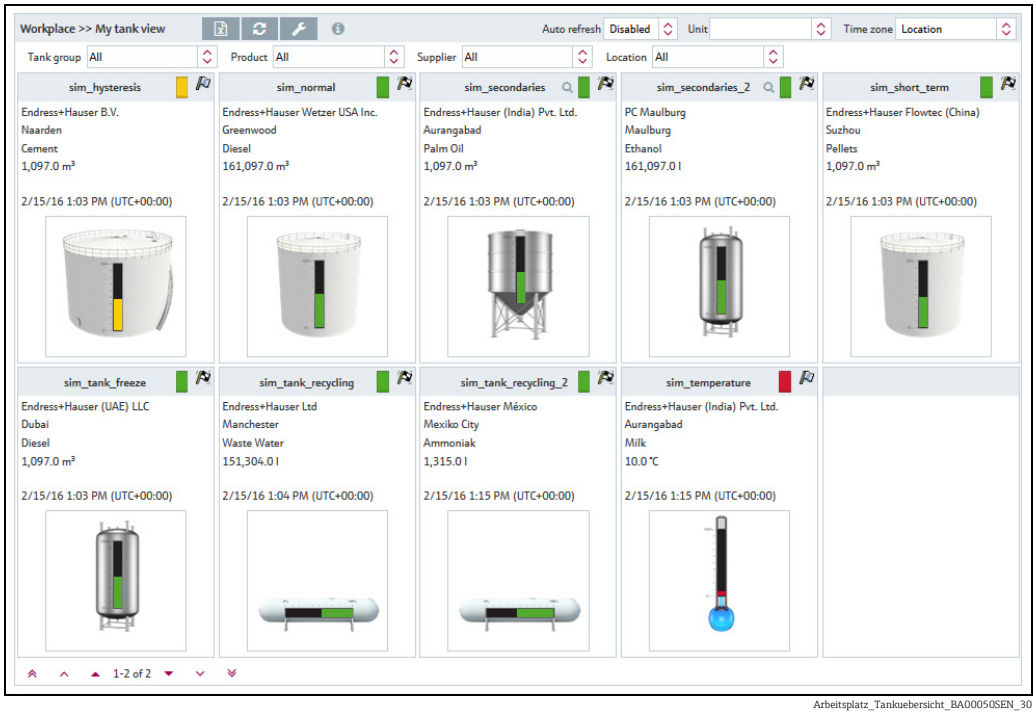
The personalized tank view shows you the tanks that you selected in your user profile in the **My tank view** tab (→ 158).

The **My tank view** menu item is available to people with **Read only**, **Scheduler** or **Operator** configured as their user role.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **My tank view** menu item.
3. You are shown a list of all the tanks which you selected in the user profile.

Manual values are displayed in blue color followed by the text **MAN**. The column **Data source** provides information on where the data comes from: measured or manually entered.

You can filter the tanks via the picklists **Tank group**, **Product**, **Supplier** and **Location**. Whenever a selection is done, only the tanks within that group are displayed on the screen.



Arbeitsplatz_Tankuebersicht_BA00050SEN_30

4. Where available, the following primary data are displayed for every tank: Tank name, Company name, Location, Product, Value with unit, Time stamp with time zone.

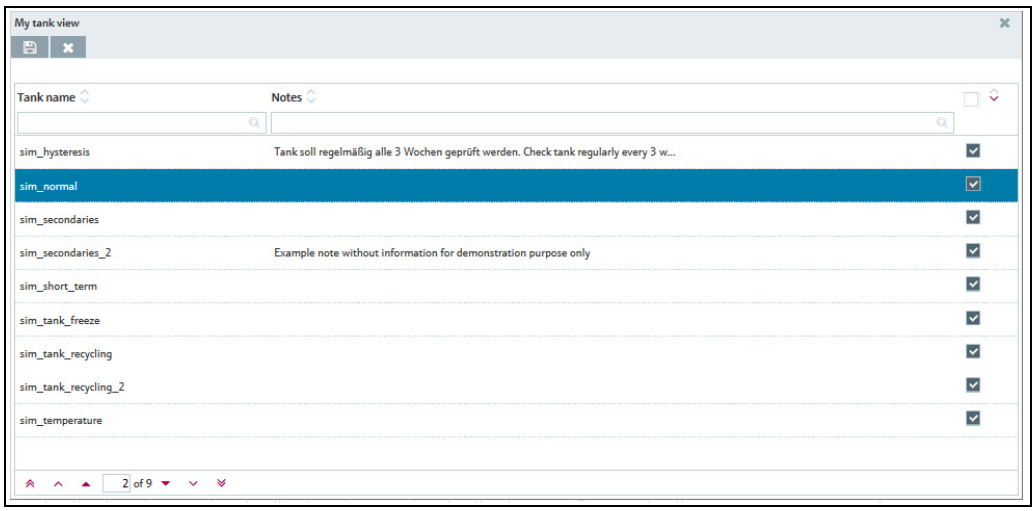
The last primary value is displayed. For aggregated tanks, the sum of all the last measured values for the associated tanks is displayed.

Click the button to export the content displayed to an Excel file.

To update the view and call up new measured data, you can either click the button. In addition it is possible to automatically refresh the view. Therefore, select your favored time period for reloading from the picklist "**Auto refresh**".

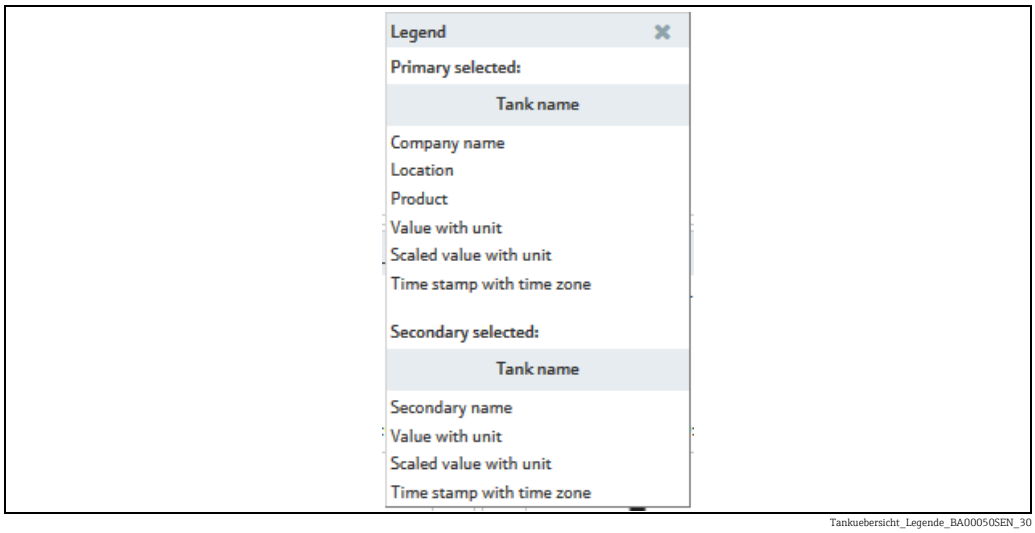
The Auto refresh function only works if this feature is predefined in your system properties (see respective chapter in the Service Manual).

Click the button to configure your Tank view. The **My tank view** configuration window is displayed.



Configuration_My tank view_BA0050SEN_30

Click the button to display the legend. You can move the legend to another location by pointing the cursor at the grey title bar and pressing and holding the left mouse button.



Tankuebersicht_Legende_BA0050SEN_30

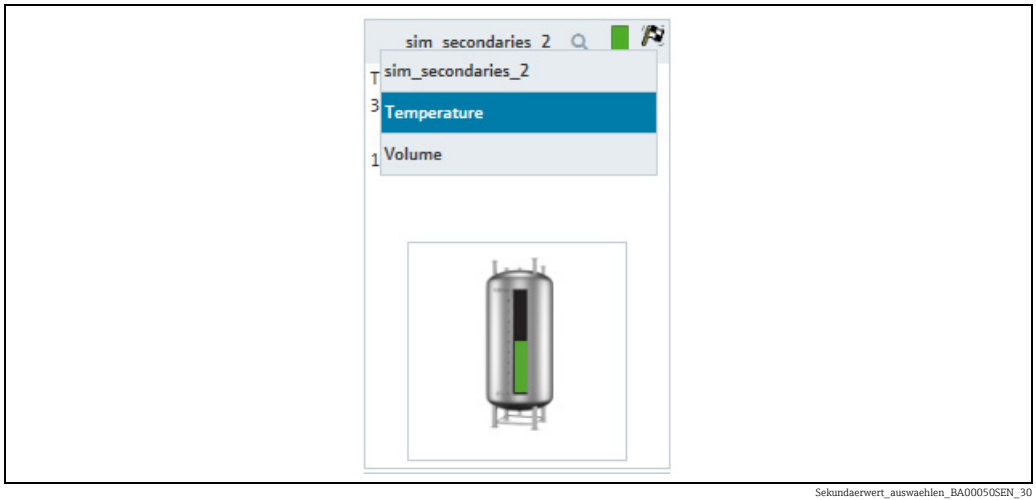
5. Click the picture of the tank if you would like to see more tank details (→ 39).

Bestandsdiagramm_Tankuebersicht_BA00050SEN_30

7.1 Viewing secondaries

The button is also displayed if secondary data are available for the tank.

1. Click the button to display the secondary data.
2. A submenu opens. The first menu item displays the tank name of the primary value. This can be followed by up to eight secondary names.



Sekundaerwert_auswaehlen_BA00050SEN_30

3. Select the appropriate secondary name.
4. The following secondary data are displayed: Tank name, Secondary name, Value with unit, Time stamp with time zone.
   Click the button again to return to the primary data. Select the tank name of the primary value in the submenu.

8 Editing events - "Event" workplace

8.1 Event management - Status and weighting of events

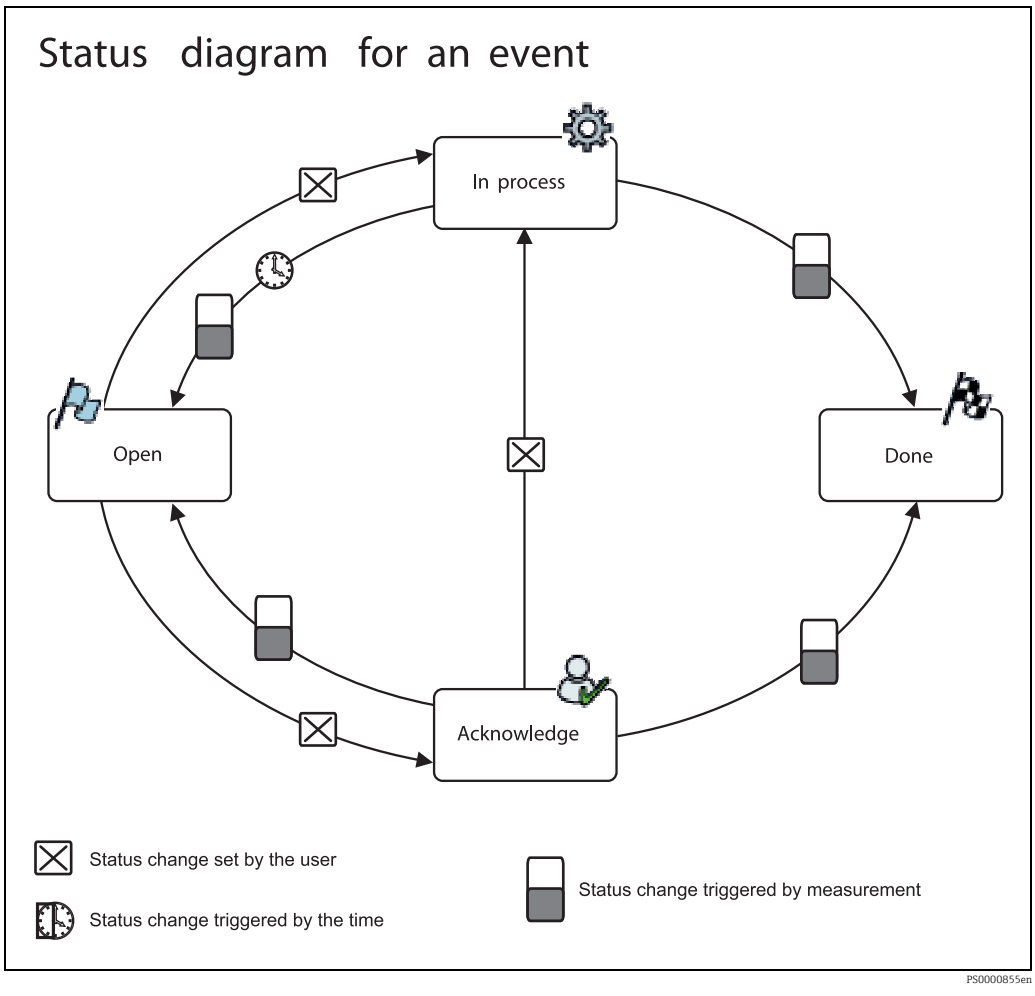
An event is triggered if a limit value is undershot (Plan point, Ship point, Safety stock). The status of the event is then set to **Open**. The weighting (severity) is derived from the limit value, i.e. reaching the plan point is categorized as not critical (low) while reaching the safety stock level is regarded as very critical (high).

Once an event has been generated, the user can change the status to **Acknowledged** or **In process**. To making it easier to track events later, the change is stored with a time stamp and user name.

If a critical limit is reached, determined by another measurement, the status of the event is set to **Open**. If an inventory that is above the plan point is detected for standard tanks, and if an inventory that is below the plan point is detected for recycling tanks, the event assumes the status **Done** and no other activities are required.

A point must be noted with the **In process** status. If the tank is not refilled by the set resubmission date, the event status returns to **Open**.

The following diagram shows the status for an event in SupplyCare Hosting:



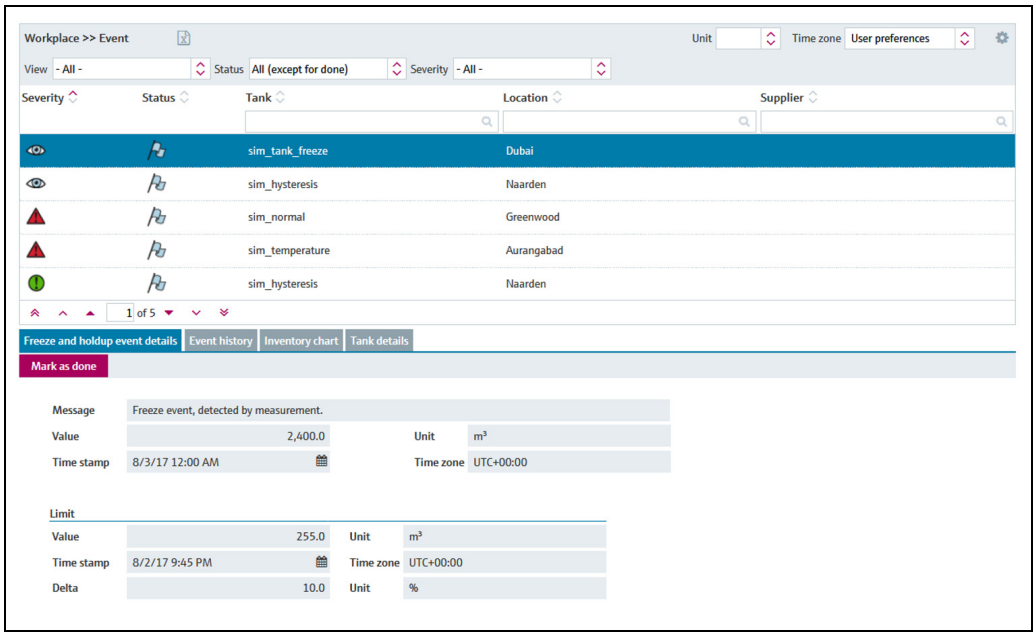
8.2 Viewing event messages

The **Event** menu item is available to people with **Read only**, **Scheduler** or **Operator** configured as their user role.

The time zone configured in the **User preferences** menu item is used for the **Event details/Freeze event details** and **Event history** tabs (→ 160). "UTC+00:00" is the default value. The time zone configured for the location is used for the **Inventory chart** and **Tank details** tabs (→ 128). "UTC+00:00" is the default value.

The **Event** menu item provides effective support in a replenishment process which is controlled by means of order limits. For standard tanks, the events are triggered if limit values in the individual tanks are undershot; for recycling tanks, they are triggered if the limit values in the individual tanks are exceeded. A **Freeze Event** is triggered if the actual measurement exceeds the configured freeze event delta. In addition to screen display, people can also be notified of the events by e-mail.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Event** menu item.
3. The following is displayed in the portal window with an overview of all the events, sorted in order of priority:

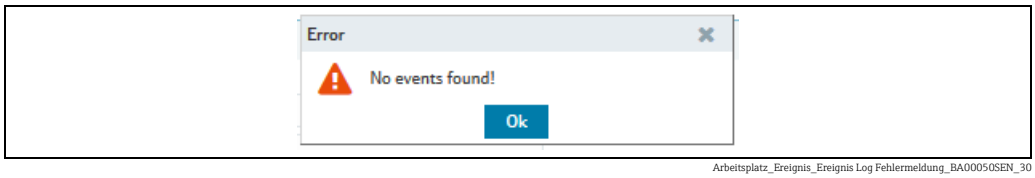


S48_BA00050SEN_0211_30

4. To filter the displayed events, select the filter criteria:

- **View**: Select between **All**, **Only limit events** or **Only freeze events**.
- **Status**: Select between **All (except for done)**, **Only open**, **Only acknowledged**, **Only in process** or **Only done**.
  The filters **Only acknowledged** and **Only in process** exclusively have an effect on limit events. Any other filter will effect both types of events.
- **Severity**: Select between **All**, **Only low**, **Only medium** or **Only high**.
  The filters **Only low** and **Only medium** and **Only high** exclusively have an effect on limit events. Any other filter will effect both types of events.

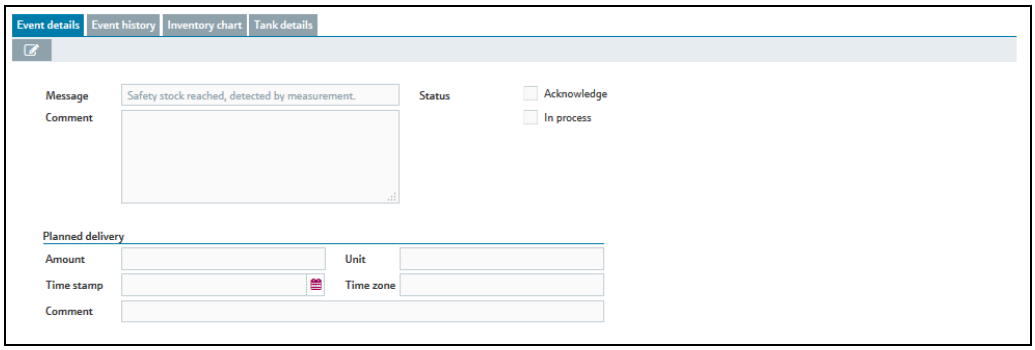
If the set filters do not overlap each other, i.e. resulting in no events, the previous filter settings are restored. The following error message is displayed:



Arbeitsplatz_Ereignis_Ereignis Log Fehlermeldung_BA00050SEN_30

5. In the overview table, click on an event which you would like to view or for which you require further information.
6. You can select the following tabs in the lower area of the application window: **Event details/Freeze event details**, **Event history**, **Inventory chart** or **Tank details**.

8.2.1 Event details

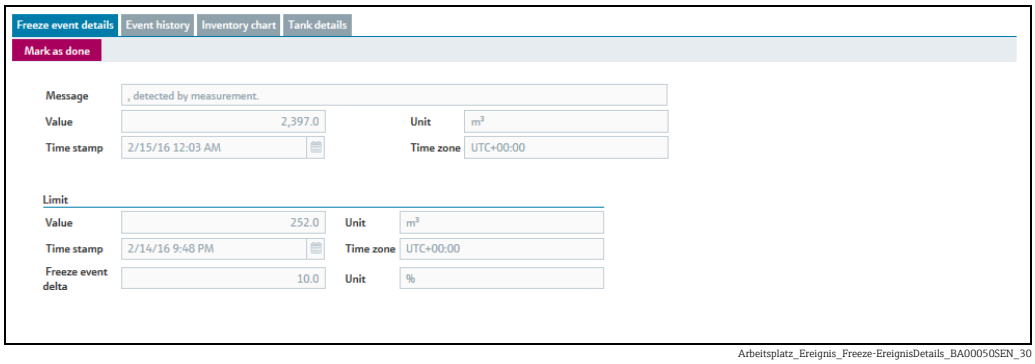


S49_BA00050SEN_0211_30

A form with the following fields is shown on this tab:
Message, Comment, Acknowledge and In process.

In addition, the display also shows the **Amount**, **Time stamp**, **Unit**, **Time zone** and **Comments** fields for standard tanks for planned deliveries, and for recycling tanks for planned disposals.

8.2.2 Freeze event details



Arbeitsplatz_Ereignis_Freeze-EreignisDetails_BA00050SEN_30

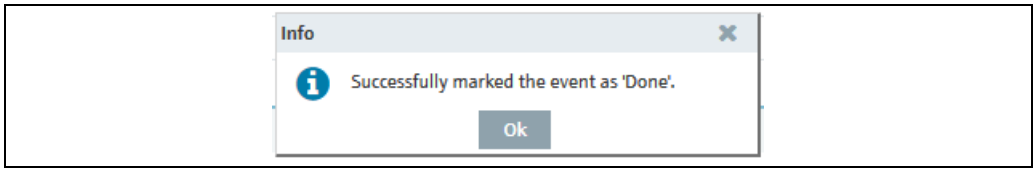
A form with the following fields is shown on this tab:
Message, **Value** of the received measurement, **Unit** of the tank, **Time stamp** of the measurement in the respective time zone, **Time zone** of the measurement.

In addition, the display shows in the lower section information on the Limit:
Value ("Frozen measurement" in respective Unit), **Unit** of the tank, **Time stamp** of the frozen measurement in the respective time zone, **Time zone** of the frozen measurement, **Freeze event delta**, **Unit** of the tank.

A form with the following fields is shown on this tab:
Message: Short description of the type of event
Value: Value of the received measurement
Unit: Unit of the tank
Time stamp: Point of time of the "frozen" measurement in the respective time zone
Time zone: Time zone of the measurement

In addition, the display shows in the lower section information on the **Limit**:
Value: "Frozen" measurement in respective Unit
Unit: Unit of the tank
Time stamp: Point of time of the "frozen" measurement in the respective time zone
Time zone: Time zone of the "frozen" measurement
Freeze event delta: Numeric value for the set event delta
Unit: Unit of the event delta

1. Click the **Mark as done** button to acknowledge the event. The following message appears:

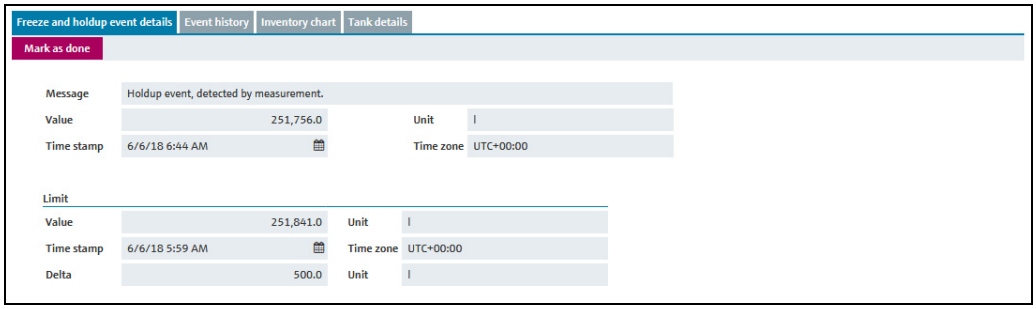


Arbeitsplatz_Ereignis_Freeze-EreignisDetails_2_BA00050SEN_30

2. Click **OK**.

A Freeze event will only be generated once during a check period. The status of the event is **Open** until it is marked as done. If a new Freeze event occurs in the next check period, the previously created event is taken over to the Event history.

8.2.3 Holdup event details



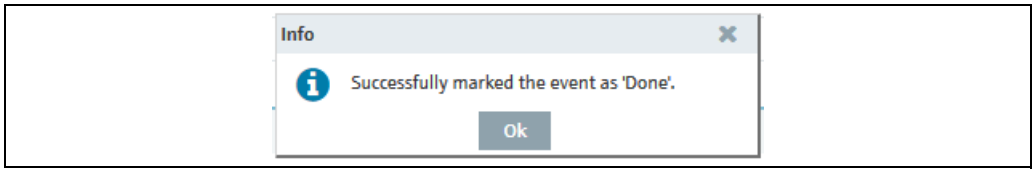
Arbeitsplatz_Ereignis_Holdup-EreignisDetails_BA00050SEN_33

A form with the following fields is shown on this tab:
Message: Short description of the type of event
Value: Value of the received measurement

Unit: Unit of the tank
Time stamp: Point of time of the "frozen" measurement in the respective time zone
Time zone: Time zone of the measurement

In addition, the display shows in the lower section information on the **Limit**:
Value: "Frozen" measurement in respective Unit
Unit: Unit of the tank
Time stamp: Point of time of the "frozen" measurement in the respective time zone
Time zone: Time zone of the "frozen" measurement
Delta: Texttexttext
Unit: Unit of the Delta

1. Click the **Mark as done** button to acknowledge the event. The following message appears:

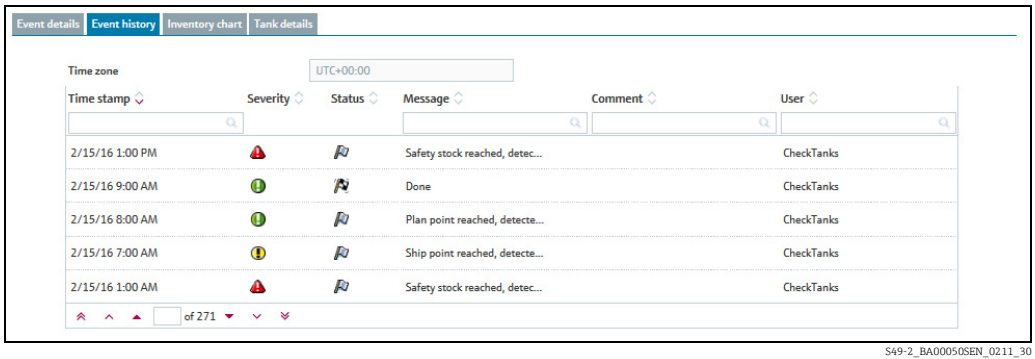


Arbeitsplatz_Ereignis_Freeze-EreignisDetails_2_BA00050SEN_30

2. Click **OK**.

A Holdup event will only be generated once during a check period. The status of the event is **Open** until it is marked as done. If a new Holdup event occurs in the next check period, the previously created event is taken over to the Event history.

8.2.4 Event history



S49-2_BA00050SEN_0211_30

This tab displays the history of an event selected in the overview table. The screen includes **Time stamp**, **Severity**, **Status**, **Message**, **Comment** and **User**.

8.2.5 Inventory chart

The inventory chart of the associated tank is shown here for the event currently selected. For a description of the **Inventory chart** tab, → 38.

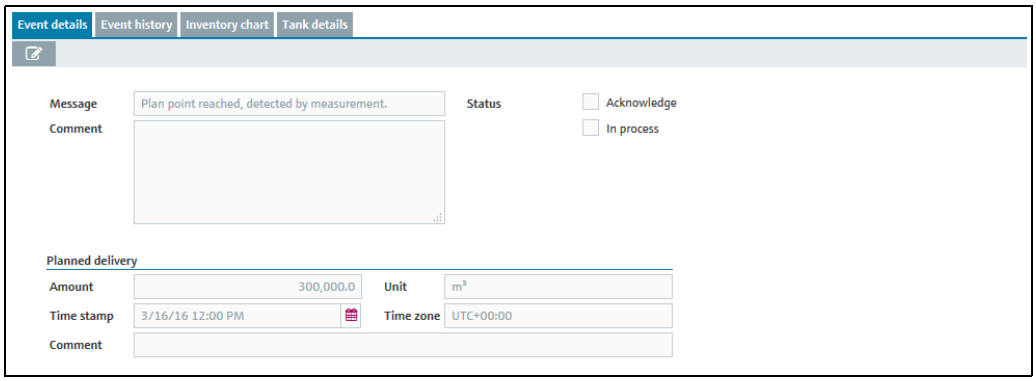
8.2.6 Tank details

The tank details of the associated tank are shown here for the event currently selected.For a description of the **Tank details** tab, → 39.

8.3 Processing messages

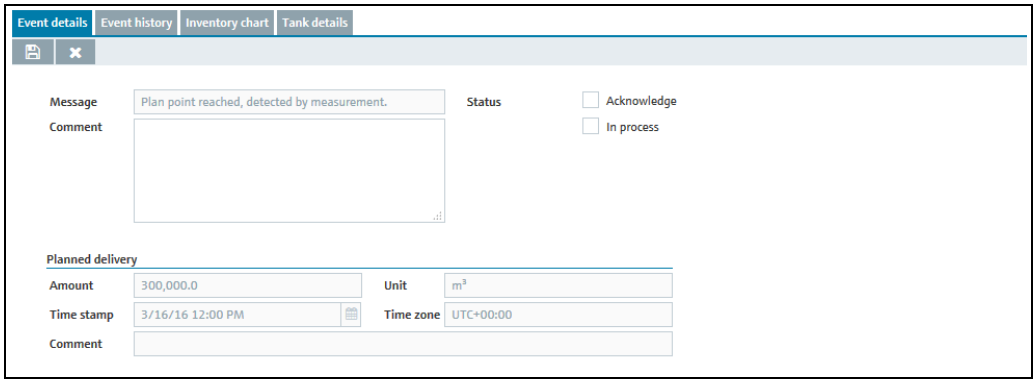
Only users with the **Scheduler** or **Operator** user role can comment on events and assign a status.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Event** menu item.
3. In the overview table, select the event that you want to process.
4. In the lower section of the application window, select the **Event details** tab.



S50_BA00050SEN_0211_30

5. Click the button.
6. The tab is displayed in the edit mode.



S50-2_BA00050SEN_0211_30

7. If you have acknowledged this event, activate the **Acknowledge** check box.
   If replenishment measures have already been initiated, activate the In process check box and change the resubmission date if necessary.
   You can enter comments on this event in the Comment section.

If the status of the event was set to **In process**, the system monitors whether the tank is replenished by the **Resubmission date**. If this is not the case, the status of the event is reset to **Open** and the appropriate notification messages are triggered. As standard, the **Resubmission date** is calculated from the standard delivery time. This can also be set individually for every event however.

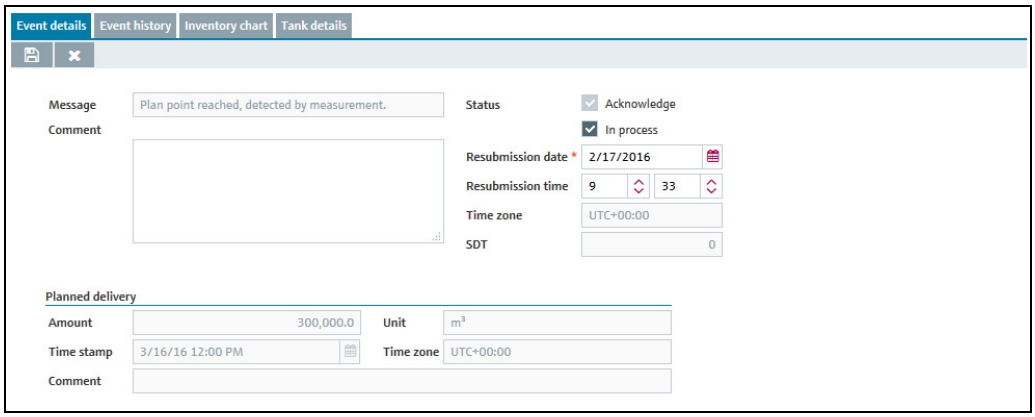
8. Click to save your changes. Click to abort the process.

8.4 Setting the resubmission date

Only people whose user role is configured as **Scheduler** or **Operator** can set a resubmission date for events.

You can only set a resubmission date for the **In process** option.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Event** menu item.
3. In the overview table, select the event that you want to process.
4. In the lower section of the application window, select the **Event details** tab.
5. Click the button.
6. Activate the **In process** check box.
7. The tab is displayed in the edit mode.



S51_BA00050SEN_0211_30

8. Either enter the date directly in the **Resubmission date** field or use the button.
9. If necessary, specify a time (in hours and minutes) for the **Resubmission time** fields.
10. Click to save your changes. Click to abort the process.

If a standard tank is refilled and the inventory is again above the plan point, the status of the event automatically changes to **Done**. If a recycling tank is drained and the inventory is once again below the plan point, the status of the event automatically changes to **Done**.

The "Standard delivery time" is displayed for standard tanks, and the "Standard disposal time" for recycling tanks.

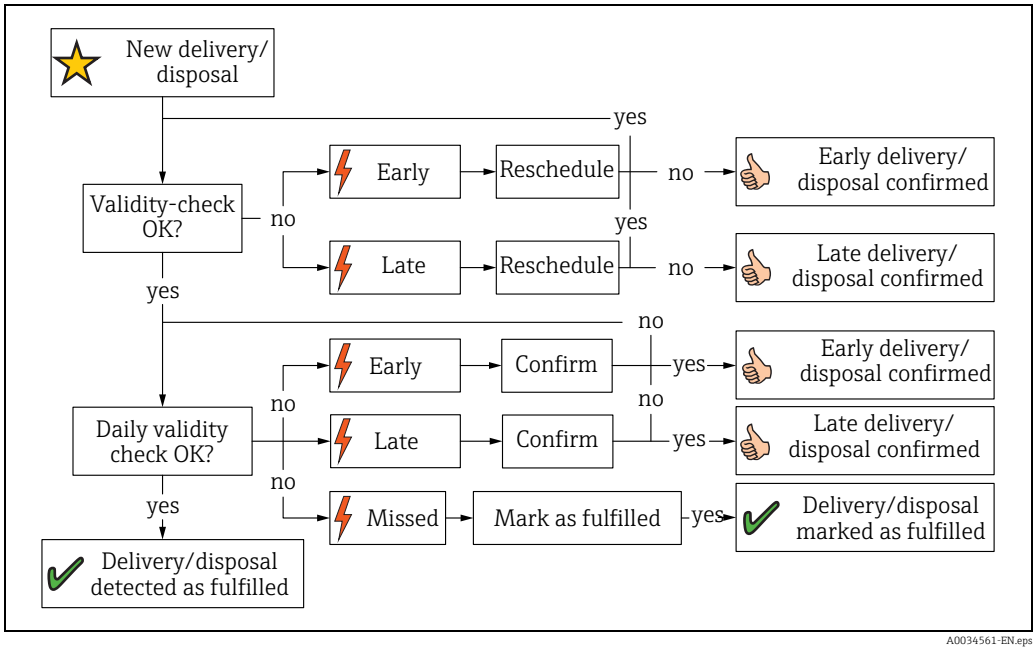
9 Planning delivery and disposal – "Scheduling" workplace

9.1 Status management – delivery and disposal

When a new delivery/disposal is created, the system checks whether the delivery/disposal is planned too early or too late. The forecast data determined by SupplyCare are used to check the information. The user can either reschedule the delivery/disposal which is too late/early or confirm this as an early or late delivery/disposal.

SupplyCare monitors the deliveries and disposals daily. If it detects an early or late delivery/disposal, this delivery/disposal can be confirmed. If it detects a missing delivery/disposal, this delivery/disposal can be mark as fulfilled. For the event "Missing delivery", the same hysteresis values apply which have been entered in the menu **Configuration**, menu item **Tank**, **Tank details** tab → 95 and → 101.

The following diagram shows the status management for disposals and deliveries in SupplyCare Hosting:

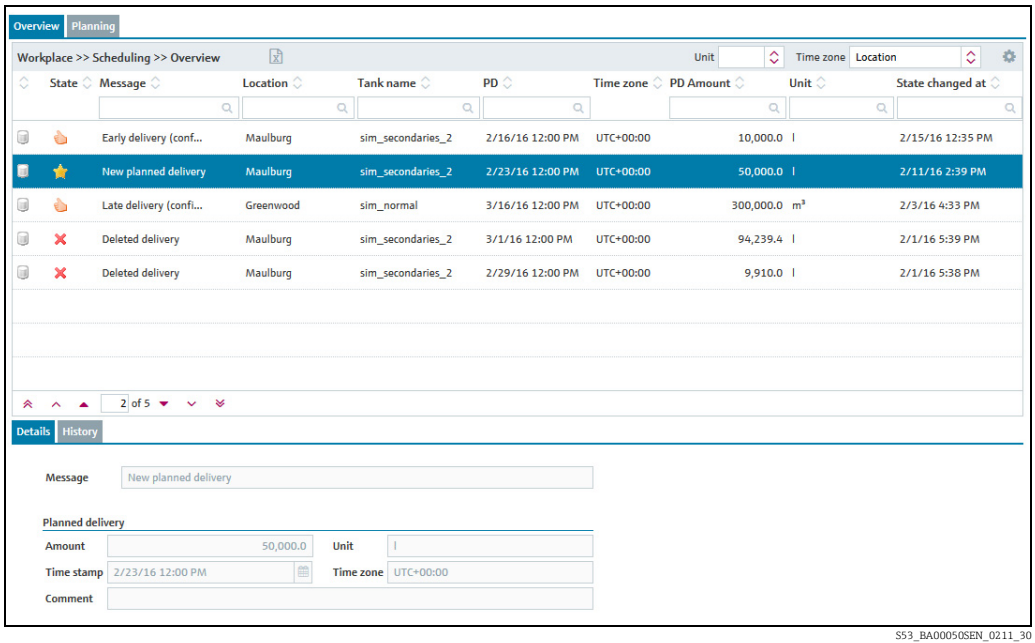


9.2 Status display and notification of planned delieveries and disposals

Only users with the **Scheduler** user role receive notification of planned deliveries and disposals and can process such notification messages.

For a user to receive notification, the PDL and/or PDE check boxes must be enabled in the Tank group tab in the Tank group menu.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Scheduling** menu item.
3. Click the **Overview** tab.
4. The following is displayed in the portal window with an overview of all the statuses for all the disposals and deliveries:



S53_BA00050SEN_0211_30

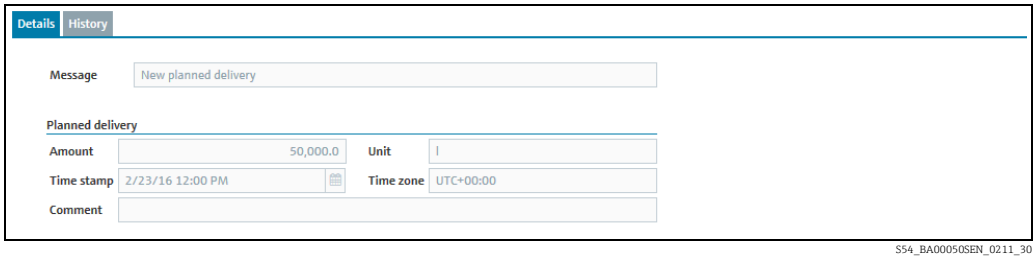
5. In the overview table, click a status to change it or to view the history.
6. You can select the following tabs in the lower area of the Application window: **Details** or **History**.

9.2.1 Processing status

The following status information can be displayed:

Symbol	Meaning
	Detected - the **Detected** status is displayed in the following situations: ▪ The system has detected a delivery or disposal which has been scheduled too early or too late. You can process this delivery or disposal in the **Details** tab using the **Confirm** button. ▪ The system has detected a missing delivery or disposal. You can process this delivery or disposal in the **Details** tab using the **Mark as fulfilled** button. ▪ The system has detected that measured data are missing. You can process this delivery or disposal in the **Details** tab using the **Mark as fulfilled** button.
	Confirmed - the **Confirmed** status is displayed in the following situations: ▪ A delivery or disposal which has been scheduled too early or too late was confirmed when the delivery/disposal was created. ▪ A delivery or disposal which has been scheduled too early or too late has been confirmed in the **Details** tab.
	Deleted - a planned delivery or disposal has been deleted.
	New - a new delivery or disposal has been planned.
	Fulfilled - a new delivery or disposal has been fulfilled. If a delivery and disposal is made, this is flagged by SupplyCare as **Delivery made (detected)/Disposal made (detected)**. If the system has detected a missing delivery/disposal or missing measured data, you can process this delivery/disposal in the **Details** tab using the **Mark as fulfilled** button. The delivery/disposal is displayed as **Delivery fulfilled (confirmed)/Disposal fulfilled (confirmed)**.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Scheduling** menu item.
3. In the overview table, select a status that you want to process.
4. In the lower section of the Application window, select the **Details** tab. The following tab appears:



S54_BA00050SEN_0211_30

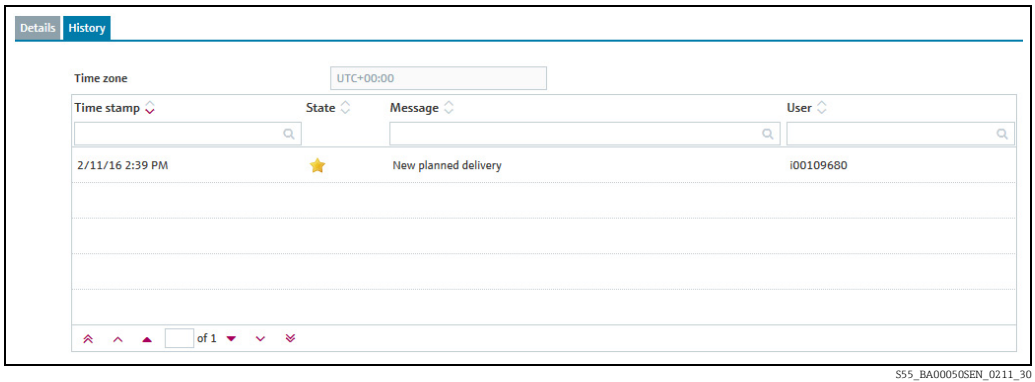
You can process the following statuses with the **Mark as fulfilled** button:
– Missed delivery/disposal (detected)
– Missed delivery/disposal (no measurement)

You can process the following statuses with the **Confirm** button:
– Early delivery/disposal (detected)
– Late delivery/disposal (detected)

9.2.2 Viewing status history

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Scheduling** menu item.

3. In the overview table, select a status that you want to process.
4. In the lower section of the Application window, select the **History** tab. The following tab appears:



S55_BA00050SEN_0211_30

9.3 Planning delivery and disposal – "Scheduling" workplace

Only users with the **Scheduler** user role can plan deliveries for standard tanks and disposals for recycling tanks.

Manual values are displayed in blue color followed by the text **MAN**. The column **Data source** provides information on where the data comes from: measured or manually entered.

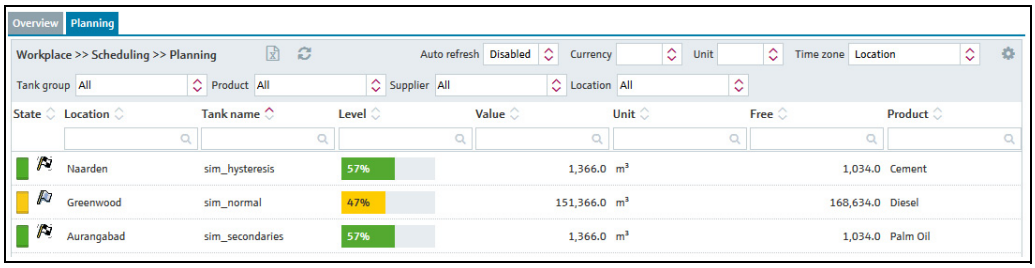
You can plan several deliveries for each standard tank, a maximum of 3 deliveries per day. You can plan several disposals for each recycling tank, a maximum of 3 disposals per day. There has to be a 30 minute time interval between the deliveries or disposals.

The time zone of the location of the tank is used as the time zone. The unit of the tank is used as the unit. In the case of mass units and volume units, priority is given to your settings for the **Mass unit** or **Volume unit** fields in the **User preferences** menu item.

If a tank is out of service, this is indicated in the calendar with a bar and the ✖ symbol. No deliveries or disposals can be planned for this period.

Planned deliveries and disposals are indicated by a delivery van in the calendar and in the **Inventory chart** tab.

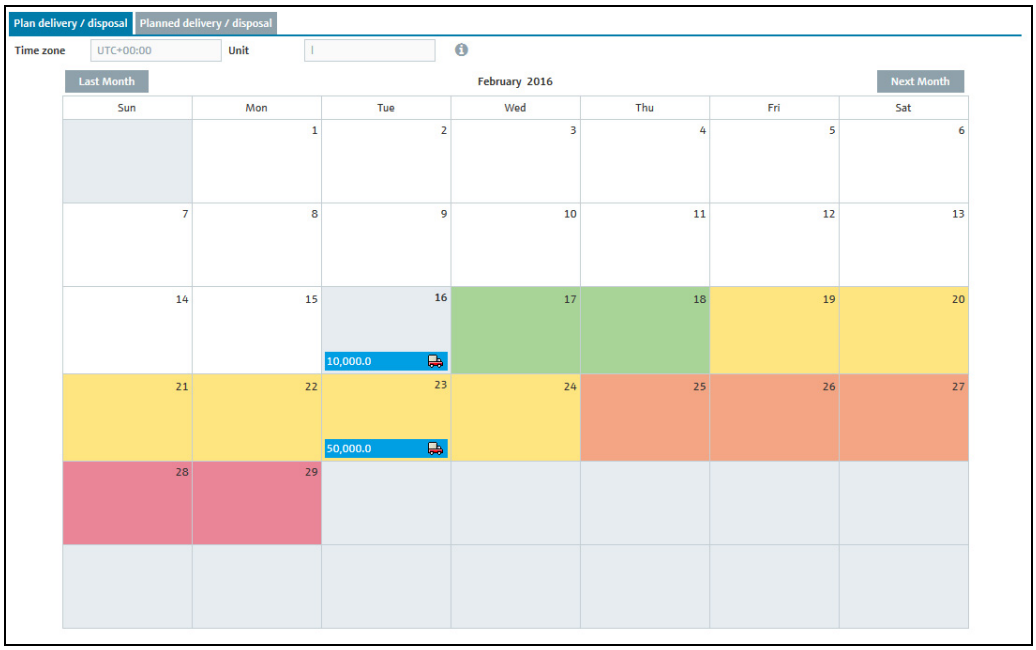
1. Click the **Workplace** menu in the Navigation window.
2. Click the **Scheduling** menu item.
3. Click on the **Planning** tab. The following view is displayed in the Application window:



Plan_delivery_disposal_1_BA00050SEN_30

4. In the overview table, click the tank for which you want to plan a disposal or delivery.

5. The following detail view is displayed in the Application window:



Lieferung_planen_BA00050SEN_30

The current date is displayed with a grey background in the calender. Every date in the future has a color background. The color indicates the forecast value for the tank status for that particular date.

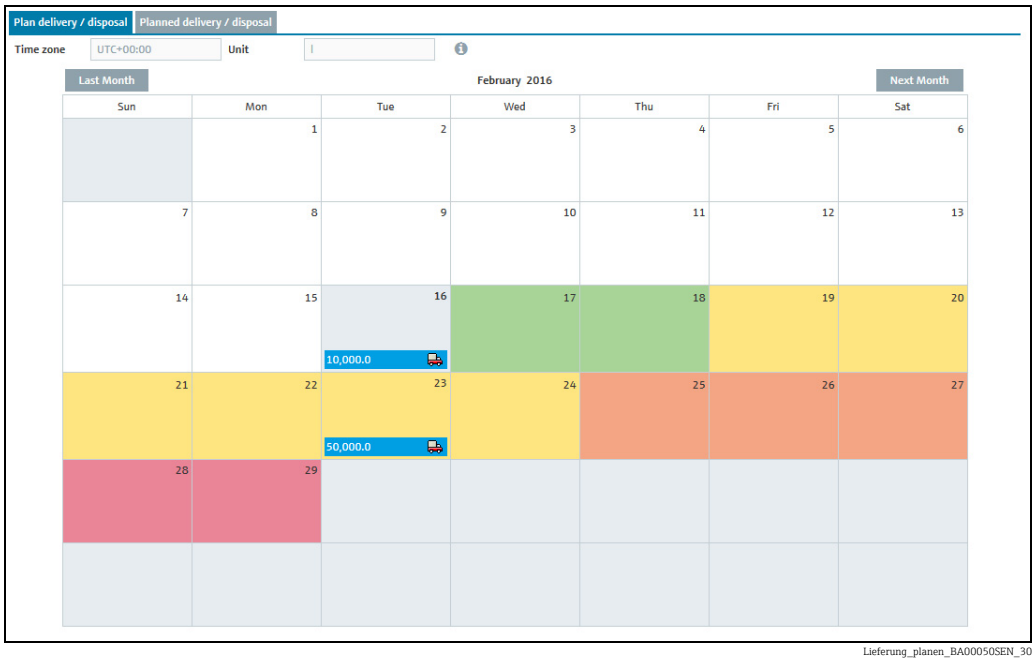
Color	Standard tanks	Recycling tanks
Grey	Current date	Current date
Green	"OK": The forecast value is larger than the plan point	"OK": The forecast value is between 0 and the plan point
Yellow	"Plan point": The forecast value is between the plan point and the ship point	"Plan point": The forecast value is between the plan point and the safety stock
Orange	"Ship point": The forecast value is between the ship point and the safety stock	Not applicable
Red	"Safety stock": The forecast value is below the safety stock	"Safety stock": The forecast value is above the safety stock
White	The date is in the past or the tank/ aggregated tank is out of service	The date is in the past or the tank/ aggregated tank is out of service

Click the ⓘ button to display the legend. You can move the legend to another location by pointing the cursor at the blue title bar and pressing and holding the left mouse button.

00:00 (midnight) is the time that is used to determine the color or the tank status for the particular date. For example, if the "Ship point" is reached at 4 a.m. (04:00) on May 15, and the "Safety stock" at 8:30 p.m. (20:30), May 15 is given the background color "red" for "Safety stock".

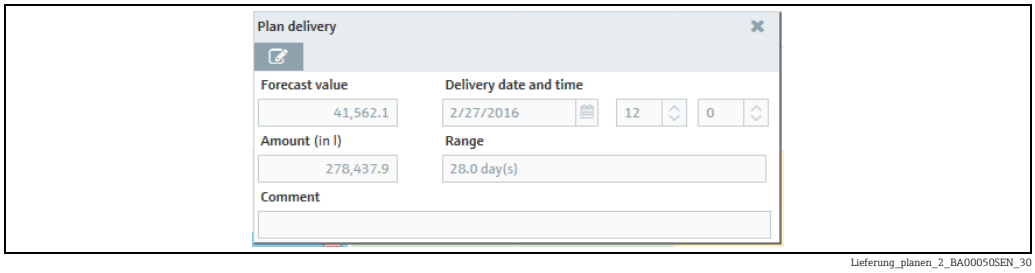
9.3.1 Planning a delivery or disposal

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Scheduling** menu item.
3. Click on the **Planning** tab.
4. In the overview table, click the tank for which you want to plan a delivery or disposal.
5. The following detail view is displayed in the Application window:



Lieferung_planen_BA00050SEN_30

6. Click the **Plan delivery/disposal** tab.
7. In the calendar, where necessary use the **Next month** button to select the month for which you are planning a delivery or disposal.
8. A gray "**+**" shows up in the day where the cursor is placed. Click the gray "**+**".
9. The **Plan delivery** dialog box appears for standard tanks. The **Plan disposal** dialog box appears for recycling tanks.



Lieferung_planen_2_BA00050SEN_30

10. Click the button.
11. The dialog box appears in the editing mode.
12. You can view and enter the following data here:

– **Value**: Displays the projected level
– **Delivery date and time**: The day selected in the calendar is used for the date. The time is predefined.

- **Amount**: Enter the planned amount.
- **Range**: This field shows the number of days before the safety stock is reached for the amount entered. In the case of standard tanks, the number of days is calculated from the "Average daily outflow" value. In the case of recycling tanks, the number of days is calculated from the "Average daily inflow" value.
- **Refresh range**: Via the button, the **Range** field is updated for the amount entered.
- **Comment**: Enter a comment or note.

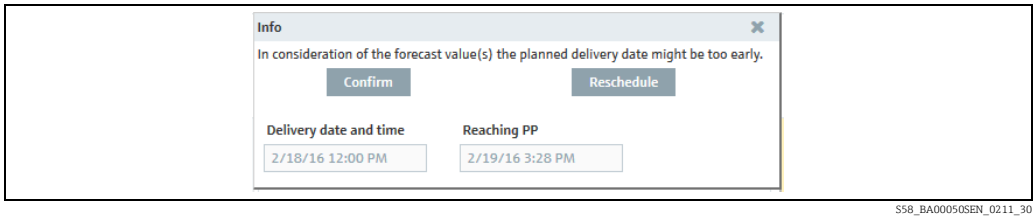
13. Click to save your changes. Click to abort the process.
The system performs a plausibility check when a planned disposal or planned delivery is saved. If the values entered are implausible, a dialog box is displayed, → 72.
14. Deliveries and disposals are entered in the calendar with a delivery van icon and the planned amount. The delivery date and time are displayed when you move the cursor over this field.

9.3.2 Plausibility check

The plausibility check only checks the latest planned delivery/disposal.

A plausibility check is only performed if a safety stock (SST) and plan point (PP) have been saved for the tank.

The system performs a plausibility check on which a planned delivery or a planned disposal is saved. The planned date and the planned time are checked with the calculated values for the safety stock (SST) and plan point (PP). If the planned date is before the calculated date when the plan point will be reached, a dialog box is displayed with the message "In consideration of the forecast value(s) the planned delivery/disposal date might be too early". If the planned date is after the date on which the safety stock will be reached, the dialog box "In consideration of the forecast value(s) the planned delivery/disposal date might be too late" is displayed.



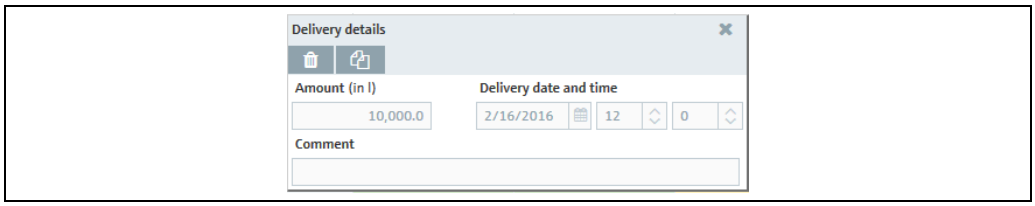
S58_BA00050SEN_0211_30

Click the **Confirm** button to confirm the date entered for the delivery/disposal.

Click the **Reschedule** button to correct your entries.
- The **Plan delivery** dialog box appears for standard tanks. The **Plan disposal** dialog box appears for recycling tanks.
- Correct your entries.
- Click to save your changes.

9.3.3 Deleting a delivery or disposal

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Scheduling** menu item.
3. Click on the **Planning** tab.
4. In the table, click the tank for which you want to delete a delivery or disposal.
5. Click the **Plan delivery/disposal** tab.
6. In the calendar, click the entry that you want to delete.
7. The **Delivery details** dialog box appears for standard tanks. The **Disposal details** dialog box appears for recycling tanks.

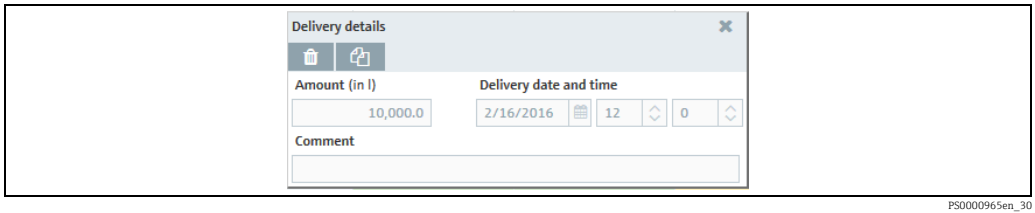


PS0000965en_30

8. Click the button to delete the delivery or disposal.
9. The prompt "Do you really want to delete?" is displayed.
10. Click **OK** to delete the entry. Click **Cancel** to abort the process.

9.4 Copying a delivery or disposal

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Scheduling** menu item.
3. Click on the **Planning** tab.
4. In the overview table, click the tank for which you want to copy a delivery or disposal.
5. Click the **Plan delivery/disposal** tab.
6. In the calendar, click the entry that you want to copy.
7. The **Delivery details** dialog box appears for standard tanks. The **Disposal details** dialog box appears for recycling tanks.



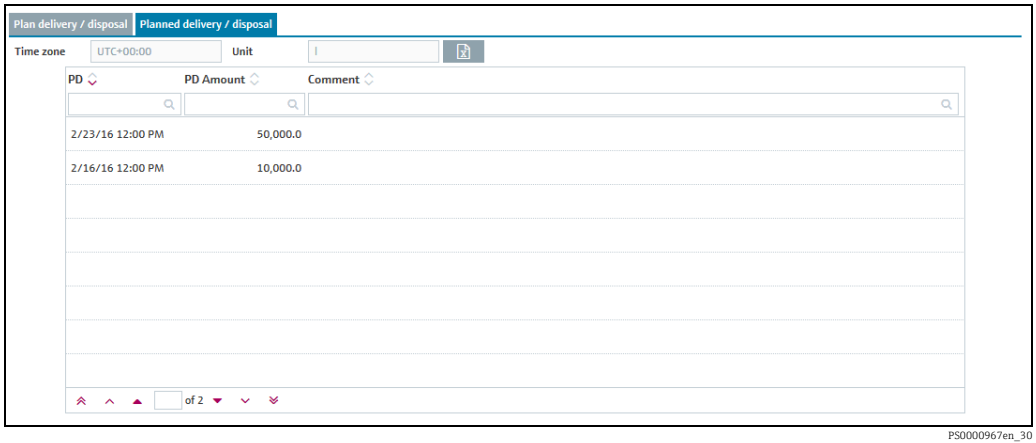
PS0000965en_30

8. Click to copy the entry.
9. The **Copy delivery** dialog box appears for standard tanks. The **Copy disposal** dialog box appears for recycling tanks.
10. Click the button.
11. The dialog box appears in the editing mode.
12. Enter the desired amount in the **Amount** field.
13. For the **Delivery date and time field**, select a new date and time.

14. Enter a comment or a note for the **Comment** field.
15. Click  to save your changes. Click  to abort the process.
16. Deliveries and disposals are entered in the calendar with a delivery van icon  and the planned amount. The delivery date and time are displayed when you move the cursor over this field.

9.4.1 Viewing a planned delivery or disposal and saving as an Excel spreadsheet

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Scheduling** menu item.
3. Click on the **Planning** tab.
4. In the overview table, click the tank for which you want to display the deliveries or disposals.
5. Click the **Planned delivery/disposal** tab.
6. The following detail view is displayed in the Application window:



PS0000967en_30

7. All the deliveries or disposals for the selected tank are listed in the table, with information on the date (**PD** column), amount (**PD amount** column) and a comment.
8. Click the  button to download the table as an Excel spreadsheet

10 Totaling and managing templates – "Totaling" workplace

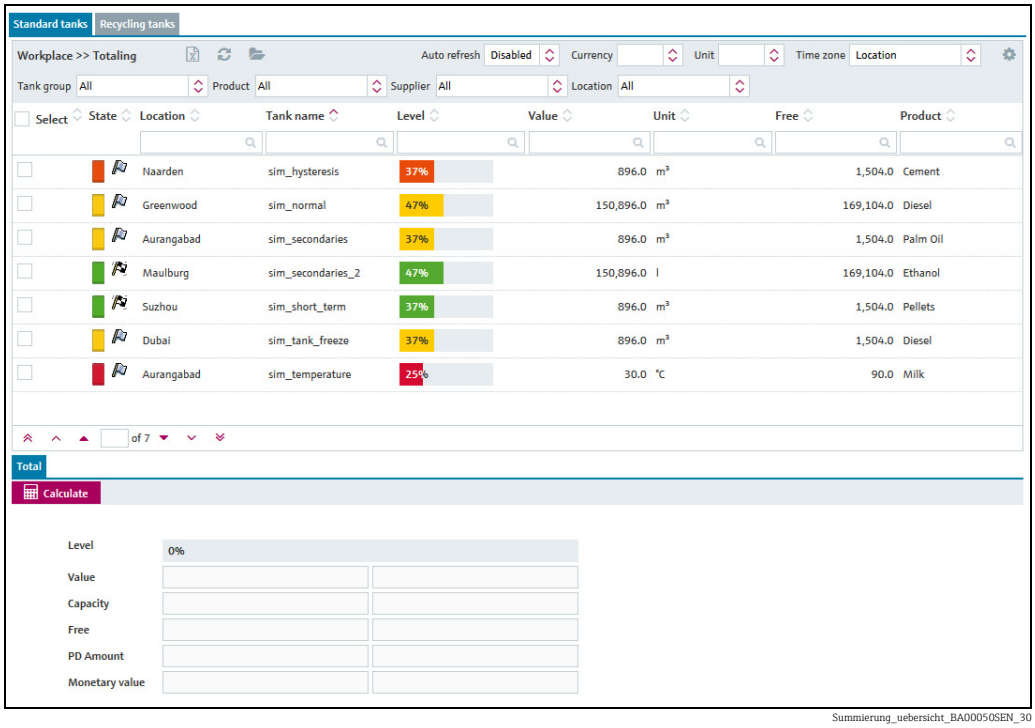
The **Totaling** menu item is available to people with **Read only**, **Scheduler** or **Operator** configured as their user role.

Manual values are displayed in blue color followed by the text **MAN**. The column **Data source** provides information on where the data comes from: measured or manually entered.

10.1 Totaling

In the **Totaling** menu item, it is possible to add up the values of the **Value**, **Capacity**, **Free** and **PD amount** and **Monetary value** fields. The totalized **Level** is represented graphically. The values of standard tanks can be totaled in the **Standard tanks** tab and the values of recycling tanks in the **Recycling tanks** tab. Tanks and aggregated tanks can be included in a calculation.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Totaling** menu item.
3. The following view is displayed in the Application window:



Summierung_uebersicht_BA00050SEN_30

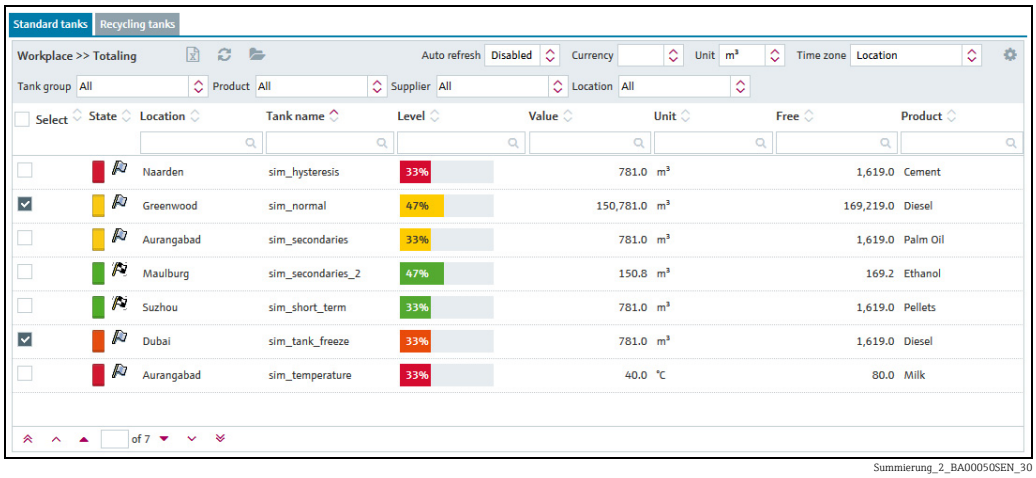
4. In the **Select** table column, enable the check boxes of the tanks that should be totaled.

At least one tank must be selected for the calculation.

As a prerequisite for the monetary value calculation, a price must be entered in the **Product details** tab in **Configuration** menu → 131.

Only tanks with convertible units and currencies can be totalized.

Activating the check box in the **Select** column header selects all the tanks in the table, while deactivating the check box disables all the tanks.



Summierung_2_BA00050SEN_30

5. Select the unit of the selected tanks in the **Unit** field.
6. Click the **Calculate** button.
7. The following detail view is displayed in the Application window:

Summierung_3_BA00050SEN_30

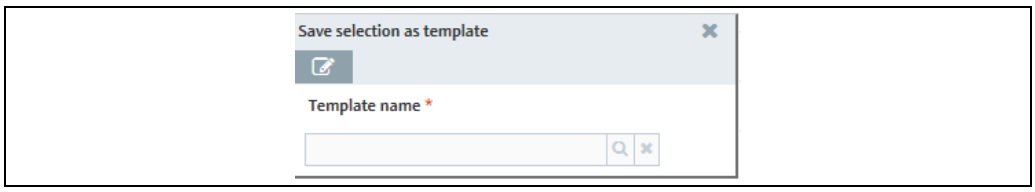
You must press the **Calculate** button a second time to incorporate any changes to the selection which are made after the calculation has been performed. If you do not, the following message is displayed beside the **Calculate** button: "You have changed the selection. Please recalculate."

Clicking the button deactivates any activated check boxes and deletes the calculated values in the detail view. However, anything selected via the picklists of the various fields in the table header is retained.

10.2 Saving a selection as a template

The choice of tanks or aggregated tanks can be saved as a template.

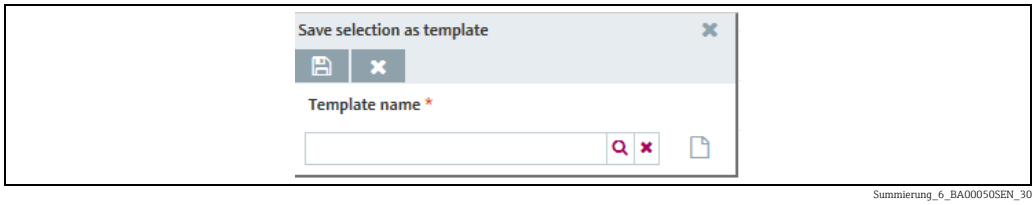
1. Click the **Workplace** menu in the Navigation window.
2. Click the **Totaling** menu item.
3. In the **Select** table column, select the check boxes of the tanks that should be totaled.
4. Select the unit of the selected tanks in the **Unit** field.
5. Click the **Calculate** button.
6. The **Save** button appears in the header of the table.
7. Click the **Save** button.
8. The **Save selection as template** dialog box appears on the display:



Summierung_5_BA00050SEN_30

The and buttons do not appear in the dialog box when you create the first template.

9. Click the button.
10. The dialog box appears in the editing mode.



Summierung_6_BA00050SEN_30

You have two options: you can either create a new template or overwrite an existing template.

10.2.1 Creating a new template

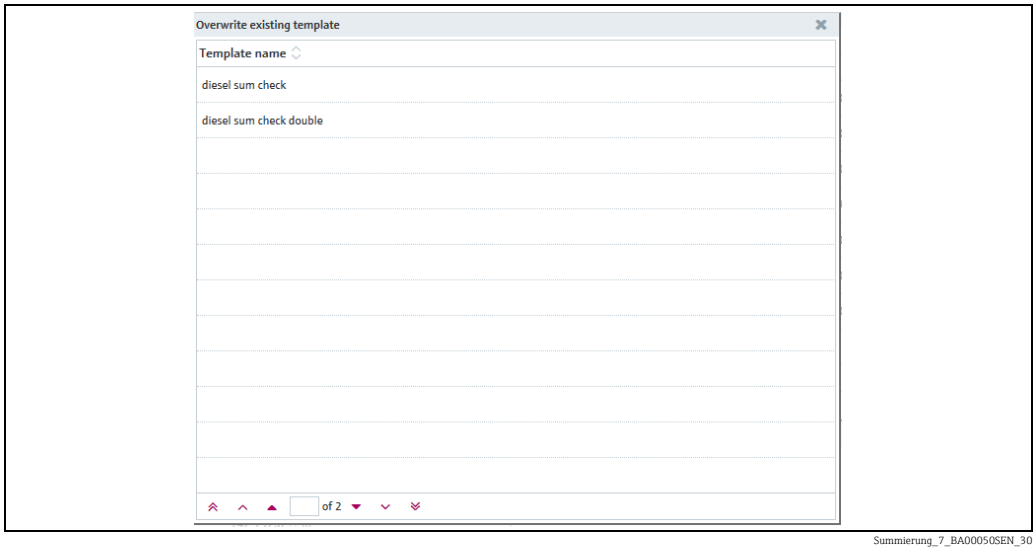
1. Perform all the steps specified in Chapter "Saving a selection as a template", → 77.
2. In the **Save selection as template** dialog box, click the button.

The button does not appear in the dialog box when you create the first template.

3. Enter a template name. The template name can have a maximum of 64 characters.
4. Click to save your changes. Click to abort the process.

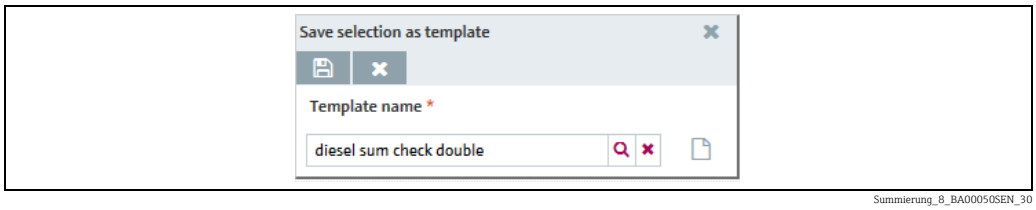
10.2.2 Overwriting an existing template

1. Perform all the steps specified in Chapter "Saving a selection as a template", → 77.
2. Click the button.
3. The **Overwrite existing template** dialog box is displayed:



Summierung_7_BA00050SEN_30

4. In the overview table, click the template you wish to overwrite.
5. The template is displayed in the **Save selection as template** window.



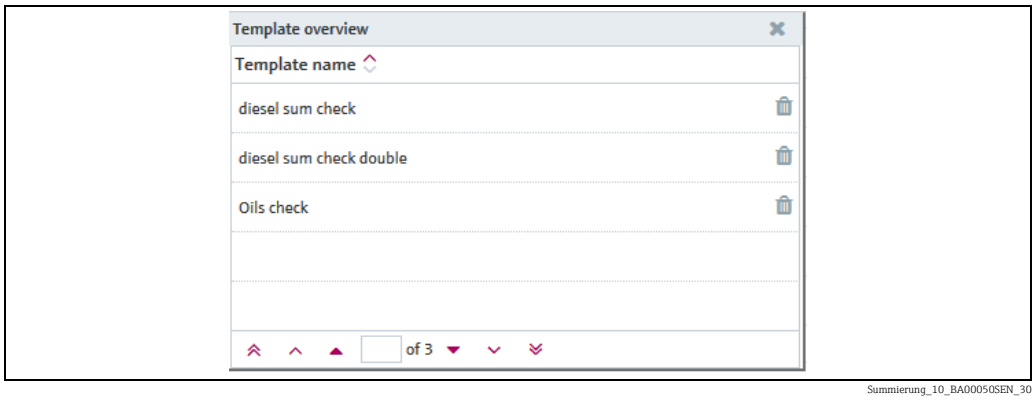
Summierung_8_BA00050SEN_30

6. If you want to undo your selection, click the button, then click the button and select another template.
7. Click the button if you want to save the selection. Click the button if you want to abort the process.

A tank is deleted from a template automatically if the tank is deleted or if the tank is no longer part of the tank group that was assigned to a user.

10.3 Selecting or deleting templates

1. Click the **Open** button in the overview.
2. The **Template overview** window is displayed:



Summierung_10_BA00050SEN_30

3. If you want to accept a template, click the corresponding row in the table. If you want to delete a template, click the button in the corresponding row and then click **OK** in the **Confirm deletion** window.

10.4 Creating an Ad hoc Reconciliation Report

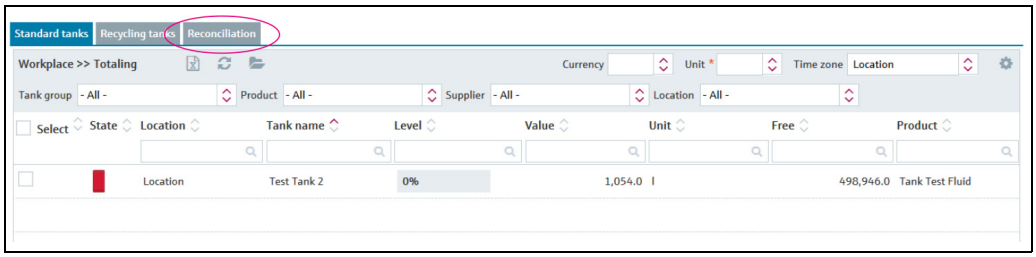
The Reconciliation report offers the opportunity to create reports that display the inventory development in one or more tanks very accurately.
The enhanced accuracy compared to sole level measurement is achieved by adding measurement values from flow meters for inflow to a tank (Input) and the discharge from a tank (Output) to the measurement process.
The Reconciliation report relates these 3 values and balances them against each other, and thus makes inconsistencies visible.

The Reconciliation report measurement values are more accurate than those delivered by the measurements in the "Analysis" workplace. For this reason, the Reconciliation report values may differ slightly from those in the "Analysis" workplace.

There are several ways to create a Reconciliation report.
- Ad hoc upon request of a SupplyCare user
- Regularly, based on variably definable time intervals → 152

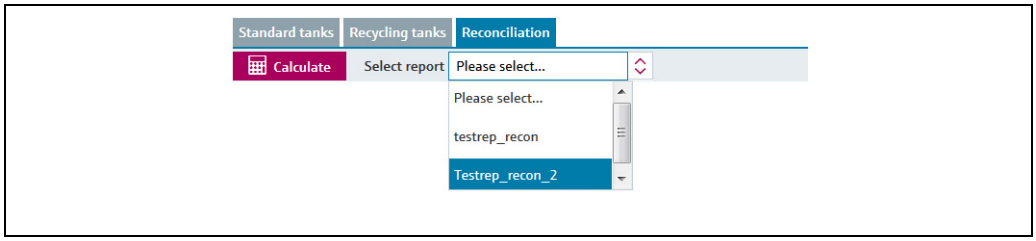
To create an **Ad hoc Reconciliation Report**, there must have been at least one report created and configured before. Creating a report: → 152.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Totaling** menu item.
3. Select the **Reconciliation** tab:



Rep_Recoadhoc_1_BA00050SEN_31

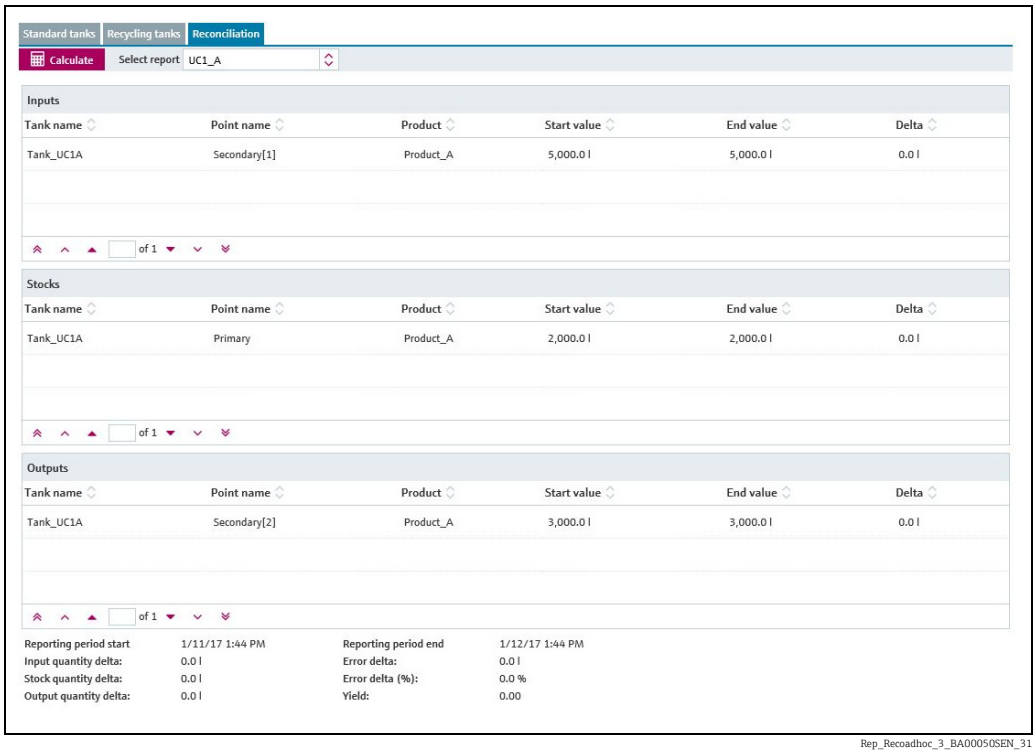
4. Select a report and click the **Calculate** button.



Rep_Recoadhoc_2_BA00050SEN_31

You cannot change the report's configuration here. If you want to alter a report or create a new one, click the **Configuration** menue in the navigation window and select the menue point **Report** → 152.

Example Ad hoc Reconciliation Report:



Rep_Recoadhoc_3_BA00050SEN_31

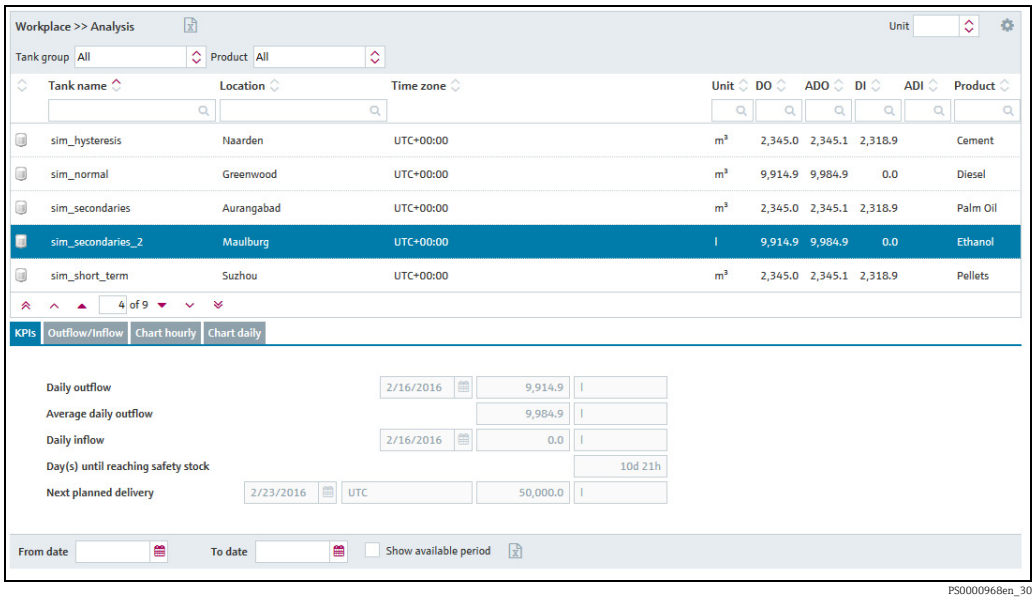
11 Viewing analysis data – "Analysis" workplace

The **Tank** menu item is available to people with **Scheduler** or **Operator** configured as their user role.

This menu item allows you to view important indicators for the inflow and outflow of the individual tanks as data and charts. You can use these data and charts to analyze past cycle patterns and use them as the basis for future planning. You can export all the information to an Excel spreadsheet. In addition, it is also possible to print out the charts.

When tanks are transported and brought into a horizontal position for this purpose, the devices still send measurement data. SupplyCare processes the measurement data accordingly to alarms, planning data, calculation of inputs and outputs and so on. Therefore, before transport, the tank service status should be set accordingly → 43.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Analysis** menu item. A list of the tanks assigned to you is displayed.



PS0000968en_30

3. In the table, click the tank whose analysis data you want to view.
4. You can choose the following tabs in the lower part of the application window: KPIs, Outflow/Inflow, Chart hourly and Chart daily.

11.1 "Analysis" overview table

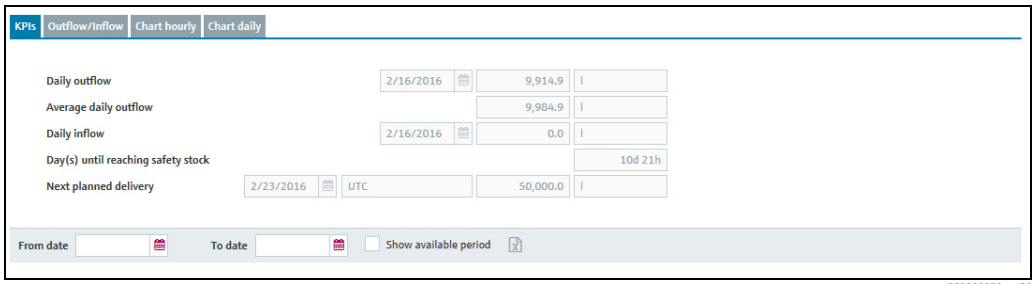
Pressing the button in the table header in the overview opens a context menu. Via this context menu, you can show, hide and move table columns.

The following columns are available for the overview table

Columns	Description
Location	Indicates the tank location. The location is the name of the location. The name is selected in the **Configuration** menu in menu item **Tank**, field **Location**. The location is specified in the **Location** menu item.
Tank name	Indicates the tank name. The tank name is entered in the **Tank name** field (path: Configuration → Tank → Tank details → Tank name).
Unit	Indicates the unit. The unit for the primary value is specified via the **Unit** field in the **Tank details** tab. In the case of mass units and volume units, priority is given to your settings for the **Mass unit** or **Volume unit** fields in the **User preferences** menu item.
Time zone	Time zone of time stamp. The time zone of the location is used.
DO (daily outflow)	Displays the daily outflow last calculated
ADO (average daily outflow	Displays the value for "Average daily outflow". The value is calculated with the average quantity per day. The calculated average quantity is based on the configured "Forecast based on" value. This field is empty for recycling tanks.
DI (daily inflow)	Displays the daily inflow last calculated
ADI (average daily inflow)	Displays the value for "Average daily inflow". The value is calculated with the average quantity per day. The calculated average quantity is based on the configured "Forecast based on" value. This field is empty for standard tanks.
Product	Indicates the product in the tank.

11.2 KPIs (key performance indicators)

The tab displays important indicators for the inflow and outflow of the selected tank.



PS0000970en_30

The **Daily outflow** and **Daily inflow** fields display the values last calculated.

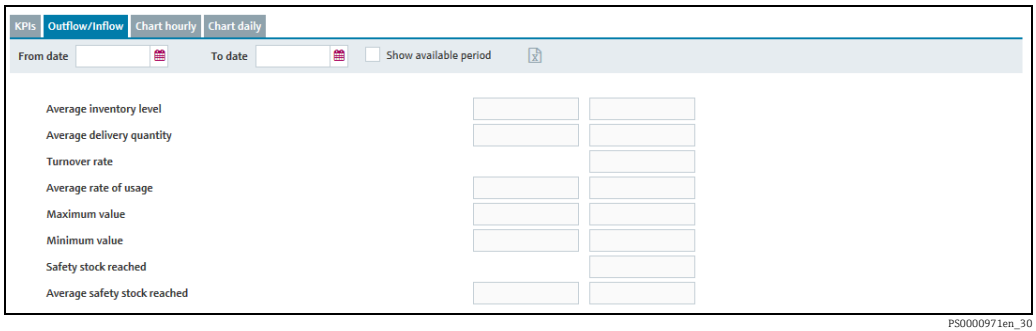
Additional information is displayed if you enter a period for the **From date** and **To date** fields or enable the **Show available period** check box.

11.2.1 Description of fields

Field	Description
Daily outflow	Displays the calculated daily outflow for the date entered.
Average daily outflow/ average daily inflow	▪ Standard tanks: Average daily outflow ▪ Recycling tanks: Average daily inflow The values are calculated with the average quantity per day. The calculated average quantity is based on the configured "Forecast based on" value.
Daily inflow	Displays the daily inflow for the date entered.
Days until the safety stock is reached	Indicates the estimated number of days remaining until the safety stock is reached. The value is calculated with the average quantity per day. ▪ If "Safety stock" has been disabled or if the value is "0", the **Days until the safety stock is reached** field is empty.
Next planned delivery/ Next planned disposal	▪ Standard tanks: Displays the next planned delivery ▪ Recycling tanks: Displays the next planned disposal
Total outflow	Displays the total outflow for the period entered.
Total inflow	Displays the total inflow for the period entered.
Number of deliveries/ Number of disposals	▪ Standard tanks: Displays the number of deliveries made for the period entered. ▪ Recycling tanks: Displays the number of disposals made for the period entered.
Frequency of deliveries/ Frequency of disposals	▪ Standard tanks: Average interval between two deliveries for the period entered. ▪ Recycling tanks: Average interval between two disposals for the period entered.

11.3 Outflow/Inflow

The tab displays important indicators for the inflow and outflow of the selected tank.



PS0000971en_30

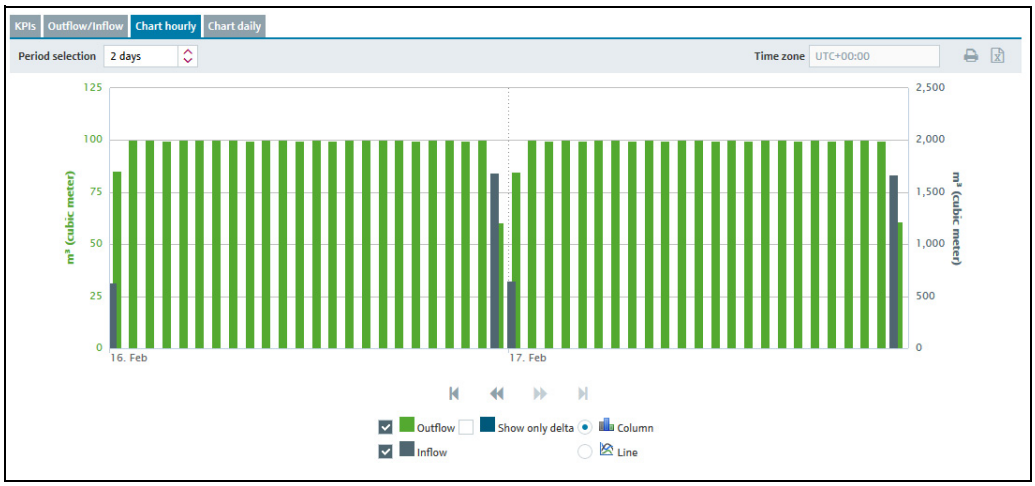
Using the **From date** and **To date** fields, you can enter a period for which you want to analyze the values. If you enable the **Show available period** check box all the saved values will be analyzed.

Description of fields

Field	Description
Average inventory level	Displays the average amount for the period entered.
Average delivery quantity/ Average disposal quantity	▪ Standard tanks: Displays the average delivery quantity for the period entered. ▪ Recycling tanks: Displays the average disposal quantity for the period entered. To ensure that fluctuating changes in the level do not falsify the result, the value entered for the **Hysteresis** field is factored into the calculation.
Turnover rate	Displays the turnover rate for the period entered. ▪ Calculation for standard tanks: Total outflow/Average inventory level ▪ Calculation for recycling tanks: Total inflow/Average inventory level
Average rate of usage	Displays the average rate of usage for the period entered. ▪ Calculation for standard tanks: (Average inventory level / Optimum) * 100 If "Optimum" has been disabled or if the value is "0", the system calculates with the capacity entered. ▪ Calculation for recycling tanks: (Average inventory level / Safety stock) * 100 If "Safety stock" has been disabled, the system calculates with the capacity entered.
Maximum value	Maximum value for the period entered.
Minimum value	Minimum value for the period entered.
Safety stock reached	Number of times the safety stock has been undershot in the case of standard tanks and exceeded in the case of recycling tanks for the period entered. ▪ Valuation for standard tanks: Measured value < value entered for safety stock ▪ Calculation for recycling tanks: Measured value > value entered for safety stock ▪ All measured values within the set hysteresis are not counted (→ 101). ▪ If "Safety stock" has been disabled, the **Safety stock reached** field is empty. ▪ If the value for "Safety stock" is "0", the **Safety stock reached** field is "0".
Average safety stock reached	Standard tanks: Average value by which the safety stock was undershot for the period entered. Recycling tanks: Average value by which the safety stock was exceeded for the period entered. If "Safety stock" has been disabled, the **Average safety stock reached** field is empty. If the value for "Safety stock" is "0", the **Average safety stock reached** field is "0".

11.4 Chart hourly

This chart shows the outflow, inflow or the difference between the inflow and outflow for the period selected, depending on the option selected.



Diagramm_Stundenbasis_BA00050SEN_30

Select the period of time for **Chart hourly** via the **Period selection** field. You can select a period of 1 to 7days.

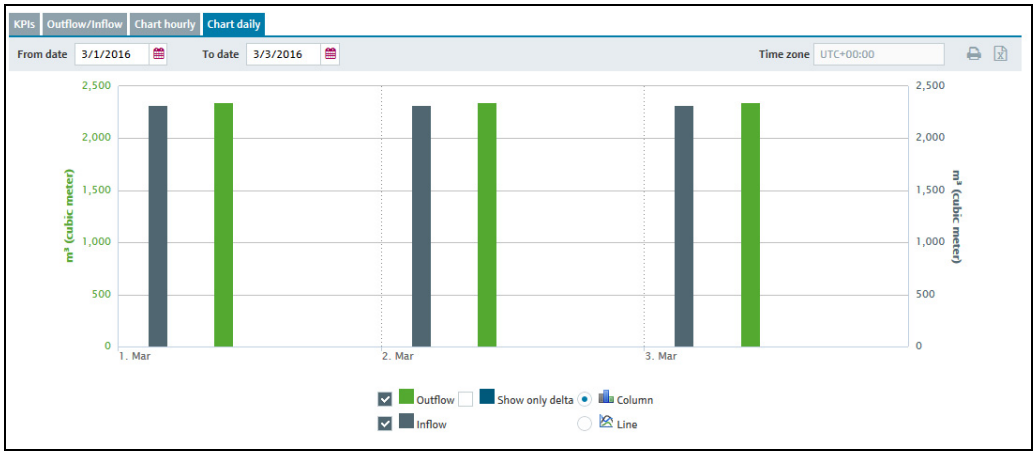
Select the type of chart via the **Column** or **Line** buttons.

If you move the cursor over a graph in the chart, a window appears with the name of the graph, the specific measured value and the time stamp.

It takes 48 hours after the measuring point concerned has been added until the charts are available and reliable.

11.5 Chart daily

This chart shows the outflow, inflow or the difference between the inflow and outflow for the period entered, depending on the option selected.



PS0000973en_30

Using the **From date** and **To date** fields, specify a period for **Chart daily**.

Select the type of chart via the **Column** or **Line** buttons.

If you move the cursor over a graph in the chart, a window appears with the name of the graph, the specific measured value and the time stamp.

It takes 48 hours after the measuring point concerned has been added until the charts are available and reliable.

12 Viewing tank locations on the map – "Map" workplace

The **Map** menu item is available to people with **Read only**, **Scheduler** or **Operator** configured as their user role.

Manual values are displayed in blue color followed by the text **MAN**.

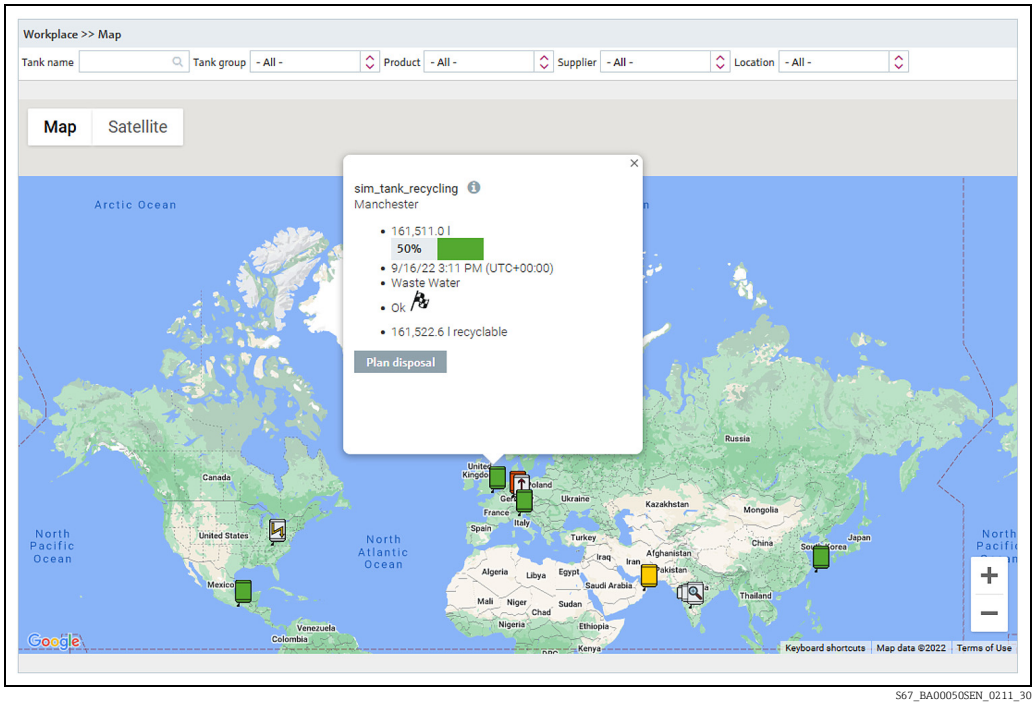
You can use this menu item to get an overview of the locations of the individual tanks on Google Maps. The tanks can be filtered by tank name, tank group, product, supplier and location. You can call up detailed information on every tank, such as value, plan delivery or disposal.

12.1 Viewing a map and associated information

The following conditions must be met to display a tank or an aggregated tank on the map:

- The tank or aggregated tank must be assigned to a specific location. The user must have the geographical coordinates (degree latitude and longitude) of the location. → 128.
- The tank or aggregated tank must be assigned to a tank group.

1. Click the **Workplace** menu in the Navigation window.
2. Click the **Map** menu item. A map with an overview of the tank locations is displayed.

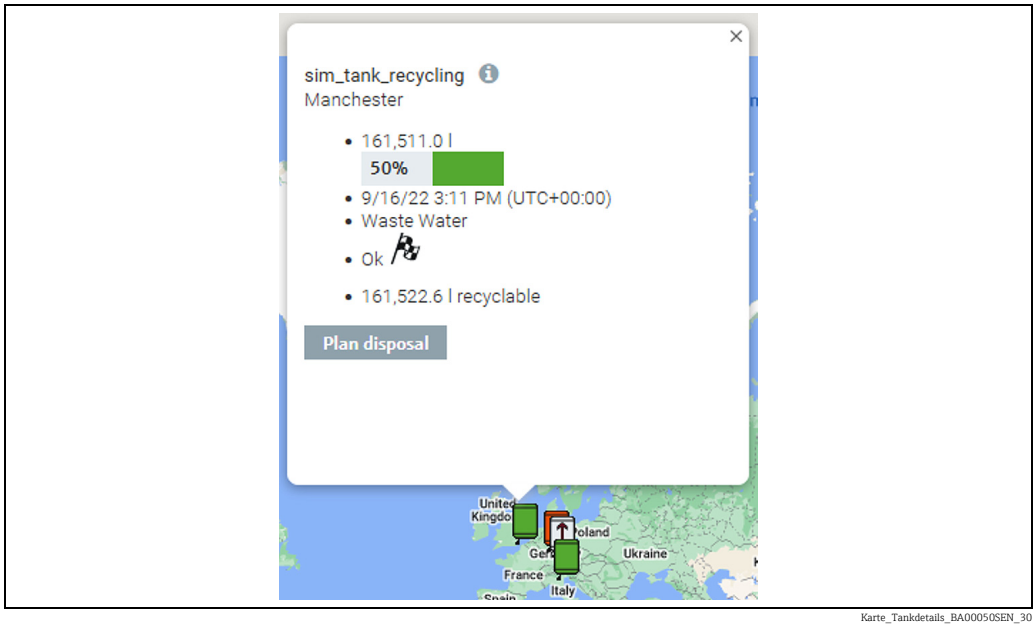


S67_BA00050SEN_0211_30

– The map view is automatically adapted to the filter criteria so that you see all the tanks for the locations in question.
– If no tanks are found for the filter criteria, the message "No tanks found!" is displayed. The filter criteria are reset to the values previously used.

12.2 Tank details

1. If you click a tank on the map, this opens up a window containing more detailed information.
2. The following data are displayed for the tank:



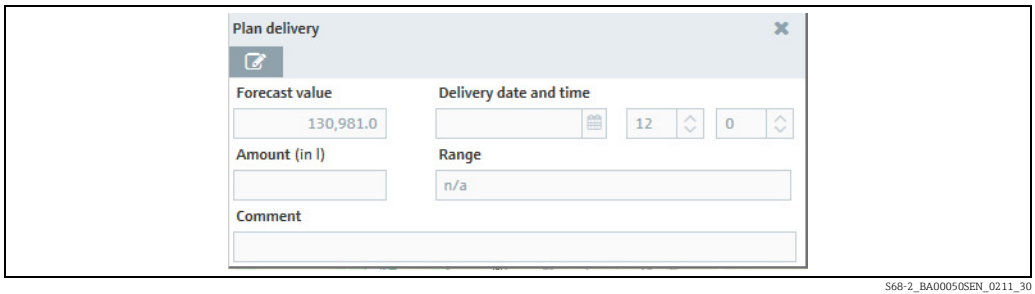
Karte_Tankdetails_BA00050SEN_30

- Scroll icons if there are several tanks in one location.
- Tank name along with the number and total quantity of tanks if there are several tanks in one location.
- ℹ button behind the tank name: By clicking the button it is possible to open the tabs with all the information about the tank. Here it is possible to access all the information that is also accessible through the access via the workplace Tank.
- Location. If there are GPS data available for this tank, the addendum **GPS Data** is displayed additionally to the tank's name.
- Value and unit
- Time stamp and time zone
- Product
- Status of the tank with the symbol for the event.
- Amount and unit, deliverable (for standard tanks) or recyclable (for recycling tanks) if a disposal or delivery is not planned.
  PD amount and unit as well as PD (date and time of delivery/disposal) if a delivery or disposal is planned.
- **Plan delivery** or **Plan disposal** button.

3. To close the window, click the **Close** icon on the top right.

12.3 Planning a disposal or delivery

1. Click the **Plan delivery** or **Plan disposal** button in the window with the tank details.
2. The **Plan delivery** or **Plan disposal** dialog box appears:



S68-2_BA00050SEN_0211_30

3. Click the button.
4. Select the **Date** for the planned delivery/disposal in the calendar, or enter the date manually.
5. The **Value**, **Amount** and **Range** fields are computed automatically.
   These fields are recomputed if you change the date.
6. You can update the range, enter a comment and save or reject the changes for the amount entered, → 71.

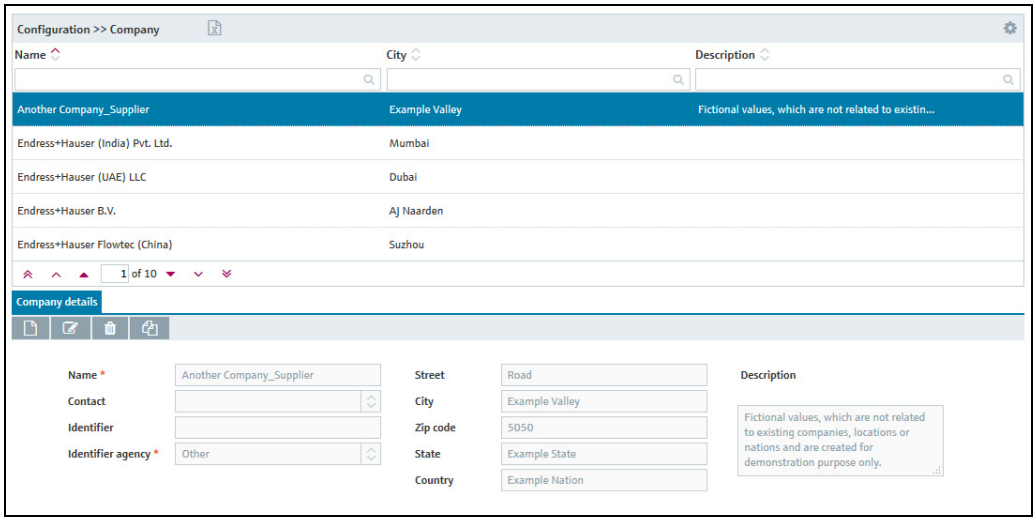
13 Managing master data

13.1 Managing companies

Only people whose user role is configured as **Master data** can create, change and delete companies.

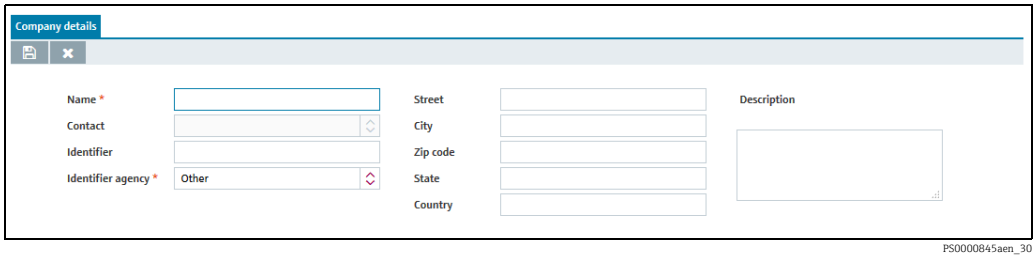
13.1.1 Creating a company

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Company** menu item.
3. The following detail view is displayed in the Application window:



S69_BA00050SEN_0211_30

4. Click the button on the **Company details** tab.
5. The tab is displayed in the edit mode.



PS0000845aen_30

6. Here, you can enter company data such as:

- **Name** (obligatory): Name of the company
- **Contact**: Select a contact person from the picklist.
  The contact person has to have been added beforehand using the **User** menu item and assigned to the **Company**.
- **Identifier**: Company ID to be used in the CIDX reports
- **Identifier agency**: Selection of organization responsible for managing the identifier for the companies. The selection complies with the CIDX standard. The identifier agency is required to create CIDX reports.
- **Street**

– **City**
– **Zipcode**
– **State**
– **Country**
– **Description**: You can enter a multiline description here.

7. Click to save your entries. Click to abort the process.

13.1.2 Changing a company

For details → 27

13.1.3 Deleting a company

For details → 31

A company can only be deleted if no more users are assigned to this company. If you still want to delete the company, you first have to delete the users assigned to this company. The button is only displayed for a company which can be deleted.

13.1.4 Copying a company

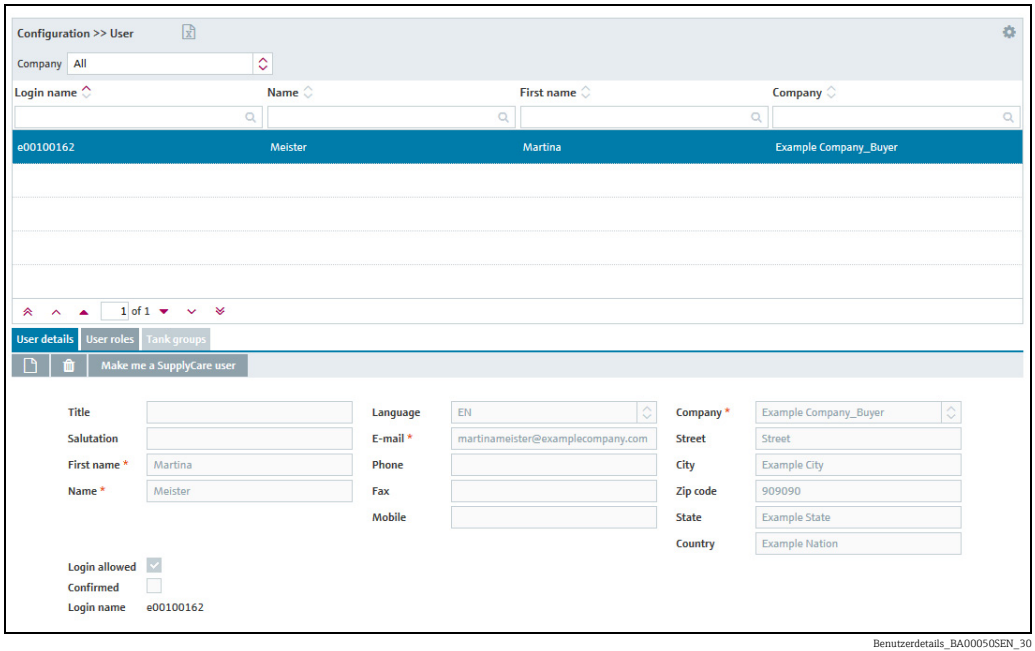
For details → 32

13.2 Managing users

Only people whose user role is configured as **Master data** can create, change and delete users.

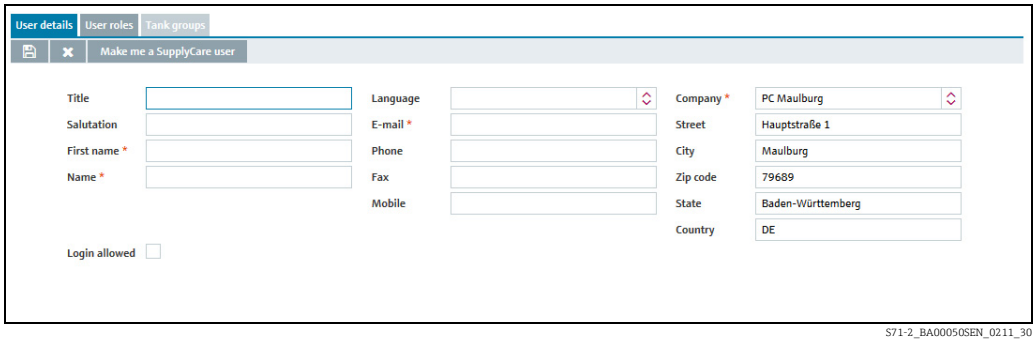
13.2.1 Creating a user

1. Click the **Configuration** menu in the Navigation window.
2. Click the **User** menu item.
3. The following detailed view appears in the Application window:



Benutzerdetails_BA00050SEN_30

4. Select the **User details** tab.
5. Click the button.
6. The tab is displayed in the edit mode.



S71-2_BA00050SEN_0211_30

7. Here, you can enter data on the user such as:

- **Title**
- **Salutation**
- **First name** (obligatory)
- **Surname** (obligatory): Surname of user
- **Login allowed**: If the **Login allowed** check box is activated, the **Confirmed** check box and the **Login name** field are displayed.
  Once the user has been created and the **Login allowed** check box has been activated, Endress+Hauser checks whether the user is authorized for SupplyCare Hosting. If the user is authorized, the user receives his or her Login name from Endress+Hauser via the e-mail address specified here.
  If the **Login allowed** field is deactivated, the **Confirmed** check box and **Login name** field are no longer displayed.
- **Confirmed** (read only): This check box only appears once the Login allowed check box has been activated. The check box is activated by Endress+Hauser.
- **Login name** (read only): This field only appears once the Login allowed check box has been activated. The **Login name** is displayed once the user has been confirmed for SupplyCare Hosting by Endress+Hauser.
- **Language**
- **E-Mail** (obligatory
- **Phone**
- **Fax**
- **Mobile**
- **Company** (obligatory): The company is automatically pre-populated.
- **Street**
- **City**
- **Zipcode**
- **State**
- **Country**

Click to save your entries. Click to abort the process.

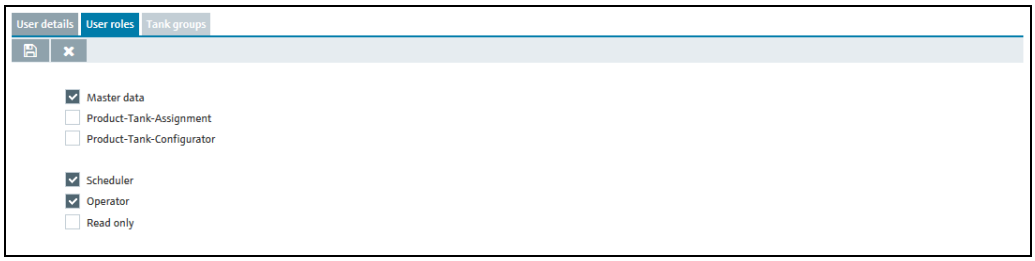
9. Select the **User roles** tab to assign a role to the user (→ 92).
10. Select the **Tank groups** tab to assign a tank group to the user (→ 93).

13.2.2 Assigning user roles

One or more user roles can be assigned to a user in the **User roles** tab. The user receives different authorizations depending on the user role (→ 17 and → 163).

On this tab you can also specify whether the user should receive alarms via e-mail.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **User** menu item.
3. Select the **User roles** tab.
4. Click the button.
5. The tab is displayed in the edit mode.



Konfiguration_Benutzer_Rollen_BA00050EN_30

6. Activate the appropriate **check box** to assign the user a user role. You can assign multiple user roles to a user at the same time.
7. Click to save your entries. Click to abort the process.

13.2.3 Changing a user

For details → 27

13.2.4 Deleting a user

For details → 31

A user can only be deleted if he or she is not assigned to any tank group or any company as a contact person. The user must not be logged in. The tank group assignment can be canceled in the **Tank groups** tab. The company assignment can be canceled in the **Company** menu item. The symbol is only displayed for a user who can be deleted.

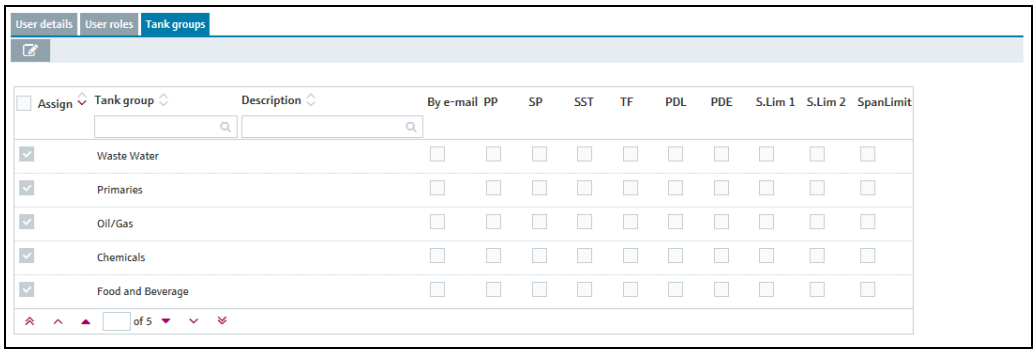
13.2.5 Copying a user

For details → 32

13.2.6 Assigning tank groups to a user and setting up notifications for tank events

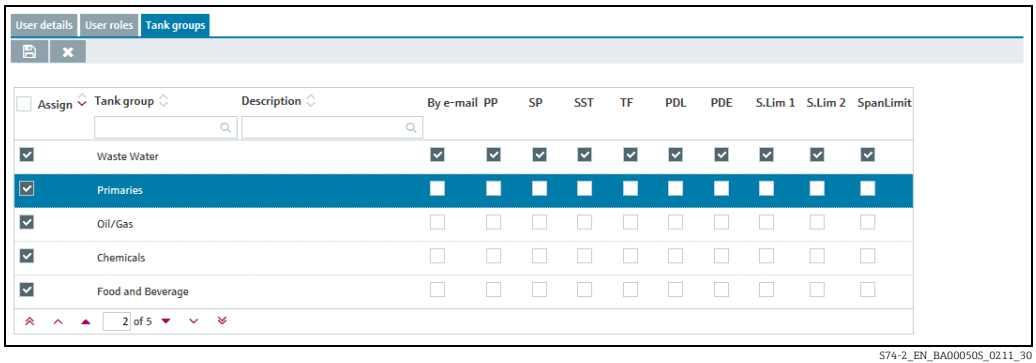
You can assign one or more tank groups to the user using the **Tank groups** tab. On this tab you can also specify the tank events which the user should be informed about.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **User** menu item.
3. In the table, click the user whose assignment you want to edit.
4. Select the **Tank groups** tab.



S74_EN_BA00050S_0211_30

5. Click the button.
6. The tab is displayed in the edit mode.



S74-2_EN_BA00050S_0211_30

7. Activating the **check box** in the **Assign** column assigns a tank group to the user. Deactivate the **check box** to undo the assignment. The assigned tank groups are listed in the "Workplace - Tank" view.
8. Activate the **By E-Mail** check box if you want the user to also be informed about tank events by e-mail.
9. Enable the check boxes corresponding to the events for which the user should receive notification.

- **PP** (plan point)
- **SP** (ship point)
- **SST** (safety stock)
- **TF/SF/OF** (Tank freeze/silo freeze/object freeze): comprises all the information regarding tank freeze/silo freeze/object freeze events
- **PDL** (planned delivery/disposal loop): comprises all the new deliveries/disposals which have been planned or deleted
- **PDE** (planned delivery/disposal events): comprises all the early, late, missed and completed deliveries/disposals
- **S.Lim1/S.Lim2** (Secondary Limit 1/2)

10. Click to save your entries. Click to abort the process.

13.3 Managing tanks

Only people whose user role is configured as **Master Data** can create, change and delete tanks.

Depending on your configuration, **Objects** or **Silos** are displayed instead of **Tanks**. For more information refer to the appropriate chapter in the Service Manual for System administration.

13.3.1 Creating a tank

There are several ways to create a tank in SupplyCare: you can use the Tank setup wizard or the tabs in the **Configuration** menu, **Tank** menu item.

By using the Tank setup wizard you can easily select the tank settings for a new tank: the basic settings **Tank name**, **Capacity**, **Planning type** and **Tank group** and other optional tank settings. The settings can be changed subsequently via the tabs mentioned above.

A tank always has to be assigned to a tank group since you can only assign tank groups to a user.

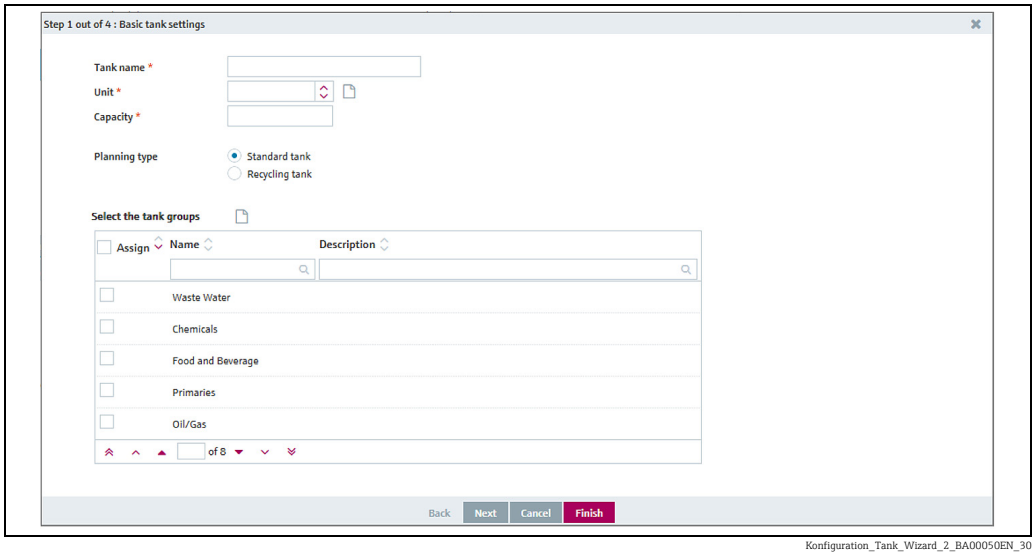
The "**Location**", "**Buyer**", "**Supplier**" and "**Product**" first have to be created before you can select elements for these fields. The **Buyer** and **Supplier** are created as a Company (→ 90).

a) Creating a tank using the Tank setup wizard

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. The detail view is displayed in the Application window.
4. Click the **Tank setup wizard** button.

The Tank wizard **cannot** be used to create aggregated tanks.

5. The dialog window **Step 1 out of 4: Basic tank settings** is displayed:



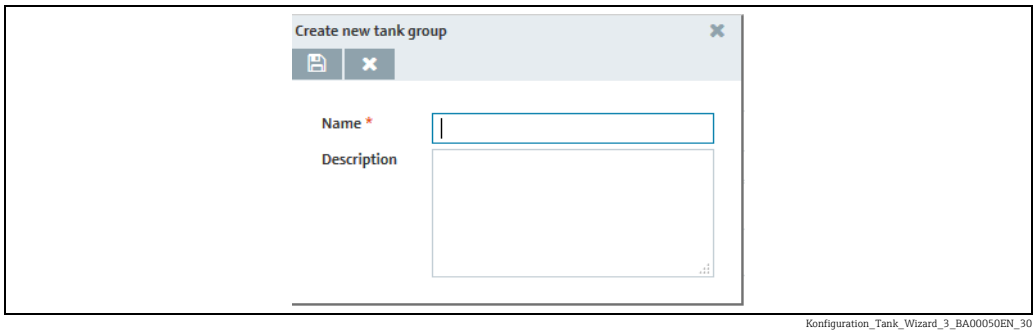
Konfiguration_Tank_Wizard_2_BA00050EN_30

6. Enter the following data:
Tank name (mandatory), **Unit** (mandatory), **Capacity** (mandatory), **Planning type** (→ 100)

If the customer wants to do his planning and daily operation on tanks based on mass, the maximum capacity must be used as volume unit, e.g. m^3. For appropriate product configuration refer to → 131.

7. By activating the **check box** in the **Assign** column, assign the tank to a tank group that already exists or create a new tank group if applicable. Click the button to create a new tank group.

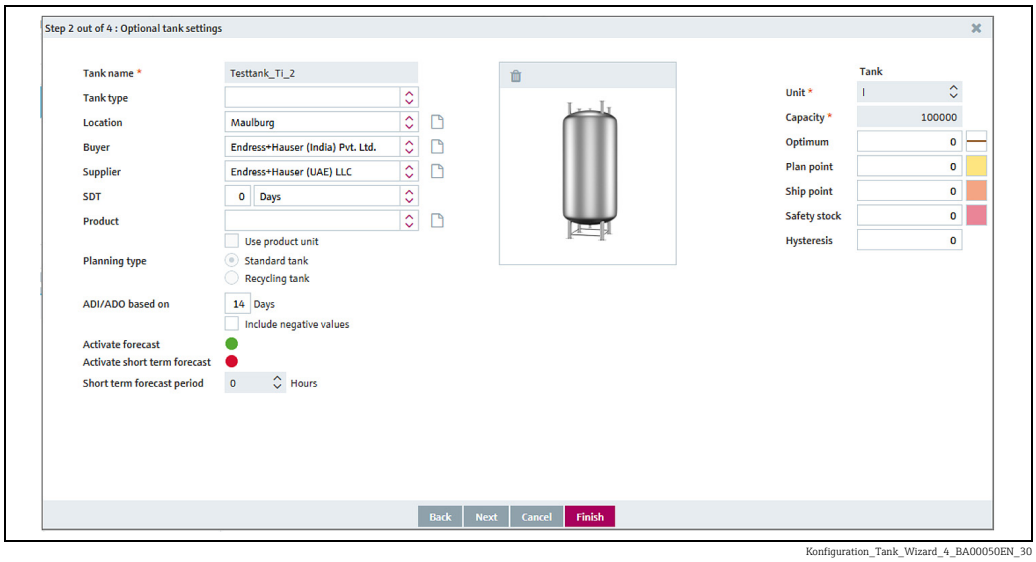
The **Create new tank group** dialog window appears:



Konfiguration_Tank_Wizard_3_BA00050EN_30

8. Enter the following data:
Name (mandatory), **Description**
9. Click to save your entries. Click to abort the process.
10. Click the **Next** button to enter more optional tank settings. Click the **Cancel** button to cancel the process or click the **Finish** button to finish creating the tank.

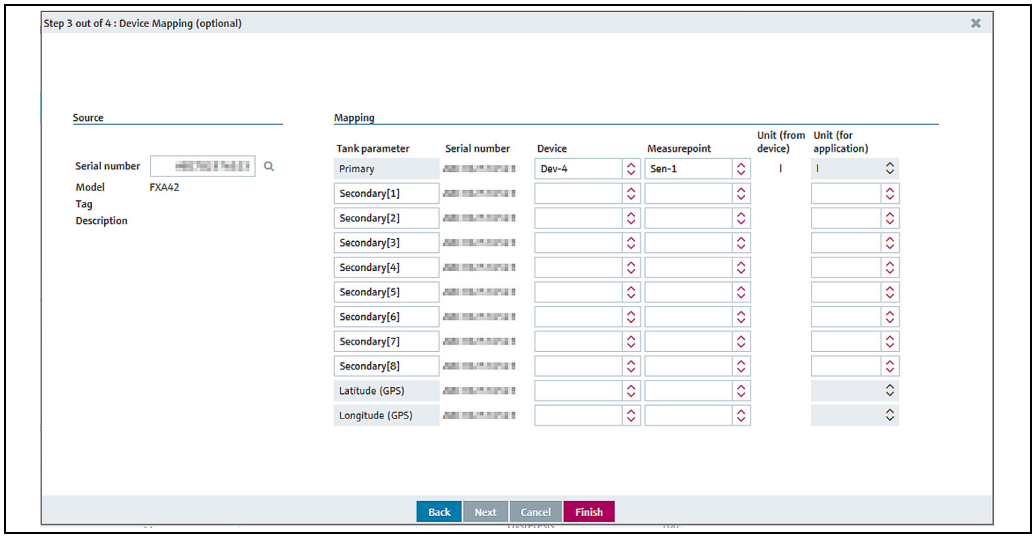
When you click **Next** the **Step 2 out of 4: Optional tank settings** dialog window appears:



Konfiguration_Tank_Wizard_4_BA00050EN_30

11. Enter the data as described below → 98.
12. Click the appropriate button to create a new location, buyer, supplier and product.
13. Select a graphic depicting the appropriate tank shape (→ 102).

14. Click the **Back** button to go back to the **Step 1 out of 4: Basic tank settings** dialog window. Click the **Cancel** button to cancel the process or click the **Finish** button to finish creating the tank. If you want to assign a device to the tank and select a linearization type, you can call up the next configuration steps with **Next**:

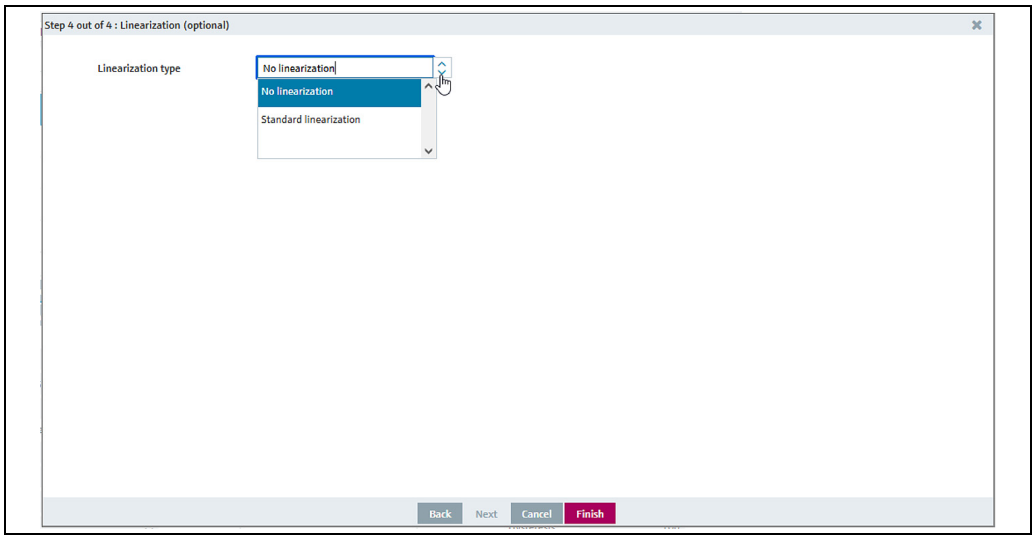


Konfiguration_Tank_Wizard_5_BA00050EN_30

15. **Step 3 out of 4: Device Mapping (optional)**: Assign devices and measurepoints to the tank parameters → 115.

Device mapping is only offered if the corresponding function is activated in the selected SupplyCare contract. If Device mapping is not available and should be activated, please contact Endress+Hauser:
www.addresses.endress.com.

16. Click the **Next** button to enter more optional tank settings. Click the **Cancel** button to cancel the process or click the **Finish** button to finish creating the tank.

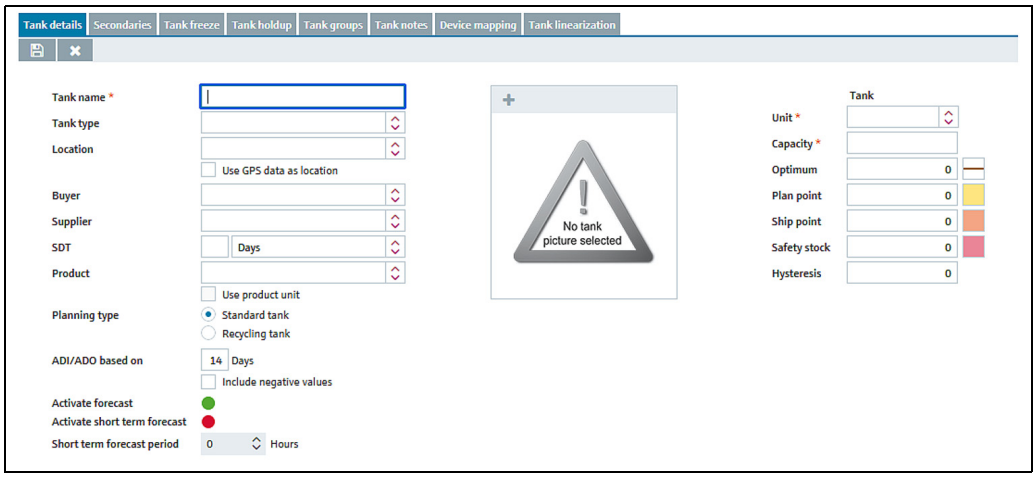


Konfiguration_Tank_Wizard_6_BA00050EN_30

b) Creating a tank using the tabs in the Configuration menu, Tank menu item

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. The detail view is displayed in the Application window. In the lower section, select the **Tank details** tab.

4. Click the button.
5. The tab is displayed in the edit mode.



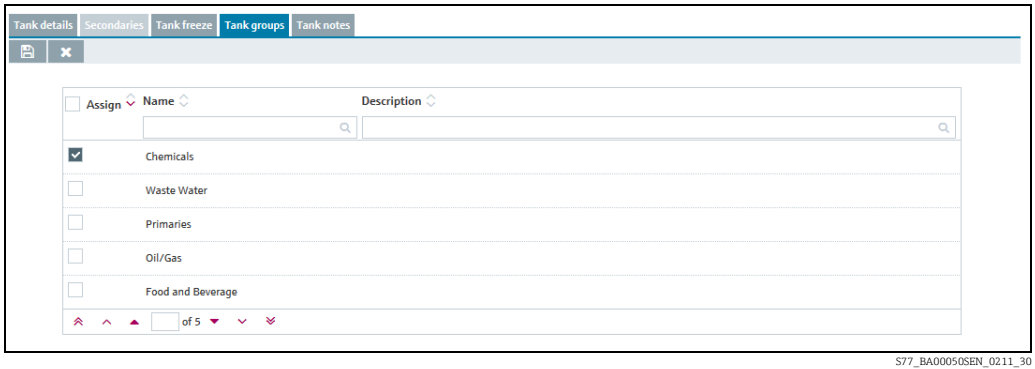
Konfiguration_Tank_5_BA00050EN_30

6. Here, you can enter data on the tank such as:

- **Tank name** (obligatory)
- **Tank type:** Select a tank type fom the pick list
- **Location**: Select the location from the picklist.
- **Use GPS data as location**: Activate the check box to display the GPS data generated by a GPS tracker on the tank. **Note:** This option cannot be used, until the tank is created and the necessary measure points are assigned. More information: Service Handbook SH00001S, Chapter: **Use GPS data as location**.
- **Buyer**: Select a buyer (company) from the picklist.
- **Supplier**: Select a supplier (company) from the picklist.
- **SDT** (Standard delivery/disposal time)
- **Product**: Select a product from the picklist.
- **Use product unit**: If this option is activated, the unit of the selected product is automatically used in the **Unit** field. The values in the fields **Capacity**, **Optimum**, **Plan point**, **Ship point**, **Safety stock** and **Hysteresis** are converted based on the density entered for the product.
  If the customer wants to do his planning and daily operation on tanks based on mass, the maximum capacity must be used as volume unit, e.g. m^3. For appropriate product configuration refer to → 131.
- **Planning type**: By activating the **Standard tank** check box, you specify that the tank is a standard tank, and by activating the **Recycling tank** check box you specify that the tank is a recycling tank. The event messages and the way the inventory chart and levels are displayed are adapted to this **planning type** (→ 100).
- **ADI(/ADO based on**: 14 days is the standard value specified here. This period is used for extrapolating in the inventory chart (→ 38).
- **Include negative values**: If this option is enabled, negative measuring values are included in the ADI/ADO calculations.
- **Activate forecast**: If this option is enabled, a forecast of the inventory is displayed in the **Inventory Chart** tab.
  The enabled forecast is displayed with a green button; the disabled forecast is displayed with a red button. This option can be changed in edit mode by clicking the green or red button.
- **Activate short term forecast**: see → 52.
- **Unit**
- **Capacity**: If the customer wants to do his planning and daily operation on tanks based on mass, the maximum capacity must be used as volume unit, e.g. m^3. For appropriate product configuration refer to → 131.

- **Optimum** (for standard tanks only)
- **Plan point**
- **Ship point**(for standard tanks only)
- **Safety stock**
- **Hysteresis**: The hysteresis serves to prevent constant event messages, e.g. due to a fluctuating level (→ 101).

7. In the case of a standard tank it is possible to deactivate the **Optimum**, **Plan point**, **Ship point** and **Safety stock** input fields individually, and the **Safety stock** and **Plan point** fields in the case of a recycling tank. For this purpose, click the button to the right of the specific input field. This field then becomes gray just like the button. It is no longer possible to enter information. These input fields can be activated by clicking the gray button in question.
8. Select a graphic depicting the appropriate tank shape (→ 102).
9. Click to save your entries. Click to abort the process.
10. Select the **Tank groups** tab.
11. Click the button.
12. The tab is displayed in the edit mode.

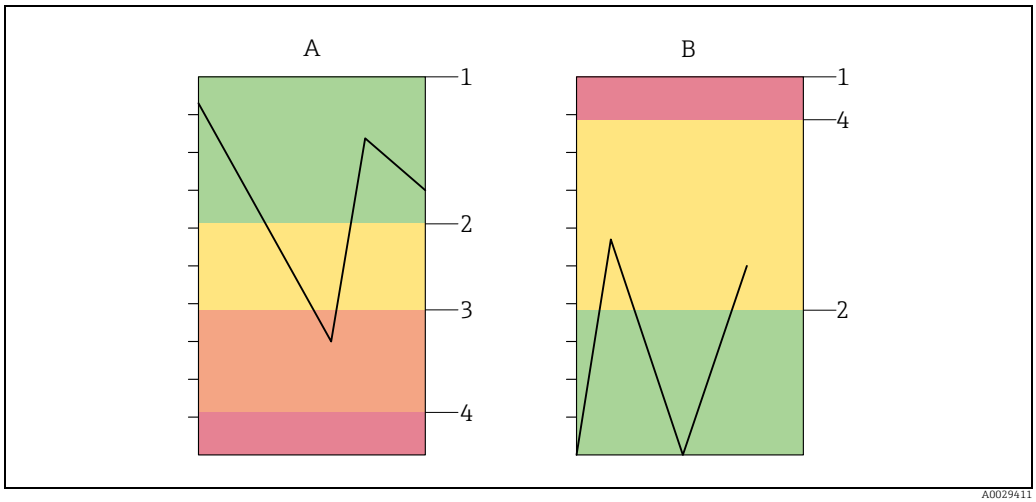


S77_BA00050SEN_0211_30

13. Activating the **check box** in the **Assign** column assigns the tank to a tank group.
14. Click to save your entries. Click to abort the process.

Standard tank and recycling tank

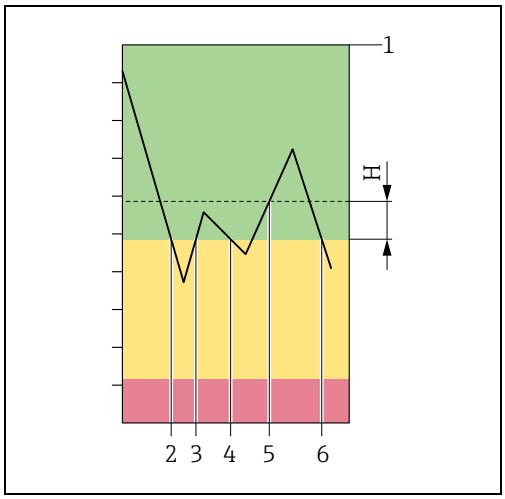
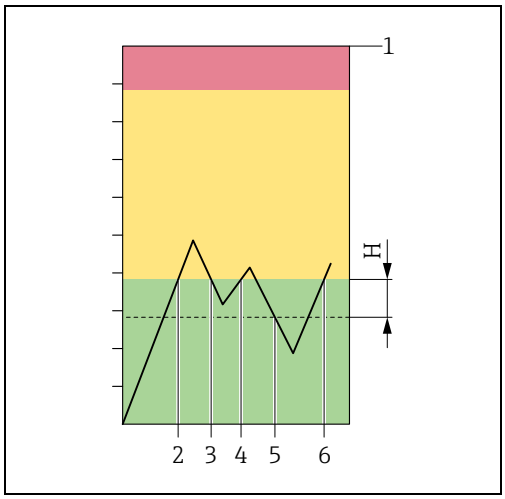
SupplyCare distinguishes between standard tanks and recycling tanks. From a standard tank, the product is withdrawn. For a recycling tank, the tank is filled with the product. Activating the **Recycling** check box turns the standard tank into a recycling tank. The display logic in the inventory chart and the notification logic are changed according to the following illustration.



A *Standard tank*
B *Recycling tank*
1 *Capacity*
2 *Plan point*
3 *Ship point*
4 *Safety stock*

Hysteresis

The hysteresis pertains solely to event notifications. The hysteresis prevents multiple triggering of an event notification, e.g. due to fluctuating levels.
The hysteresis applies to the following events: Plan point, Ship point and Safety stock

Standard tank	Recycling tank
 A0029409	 A0029410
1. Capacity 2. The level falls below the limit value for the Plan point. The "Plan point reached" event is triggered. The status of the event is set to **Open**. 3. The level climbs back above the limit value for the Plan point. The status for event 2 remains **Open**. The tank status switches to "OK" (green). 4. The level falls back below the limit value for the Plan point. No new event is triggered. The status for event 2 remains **Open**. The tank status switches to "Plan point reached" (yellow). No new event is triggered, as the level has not first climbed above the limit value for the Plan point plus the hysteresis. 5. The level rises above the limit value for the Plan point plus the hysteresis. Event 2 now assumes the status **Done**. 6. The level falls back below the limit value for the Plan point. A new "Plan point reached" event is triggered. The status of the event is set to **Open**.	1. Capacity 2. The level climbs above the limit value for the Plan point. The "Plan point reached" event is triggered. The status of the event is set to **Open**. 3. The level falls below the limit value for the Plan point. The status for event 2 remains **Open**. The tank status switches to "OK" (green). 4. The level climbs back above the limit value for the Plan point. No new event is triggered. The status for event 2 remains **Open**. The tank status switches to "Plan point reached" (yellow). No new event is triggered, as the level has not first fallen below the limit value for the Plan point minus the hysteresis. 5. The level falls below the limit value for the Plan point minus the hysteresis. Event 2 now assumes the status **Done**. 6. The level climbs back above the limit value for the Plan point. A new "Plan point reached" event is triggered. The status of the event is set to **Open**.

13.3.2 Selecting and deleting a depicted tank shape

Selecting a depicted tank shape

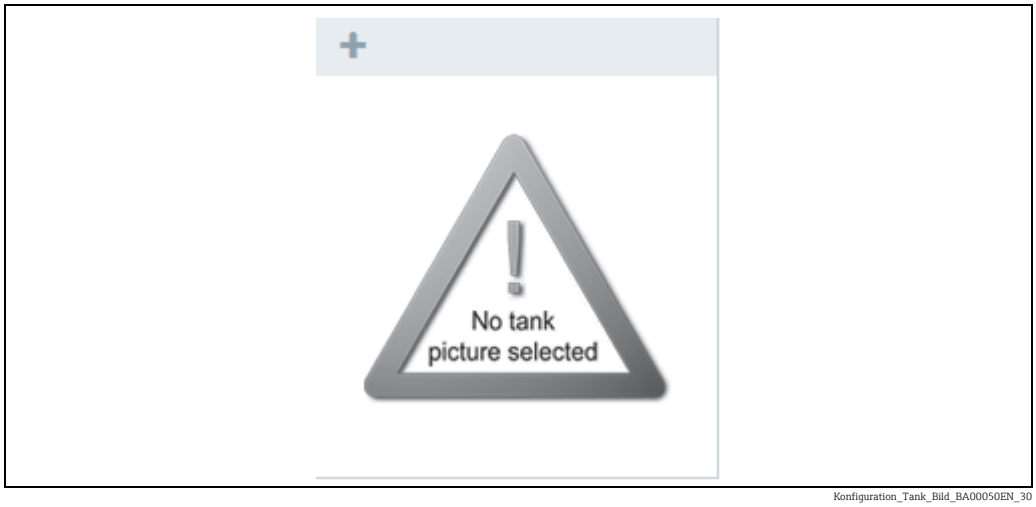
In the **Tank details** tab, you can select a graphic depicting the appropriate tank shape for a tank created. The selected graphic is also displayed in the "Workplace – Tank" view in the **Tank details** tab.

The "Vertical bar" and "Horizontal bar" tank pictures can be used if you prefer general symbols.

The "Digital display" tank picture can be used if you prefer the value to be displayed in digital format.
Please note that the digital display can show a maximum of 17 digits, including commas and thousand separators. If the value is longer than 17 digits, some or all of the decimal places are not displayed. If the value can still not be displayed with 17 digits even when the decimal places are omitted, the following appears on the display: ##################

The speedometer or gauge can also be used to display non-tank asset use, e.g. pressure.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. Select the **Tank details** tab.
4. Click the button.
5. The tab is displayed in the edit mode.
6. Click the button.



Konfiguration_Tank_Bild_BA00050EN_30

7. The **Select tank picture** dialog box is displayed.
8. Click the picture of the tank shape that applies for the tank you created.
9. The selected graphic is added to the **Tank details** tab.
10. Click to save your selection. Click to abort the process.

Deleting a depicted tank shape

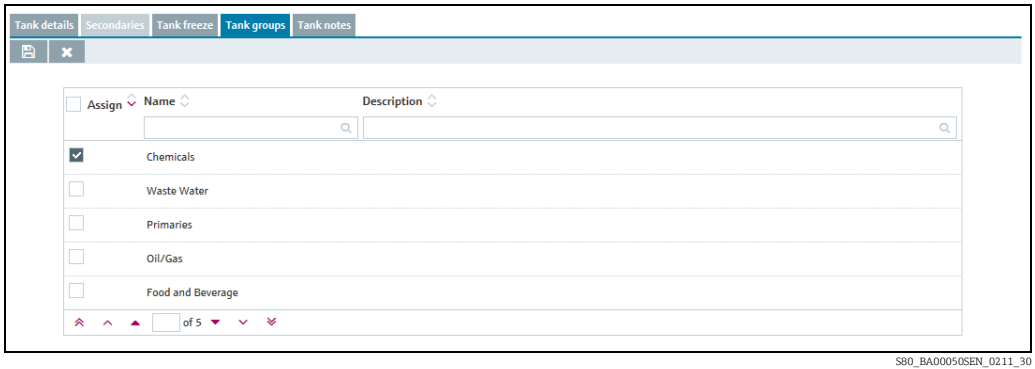
1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.

3. Select the **Tank details** tab.
4. Click the button.
5. The tab is displayed in the edit mode.
6. Click the button in the **Tank shape** graphic.
7. The prompt "Do you really want to delete?" is displayed.
8. Click **OK** to delete the graphic. The "No tank picture selected" graphic is displayed. Click **Cancel** to abort the process.
9. Click to save your changes. Click to abort the process.

The picture is only deleted if you save your changes with button.

13.3.3 Changing tank-tank group assignment

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the table, click the tank whose assignment you want to change.
4. Select the **Tank groups** tab.
5. Click the button.
6. The tab is displayed in the edit mode.



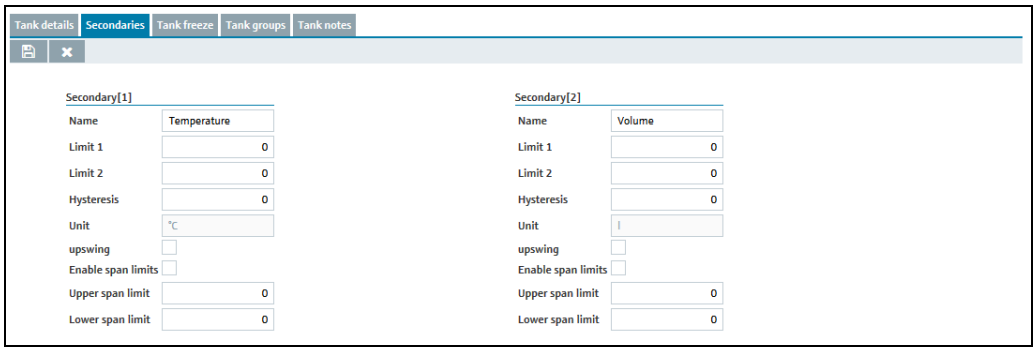
S80_BA00050SEN_0211_30

7. Activating the check box in the **Assign** column assigns the tank to a tank group. Deactivate the check box to undo the assignment.
8. Click to save your entries. Click to abort the process.

13.3.4 Configuring secondaries

If secondary values have been assigned to the tank via the "Gateway configuration" menu item in the "Assign measure point to tank" tab, these secondary values are displayed in the "Secondaries" tab.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the lower section of the application window, select the **Secondaries** tab.
4. Click the button.
5. The tab is displayed in the edit mode.



Sekundaerwerte_BA00050SEN_30

6. You can enter additional information on the secondary values here, such as:

- **Name**: The name is displayed in the "Workplace – Tank" view in the **Tank name** column and in the **Inventory chart** tab.
- **Limit 1**: See the following section: Display for "Descending limits" and "Ascending limits".
- **Limit 2**: See the following section: Display for "Descending limits" and "Ascending limits".
- **Hysteresis**
- **Unit** (read only)
- **Upswing**: Switch between descending and ascending limits.
- Enable span limits
- **Upper span limit**
- Lower span limit

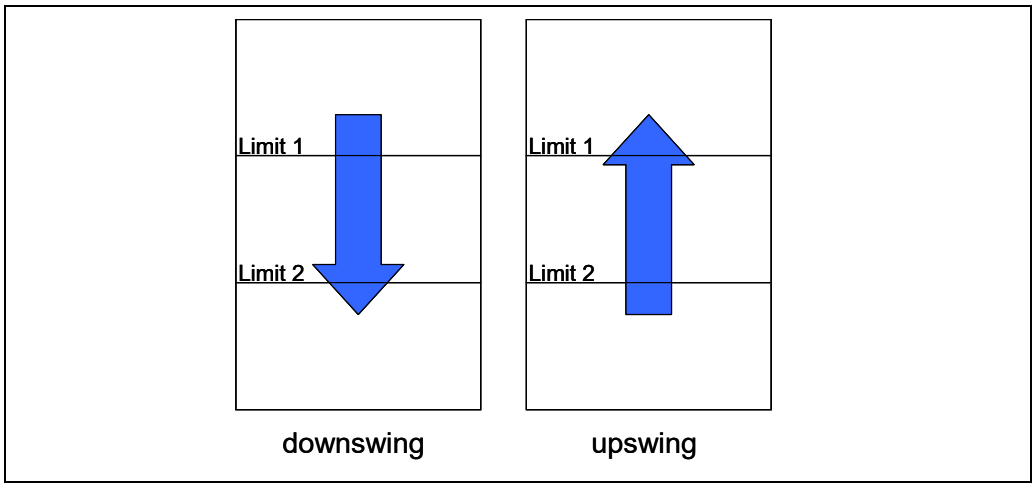
Recommendation: Apply either limits or span limits to monitor the secondary value. Do not use both means. Although possible, this may lead to misconceptions.

Inside the span limits, there's a hysteresis for the reset of events. The hysteresis range is located inside the span limits. If the secondary value moves out of the set span limits, then the status in the tank overview changes and events are triggered. Events are only reset, if the secondary value has moved back inside the span so far that it has also passed the hysteresis range → 101.

Display for "Descending limits" and "Ascending limits"

Using the **Upswing** check box, choose between the "Descending limits" and "Ascending limits" display.

"Upswing" check box	Description	Column in the "Workplace – Tank" view
Descending limits: "Upswing" check box disabled	Limit 1	PP (plan point)
	Limit 2	SST (safety stock)
Ascending limits: "Upswing " check box enabled	Limit 2	PP (plan point)
	Limit 1	SST (safety stock)



13.3.5 Configuring tank freeze events

Tank freeze events are generated using an internal limit based on the latest measurement received for the tank within a defined time span, e.g. to recognize material theft, leakage or defects.

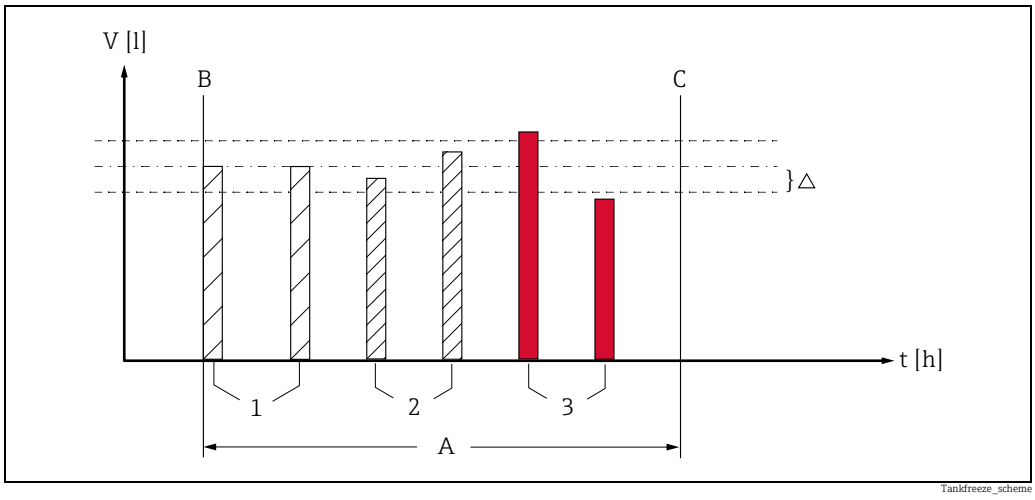
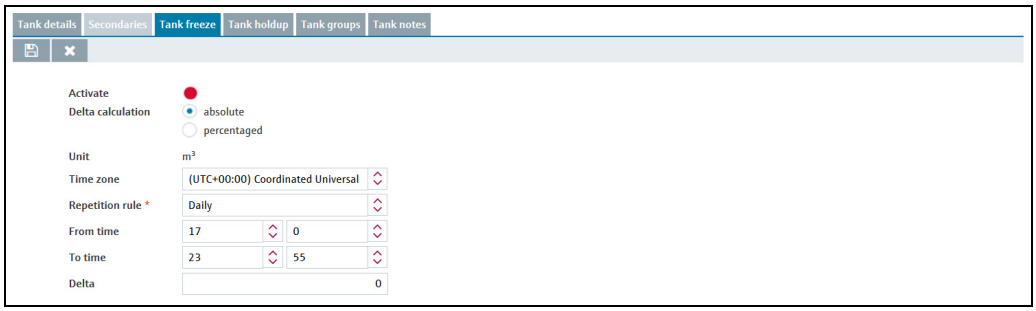


Fig. 1:
A Configured monitoring time
B Monitoring time start
C Monitoring time end
1 Start level, unchanged level
2 Level changed, but inside the configured freeze event delta. There is no tank freeze event created.
3 Level changed, but outside the configured freeze event delta. A tank freeze event is created.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the lower section of the application window, select the **Tank freeze** tab.
4. Click the button.
5. The tab is displayed in the edit mode.



Konfiguration_Tank_Tank-Freeze_1_BA00050SEN_31

6. Here you can enter data to configure tank freeze events, such as:

- **Activate**: If this option is enabled, tank freeze events are enabled. The enabled tank freeze events are displayed with a green button; the disabled tank freeze events are displayed with a red button. This option can be changed in edit mode by clicking the green or red button. The default setting for this option is "disabled".
- **Delta calculation**: Select **absolute** to specify the **Freeze event delta** as a fixed value in the unit of the tank. Select **percentaged** to specify the **Freeze event delta** as a percentage of the configured tank capacity. The default setting for this option is **absolute**. You can toggle between absolute and percentaged anytime. If you change the calculation mode for the delta, the delta value for the relevant monitoring time becomes invalid and must be put in again. If the repetition rule **Daily** is set, the delta is set to zero.
- **Freeze event delta**: (obligatory) Enter a positive numeric value.
  At the beginning of the monitoring time the last measured tank value (e.g. the tank level) is saved ("frozen"). This "frozen" measurement is compared with the current measurements during the monitoring time. If the difference between the frozen measurement and the current measurement exceeds the **Freeze event delta** (positive or negative), a tank freeze event is generated. The Freeze event delta can be configured for each monitoring time separately.
- **Unit**: Displays the unit configured for the tank capacity if **Delta calculation** is set to absolute. Displays "%" otherwise.
- **Time zone**: Select the time zone to be used for the monitoring times configured under **Repetition rule**.
- **Repetition rule**: (obligatory) Select a rule for the repetition of the monitoring time.
  Daily: Select a **From time** (start time) and a **To time** (end time) for each daily monitoring time.
  The **From time** must represent an earlier time point than the **To time**. For a daily monitoring time from a time point before midnight and after midnight, configure a **Weekly on every...** repetition rule.
  Weekly on every...: Configure monitoring times for tank freeze events for each weekday individually.
  For more details on the configuration of the **Weekly on every...** repetition rule, refer to the following chapter "Configuring the Weekly on every... repetition rule" (→ 107).

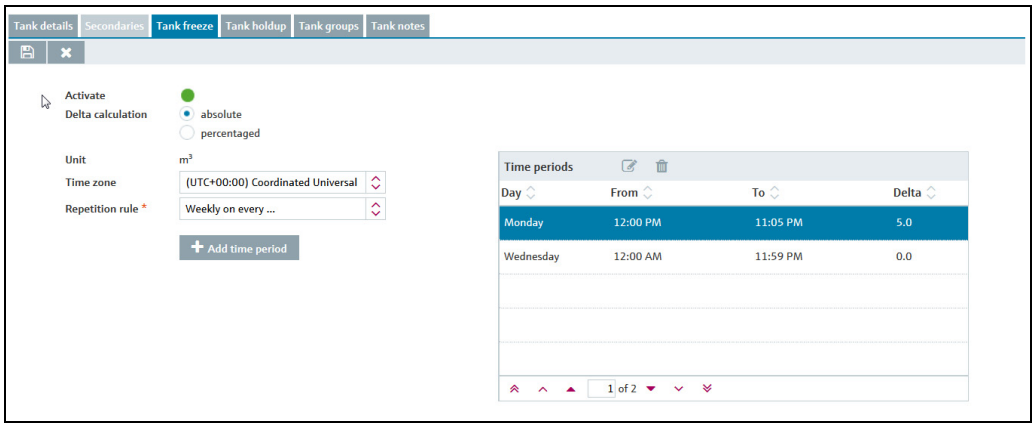
You can configure only one kind of repetition rule (Daily... **or** Weekly...) for a given tank. Valid is always the repetition rule that you configured and saved last.

7. Click to save your configuration. Click to abort the process.

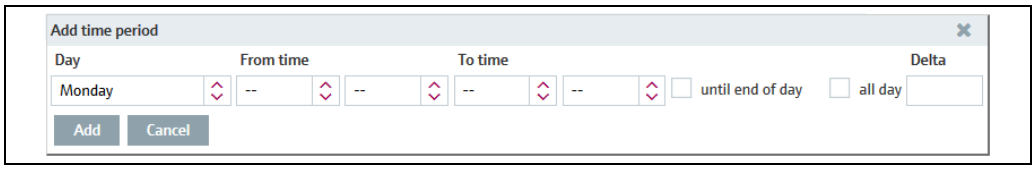
Use the **Copy to other tanks** button to copy the **Tank freeze** configuration to other tanks. For more details, refer to the chapter "Copying the Tank freeze configuration to other tanks" (→ 108).

Configuring the Weekly on every ... repetition rule

Configure monitoring times for tank freeze events for each weekday individually. You can configure up to 25 monitoring times per week.



Konfiguration_Tank_Tank-Freeze_2_BA00050SEN_31



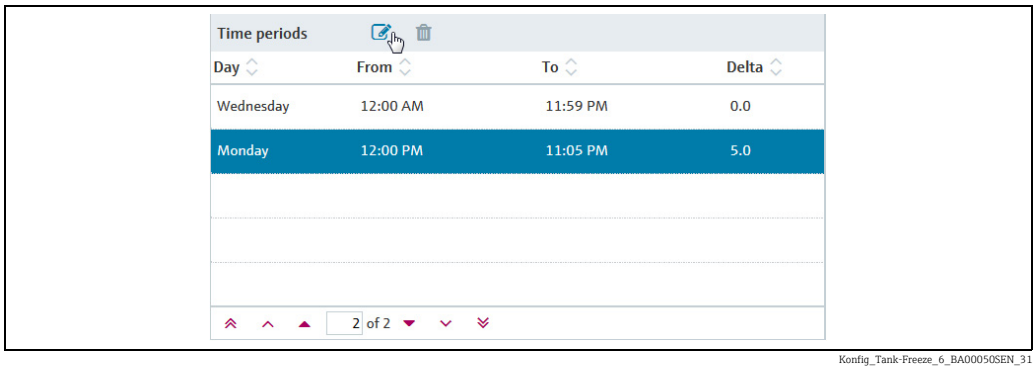
Konfig_Tank-Freeze_5_BA00050SEN_31

- Click on the button **Add time period** and select the weekday for which you want to configure the monitoring times in the following window.
- Select a **From time** (start time) and a **To time** (end time) for the monitoring for tank freeze events. The value for **From time** must be smaller than the value for **To time**.
- Select **until end of day** for a selected weekday to set the end of the monitoring time to 23:59, i.e. substituting **To time** with 23:59. If **until end of day** is selected, To time is disabled and hidden.
- If you want to configure a monitoring time on one day which extends into the morning hours of the following day, proceed as follows: Choose a **From time** and select **until end of day** to set the end of the monitoring time to 23:59 (11:59 PM). Save this configuration and add one more monitoring time for the following weekday, which starts at 0:00 h and ends with the set To time. Select the same delta. The total monitoring time then refers to the measurement taken for the From time of the first day.
- Select **all day** to set the monitoring time from 0:00 to 23:59, i.e. substituting **From time** with 0:00 and **To time** with 23:59. If **all day** is selected, **From time** and **To time** are disabled and hidden.
- Select a **Freeze event delta**.
- Click the button **Add** to add your configuration to the list of active monitoring time periods. Click **Cancel** to abort the process.
- Click on the **Tank freeze** tab to save your configuration. Click to abort the process.

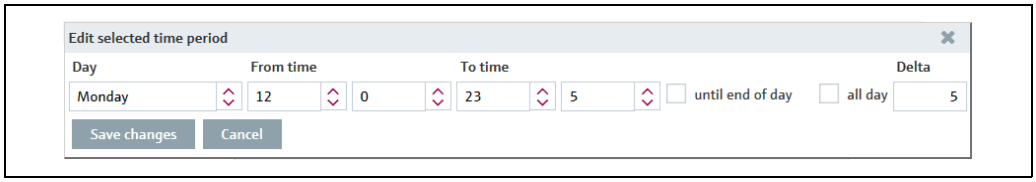
Monitoring time periods cannot overlap.

Changing monitoring time periods

1. Click on the **Tank freeze** tab. The tab is displayed in the edit mode.
2. Select the relevant monitoring time from the list. Click in the list's head.



Konfig_Tank-Freeze_6_BA00050SEN_31

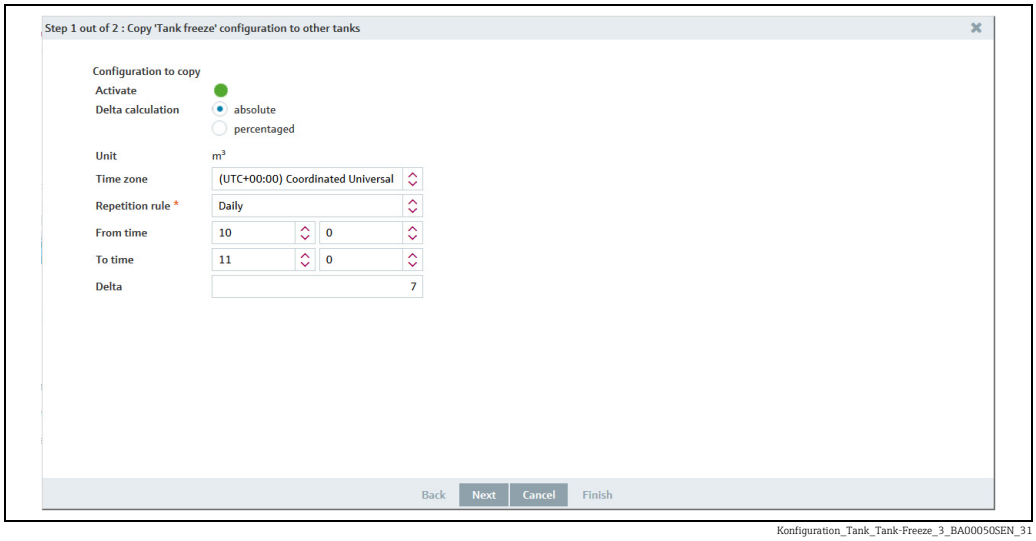


Konfig_Tank-Freeze_7_BA00050SEN_31

3. The window displays the last saved Tank freeze configuration. Change the configuration if desired.
4. Click the button **Save changes** to save the new configuration or click **Cancel** to abort the process.
5. Click on the **Tank freeze** tab to save your configuration. Click to abort the process.

Copying the Tank freeze configuration to other tanks

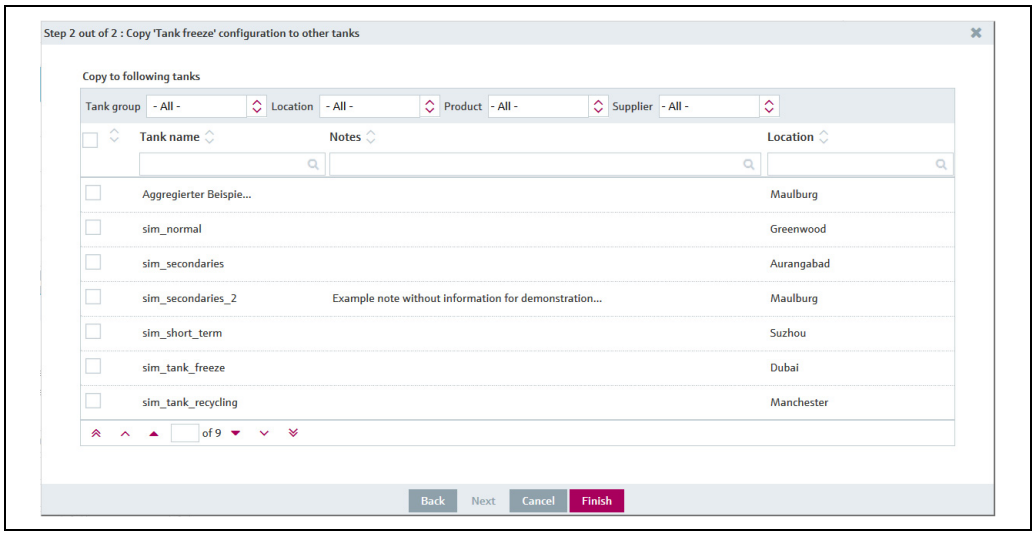
1. Click the **Copy to other tanks** button in the **Tank freeze** tab.
2. The dialog window **Step 1 out of 2: Copy 'Tank freeze' configuration to other tanks** is displayed:



Konfiguration_Tank_Tank-Freeze_3_BA00050SEN_31

3. The window displays the last saved Tank freeze configuration. Change the configuration if desired.
   Activate: The default setting for this option is "disabled". Click the red button to activate the option. The enabled tank freeze events are displayed with a green button.

4. Click **Next** to proceed to the next step, click **Cancel** to cancel the process.
5. When you click **Next**, the dialog window **Step 2 out of 2: Copy 'Tank freeze' configuration to other tanks** is displayed:

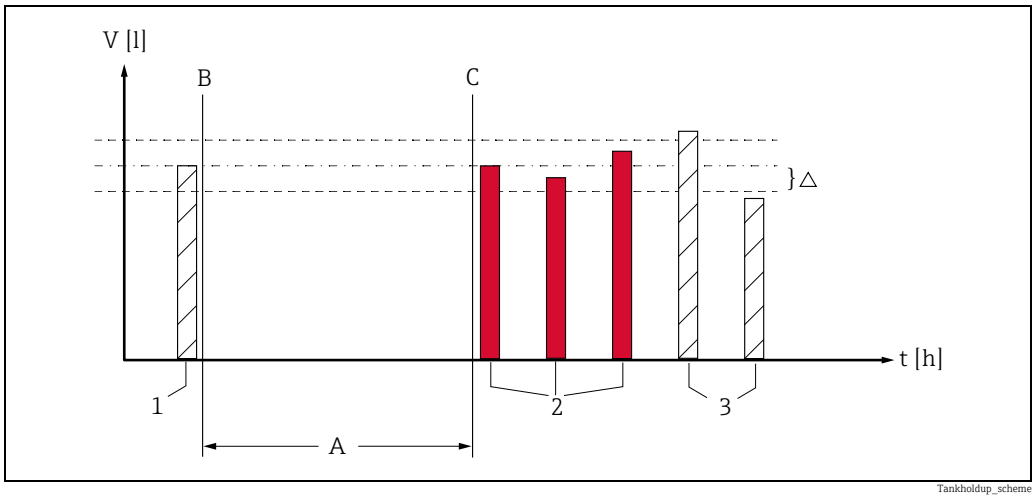


Konfiguration_Tank_Tank-Freeze_4_BA00050SEN_31

6. Select the tanks to which you want to copy the Tank freeze configuration by activating the check boxes before the tanks.
   You can filter the displayed tanks by **Tank group**, **Location**, **Product** or **Supplier**.
7. Click **Back** to return to the previous step, click **Cancel** to cancel the process or **Finish** to copy the Tank freeze configuration to the selected tanks.

13.3.6 Configuring tank holdup events

Tank holdup events are, similar to the Tank freeze events, generated using an internal limit based on the latest measurement received for the tank within a defined time span. The purpose of this monitoring function is to recognize material theft, malfunction or defects.



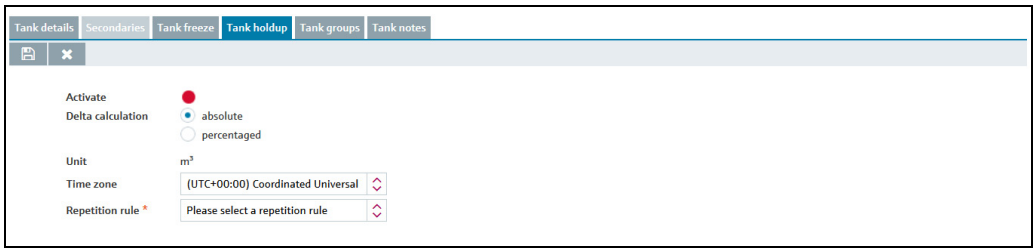
Tankholdup_scheme

Fig. 2:
A Configured monitoring time
B Monitoring time start
C Monitoring time end
1 Start level
2 Level unchanged or changed, but inside the configured event delta. A tank holdup event is created.
*3 Level changed, but outside the configured event delta. There is **no** tank holdup event created.*

Concept

Different to the tank freeze events, the expected condition of a tank is that there is content being unloaded or refilled, the level respectively changes. Furthermore, it is a minimum amount (event delta) that's being removed in the period between the two measurements, which reflects the normal, expected course. An event is created, if the configured delta is not reached. The tank holdup function is therefore suited for e.g. self-service filling stations, where there is a certain amount of unload is observed and thus can be expected in future.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the lower section of the application window, select the **Tank holdup** tab.
4. Click the button.
5. The tab is displayed in the edit mode.



Konfiguration_Tank_holdup_1_BA00050SEN_31

6. Here you can enter data to configure tank holdup events, such as:

- **Activate**: The default setting for this option is "disabled". If this option is enabled, tank holdup events are enabled. The enabled tank holdup events are displayed with a green button.
- **Delta calculation**: Select **absolute** to specify the **event delta** as a fixed value in the unit of the tank. Select **percentaged** to specify the **event delta** as a percentage of the configured tank capacity. The default setting for this option is **absolute**.
- **Delta for Tank holdup events**: (obligatory) Enter a positive numeric value.
  At the beginning of the monitoring time the last measured tank value (e.g. the tank level) is saved ("frozen"). This "frozen" measurement is compared with the current measurements during the monitoring time. If the difference between the frozen measurement and the current measurement does not exceed the **event delta** (positive or negative), a tank holdup event is generated.
- **Unit**: Displays the unit configured for the tank capacity if **Delta calculation** is set to absolute. Displays "%" otherwise.
- **Time zone**: Select the time zone to be used for the monitoring times configured under **Repetition rule**.
- **Repetition rule**: (obligatory) Select a rule for the repetition of the monitoring time.
  Daily: Select a **From time** (start time) and a **To time** (end time) for each daily Tank holdup event monitoring time.
  The **From time** must represent an earlier time point than the **To time**. For a daily monitoring time from a time point before midnight and after midnight, configure a **Weekly on every...** repetition rule.
  Weekly on every...: Configure monitoring times for tank holdup events for each weekday individually.
  For more details on the configuration of the **Weekly on every...** repetition rule, refer to the following chapter "Configuring the Weekly on every... repetition rule" (→ 111).

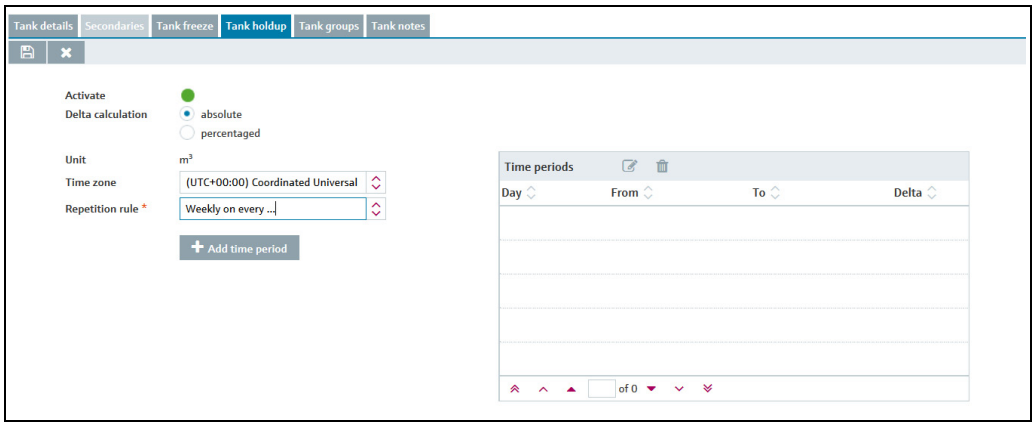
You can configure only one kind of repetition rule (Daily ... **or** Weekly...) for a given tank. Valid is always the repetition rule that you configured and saved last.

7. Click to save your configuration. Click to abort the process.

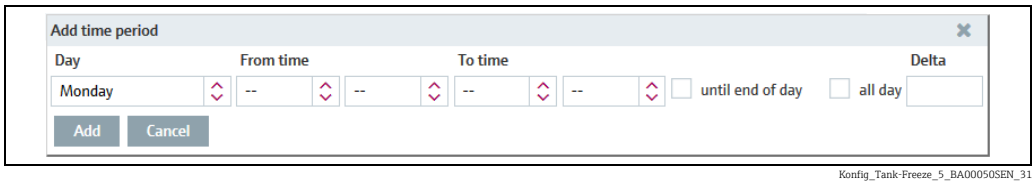
Use the **Copy to other tanks** button to copy the **Tank freeze** configuration to other tanks. For more details, refer to the chapter "Copying the Tank freeze configuration to other tanks" (→ 111).

Configuring the Weekly on every ... repetition rule

Configure monitoring times for tank holdup events for each weekday individually.



Konfiguration_Tank_holdup_2_BA00050SEN_31



Konfig_Tank-Freeze_5_BA00050SEN_31

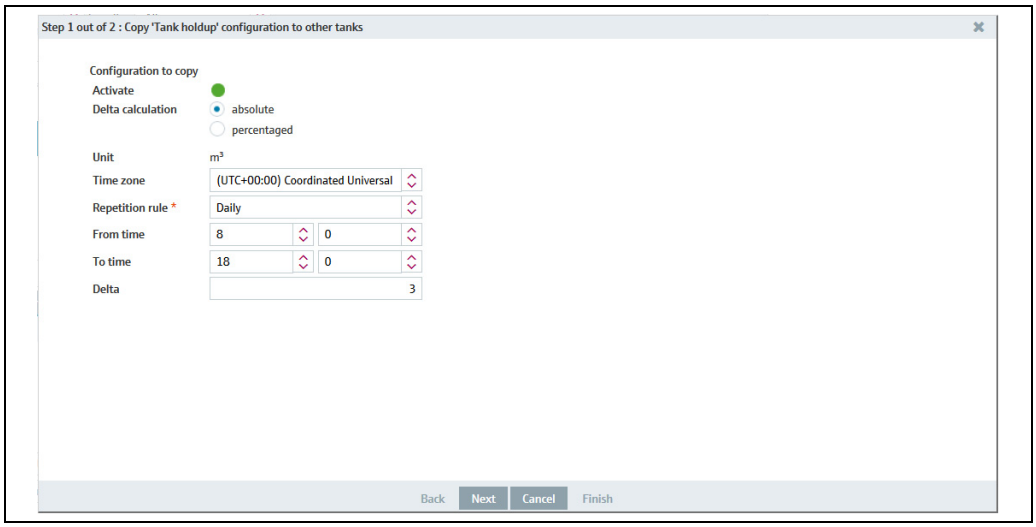
- Click on the button **Add time period** and select the weekday for which you want to configure the monitoring times in the following window.
- Select a **From time** (start time) and a **To time** (end time) for the monitoring for tank holdup events. The value for **From time** must be smaller than the value for **To time**.
- Select **until end of day** for a selected weekday to set the end of the monitoring time to 23:59, i.e. substituting **To time** with 23:59. If **until end of day** is selected, To time is disabled and hidden.
- If you want to configure a monitoring time on one day which extends into the morning hours of the following day, proceed as follows: Choose a **From time** and select **until end of day** to set the end of the monitoring time to 23:59 (11:59 PM). Save this configuration and add one more monitoring time for the following weekday, which starts at 0:00 h and ends with the set To time. Select the same delta. The total monitoring time then refers to the measurement taken for the From time of the first day.
- Select **all day** to set the monitoring time from 0:00 to 23:59, i.e. substituting **From time** with 0:00 and **To time** with 23:59.
  If **all day** is selected, **From time** and **To time** are disabled and hidden.
- Select an **event delta**.
- Click the button **Add** to add your configuration to the list of active monitoring time periods. Click **Cancel** to abort the process.
- Click on the **Tank freeze** tab to save your configuration. Click to abort the process.

Monitoring time periods cannot overlap.

Copying the Tank holdup configuration to other tanks

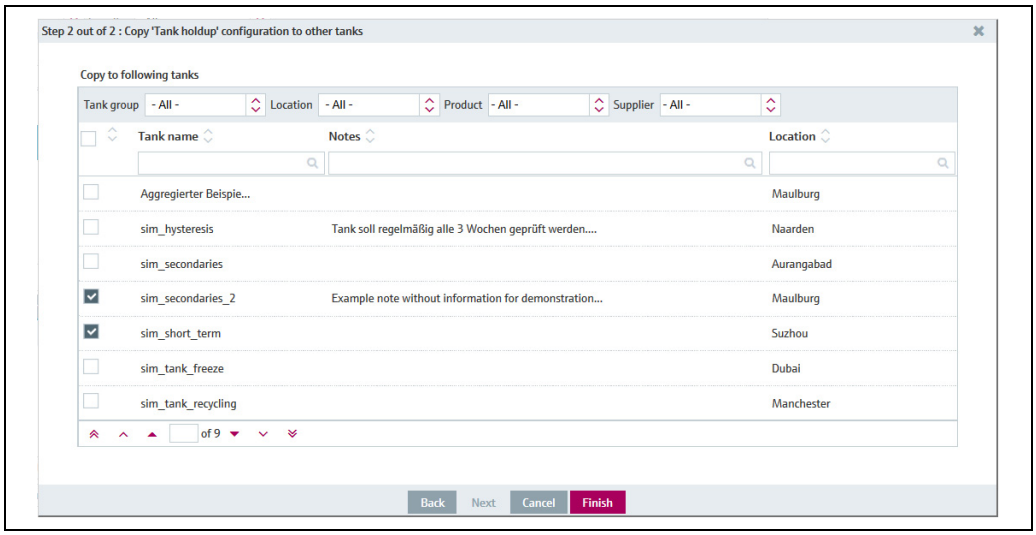
1. Click the **Copy to other tanks** button in the **Tank holdup** tab.

2. The dialog window **Step 1 out of 2: Copy Tank holdup configuration to other tanks** is displayed:



Konfiguration_Tank_holdup_5_BA00050SEN_31

3. The window displays the last saved Tank holdup configuration. Change the configuration if desired.
Activate: The default setting for this option is "disabled". Click the red button to activate the option. The enabled tank holdup events are displayed with a green button.
4. Click **Next** to proceed to the next step, click **Cancel** to cancel the process.
5. When you click **Next**, the dialog window **Step 2 out of 2: Copy 'Tank holdup' configuration to other tanks** is displayed:



Konfiguration_Tank_holdup_6_BA00050SEN_31

6. Select the tanks to which you want to copy the Tank holdup configuration by activating the check boxes before the tanks.
You can filter the displayed tanks by **Tank group**, **Location**, **Product** or **Supplier**.

Notice! If you click **Finish**, the monitoring times you entered here will overwrite the monitoring times that you have configured before for the actual tank and all the tanks selected!

7. Click **Back** to return to the previous step, click **Cancel** to cancel the process or **Finish** to copy the Tank freeze configuration to the selected tanks.

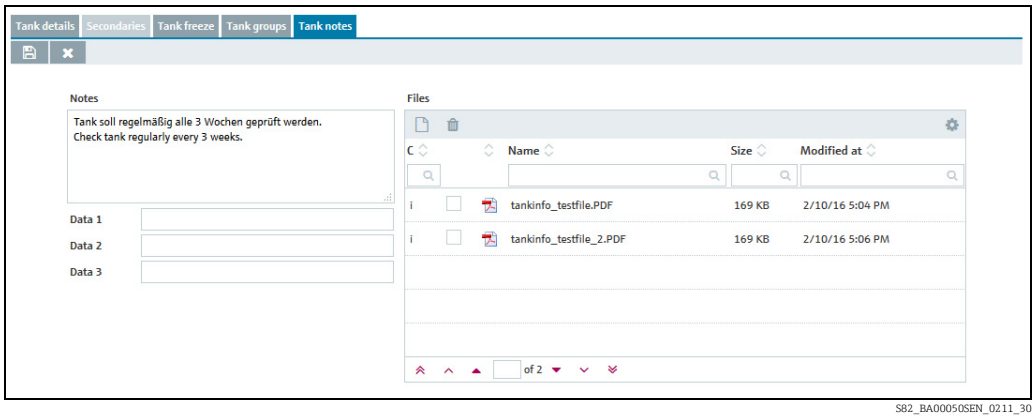
13.3.7 Adding, opening and deleting files and other information for a tank

Using the **Tank notes** tab, you can add additional information for a tank and a maximum of five files. The information entered here and the attached files are also displayed in the "Workplace – Tank" view, **Notes and files** tab.

The files must meet the following requirements:
- File formats supported: doc, xls, pdf, ppt, jpg, gif, png, bmp or txt.
- Maximum file size: 5 MB

Adding a file

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the table, click the tank for which you want to add a file.
4. Select the **Tank notes** tab.
5. Click the  button.



S82_BA00050SEN_0211_30

6. The **Tank notes** tab is displayed in the edit mode.
7. Enter a description for the **Notes**, **Data 1**, **Data 2** and **Data 3** fields.
8. Click the  button in the table.
9. The **Upload new file** dialog box is displayed.
10. Click the **Search** button.
11. Select the **File** in your directory. The file name is displayed in the **Name** column in the table.
12. Click the **Upload new file** button.
13. The file is listed in the table with information on the file format, file name, file size and the date the file was last changed.

Opening or saving a file

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. Select the **Tank notes** tab.
4. Click the **File name** (hyperlink) in the **Name** column in the table.
5. A dialog box opens. Here you can choose whether you want to open the file or save it.
6. Click **OK** to open or save the file. Click **Cancel** to abort the process.

Deleting a file

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank** menu item.
3. Select the **Tank notes** tab.
4. Click the button.
5. The **Tank notes** tab is displayed in the edit mode.
6. In the table, enable the check box for the file that you want to delete.
7. Click the button.
8. The prompt "Do you really want to delete?" is displayed.
9. Click **OK** to delete the file. Click **Cancel** to abort the process.
10. Click to save your changes. Click to abort the process.

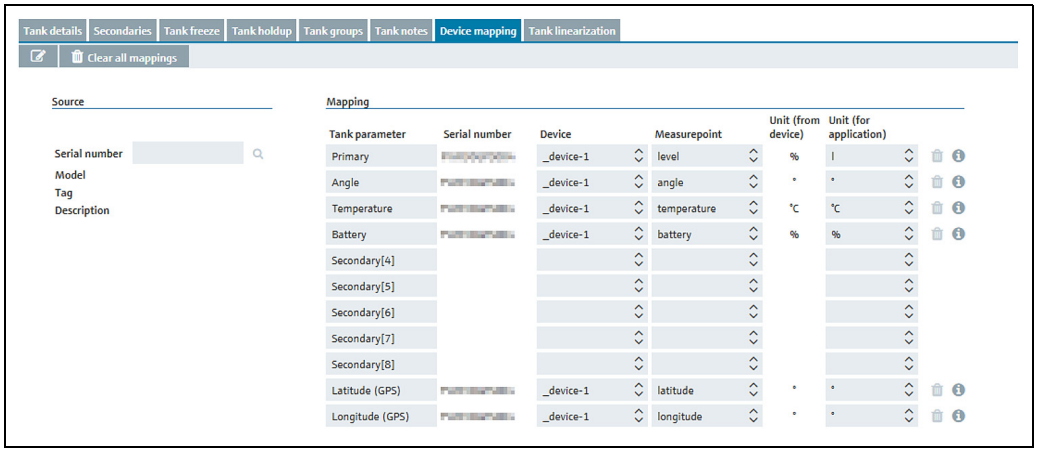
The file is only deleted if you save your changes by pressing the button.

You can change or delete descriptions in the **Notes**, **Data 1**, **Data 2** and **Data 3** fields in the editing mode. Click to save the changes.

13.3.8 Device mapping

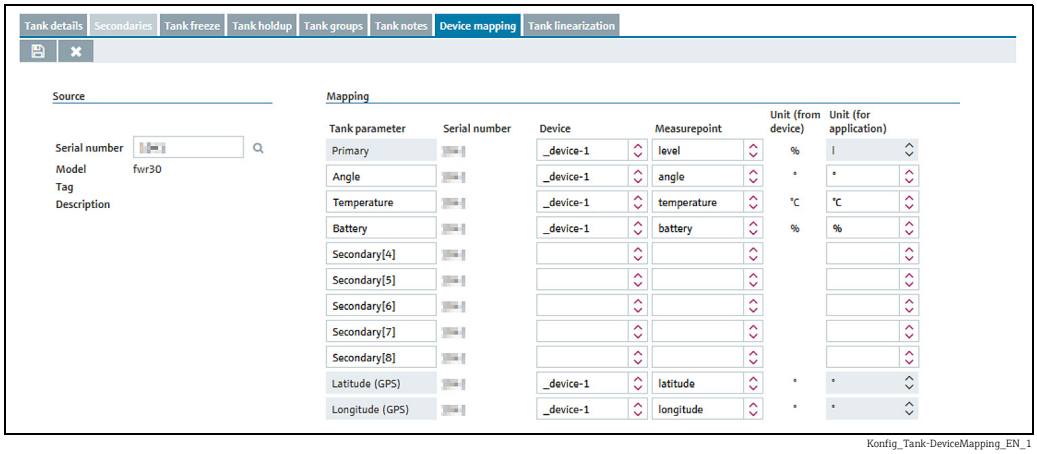
Via the Device mapping tab, you can map devices to a tank and get an overview of the mapping of tank parameters to the gateways with the associated measurepoints.

Device mapping is only offered if the corresponding function is activated in the selected SupplyCare contract. If Device mapping is not available and should be activated, please contact Endress+Hauser:
www.addresses.endress.com.



Konfig_Tank-DeviceMapping_EN_2

In addition, the set units and measurement units are displayed. With the exception of the tank parameters **Primary**, **Latitude (GPS)** and **Longitude (GPS)** and the associated units of measurement, all fields are editable (edit mode).



Konfig_Tank-DeviceMapping_EN_1

- **Source**: Data is supplied by this source.
- **Serial number**: Using the serial number of a gateway, you can determine a gateway that you want to assign to a tank. The program searches for the entered serial number among the gateways that are assigned to the active contract and are active.
- **Model**, **Tag** and **Description**: automatically filled known data for a found gateway.
- **Mapping**: Here the data are assigned to a tank and its parameters.
- **Tank parameters**: The tank parameters listed here can be assigned to the measurepoints offered by the selected gateway. With a few exceptions, the naming of a tank parameter can be freely selected. The individual texts are then reproduced in each language as filled in, meaning they are not translated.
- **Serial number**: The serial number of the selected gateway.
- **Device**: The drop-down list in a data field shows the devices belonging to the gateway.

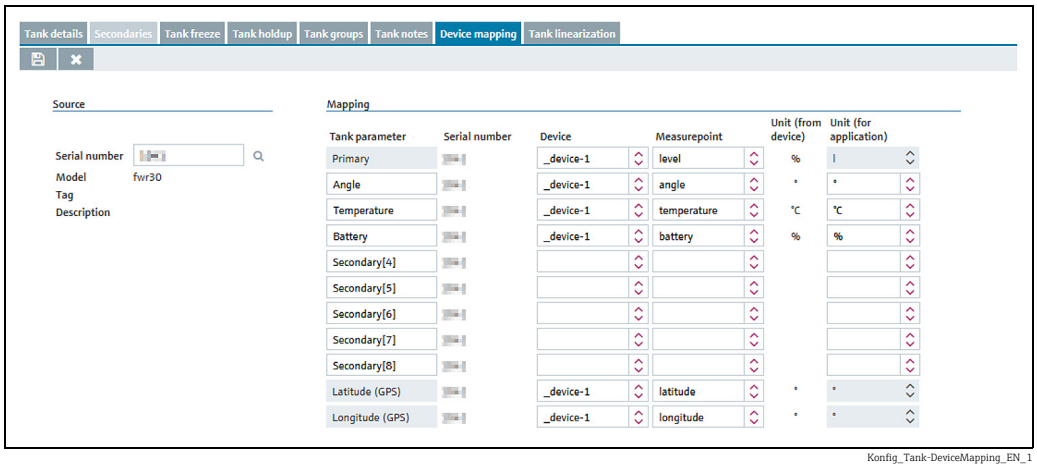
- **Measurepoint**: As soon as a device offered by the gateway is selected, the associated measurepoints can be selected using the drop-down list. If a measurepoint is assigned, then it is no longer available in the drop-down list for other tank parameters.
- **Unit (from device)**: If device and measuring point are assigned to a tank parameter, the unit transferred from the device is displayed in the **Unit** column.
- **Unit (for application)**: The unit transferred from the device is automatically entered as the default value if no other unit has been set manually. Prerequisite: the unit transferred from the device was recognized by SupplyCare.
- button at the end of a row: By clicking the button, the assignment in this row can be deleted.
- button: Clicking the button opens a window that shows the last 15 measured values of the assigned measuring point with **Timestamp (UTC)**, **Value** and **Unit**.

Exceptions for the tank parameter **Primary**:
As soon as a measuring point is assigned to this tank parameter, the tank unit is adopted for this measurepoint in the **Unit (for application)** field. If the assignment is cancelled again, then the measurepoint gets the unit transferred by the device again. Units with the same physical quantity are not converted (e.g. mm and m or °C and °F). The tank parameter **Primary** is permanently named, i.e. the text cannot be edited. If the language for the user interface is changed, the text adapts.

Exceptions for the tank parameters **Latitude (GPS)** and **Longitude (GPS)**:
These tank parameters are permanently named, i.e. the text cannot be edited. The **Unit (for application)** field always contains the unit degrees (°). If a measurepoint is assigned here, it automatically receives this unit.

Displaying and changing Device mapping

1. Click on the **Configuration** menu in the navigation window.
2. Click on the **Tank** menu item.
3. In the table, click on the tank for which you want to display or change the Device mapping.
4. Select the **Device mapping** tab.
5. Click the button.



Konfig_Tank-DeviceMapping_EN_1

6. The **Device mapping** tab is displayed in the edit mode.
7. In the **Serial number** field, enter the serial number of a gateway and click to start the search.
8. Click in the fields to enter changes or select from a list. For certain gateways, such as Micropilot FWR30, pre-populated fields are offered.

9. Click to save your entries. Click to abort the process.

Delete device mapping

1. Click on the **Configuration** menu in the navigation window.
2. Click on the **Tank** menu item.
3. In the table, click on the tank for which you want to delete the Device mapping.
4. Select the **Device mapping** tab.
5. Click on the **Clear all mappings** button.
6. The security query "Do you really want to clear all mappings of this tank?" appears.
7. Click **Yes** to delete the mapping. Click the **No** button to cancel the operation.

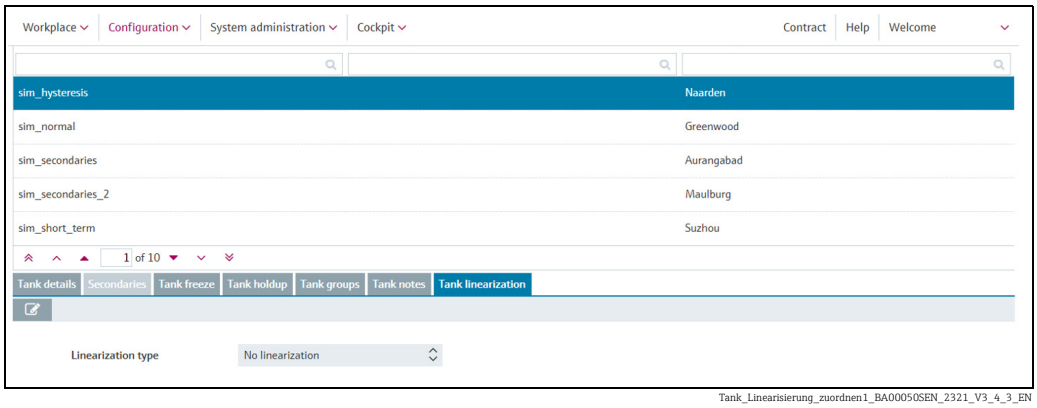
13.3.9 Mapping linearization to a tank

Using the **Tank linearization** tab, you can map or delete an existing linearization to a primary value of a tank directly.

Linearization mappings are not possible for aggregated tanks.

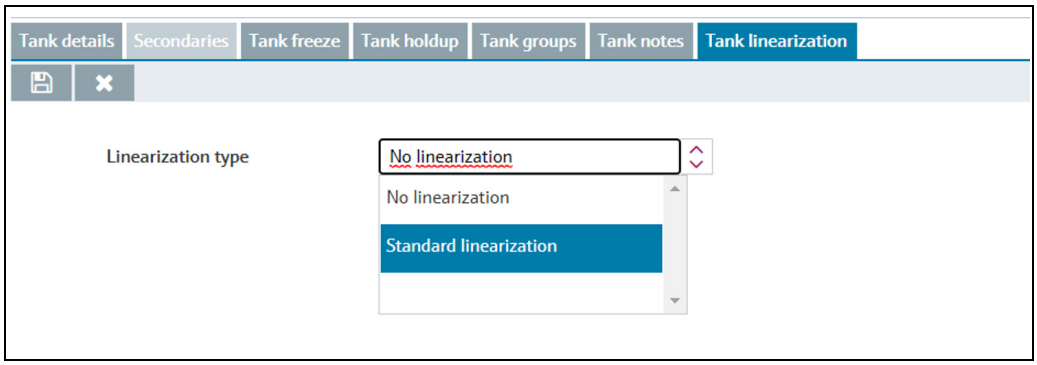
Mapping linearization

1. Click the Configuration menu in the Navigation window.
2. Click the **Tank** menu item.
3. In the table, click the tank for which you want to add a linearization to.
4. Select the **Tank linearization** tab:



Tank_Linearisierung_zuordnen1_BA00050SEN_2321_V3_4_3_EN

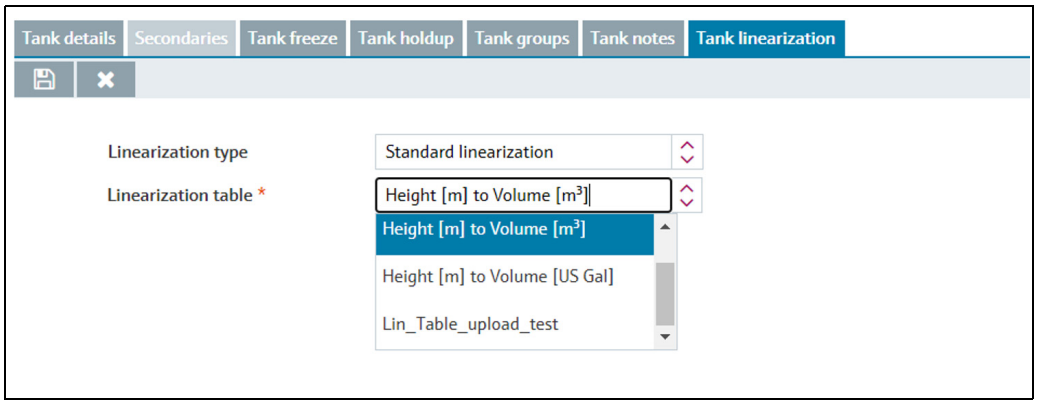
5. Click the button.
6. The **Tank linearization** tab is displayed in the edit mode.
7. Select the desired **Linearization type** from the list:



Tank_Linearisierung_zuordnen2_BA00050SEN_2321_V3_4_3_EN

8. The **Linearization table** is displayed.

9. Select the desired linearization table from the **Linearization table** (obligatory). Prerequisite: Linearization tables are available. Additional information regarding "Managing linearization tables" (→ 135).

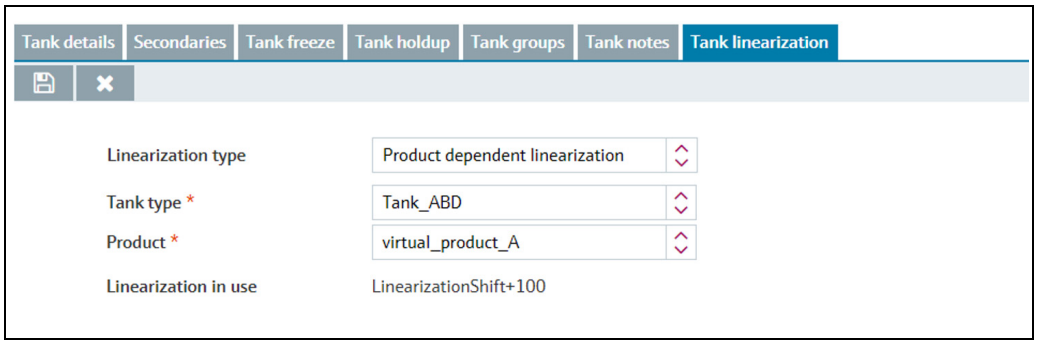


Tank_Linearisierung_zuordnen3_BA00050SEN_2321_V3_4_3_EN

Depending on your contract: In addition to the standard linearization, another linearization type **Product dependent linearization** can be released for selection. With this linearization type, there's the opportunity to automatically set a linearization by selecting the product for the tank. In case of need, please contact Endress+Hauser.

Here, you can select or see the following data:

- **Tank type**: (obligatory) A drop down list which contains all configured tank types inside the contract.
- **Product**: (obligatory) A drop down list which contains all current configured products inside the contract.
- **Linearization in use**: Displays the current selected linearization name (depending on definition from tab Linearization rules inside Linearization page) for the selected product and tank type.

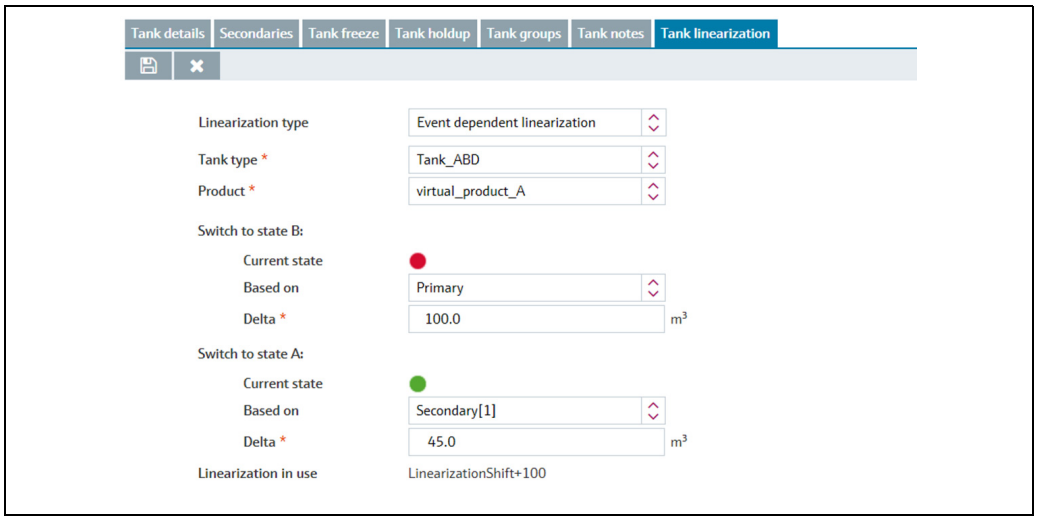


Tank_Linearisierung_zuordnen4_BA00050SEN_2321_V3_4_3_EN

Depending on your contract: In addition to the standard linearization, another linearization type **Event dependent linearization** can be released for selection. Based on desired primary or secondary values, including deltas, the linearization can switch between 2 states. For either state a different linearization table is selected. In case of need, please contact Endress+Hauser.

Here you can choose or add inputs for the **Switch to state B** and the **Switch to state A**, such as:

- **Current state**: The enabled state is displayed with a green button; the disabled state is displayed with a red button. This option can be changed in edit mode by clicking the red button. If the current state is changed (before: red, after: green), the state of the respective other state is adapted automatically (before: green, after: red).
- **Based on**: Select on which value the trigger is based on. The primary or one of the secondary values can be selected.
- **Delta** (obligatory): Delta is the amount by which a selected value must be exceeded to cause the state to change. Enter a floating point value. When entering a negative value, enter the sign.



Tank_Linearisierung_zuordnen5_BA00050SEN_2321_V3_4_3_EN

10. Click to save your changes. Click to abort the process.

13.3.10 Changing a tank

For details → 27

13.3.11 Deleting a tank

For details → 31

13.3.12 Copying a tank

For details → 32

13.4 Managing aggregated tanks

Only people whose user role is configured as **Master Data** can create, change and delete aggregated tanks.

Depending on your configuration, **Aggregated Objects** or **Silos** are displayed instead of **Aggregated Tanks**. For more information refer to the appropriate chapter in the Service Manual for System administration.

13.4.1 Creating an aggregated tank

The **Location**, **Buyer**, **Supplier** and **Product** first have to be created before you can select elements for these fields. The **Buyer** and **Supplier** are created as a Company → 90).

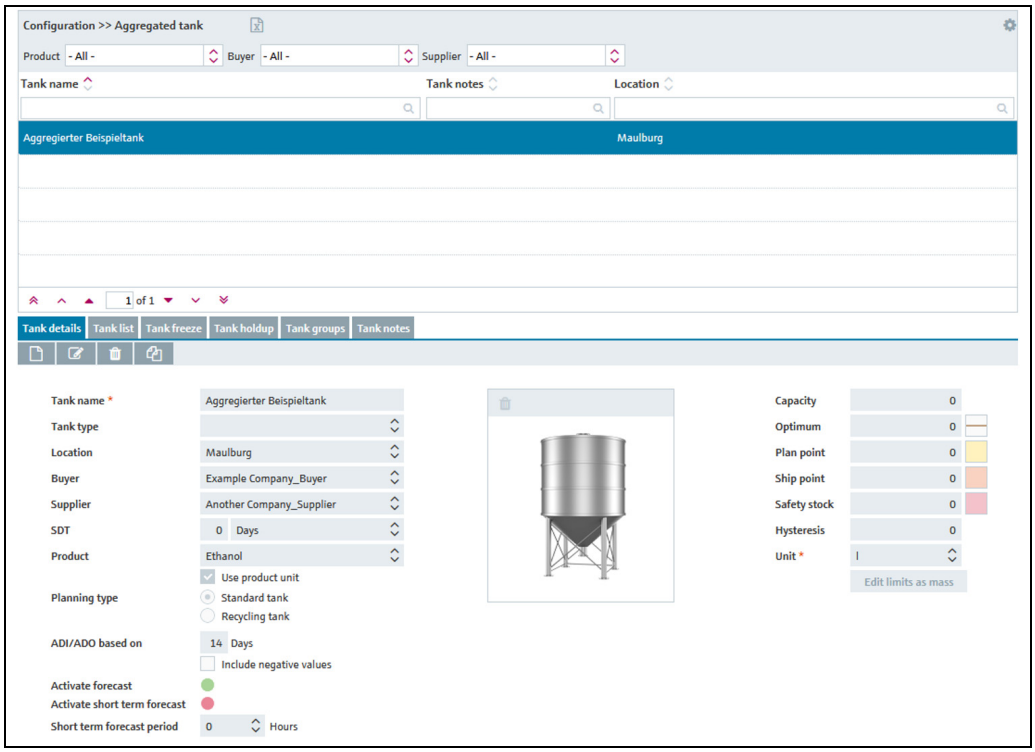
If you have assigned a tank to an aggregated tank, this tank is removed from the **Tank assignment** tabs under the **Tank**, **Tank group** and **Report** menu items.

If you would like to make changes to a tank that is assigned to an aggregated tank, you first have to remove the tank from the tank list.

If you want to assign a tank, which is already assigned to a tank group, to an aggregated tank, this tank must be removed from the tank group.

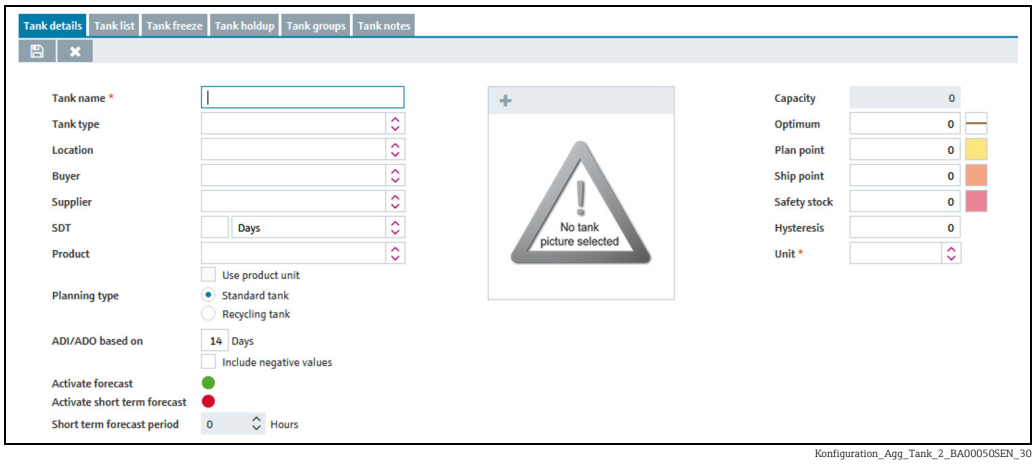
An aggregated tank always has to be assigned to a tank group since you can only assign tank groups to a user.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Aggregated tank** menu item.
3. The following detail view is displayed in the Application window:



Konfiguration_Agg_Tank_BA00050SEN_30

4. In the lower section of the application window, select the **Tank details** tab.
5. Click the button.
6. The tab is displayed in the edit mode.



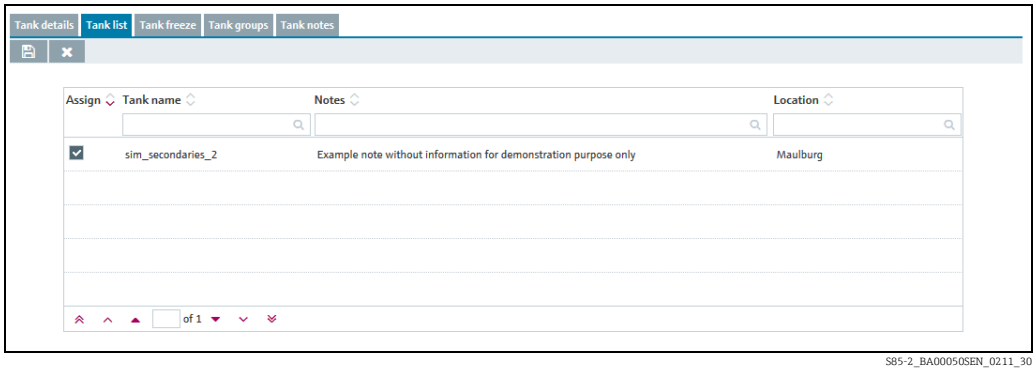
Konfiguration_Agg_Tank_2_BA00050SEN_30

7. Here, you can enter data on the aggregated tank such as:

- **Tank name** (obligatory)
- **Tank type:** Select a tank type from the pick list
- **Location**: Select the location from the picklist.
- **Buyer**: Select a buyer (company) from the picklist.
- **Supplier**: Select a supplier (company) from the picklist.
- **SDT** (Standard delivery/disposal time)
- **Product**: Select a product from the picklist.
- **Use product unit**: If this option is activated, the unit of the selected product is automatically used in the **Unit** field.

- **Planning type**: By activating the **Standard tank** check box, you specify that the aggregated tank is a standard tank, and by activating the **Recycling tank** check box you specify that the tank is a recycling tank. The event messages and the way the inventory chart and levels are displayed are adapted to this planning type (→ 100).
- **ADI(/ADO based on**: 14 days is the standard value specified here. This period is used for extrapolating in the inventory chart (→ 38).
- **Include negative values**: If this option is enabled, negative measuring values are included in the ADI/ADO calculations.
- **Activate forecast**: If this option is enabled, a forecast of the inventory is displayed in the **Inventory Chart** tab.
  The enabled forecast is displayed with a green button; the disabled forecast is displayed with a red button. This option can be changed in edit mode by clicking the green or red button.
- **Capacity** (read only)
- **Optimum**
- **Plan point**
- **Ship point**
- **Safety stock**
- **Hysteresis**: (→ 101)
- **Unit** (obligatory)

8. In the case of a standard tank it is possible to deactivate the **Optimum**, **Plan point**, **Ship point** and **Safety stock** input fields individually, and the **Safety stock** and **Plan point** fields in the case of a recycling tank. For this purpose, click the button to the right of the specific input field. This field then becomes grey just like the button. It is no longer possible to enter information. These input fields can be activated by clicking the grey button in question.
9. Click  to save your entries. Click  to abort the process.
10. Select the **Tank list** tab.
11. Click the  button.
12. The tab is displayed in edit mode in the lower part of the Application window.



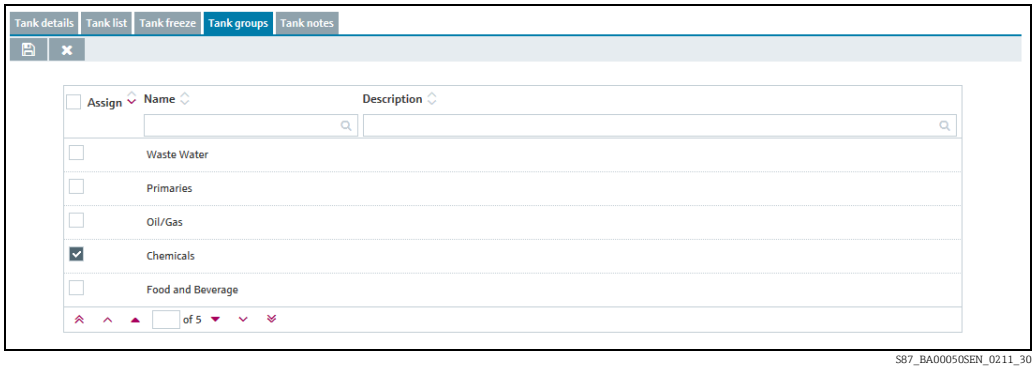
S85-2_BA00050SEN_0211_30

13. Activating the appropriate check box in the **Assign** column assigns the tanks to the aggregated tank.

Only the same planning type tanks - i.e. standard tanks or recycling tanks - are displayed in the tank list. In the **Measure point details** tab, these tanks must be assigned a measure point and the same "Engineering unit (for application)" as has been assigned to the aggregated tank. Only these tanks can be added to the aggregated tank.

14. Click  to save your entries. Click  to abort the process.

15. Select the **Tank groups** tab.
16. Click the button.
17. The tab is displayed in the edit mode.



S87_BA00050SEN_0211_30

18. Activating the **check box** in the **Assign** column assigns the tank to a tank group.
19. Click to save your entries. Click to abort the process.

13.4.2 Selecting and deleting a depicted tank shape

For details → 102

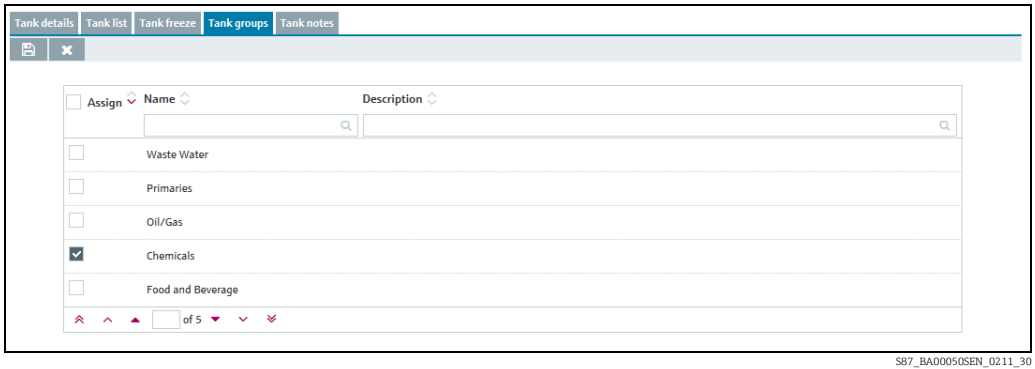
13.4.3 Adding, opening and deleting files and other information for an aggregated tank

Using the **Tank notes** tab, you can add additional information for an aggregated tank and a maximum of five files. The information entered here and the attached files are also displayed in the "Workplace – Tank" view, **Notes and files** tab.

For information on adding, opening, saving or deleting a file, → 113.

13.4.4 Changing aggregated tank-tank group assignment

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Aggregated tank** menu item.
3. In the overview table, click the aggregated tank whose assignment you want to change.
4. Select the **Tank groups** tab.
5. Click the button.
6. The tab is displayed in the edit mode.



S87_BA00050SEN_0211_30

7. Activating the **check box** in the **Assign** column assigns the aggregated tank to a tank group. Deactivate the **check box** to undo the assignment.
8. Click to save your entries. Click to abort the process.

13.4.5 Configuring aggregated tank freeze events

For details → 105

13.4.6 Changing an aggregated tank

For details → 27

13.4.7 Deleting an aggregated tank

For details → 31

13.4.8 Copying an aggregated tank

For details → 32

13.5 Managing tank types

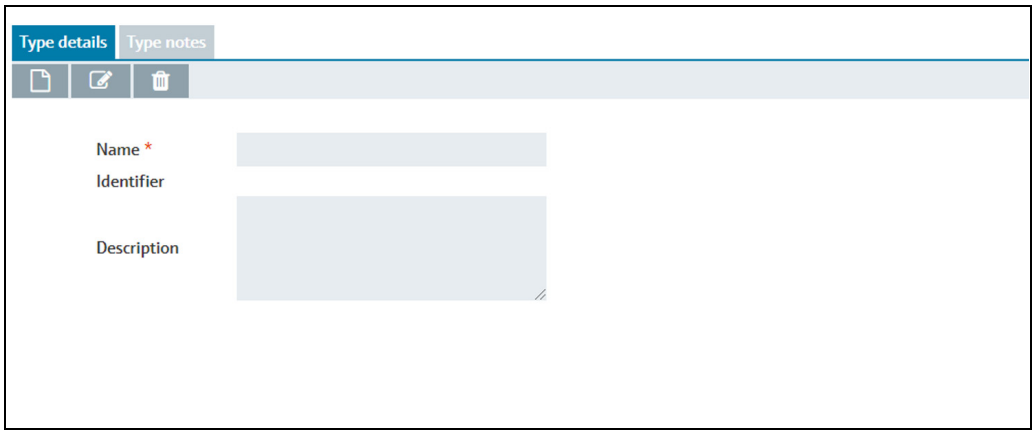
Only people whose user role is configured as **Master Data** can create, change and delete tank types.

You can manage tank types for all existing containers like **tanks**, **silos** and **objects**.

13.5.1 Creating, changing and deleting a tank type

Creating a tank type

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank type** menu item.
3. The detail view is displayed in the Application window.
4. In the lower section of the application window, select the **Type details** tab.
5. Click the button.
6. The tab is displayed in the edit mode.



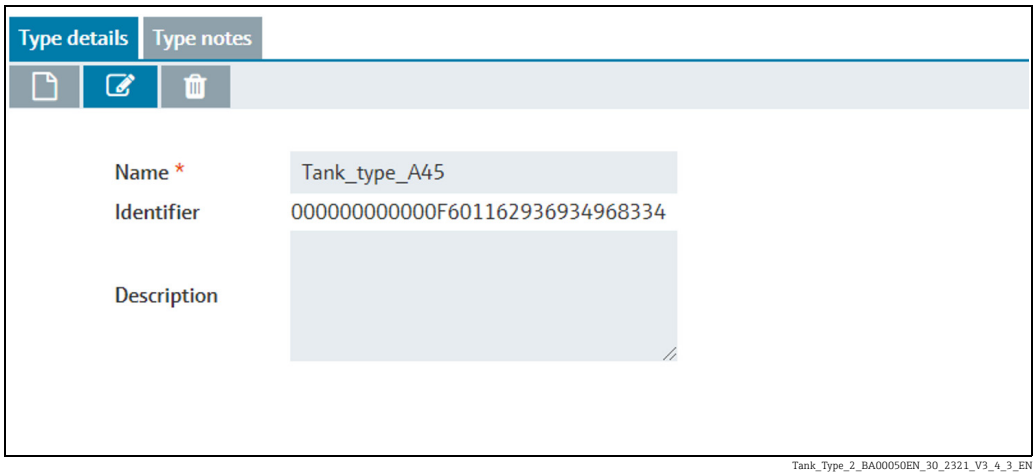
7. Here, you can enter or see the following data regarding the tank type

– **Name** (obligatory)
– **Identifier**: automatically created unique number to identify the tank type
– **Description**: you can enter a multiline description here.

8. Click to save your changes. Click to abort the process.

Changing a tank type

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank type** menu item.
3. The detail view is displayed in the Application window.
4. In the lower section of the application window, select the **Type details** tab.
5. Click the button.
6. The tab is displayed in the edit mode.



7. Here, you can enter or see the following data regarding the tank type

– **Name** (obligatory)
– **Identifier**: automatically created unique number to identify the tank type
– **Description**: you can enter a multiline description here.

8. Click to save your changes. Click to abort the process.

Deleting a tank type

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank type** menu item.
3. The detail view is displayed in the Application window.
4. In the lower section of the application window, select the **Type details** tab.
5. Click the button.
6. The prompt "Do you really want to delete?" is displayed.
7. Click **OK** to delete the tank. Click **Cancel** to abort the process.

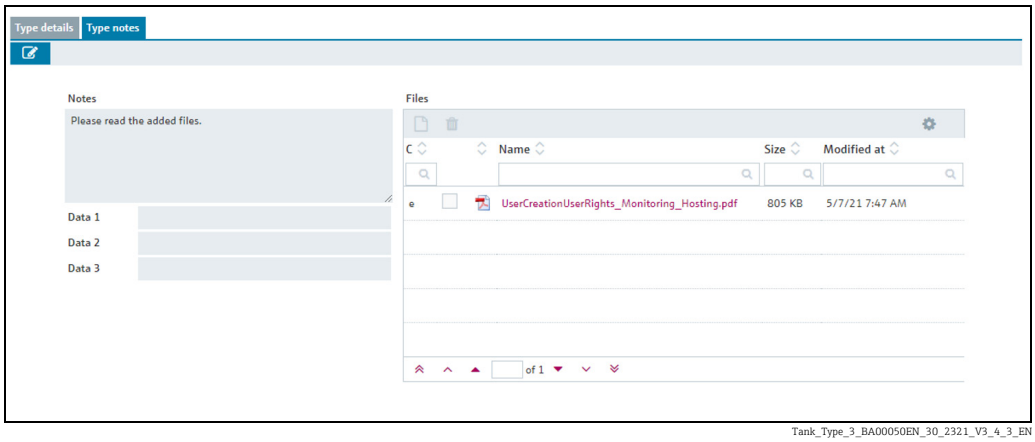
13.5.2 Adding, opening and deleting files and other information for a tank

Using the **Type notes** tab, you can add additional information for a tank type and a maximum of five files.

The files must meet the following requirements:
- File formats supported: doc, xls, pdf, ppt, jpg, gif, png, bmp or txt.
- Maximum file size: 5 MB

Adding a file

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank type** menu item.
3. In the table, click the tank for which you want to add a file.
4. Select the **Type notes** tab.
5. Click the button.



Tank_Type_3_BA00050EN_30_2321_V3_4_3_EN

6. The **Type notes** tab is displayed in the edit mode.
7. Enter a description for the **Notes**, **Data 1**, **Data 2** and **Data 3** fields.
8. Click the button in the table.
9. The **Upload new file** dialog box is displayed.
10. Click the **Search** button.
11. Select the **File** in your directory. The file name is displayed in the **Name** column in the table.
12. Select the desired **Classification**.

The **Classification** allows to distinguish between internal and external usage.

13. Click the **Upload new file** button.
14. The file is listed in the table with information on the file format, file name, file size and the date the file was last changed.

Opening or saving a file

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank type** menu item.
3. Select the **Type notes** tab.
4. Click the **File name** (hyperlink) in the **Name** column in the table.
5. A dialog box opens. Here you can choose whether you want to open the file or save it.
6. Click **OK** to open or save the file. Click **Cancel** to abort the process.

Deleting a file

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank type** menu item.
3. Select the **Type notes** tab.
4. Click the button.
5. The **Type notes** tab is displayed in the edit mode.
6. In the table, enable the check box for the file that you want to delete.
7. Click the button.
8. The prompt "Do you really want to delete?" is displayed.
9. Click **OK** to delete the file. Click **Cancel** to abort the process.
10. Click to save your changes. Click to abort the process.

The file is only deleted if you save your changes by pressing the button.

You can change or delete descriptions in the **Notes**, **Data 1**, **Data 2** and **Data 3** fields in the editing mode. Click to save the changes.

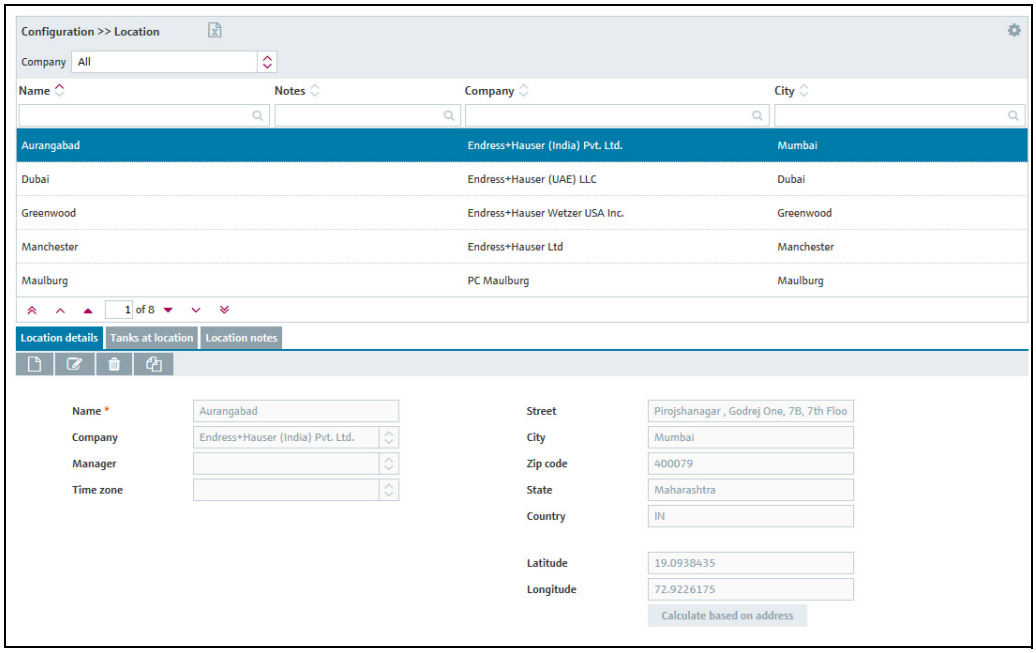
13.6 Managing locations

Only people whose user role is configured as **Master Data** can create, change and delete locations.

13.6.1 Creating a location

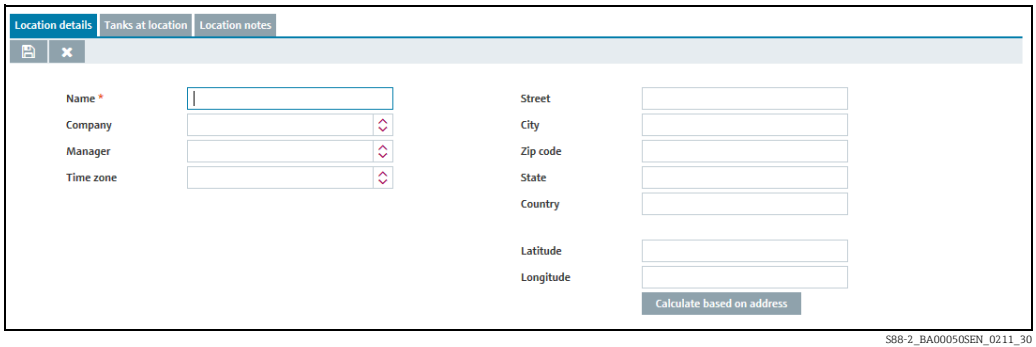
A tank must be created before you can assign this tank to a location. However, you can first create the location and then assign the tanks to a location at a later date.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Location** menu item.
3. The following detail view is displayed in the Application window:



Konfiguration_Standort_BA00050SEN_30

4. In the lower section of the application window, select the **Location details** tab.
5. Click the button.
6. The tab is displayed in the edit mode.

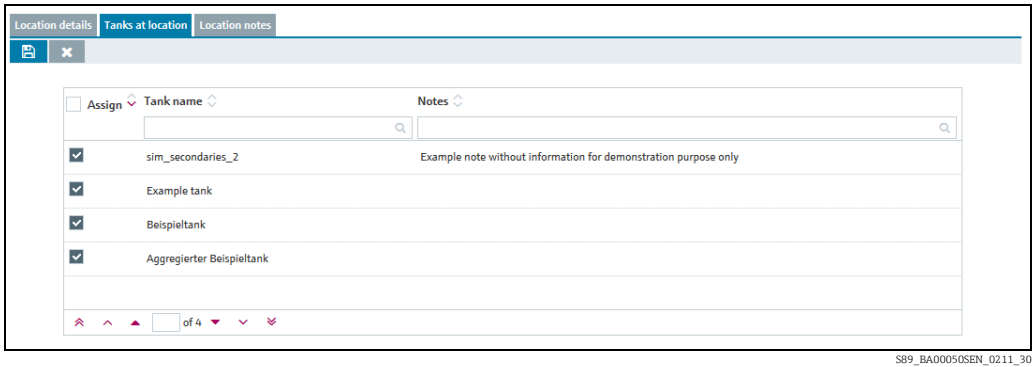


S88-2_BA00050SEN_0211_30

7. Here, you can enter data for the location such as:

- **Name** (obligatory): Unique identifier of the location
- **Company**: Select the company from the picklist.
- **Manager**
- **Time zone**: Select the time zone for the location from the picklist.
  All time data, particularly time stamps for measurements for tanks at this locations are displayed in this time zone. There is also the preferred time zone for users that is used for time information for events.
- **Street**
- **City**
- **Zipcode**
- **State**
- **Country**
- **Longitude** and **Latitude**: You can save the geographical coordinates for this location here (→ 130).
  These coordinates are used to display the location on the overview map (→ 87).
- **Calculate based on address**: The longitude and latitude are calculated automatically. (→ 130).
  These coordinates are used to display the location on the overview map (→ 87).

8. Click to save your changes. Click to abort the process.
9. Select the **Tanks at location** tab.
10. Click the button.
11. The tab is displayed in the edit mode.



S89_BA00050SEN_0211_30

12. Activating the **check box** in the **Assign** column assigns the tank to the location.
    The table shows the tanks which are already assigned to the location or which are not yet assigned to a location.
13. Click to save your changes. Click to abort the process.

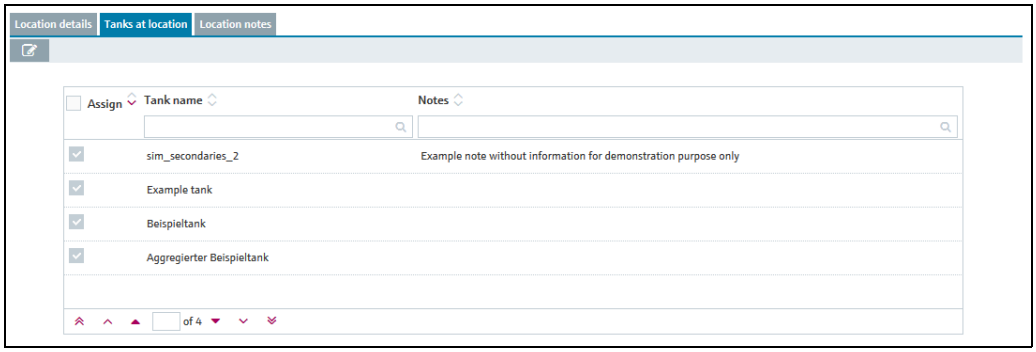
13.6.2 Adding, opening and deleting files and other information for a location

Using the **Location notes** tab, you can add additional information for a location and a maximum of five files. The information entered here and the attached files are also displayed in the "Workplace – Tank" view, **Notes and files** tab.

For information on adding, opening, saving or deleting a file → 113.

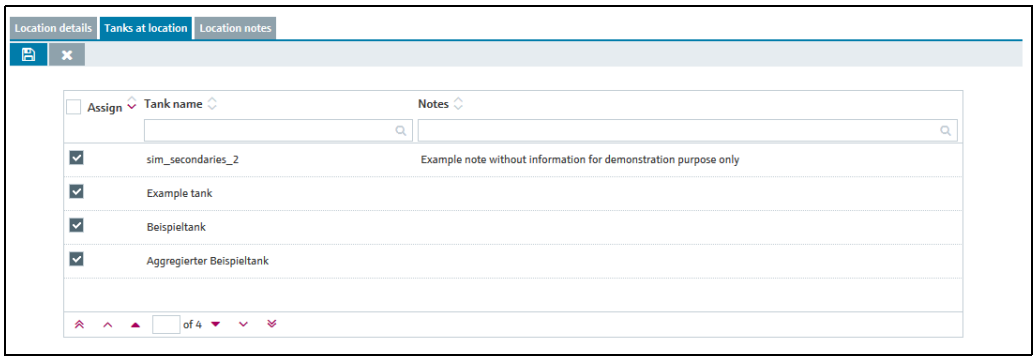
13.6.3 Changing location-tank assignment

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Location menu** item.
3. In the overview table, click the location whose assignment you want to change.
4. Select the **Tanks at location** tab.



S90_BA00050SEN_0211_30

5. Click the button.
6. The tab is displayed in the edit mode.



S89_BA00050SEN_0211_30

7. Activating the appropriate **check box** in the **Assign** column assigns the tanks to the selected location. Deactivate the **check box** to undo the assignment.
8. Click to save your entries. Click to abort the process.

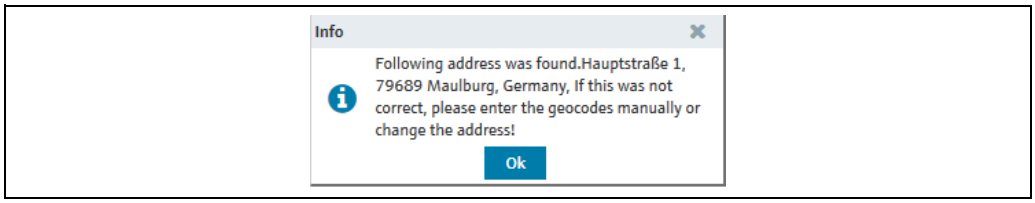
13.6.4 Computing the location automatically or entering it manually

If you change the address data, you must also update the longitude and latitude information.

You can either have the system compute the longitude and latitude automatically based on the address entered, or you can enter this information manually.

Computing the location automatically

1. Select the **Location details** tab.
2. Click the button.
3. The tab is displayed in the edit mode.
4. Click the **Based on address** button.
5. The longitude and latitude automatically computed are displayed in a window.



6. Click **OK** to confirm the longitude and latitude.

If the longitude and latitude cannot be computed because not enough address information is available, for example, the "Unknown or bad address. Please enter manually" message appears on the screen.

Entering the location manually

Enter the longitude and latitude in the corresponding fields.

The latitude must be between −85 and 85, and the longitude must be between −180 and 180. You can enter a number with up to 16 decimal places.

13.6.5 Displaying the location on the map

For details → 87

13.6.6 Changing a location

For details → 27

13.6.7 Deleting a location

For details → 31

You can only delete a location if no tanks are assigned to the location.

13.6.8 Copying a location

For details → 32

13.7 Managing products

Only people whose user role is configured as **Master Data** can create, change and delete products.

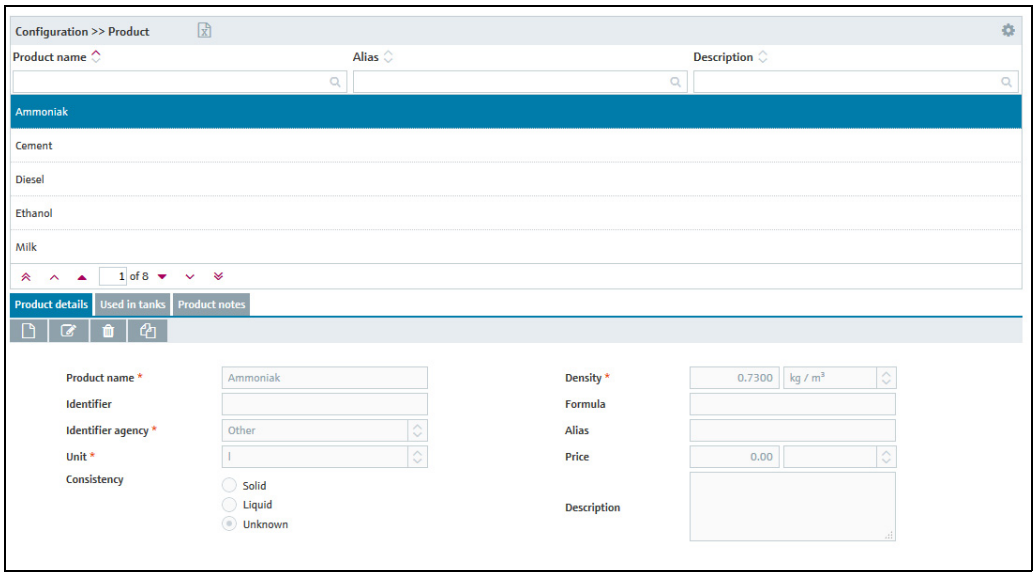
13.7.1 Creating a product

A tank must be created before you can assign a product to a tank.

However, you can first create the product and then assign the tanks to a product at a later date.

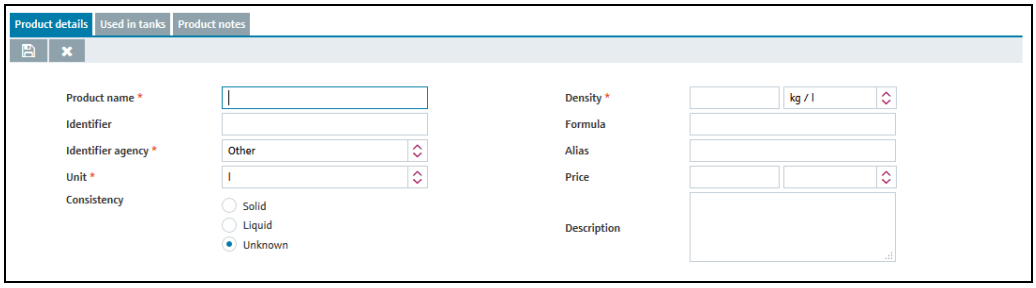
The **Product name** and the combination of the fields **Identifier** and **Identifier agency** may only be used once in the system.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Product menu** item.
3. The following detail view is displayed in the Application window:



S92_BA00050SEN_0211_30

4. In the lower section of the application window, select the **Product details** tab.
5. Click the button.
6. The tab is displayed in the edit mode.



S92-2_BA00050SEN_0211_30

7. Here, you can enter data on the product such as:

- **Product name** (obligatory): Unique identifier of a product
- **Identifier**: Unique product ID to be used in the CIDX reports
- **Identifier agency** (obligatory): Selection of organization responsible for managing the identifier for the companies. The selection complies with the CIDX standard. The identifier agency is required to create CIDX reports.
- **Units** (obligatory)
- **Consistency**
- **Density**: A product has to have a configured density (mandatory entry). It is specially useful if the customer wants to do his planning and daily operation on tanks / products based on mass (gross mass = net standard volume x reference density). The density must be set by the operator and the product's unit has to be configured as mass, e.g. kg or ton.
- **Formula**: Chemical formula of the product
- **Alias**: Another name for the product, e.g. tradename etc.
- **Description**: You can enter a multiline description here.

8. Click to save your entries. Click to abort the process.

13.7.2 Changing a product

For details → 27

13.7.3 Deleting a product

For details → 31

You can only delete a product if the product is not assigned to a tank. The symbol is only displayed for a product which can be deleted.

13.7.4 Copying a product

For details → 32

13.8 Managing tank groups

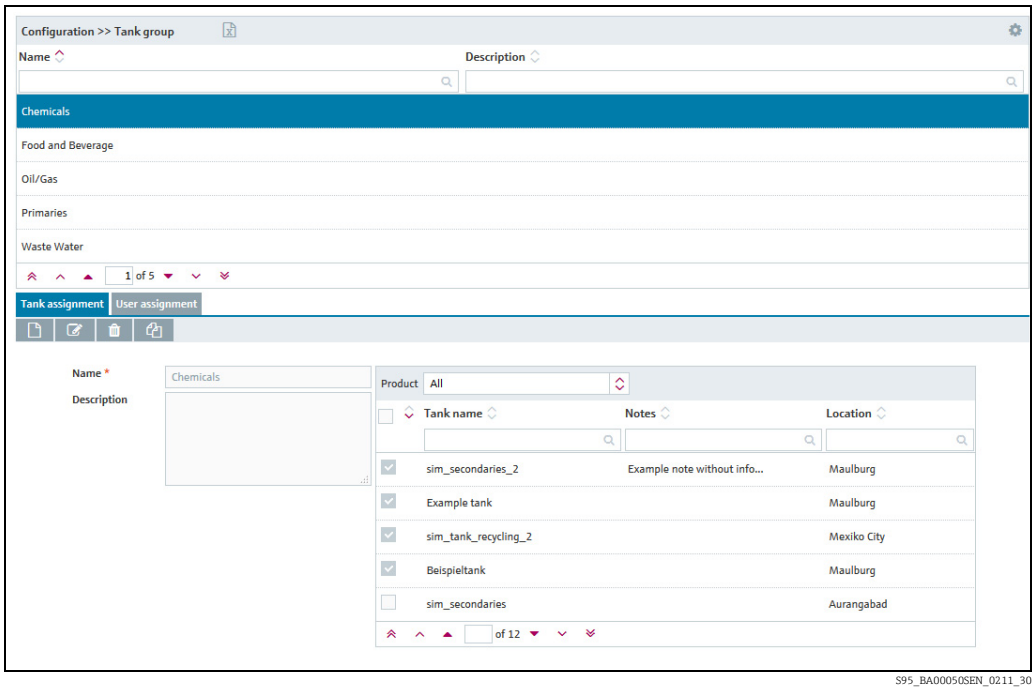
Only people whose user role is configured as **Master Data** can create, change and delete tank groups.

Depending on your configuration, **Object groups** are displayed instead of **Tank groups**. For more information refer to the appropriate chapter in the Service Manual for System administration.

Tank groups are used to organize tanks and to assign authorized users to the tanks.
In the **Tank assignment** tab, you create tank groups and assign tanks to the groups. You can assign one or more users to the tank group using the **User assignment** tab. In the **User assignment** tab, you also specify the tank events for which the user should receive notification.

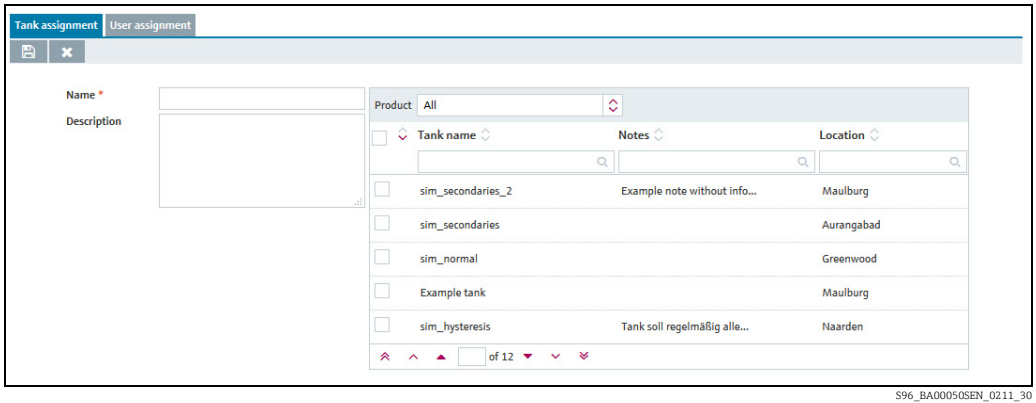
13.8.1 Creating tank groups

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank group** menu item.
3. The following detail view is displayed in the Application window:



S95_BA00050SEN_0211_30

4. In the lower section of the Application window, select the **Tank assignment** tab.
5. Click the button.
6. The tab is displayed in the edit mode.



S96_BA00050SEN_0211_30

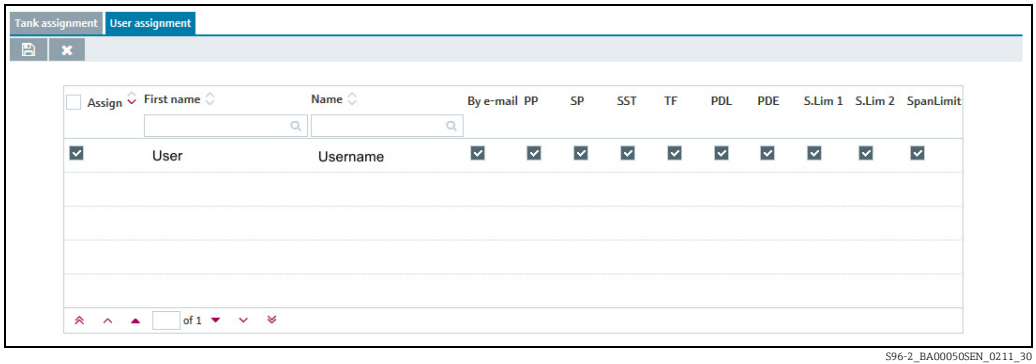
7. Here, you can enter data on the tank group such as:

- **Name** (obligatory): Unique identifier of the tank group
- **Description**: You can enter a multiline description here.
- **Assignment**: By means of the table, you can activate the **check boxes** to assign the corresponding tanks to this tank group.

8. Click to save your entries. Click to abort the process.
9. Select the **User assignment** tab to assign the tank groups to a user (→ 134).

13.8.2 Assigning users to a tank group and setting up notifications for tank events

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank group** menu item.
3. Select the **User assignment** tab.
4. Click the button.
5. The tab is displayed in the edit mode.



S96-2_BA00050SEN_0211_30

You can assign one or more users to the tank group using the "User assignment" tab. On this tab you can also specify the tank events which the user should be informed about.

6. Activating the **check box** in the **Assign** column assigns a user to the tank group. Deactivate the **check box** to undo the assignment. The assigned tank groups are listed in the Workplace Tank view.
7. Activate the **By E-Mail check box** if you want the user to also be informed about tank events by e-mail.
8. Enable the **check boxes** corresponding to the events for which the user should receive notification:

- **PP** (plan point)
- **SP** (ship point)
- **SST** (safety stock)
- **TF/SF/OF** (Tank freeze/silo freeze/object freeze): Comprises all the information regarding tank freeze/silo freeze/object freeze events
- **PDL** (planned delivery/disposal loop): Comprises all the new deliveries/disposals which have been planned or deleted
- **PDE** (planned delivery/disposal events): Comprises all the early, late, missed and completed deliveries/disposals
- **S.Lim1/S.Lim2** (Secondary Limit 1/2)

9. Click  to save your entries. Click  to abort the process.

13.8.3 Changing tank group

For details → 27

13.8.4 Deleting tank groups

For details → 31

13.8.5 Copying tank groups

For details → 32

13.9 Managing linearization tables

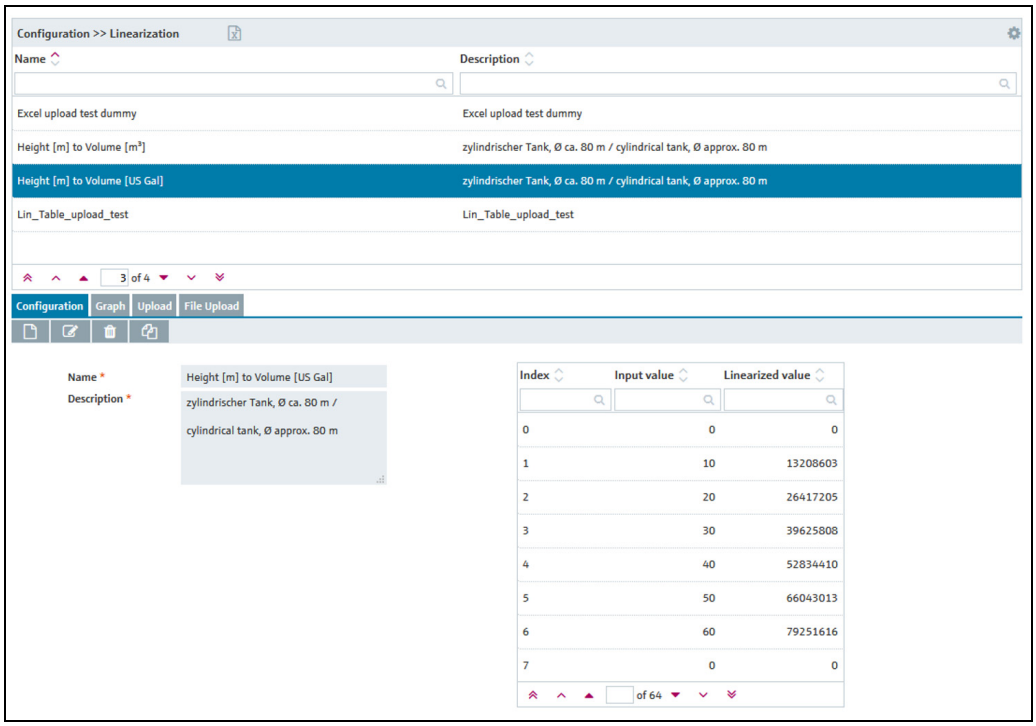
Only people whose user role is configured as **Master Data** can create, change and delete linearization tables.

A linearization table is assigned to a device in the Gateway configuration menu. For details, see infos in the service manual.

Within linearization there will be no extrapolation. Values exceeding the defined range will be linearized with the nearest point.

By means of a linearization table a measured value (X-value) is assigned the corresponding Y-value (a volume value, for example). A linearization table must have a minimum of 2 points and can have a maximum of 64 points. A point consists of an index, input level (X-value) and input volume (Y-value).

1. In the Navigation Window, click the **Configuration** menu.
2. Click the **Linearization** menu item.
3. The following detail view is displayed in the Application Window:



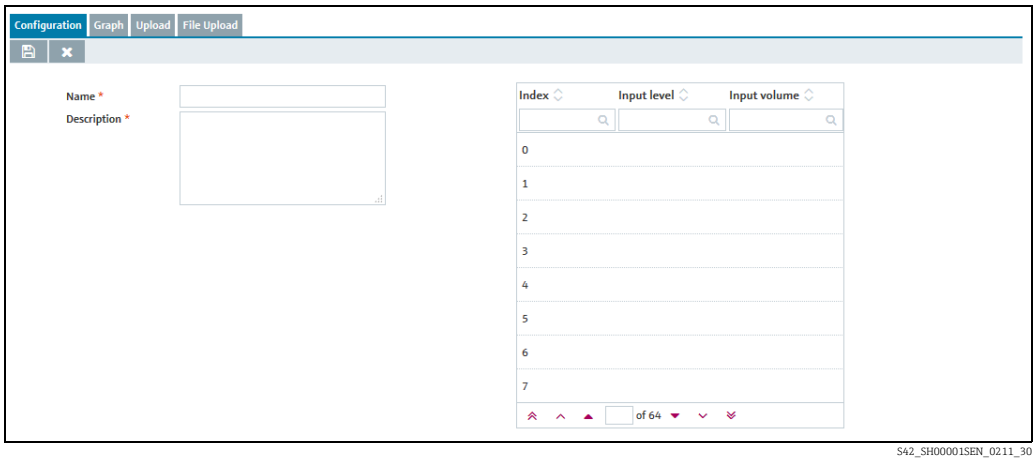
S41_SH00001SEN_0211_30

4. In the lower section of the Application Window, select the **Configuration** tab.

13.9.1 Creating, changing and deleting a linearization table

Creating a linearization table

1. In the Navigation Window, click the **Configuration** menu.
2. Click the **Linearization** menu item.
3. Click the  button.
4. The tab is displayed in edit mode in the lower section of the Application Window:



S42_SH00001SEN_0211_30

5. Here, you can enter data for the linearization table:

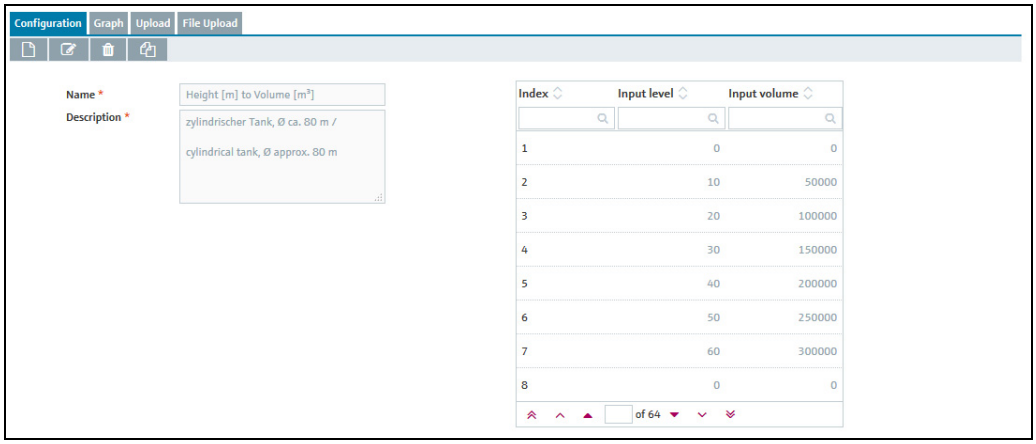
- **Name** (obligatory)
- **Description** (obligatory): you can enter a multiline description here.
- **Index**: specifies the index in the table.

– **Input level**: enter the level value.
– **Input volume**: specify the volume value belonging to the level value.

6. Click to save your entries. Click to abort the process.
7. Select the Graph tab to view the linearization table you entered as a graph.

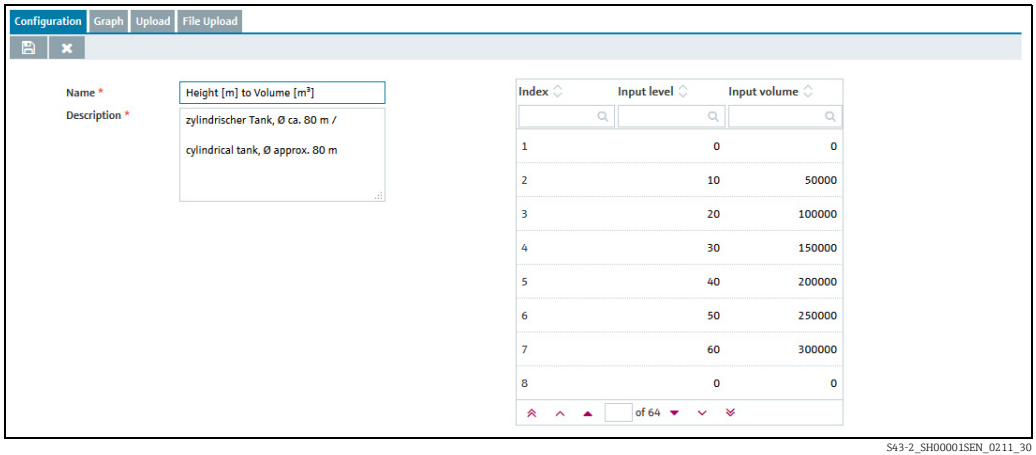
Changing a linearization table

1. In the overview table, click the linearization table you wish to change.
2. The related tab is displayed in the lower section of the Application Window:



S43_SH00001SEN_0211_30

3. Click the button.
4. The tab is displayed in the edit mode.



S43-2_SH00001SEN_0211_30

5. In the table, click the value (input level or input volume) you want to change. You can overwrite several values in succession or fill the table with more value pairs.

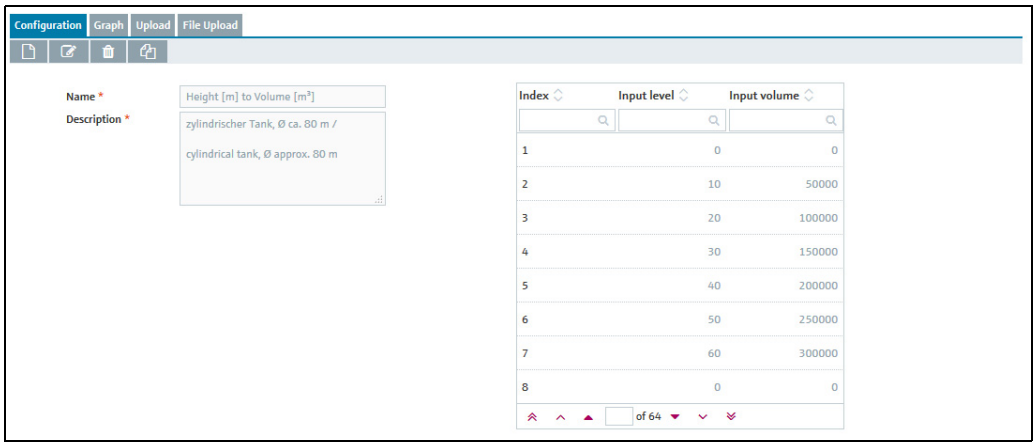
You cannot enter or delete lines in the table, or change the order of the value pairs.

6. Make your changes.
7. Click to save your entries. Click to abort the process.

Deleting a linearization table

You can only delete a linearization table if the linearization table is not assigned to a measuring device.

1. In the overview table, click the linearization table you wish to delete.
2. The related tab is displayed in the lower section of the Application Window:

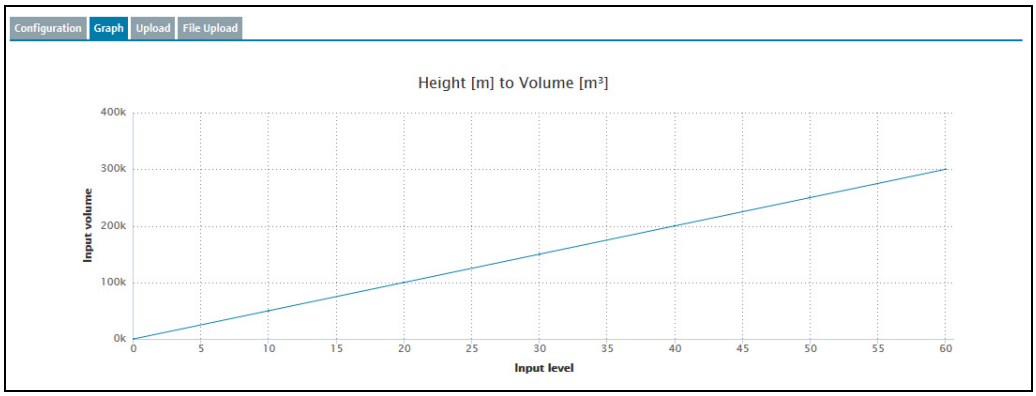


S43_SH00001SEN_0211_30

3. Click the button.
4. The prompt "Do you really want to delete?" is displayed.
5. Click the **OK** button to delete the linearization table. Click **Cancel** to abort the process.

13.9.2 Displaying a linearization table as a graph

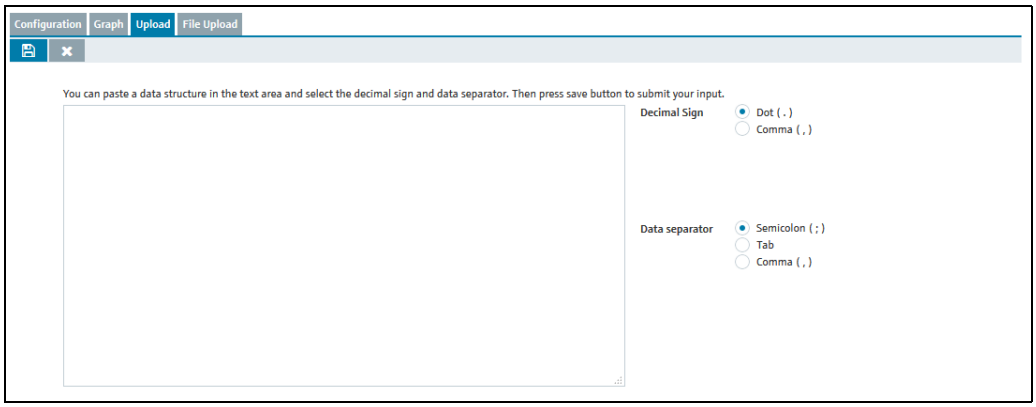
1. In the overview table, click the linearization table you wish to view as a graph.
2. Select the **Graph** tab.
3. The selected linearization table is displayed as a graph:



S44-2_SH00001SEN_0211_30

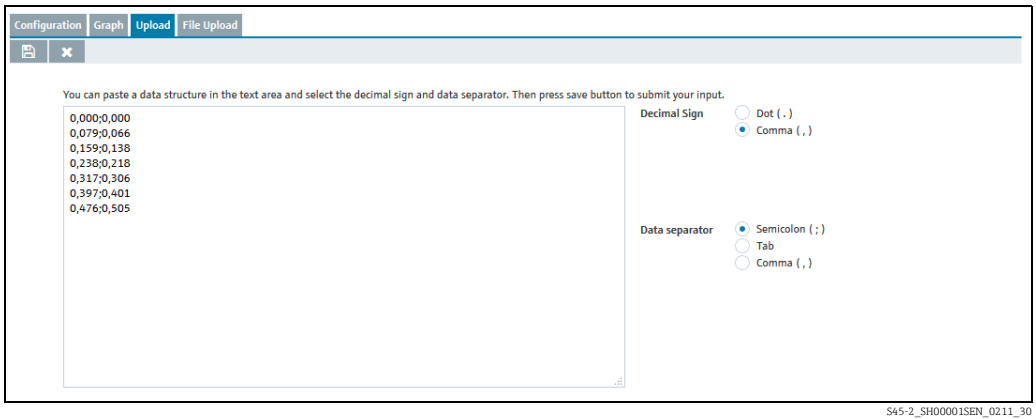
13.9.3 Uploading a linearization table

1. Select the **Configuration** tab.
2. Click the button.
3. The **Configuration** tab is displayed in edit mode.
4. Enter data for the following fields:
   –**Name**: unique name of linearization table
   –**Designation**
5. Click to save your entries. Click to abort the process.
6. Select the **Upload** tab.
7. Click the button.
8. The tab is displayed in the edit mode.



S45_SH00001SEN_0211_30

9. Copy a data structure into the text input area.
10. Specify the **Decimal sign** and the **Data separator**.



S45-2_SH00001SEN_0211_30

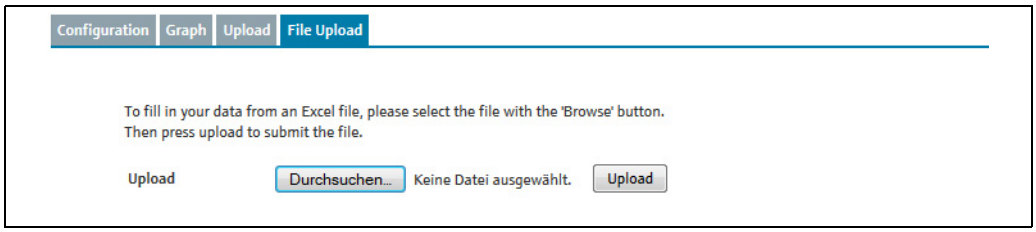
11. Click to save your entries. Click to abort the process.
12. If you save your entries, the following message appears:
    Linearization data was saved successfully
13. Select the **Configuration** tab if you wish to view the uploaded values as a linearization table. Select the **Graph** tab if you wish to view the uploaded values as a graph.

13.9.4 Uploading a linearization table as an Excel file

1. Select the **Configuration** tab.
2. Click the button.
3. The **Configuration** tab is displayed in edit mode.
4. Enter data for the following fields:

– **Name**: unique name of linearization table
– **Designation**

5. Click to save your entries. Click to abort the process.
6. Select the **File Upload** tab.
7. The tab is displayed in the lower section of the application window:



S46_SH00001SEN_0211_30

8. Click the **Browse** button.
9. Select the desired Excel file in your directory.
The Excel file must meet the following criteria and is read as follows:

	A	B	C
1	%	short tons	
2	0	0	
3	10	5.2	
4	20	10.3	
5	30	15.6	
6	40	20.8	
7	50	30.1	
8	60	40.3	
9	70	50.4	
10	80	59.8	
11	90	70.1	
12	100	80.2	
13			

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– The first line is used as a header. These data are not read.
– The Excel file may only consist of two columns. The values in the first column are read as X-values and the values in the second column are read as Y-values.
– There must be a numerical value in each cell. Text in a cell results in an error message.
– A pair of values consists of an X-value and a Y-value. An empty cell results in an error message.
– The Excel file may consist of a maximum of 64 value pairs.

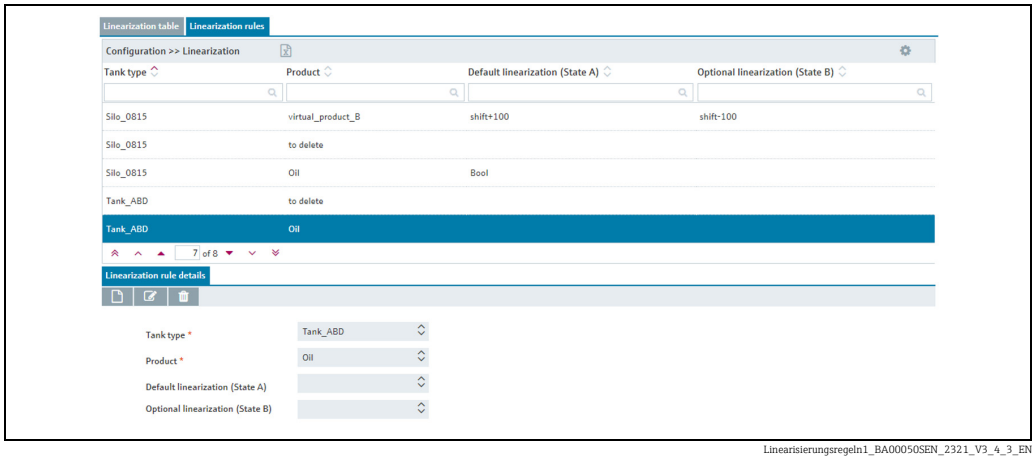
10. Click the **Upload** button.
11. Select the **Configuration** tab if you wish to view the uploaded values as a linearization table. Select the **Graph** tab if you wish to view the uploaded values as a graph.

13.10 Managing linearization rules

Depending on your contract: The additonal feature **Linearization rules** is available. In case of need, please contact Endress+Hauser.

Only people whose user role is configured as **Master Data** can create, edit and delete linearization rules.

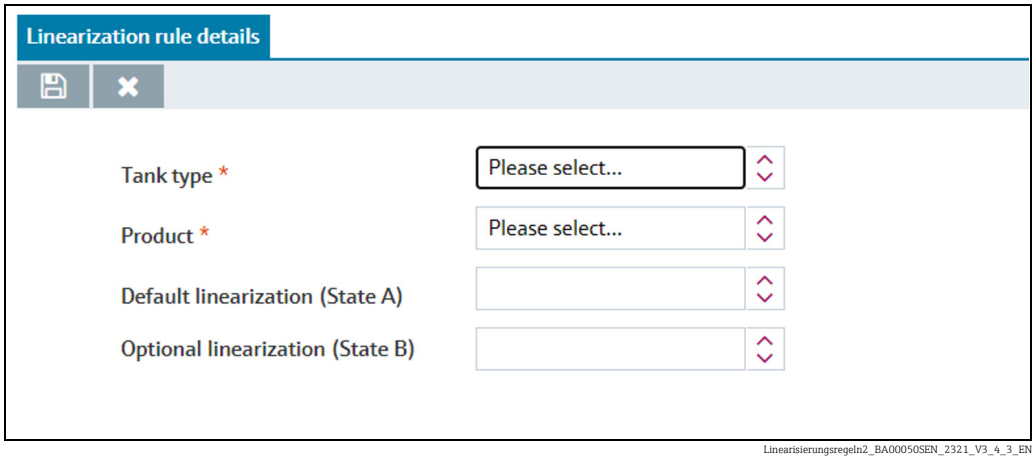
1. Click the **Configuration** menu in the Navigation window.
2. Click the **Linearization** menu item.
3. Select the **Linearization rules** tab.
4. The following detail view appears in the application window:



Linearisierungsregeln1_BA00050SEN_2321_V3_4_3_EN

13.10.1 Creating a new linearization rule

1. Click the button
2. The tab is displayed in edit mode in the lower part of the window.



Linearisierungsregeln2_BA00050SEN_2321_V3_4_3_EN

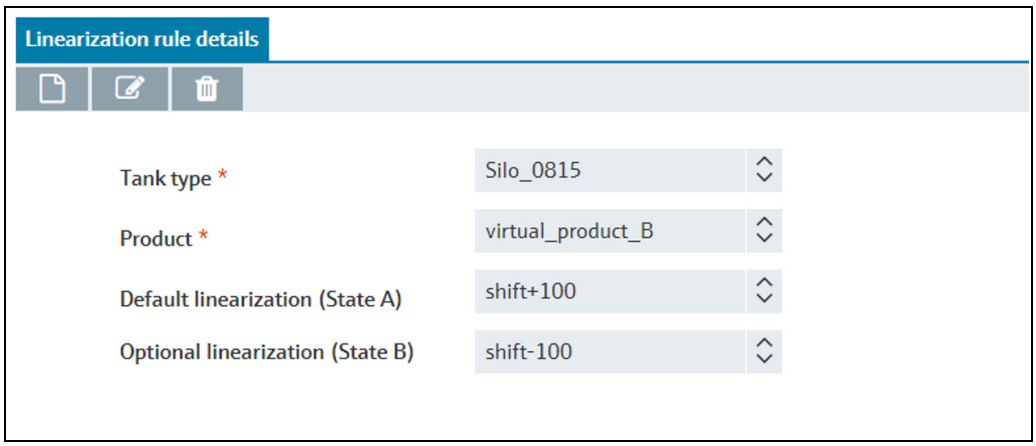
Here, you can select or see the following data:

- **Tank type**: (obligatory) A drop down list which contains all configured tank types inside the contract.
- **Product**: (obligatory) A drop down list which contains all current configured products inside the contract.
- **Default linearization (State A)**: A dropdown list which contains all declared linearizations for the contract.
- **Optional linearization (State B)**: A dropdown list which contains all declared linearizations for the contract.

3. Click to save your entries. Click to abort the process.

13.10.2 Editing a linearization rule

1. Click the button
2. The tab is displayed in edit mode in the lower part of the window.



Linearisierungsregeln3_BA00050SEN_2321_V3_4_3_EN

Here, you can select or see the following data:

- **Tank type**: (obligatory) A drop down list which contains all configured tank types inside the contract.
- **Product**: (obligatory) A drop down list which contains all current configured products inside the contract.
- **Default linearization (State A)**: A dropdown list which contains all declared linearizations for the contract.
- **Optional linearization (State B)**: A dropdown list which contains all declared linearizations for the contract.

3. Click to save your entries. Click to abort the process.

13.10.3 Deleting a linearization rule

1. Click the button.
2. The prompt "Do you really want to delete?" is displayed.
3. Click **OK** to delete the linearization rule. Click **Cancel** to abort the process.

13.11 Managing units

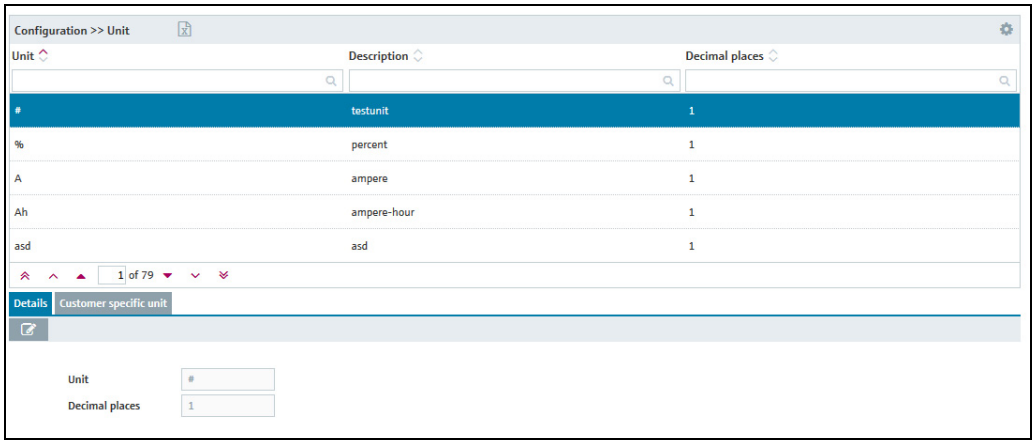
Only people whose user role is configured as **Master Data** can change the number of places after the decimal point for the units.

In the **Unit** menu item, you specify the number of places after the decimal point for the various units.

The **Unit** menu item lists all the units along with their description, number of decimal places and unit type. "Customer-specific" types of units cannot be converted to another unit. Customer-specific units are for display purposes only.

The button in the table header opens a context menu. Via this context menu, you can show and hide the **Unit type** column in the overview table.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Unit** menu item.
3. The following detail view appears in the application window:



S99_BA00050SEN_0211_30

The table displays all units along with their description and number of places after the decimal point.

4. Select the unit in the table for which you want to change the number of places after the decimal point.
5. Click the button.
6. The tab is displayed in edit mode in the lower part of the window.
7. Enter the desired number in the **Decimal places** field.
8. Click to save your entries. Click to abort the process.

13.12 Managing a report (using CIDX and CSV reports)

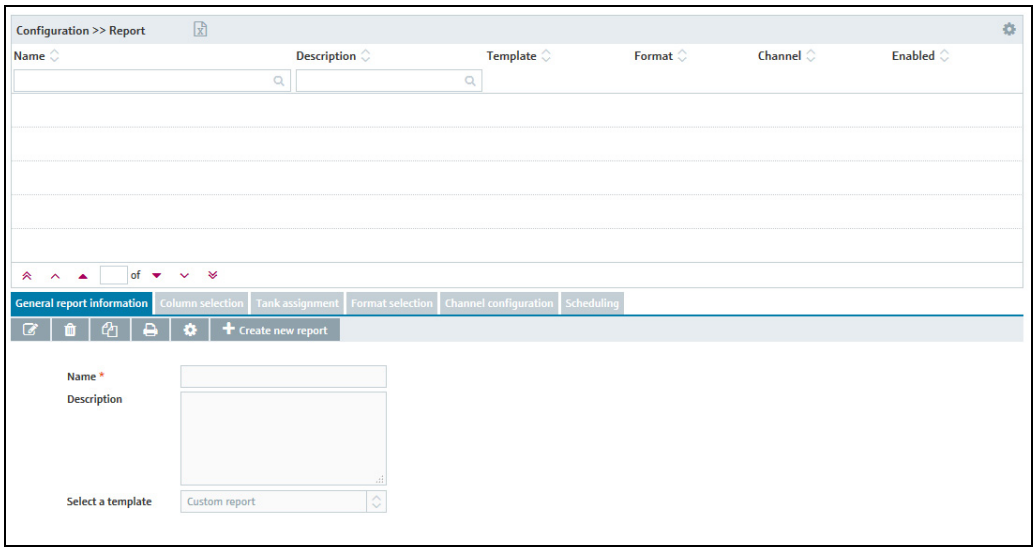
Only people whose user role is configured as **Master Data** can set up reports.

To use automatic data exchange in CIDX format, a server to receive the files must be set up on the receiver side. The URL, user name and password of the receiver side must be known.

You can schedule up to five reports.

Manual values are always marked with the text **MAN**.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Report** menu item.
3. The following detail view is displayed in the Application window:



S100_BA00050SEN_0211_30

Format CIDX and CSV
The generated CIDX and CSV files have the following format:
<contractNr><report.name>_<timestamp "yyyyMMdd_HHmmss">.<suffix>

Example: 1_report1_20100505_1634031.xml

CIDX: The CIDX format used is "InventoryActualUsage, Version 4".

The CSV files have the following structure:

Tank name	Time stamp	Value	Unit	Optimum	Plan point	Ship point	Safety stock
Tank 1	12.06.2009 17:20	920.0	l	1000	100	80	50

Validate CIDX

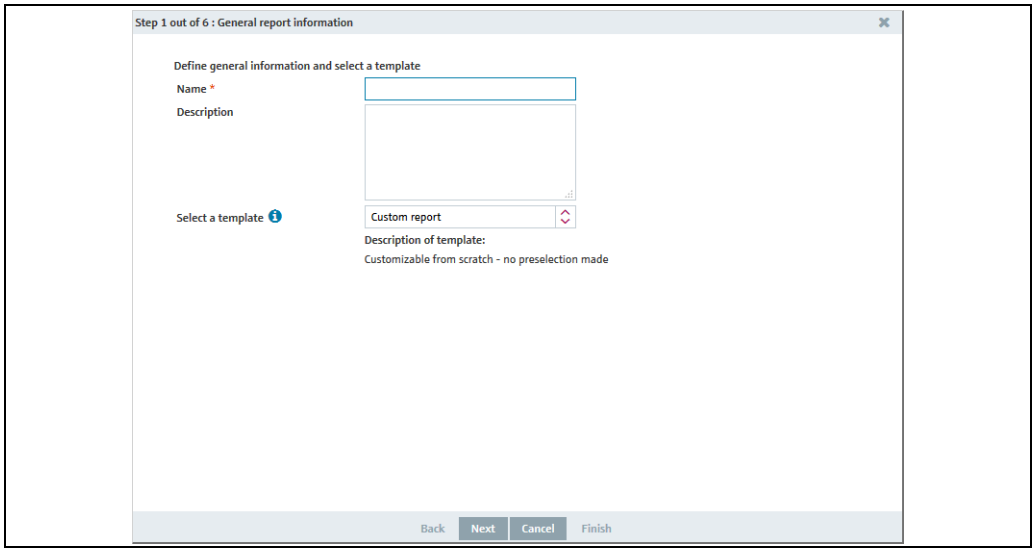
Once you have assigned the tanks to the report group, validation is performed to check whether the configuration complies with CIDX specifications. The following checks are performed:
- Is a supplier assigned to the tank?
- Is a buyer assigned to the tank?
- Is a location assigned to the tank?
- Is a product assigned to the tank?
- Is a company assigned to the location?
- Is an identifier and identifier agency set for the buyer?
- Is an identifier and identifier agency set for the supplier?
- Is an identifier and identifier agency set for the product?
- Is an identifier and identifier agency set for the company of the location?
- Is a measure point assigned to the tank?

13.12.1 Creating a report

Using the Report Wizard, you can create a report in six simple steps. You can use different report templates.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Report** menu item.

3. In the lower section of the Application window, select the **General report information** tab.
4. Click the **Create new report** button. The **General report information** dialog box appears:



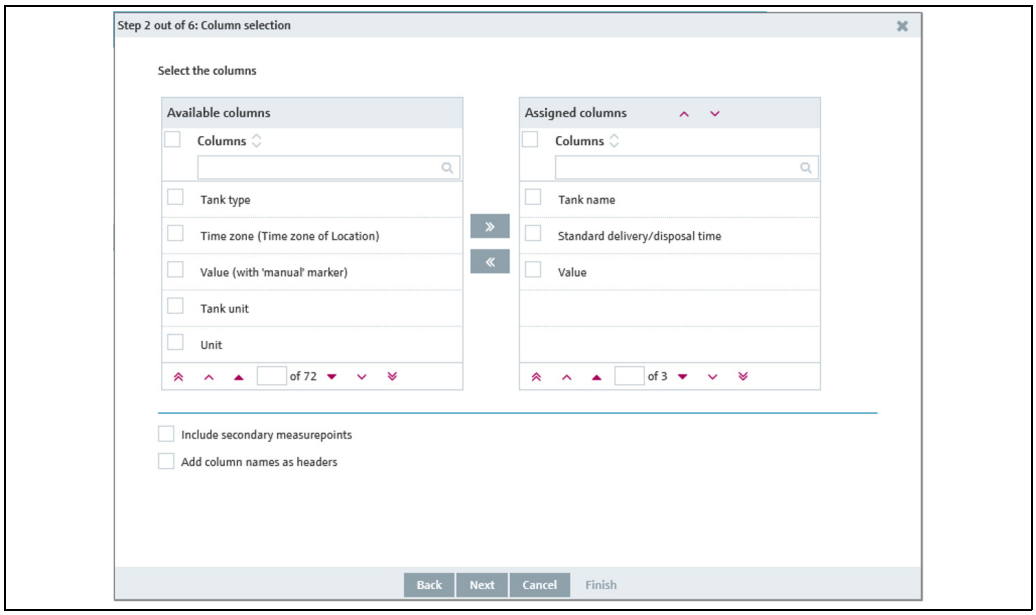
S101_BA00050SEN_0211_30

5. Here, you can enter general data on the report such as:

- **Name** (obligatory): Unique identifier
- **Description**: You can enter a multiline description here.
- **Select a template**: Select the template for the report here.

The report template **Secondary report** has been especially set up for secondary values. You can compile secondary values for a report here. In this template, all parameters that match a secondary value are preselected, as well as all secondary values and the primary value. The primary value can also be excluded from the report. A configured compilation of primary value, secondary values and parameters is stored and can be reused.

6. Click the **Next** button. The **Column selection** dialog box is displayed:



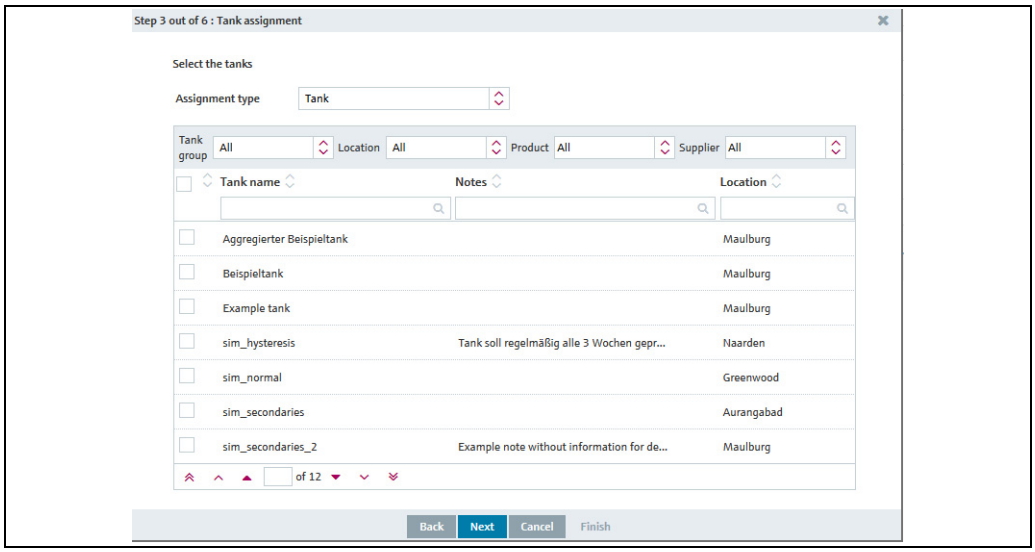
S102_BA00050SEN_0211_30

7. Here you can select the information (columns) which should be analyzed in the report.

If **Manual values** shall also be displayed in the report the column **Value (with manual marker)** has to be selected additionally.

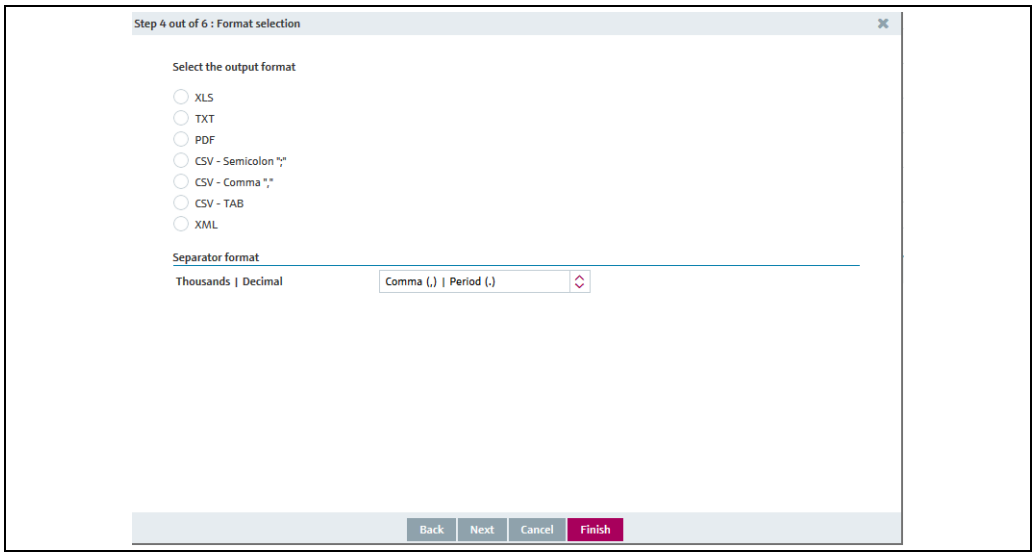
- **Available columns**: This lists all the columns that can be analyzed in the report. If you want to add a column, enable the **check box** for the corresponding column and click the » button. If you want to select all the columns, enable the uppermost **check box** beside the columns.
- **Assigned columns**: This lists all the columns that are analyzed in the report. If you want to remove a column, enable the **check box** for the corresponding column and click the « button. If you want to select all the columns, enable the uppermost **check box** beside the columns.
  If you want to change the order of the columns, select the corresponding column and click the ▼ or ▲ button.
- **Include secondary values**: the secondary values are also displayed. If this option is selected, no secondary values can be excluded from the report. If you want to select specific secondary values, choose the template **Secondary report** in step 1.
- **Add column names as headers**: The column names are used as headers.
- **Header language**: Choice of language for the column names in the header of the report. The language from your user preferences is used as the default language. If no language is selected in the user preferences, the column names are in English.

8. Click the **Next** button. The **Tank assignment** dialog box is displayed:



S102-2_BA00050SEN_0211_30

9. By means of the table, you can activate the **check boxes** to assign the corresponding tanks to this report.
10. Click the **Next** button. For CIDX and CSV reports, validation is performed to check whether the configuration complies with the specifications. The **Format selection** dialog box is displayed:



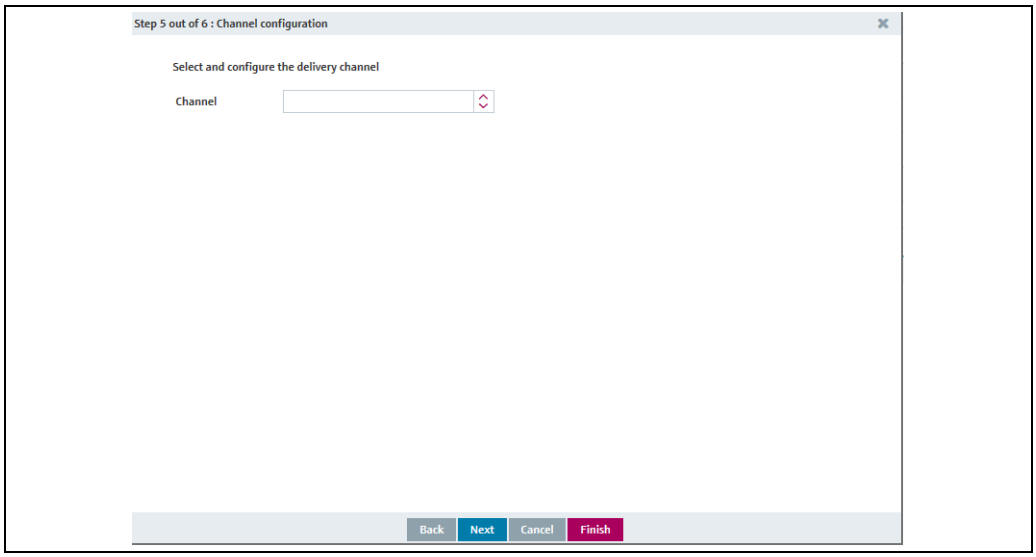
Report_Assistent_4_BA00055SEN_30

11. You can select how the report is output here:

- **XLS**: Excel file
- **TXT**: text file
- **PDF**: PDF file
- **CSV – Semicolon ";"**: CSV file (values seperated by semicolon)
- **CSV – Comma","**: CSV file (values seperated by comma)
- **CSV – TAB**: CSV file (values seperated by tabulator)
- **XML**: XML file

12. Click the **Finish** button to finish the report.

13. Click the **Next** button to go to the channel configuration. The **Channel configuration** dialog box is displayed:

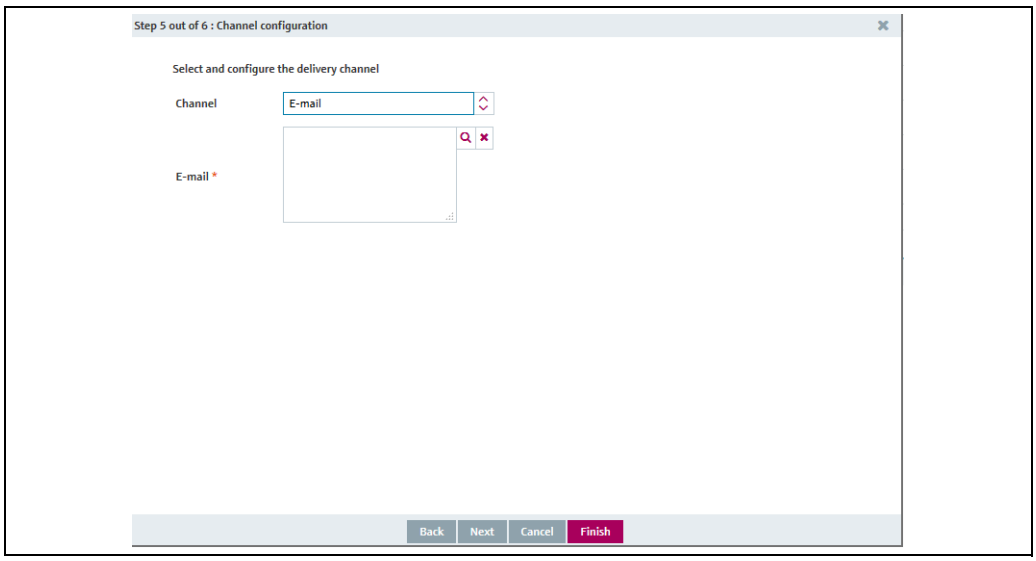


S103-2_BA00050SEN_0211_30

14. Select the distribution channel for the **Channel** field.
15. Depending on the distribution channel selected, additional fields are displayed in the tab.

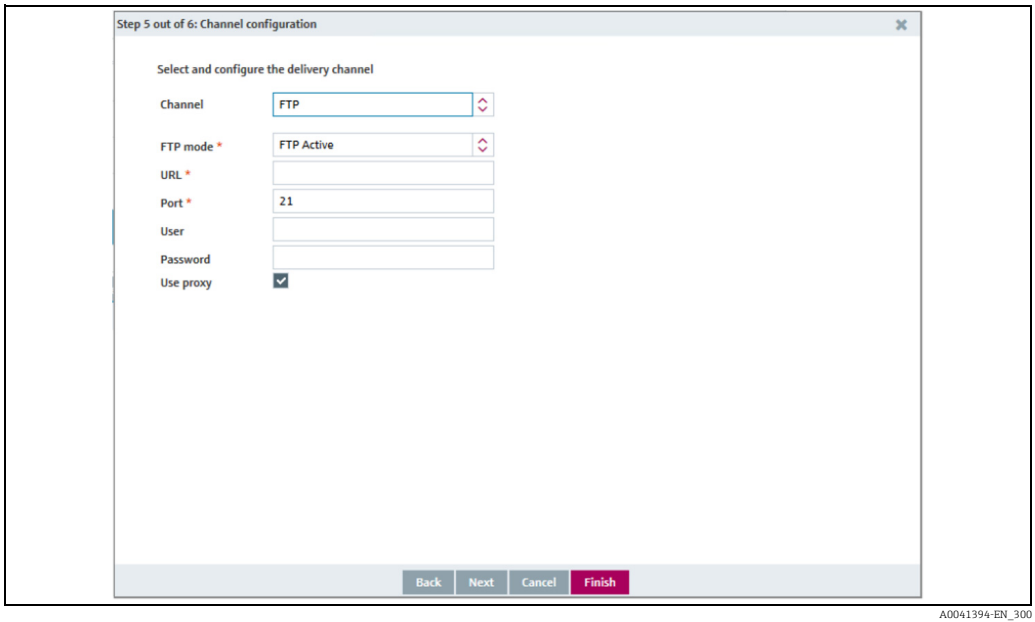
a) Distributed by e-mail

– Click the 🔍 button to select a user. Click the ✖ button to remove a user who has been selected.



S104_BA00050SEN_0211_30

b) Distributed by FTP



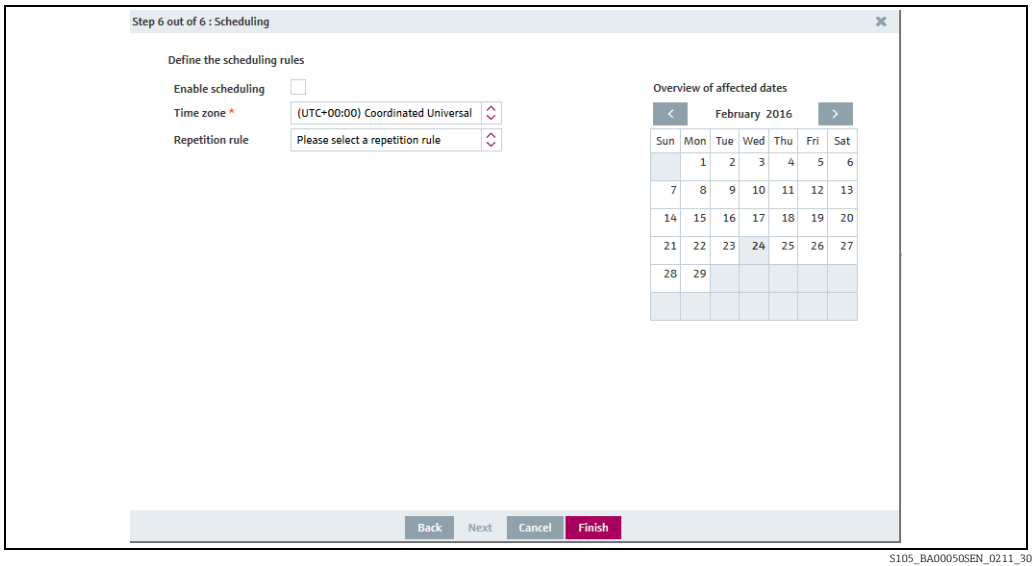
A0041394-EN_300

Enter the following data here:
- **FTP mode**: If required, select another FTP mode. Default value: FTP Active. Options: FTP Passive, FTPS Passive.
- **URL** (obligatory): Website of the selected channel
- **Port**: If needed, choose another port. Default value: 21.
- **User**
- **Password**
- **Use proxy**

FTP Active: When using active FTP, the FTP server initiates the build-up of the data channel after client and server have agreed to do so.
FTP Passive: When using passive FTP, the client initiates the build-up of the data channel, because a firewall or a router connection often prevent the data channel establishment coming from the server side.
FTPS Passive: Passive FTPS (explicit) works similar to passive FTP, but uses TLS encryption while setting up a connection.

When setting up a connection from the client side via passive FTPS in the **explicit** mode, port 21 is used.
For the data channel, the server must use a port between 10000 and 11000. The server must be configured accordingly. The IP address of the FTPS server must be signed up at Endress+Hauser and approved for connection

16. Click the **Finish** button to finish the report. Click the **Next** button to go to scheduling. The **Scheduling** dialog box is displayed:

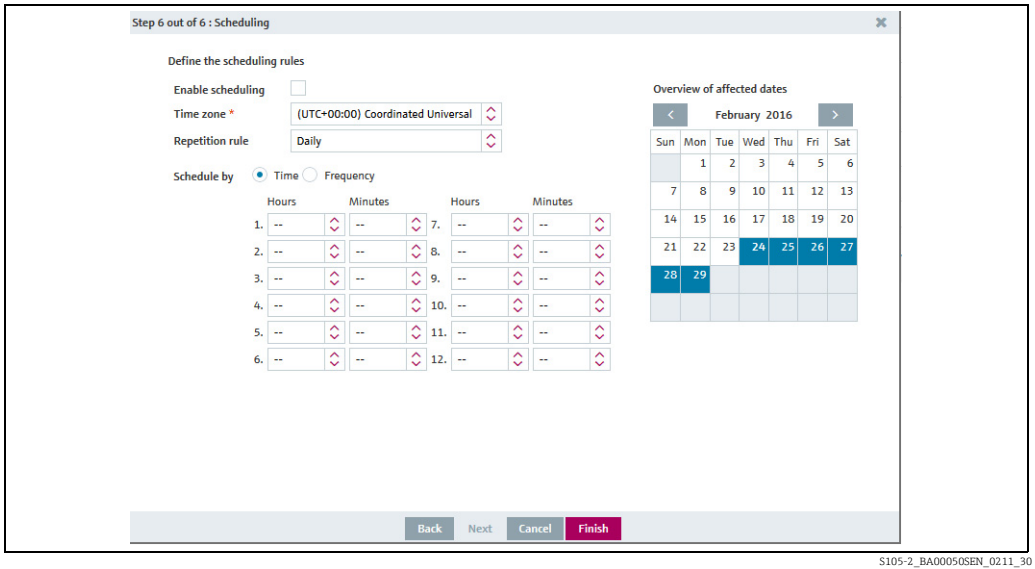


S105_BA00050SEN_0211_30

17. Here, you can enter data on the scheduling such as:

- **Enable scheduling**: The scheduling rule is enabled immediately as soon as the report has been completed.
- **Time zone**
- **Repetition rule**: You can select a rule here.
  Daily: Possible to schedule by time or frequency.
  Weekly on every...: Possible to select the specific days and schedule by time or frequency.
  Monthly on specified date: Possible to schedule the start date and time for creating the report every month.
  Monthly on last day of month: Performed on the last day of the month. Possible to schedule the time for creating the report every month.

The days on which a scheduling rule is executed are highlighted in color in the calendar. You can scroll through the calendar on a month-by-month basis.



S105-2_BA00050SEN_0211_30

18. Click the **Finish** button to finish the report.

13.12.2 Downloading the report as a PDF file

You can download a report as a PDF file and save it in your file system.

Mobile devices: Before printing reports as PDF, deactivate the ad blocker in your internet browser. If the ad blocker remains activated, it may happen that the report cannot be closed again. In this case, refresh the browser tab or log off from SupplyCare Hosting and log in again.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Report** menu.
3. Select the report in the upper section of the Application window.
4. In the lower section of the Application window, select the **General report information** tab.
5. Click the button.
6. As soon as the report is finished, the **File download** dialog box is displayed.
7. Click the **Open** button to view the report immediately. Click the **Save** button to save the report in your file system. Click **Cancel** to abort the process.

13.12.3 Creating reports and sending them immediately

Irrespective of the scheduling rules, you can create a report any time and send the report to the recipients as defined in the channel configuration. The scheduling rules remain unchanged.

Only measured values with the status 0 are taken into consideration in **CDIX** and **CSV**-type reports.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Report** menu.
3. Select the report in the upper section of the Application window.
4. In the lower section of the Application window, select the **General report** tab.
5. Click the button.
6. The report is created in the background and sent to the recipients. You receive a notification message to this effect.
7. Click **Ok** to confirm the notification message.

13.12.4 Changing a report

For details → 27

13.12.5 Deleting a report

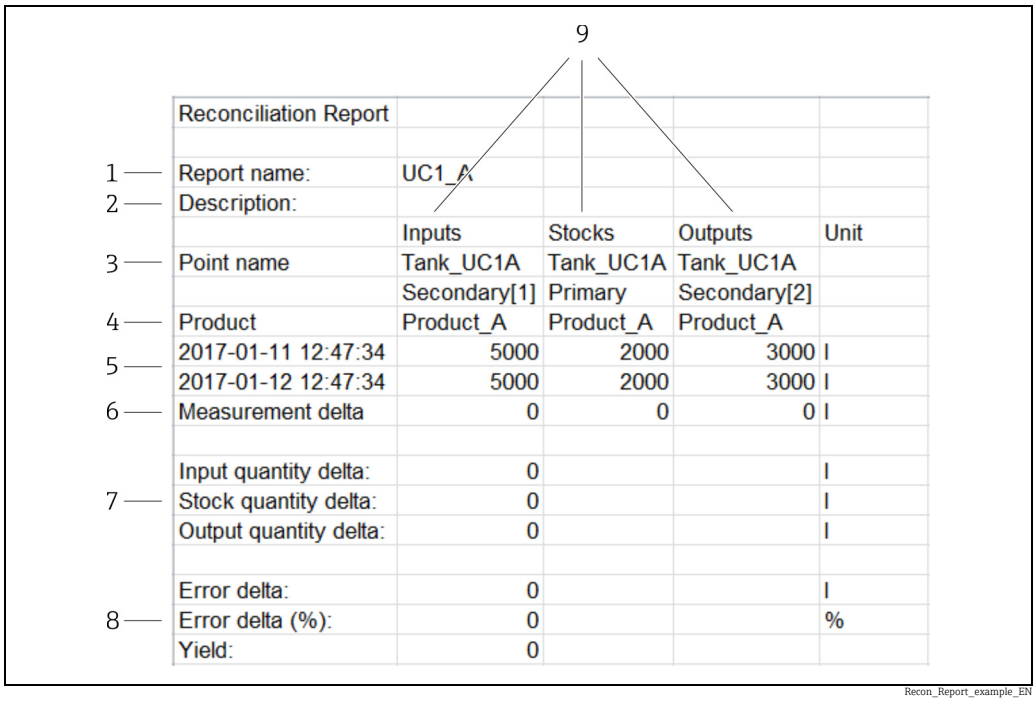
For details → 31

13.12.6 Copying a report

For details → 32

13.13 Reconciliation report

13.13.1 Description



	Reconciliation Report				
1	Report name:	UC1_A			
2	Description:				
		Inputs	Stocks	Outputs	Unit
3	Point name	Tank_UC1A	Tank_UC1A	Tank_UC1A	
		Secondary[1]	Primary	Secondary[2]	
4	Product	Product_A	Product_A	Product_A	
5	2017-01-11 12:47:34	5000	2000	3000	l
	2017-01-12 12:47:34	5000	2000	3000	l
6	Measurement delta	0	0	0	l
	Input quantity delta:	0			l
7	Stock quantity delta:	0			l
	Output quantity delta:	0			l
	Error delta:	0			l
8	Error delta (%):	0			%
	Yield:	0			

Fig. 3: Example for a Reconciliation Report in xls format. In this report, values from 3 measure points are collected: Inputs, Stocks and Outputs.

1 Report name
2 Description
3 Point name: Names of the measure points
4 Product
5 Points in time of measurement (start / end)
6 Measured delta at a separate measure point
7 Quantity Delta: Sum of the deltas from the values of all measure points of a certain type
8 Error delta: Measured product loss by unit; Error delta (%): Measured product loss in %; Yield: Factor for process efficiency (ideal: 1)
9 Column heads for the measure points Inputs, Stocks and Outputs

The Reconciliation report offers the opportunity to create reports that display the inventory development in one or more tanks very accurate.
The enhanced accuracy compared to sole level measurement (Stocks) is achieved by adding measurement values from flow meters for inflow to a tank (Inputs) and the discharge from a tank (Outputs) to the measurement process. The Reconciliation report relates these 3 values and balances them against each other, and thus makes inconsistencies visible.

The Reconciliation report measurement values are more accurate than those delivered by the measurements in the "Analysis" workplace. For this reason, the Reconciliation report values may differ slightly from those in the "Analysis" workplace.

For each measure point of the inflow type (**Input**), **Stock** and discharge (**Output**), the difference between the start point and the end point of the measurement is being calculated. A Reconciliation report can also be calculated if there are only 2 measure points. One of the measure points must be **Stock**.

For report creation, the last measurement before start time, and end time respectively, of a measure point is used.

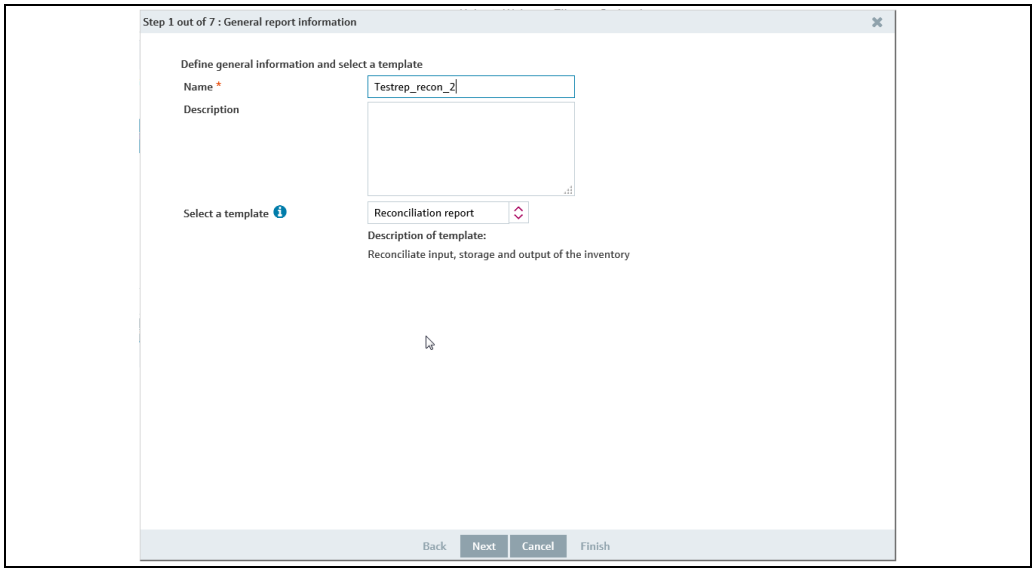
There are several ways to create a Reconciliation report.
- Ad hoc upon request of a SupplyCare user → 79.
- Regularly, based on variably defineable time intervals.

13.13.2 Configuring a Reconciliation Report

Creating a report

Using the Report Wizard, you can create a report.

1. Click the **Configuration** menu in the Navigation window.
2. Click the **Report** menu item.
3. In the lower section of the Application window, select the **General report information** tab.
4. Click the **Create new report** button. The **General report information** dialog box appears:



Konfig_Rep_Reco_1_BA00050SEN_31

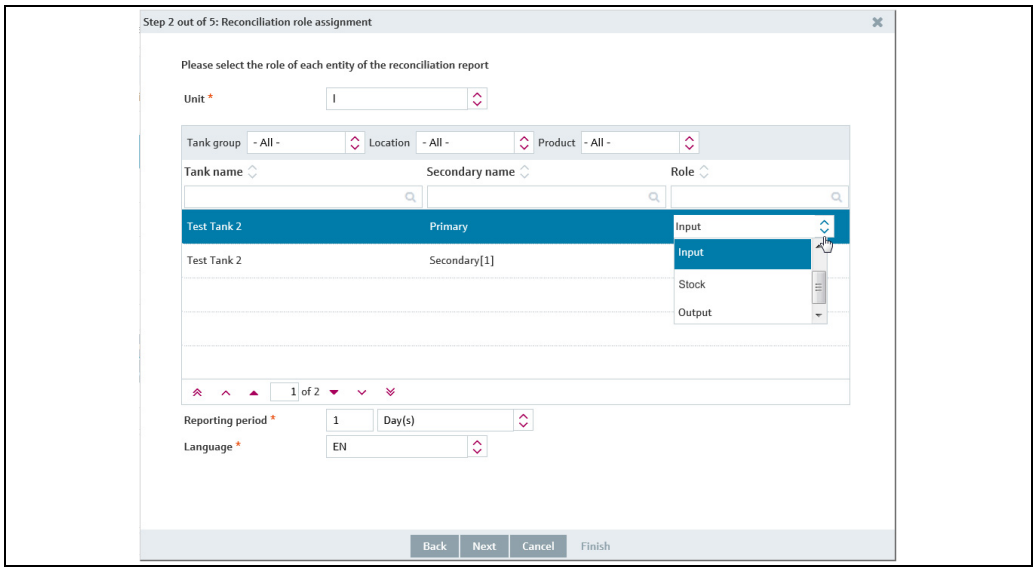
5. Here, you can enter general data on the report such as:

– **Name** (obligatory): Unique identifier
– **Description**: You can enter a multiline description here.
– **Select a template**: Select the template **Reconciliation report** here.

6. Click the **Next** button. The **Reconciliation role assignment** dialog box is displayed.

Here, you assign a role (Input, Stock or Output) to the available measure points. Typically, primary values and secondary values are assigned to the separate roles. These measurement values are then used for the inventory reconciliation.

If a measure point is not assigned to a role, its value is 0 (default).

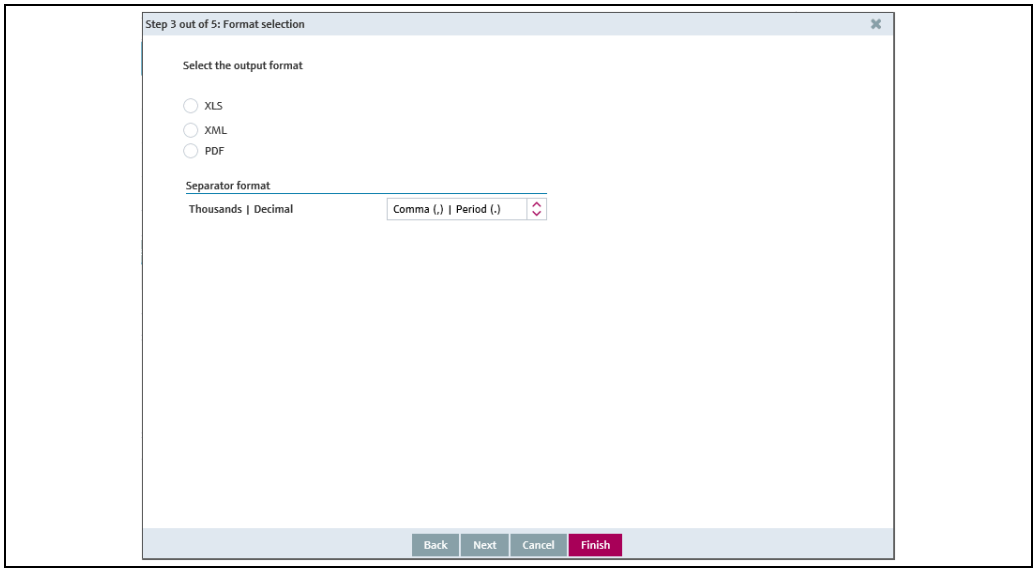


Konfig_Rep_Reco_2_BA00050SEN_31

7. Here you can filter tanks by tank group, location and product. Enter the following information and parameters:

- **Unit** (mandatory). The default unit here is cubic meters. Only those primary and secondary values can be calculated, which, from tank configuration, feature a unit that is compatible with the unit selected here. Compatible with one another are either units of volume or units of mass.
- Select the measure points of a tank. For a report, minimum 2 measure points are necessary. One of the measure points must be **Stock**. For each measure point a row is displayed. Click into the row and select a role for a measure point.
- Select the time interval and the language for the Reconciliation report.

8. Click the **Next** button. The **Format selection** dialog box is displayed:

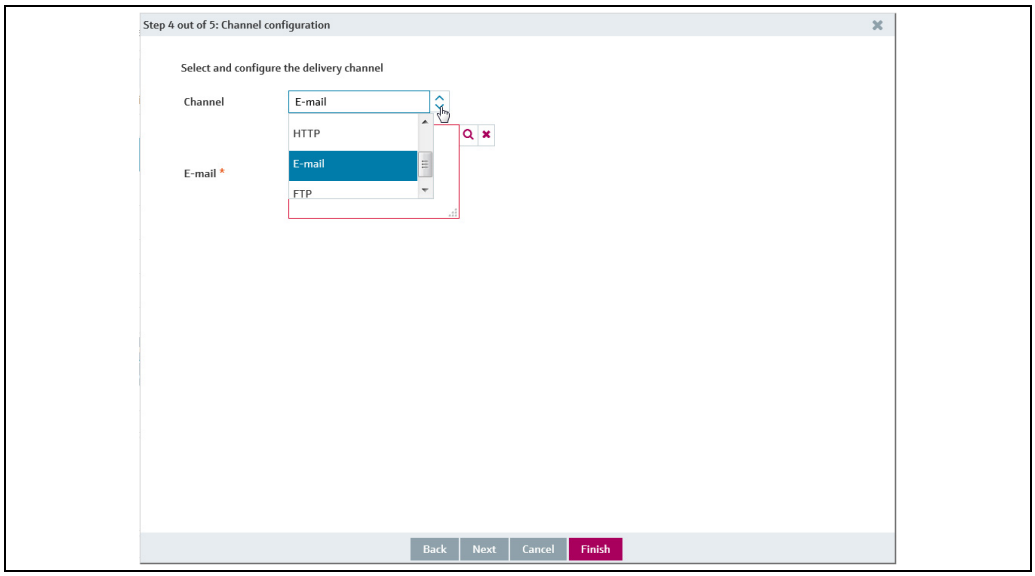


Konfig_Rep_Reco_3_BA00050SEN_31

9. You can select how the report is output here:

- **XLS**: Excel file
- **XML**: XML file
- **PDF**: PDF file

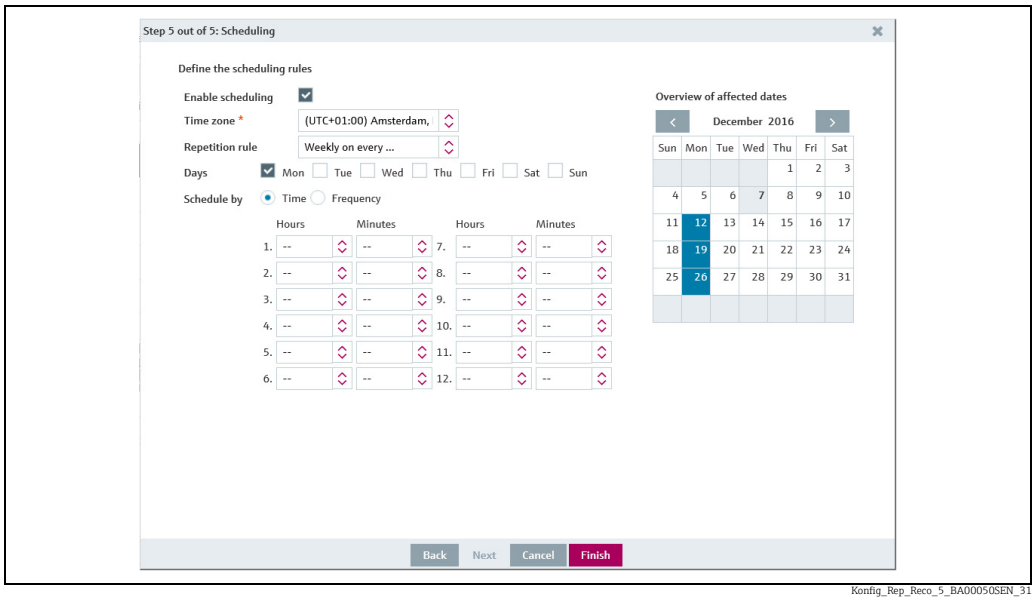
10. Click the **Next** button. The **Channel configuration** dialog box is displayed:



Konfig_Rep_Reco_4_BA00050SEN_31

11. Select the distribution channel for the **Channel** field. Depending on the distribution channel selected, additional fields are displayed in the tab. The details of the various channels are described here: → 144.

12. Click the **Next** button to go to scheduling. The **Scheduling** dialog box is displayed:



Konfig_Rep_Reco_5_BA00050SEN_31

Fig. 4: Using time for scheduling: Here, one or more points in time are defined, where there is a Reconciliation report being created on each of the days selected.

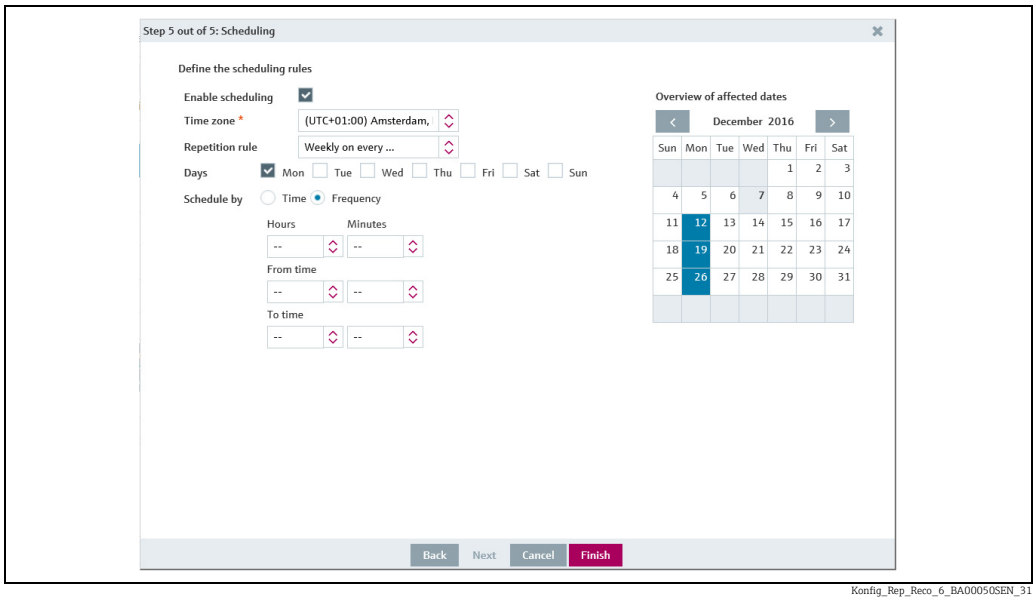


Fig. 5: Using frequency for scheduling: Here, a time-slot is defined (start time, end time), and inside of which several Reconciliation reports are created. It depends from the window's size and the frequency selected, how many reports are created.

13. Here, you can enter data on the scheduling such as:

- **Enable scheduling**: The scheduling rule is enabled immediately as soon as the report has been completed.
- **Time zone**
- **Repetition rule**: You can select a rule here.
  Daily: Possible to schedule by time or frequency.
  Weekly on every...: Possible to select the specific days and schedule by time or frequency.
  Monthly on specified date: Possible to schedule the start date and time for creating the report every month.
  Monthly on last day of month: Performed on the last day of the month. Possible to schedule the time for creating the report every month.

The days on which a scheduling rule is executed are highlighted in color in the calendar. You can scroll through the calendar on a month-by-month basis.

14. Click the **Finish** button to finish the report.

13.14 Setting up messaging

SupplyCare Hosting can actively inform users of events by e-mail. Depending on the event weighting, different people can be informed.

Only people whose user role is configured as **Master data** can set up message notification.

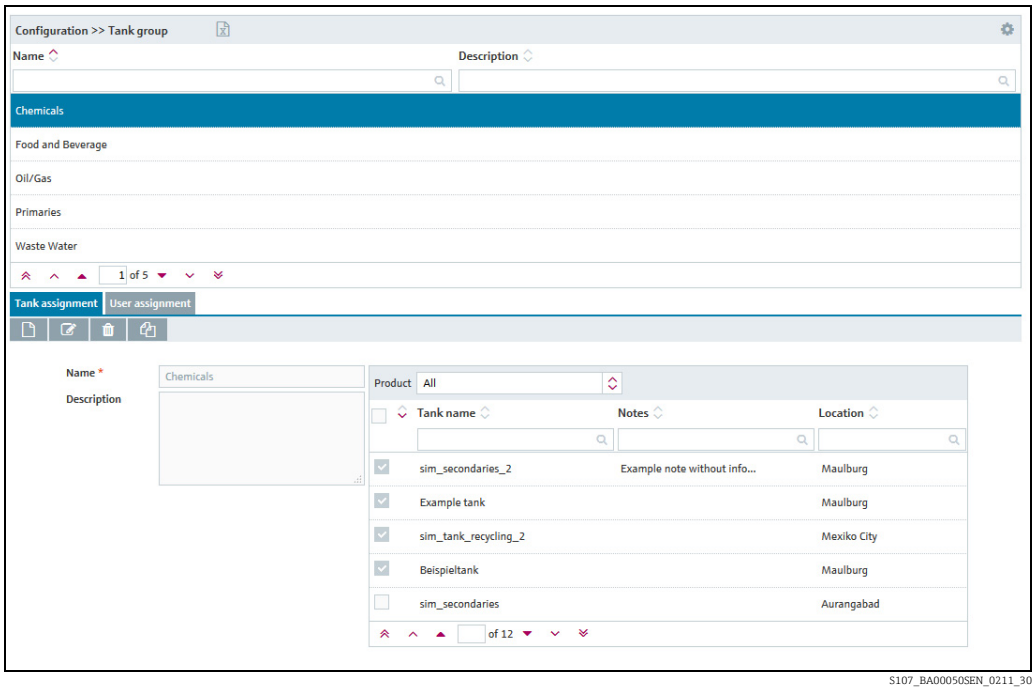
Message-based notification can only be set up for people with **Read only**, **Scheduler** or **Operator** configured as their user role.

The e-mail connection must be set up for SupplyCare before the user can be notified by e-mail.

13.14.1 Setting up messaging

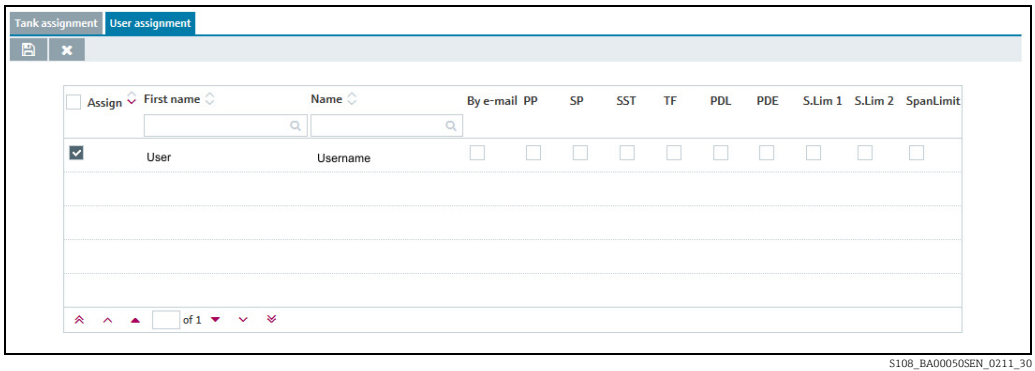
1. Click the **Configuration** menu in the Navigation window.
2. Click the **Tank group** menu.

3. The following detail view is displayed in the Application window:



S107_BA00050SEN_0211_30

4. In the overview table, select the tank group to which you want to assign a user.
5. In the lower section of the application window, select the **User assignment** tab.
6. Click the button.
7. The tab appears in the edit mode:



S108_BA00050SEN_0211_30

Anyone with **Read only**, **Scheduler** and **Operator** user roles is listed in the table. You can only assign these people to a tank group, and thus to a tank.

8. You can assign one or more tank groups to the user using the **Assign** column. These tank groups are listed in the "Workplace - Tank" view.
   You can also specify what events the user should be notified of, and whether this notification should be sent by e-mail.
9. Click to save your entries. Click to abort the process.

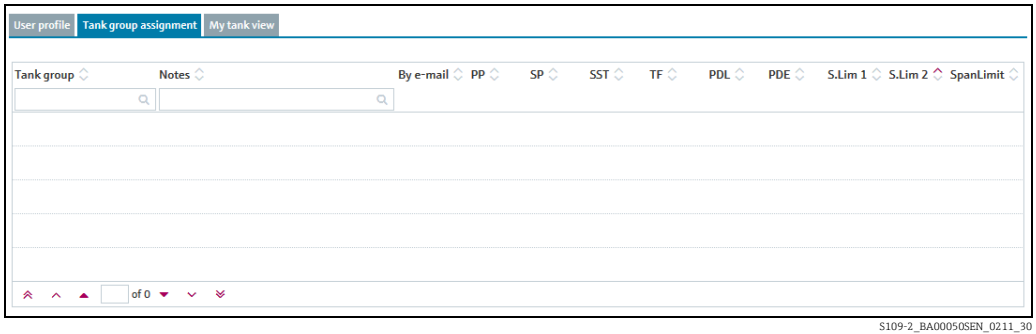
13.15 Maintaining a user profile

Each person has the possibility to change his/her user profile.

1. Click the **Profile menu** in the Navigation window.
2. Click the **User profile** menu item.
3. Select the **User profile** tab.
4. The following is an example of what is displayed in the Application window:

S109_BA00050SEN_0211_30

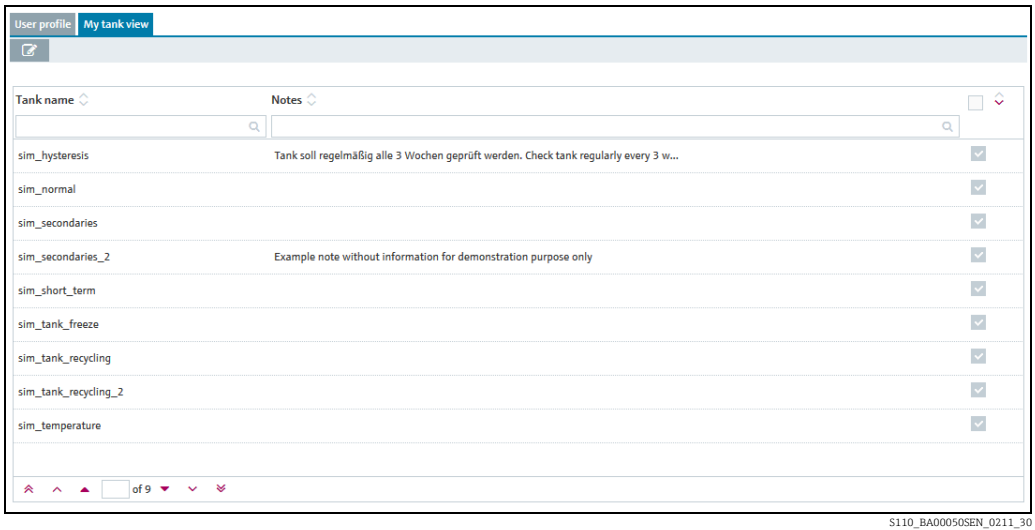
5. Click the button.
6. The tab is displayed in the edit mode.
7. Make your changes. You can change the fields with a white background, e.g. **Name** and **E-mail address**.
8. Click to save your changes. Click to abort the process.
9. The **Tank group assignment** tab shows you what tank groups you are assigned to.



S109-2_BA00050SEN_0211_30

The tank group assignment can only be changed by people with **Master data** user role in the **Tank groups** menu item.

10. The **My tank view** tab shows you all the tanks and aggregated tanks which you can access via the assigned tank groups.



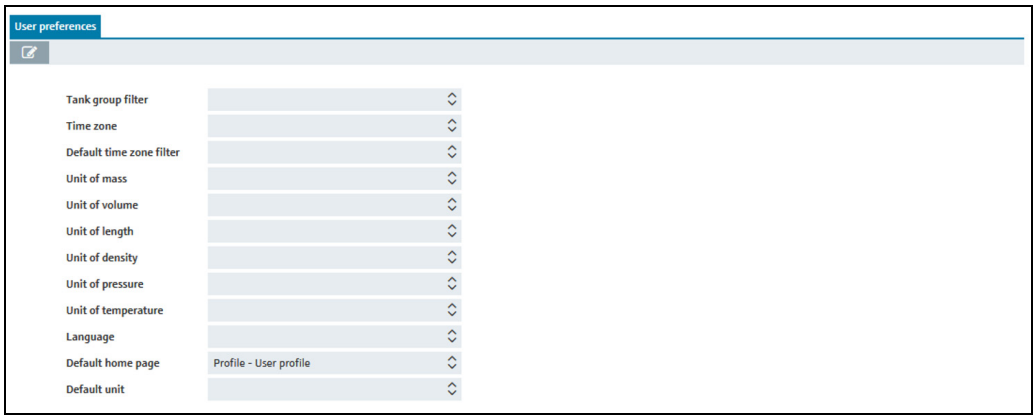
S110_BA00050SEN_0211_30

11. Click the button.
12. The tab is displayed in the edit mode.
13. Enable the **check boxes** of the tanks that should be shown in the **My tank view** workplace.
14. Click to save your changes. Click to abort the process.

13.16 Selecting and changing user preferences

Only people with **Read only**, **Scheduler** or **Operator** configured as their user role can change the user preferences.

1. Click the **Welcome <user name>** menu in the Navigation window.
2. Click the **User preferences** menu item.



Benutzereinstellungen_BA00050SEN_31

3. Click the button.
4. The tab is displayed in the edit mode.
5. Click the button of a field to choose an option or change a setting.
6. Click to save your changes. Click to abort the process.

13.16.1 Description of the filters (fields)

"Time zone" filter

The **Time zone** selected here is used in the following areas of the program:

Menu	Description
Workplace – Tank	▪ **Notes and files** tab ▪ **Event details** tab
Workplace – My tank view	▪ Tank overview
Workplace – Event	▪ Event table ▪ **Event details** tab ▪ **Event history** tab
Configuration – Tank	▪ **Tank notes** tab
Configuration – Aggregated tank	▪ **Tank notes** tab
Configuration – Location	▪ **Location notes** tab

"Default time zone filter"

The **Time zone** filter selected here is displayed in the **Time zone** picklist in the "Tank", "My tank view", "Event" and "Scheduling" workplaces. You can select the following values:

- **Empty**: The "Location" value is displayed in the "Tank", "My tank view" and "Scheduling" workplaces. "User preference" is displayed in the "Event" workplace.
- **Location**: The "Location" value is displayed.

- **User preference**: The selected time zone is displayed. The value "UTC+00:00" is displayed if the time zone is empty.
- **UTC**: The value "UTC+00:00" is displayed. "UTC" is short for "Universal Time Coordinated".

Unit filters

If you selected Mass, Volume, Length, Density, Pressure or Temperature for the tank unit, the unit selected here is used in many spots of the program. These spots are listed in the following table.

Menu	Description
Workplace – Tank	▪ "Tank" table ▪ **Inventory chart** tab ▪ **Tank details** tab ▪ **Event details** tab ▪ **Download history** tab
Workplace – My tank view	▪ Tank overview ▪ **Inventory chart** tab ▪ **Tank details** tab ▪ **Event details** tab ▪ **Download history** tab
Workplace – Event	▪ **Event details** tab ▪ **Inventory chart** tab ▪ **Tank details** tab, **Unit** field
Workplace – Scheduling	▪ Planning table ▪ **Plan delivery/disposal** tab ▪ **Planned delivery/disposal** tab ▪ **Overview** tab
Workplace – Analysis	▪ Analysis table ▪ **KPIs** tab ▪ **Outflow/Inflow** tab ▪ **Chart hourly** tab ▪ **Chart daily** tab

"Language" filter

The **Language** selected here is used as the language for event and limit notifications, as well as for the names of the columns in the header of a report.

"Default home page" filter

The **Default home page** selected here is displayed in the application window following successful login. If a splash screen image is used in the application window, the default home page is displayed once the user clicks **Next**.

14 Delimiters in export and report formats

This chapter explains the right thousand and decimal delimiter formatting used in all the Export or Reporting possibilities in SupplyCare.

- **Excel Downloads**  – The download is performed with Excel format (standard). When opened in Excel, the report will be shown in the local Excel format system.
- **Download history** – The character which the download uses as the thousand/decimal delimiter depends on the language setting selected in the browser.
- **Notifications** – The character which the notification uses as the thousand/decimal delimiter depends on the language setting selected in **User preferences**.
- **Reports** – The character which the report uses as the thousand/decimal delimiter can be selected from a Drop down list in the **Report Configuration**.

15 User roles and authorization

Multiple user roles can be assigned to one person at the same time.

Master data

Person with **Master data** configured as their user role are authorized to perform the following:
- Create, change and delete users
- Assign a user role to a user
- Assign a tank group to a user
- Assign notifications to a user
- Change their own user profile
- Create, change and delete a tank
- Assign a tank to a tank group
- Create, change and delete an aggregated tank
- Assign an aggregated tank to a tank group
- Create, change and delete tanktypes
- Create, change and delete a location
- Assign a tank to a location
- Create, change and delete a company
- Create, change and delete a product
- Upload an existing linearization table
- Create, change and delete a linearization table
- Create, change and delete a tank group
- Assign a product to a tank
- Create, change and delete reports
- Change the number of decimal places for a unit type

Read only

Person with **Read only** configured as their user role are authorized to perform the following:
- View tanks (measured values)
- View personalized tank view
- View tanks on a map (Google Maps)
- View and save measured value history
- View tank details
- View location details
- View tank service status
- View events
- Perform totaling
- Change their own user profile
- Make user preferences

Operator

The **Operator** is authorized to perform the following:
- View tanks (measured values)
- View personalized tank view
- View tanks on a map (Google Maps)
- View and save measured value history
- Analyze the history of existing measured values
- View tank details
- View location details
- Change tank service status
- View and edit events
- View event history
- Perform totaling
- Change their own user profile
- Make user preferences

Scheduler

The **Scheduler** is authorized to perform the following:
- View tanks (measured values)
- View personalized tank view
- View tanks on a map (Google Maps)
- View and save measured value history
- View notifications and status displays on planned disposals and deliveries
- View tank details
- View location details
- View tank service status
- View and edit events
- Set the resubmission date
- View event history
- Plan deliveries and disposals
- Perform totaling
- Change their own user profile
- Make user preferences

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