



New Features in ibaDaVIS v2.9.0

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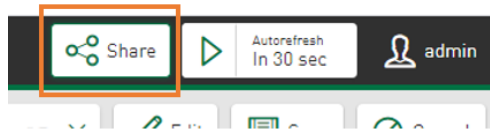
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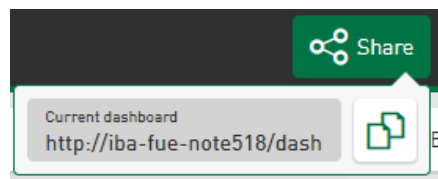
1 New Features

1.1 Share dashboards as links

In this version it is possible to share a dashboard as link. When you click on the new introduced button Share a link having the current filter settings is provided. You can copy the link as text into a mail and share the current dashboard and the belonging filters with your colleagues.



The fly out which is displayed on click to the button enabled you to copy the link into the clipboard and insert it into mails or any kind of collaboration media.



-> [http://\[ibaDaVISServerName\]/dashboard/2?dashboardStatId=3](http://[ibaDaVISServerName]/dashboard/2?dashboardStatId=3)

When you open the link to the shared dashboard in the browser, you'll see the dashboard and filter settings at the time the link was created. From this frozen dashboard status, you can continue filtering and analyzing in the dashboard or return to the saved dashboard status by clicking the now provided button "Back to original".



The provided link to the current dashboard and the filters will exceed after 100 days.

1.2 Download of linked csv, pdf, parquet files

CSV, PDF or Parquet files can be downloaded directly. The text from the database row is signed as link and can be used as download link.

table dbo.deFile_CsvPdfParquet - Datensätze begrenzt auf 11 von 11				
_TimeStamp	CSV_Files	PDF_Files	Parquet_Files	
22.08.2016 04:59:53	C:\csv_Export\ibaDaVIS_Export_2021-02-03_18-26-34.CSV	C:\PrintAllTest\Report_2.pdf	C:\DataSet2.parquet	<input type="checkbox"/>
22.08.2016 05:21:02				<input type="checkbox"/>

1.2.1 Requirement

EN: The file name of the csv, pdf or parquet file must be registered as a reference in a database table. ibaDaVIS Service must have read rights to the directory where the referenced file is located.

IBA-FUE-NOTES18\S...ile_CsvPdfParquet												
_Field	_TimeStamp	_FileName	_...	_E...	M...	E...	T...	T...	N...	N...	CSV_Files	PDF_Files
1649147586	2016-08-22 05:21:02	E:\dat\Custom...	r...	1	0	H 4...	2...	02...	674	02...	C:\csv_Export\ibaDaVIS_Export_2021-02-03_18-26-34.csv	C:\PrintAllTest\Report_1.PDF
									4...	4,04	C:\PrintAllTest\DataSet_3.par...	

1.2.2 Activation

At the Datasource management at the options for each configured datasource of type general database or ibaFile table a list of checkable file formats is given. The file format PDF, CSV and Parquet are supported as downloadable file types.

+

Add

Delete

Local HD Server

ibaTraining

local MsSQL

dbo.deFile_CsvPdfParquet

Table Settings

Event Definitions

Options

Analysis

Reference

Timezone of the data timestamp

ibaDaVIS Server Timezone

Enable segment tables

Channel Header

Set

Replace DAT files path

From

By

Replace PDF reports path

From

By

DAT Password

☒ Allow downloading PDF files by paths

☒ Allow downloading CSV files by paths

☒ Allow downloading PARQUET files by paths

1.2.3 Usage

The table tile on the dashboard can perform the download. According to the settings at the datasource configuration the strings having the suffix .csv, .pdf or .parquet are signed as download link. The download of the referenced file is performed when the link is clicked.


table dbo.deFile_CsvPdfParquet - Datensätze begrenzt auf 11 von 11				
_TimeStamp	CSV_Files	PDF_Files	Parquet_Files	
22.08.2016 04:59:53	C:\csv_Export\ibaDaVIS_Export_2021-02-03_18-26-34.CSV	C:\PrintAllTest\Report_2.pdf	C:\DataSet2.parquet	<input type="checkbox"/>
22.08.2016 05:21:02				<input type="checkbox"/>

1.3 Markers in line charts displaying HD trends and open the selected time range for deeper analysis in ibaAnalyzer

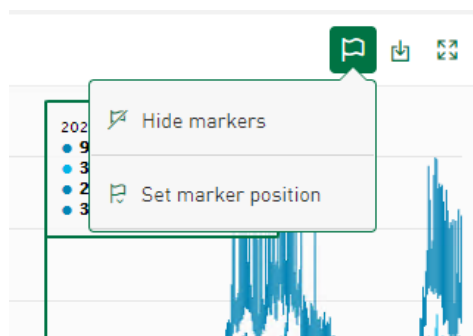
Markers can be visualized in the line chart that shows signals from time-based or event-based HD stores. The markers can be placed freely on the trend. The selected time range between the markers can be downloaded as HDQ file. This HDQ file can be used directly in ibaAnalyzer to examine the time range marked in ibaDaVIS with a suitable analysis in detail.



1.3.1 Using markers in the chart

The markers are displayed by tapping or clicking on the button with the flag  in the line diagram. The markers show the signal values of the respective marker position as label, which is also used for interactive positioning of the markers. The marker position can be changed directly by dragging the label to another position.

By clicking again or tapping on the button with the flag, a context menu is activated. The provided context menu offers to hide the markers or position the markers exactly.



The input dialog to position the markers exactly displays the current position in time of both markers. When you commit the dialog by clicking OK the values of the time input fields for the markers of the dialog are applied directly on the markers in the chart

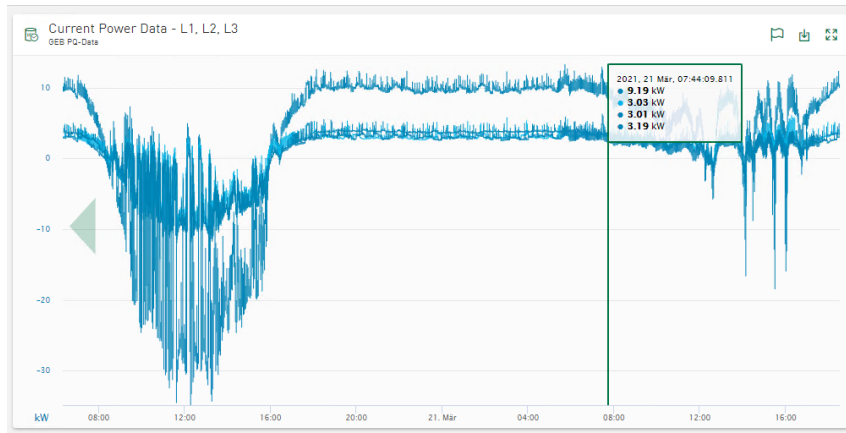
The image shows a dialog box titled 'Set marker position' with a close button (X). It contains two input fields for marker times:

- Marker 1 time: 20.03.2021 00:00:00
- Marker 2 time: 21.03.2021 07:44:09

At the bottom, there are two buttons: 'Apply on markers' and 'Abbrechen'.

1.3.2 Zoom behavior

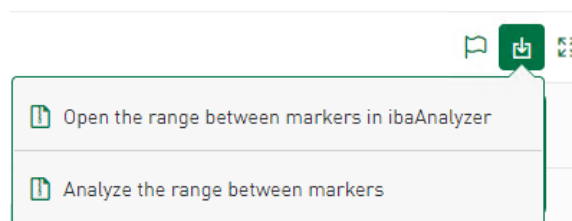
The markers remain at the selected position until they are hidden. If a marker is placed out of the currently shown time range, a transparent arrow on the line chart indicates the direction in which the marker is still positioned.



1.3.3 Open range between markers in ibaAnalyzer

If the markers are displayed, the time range between the markers can be used to download an HDQ file which contains the time points from the markers as start and stop time. ibaAnalyzer is capable to open the HDQ file and query data using the information from the HDQ file such as the HD server connection and the time ranges for start and stop time and visualize the HD data for deeper analysis.

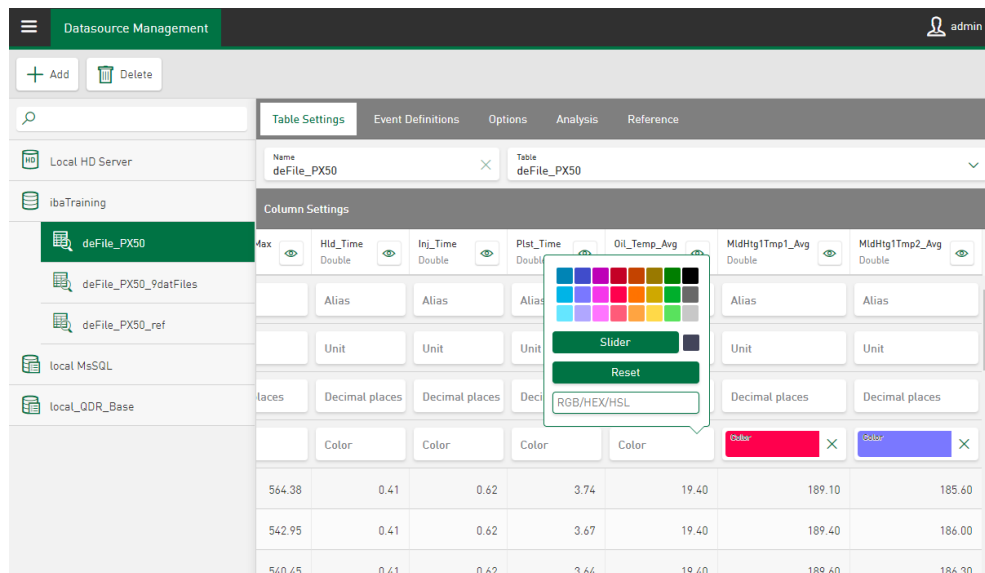
If you perform Analyze the range between markers you're getting an analysis file and the HDQ file as bundle as pdc file. The ibaAnalyzer is also capable to open the pdc file in the same way as the HDQ file alone and display the HD data directly with the downloaded analysis file.



Add the appropriate analysis in the data configuration for the HD file in the Analysis area. The configuration of an analysis is described in the ibaDaVIS manual.

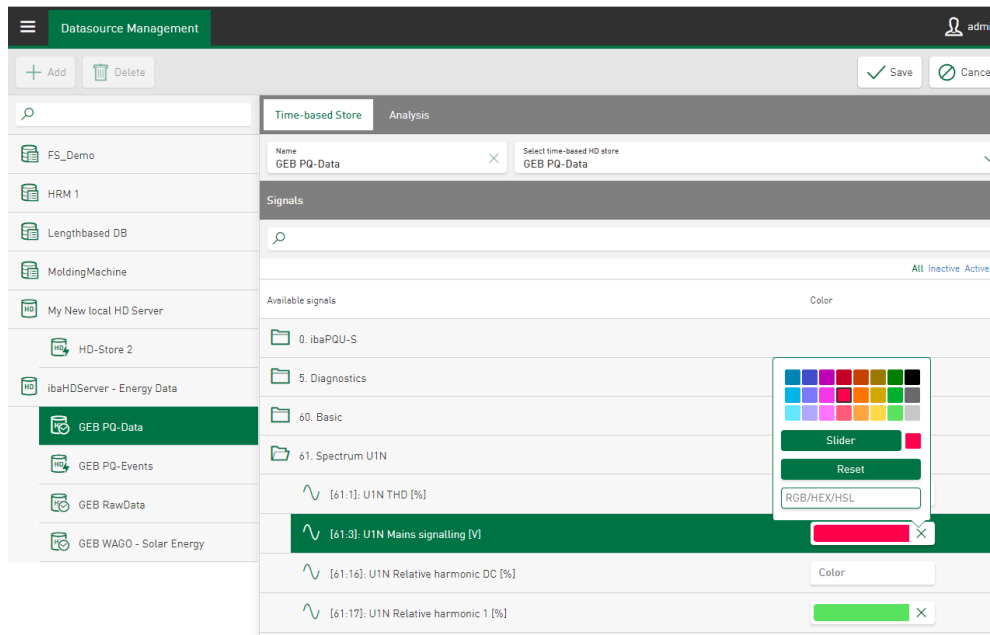
1.4 Default color for values at the datasource and apply the color for the values on each chart

In this version it is possible to globally assign a default color to a signal or value for the visualization in the dashboard tiles in the data source configuration. In all lines, scatter charts, or histograms, in which the signal is selected for display, the same color is used. In this way a standard color setup can be performed on all dashboards and a semantic given to the displayed values.



1.4.1 Configuration

In the datasource management, a color can be assigned at the level of the table column, HD event value fields or HD time-based signals from the ibaHD-Server. Clicking into the color field at the data table columns definition will open the color selection dialog which presents the colors from the current defined color scheme. If none of the colors from the given color scheme matches for the concrete value, it's possible to assign a color by the RGB, HEX or HSL color code or interactively define a color interactively using the color input slider control.



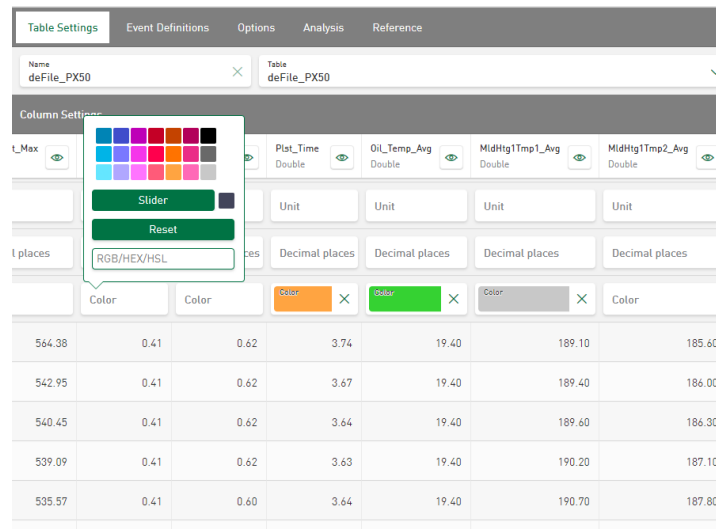
1.4.2 Effects on dashboard tiles

In a line chart, the signal color for newly added trends is assigned automatically. The colors automatically assigned to the signals depend on the order in which the signals are selected for display. The display order corresponds to the color order. Furthermore, signals with the same unit are not only displayed together on one axis. The signals combined in this way are also displayed with the same base colors but different shades of the base color from the scheme.

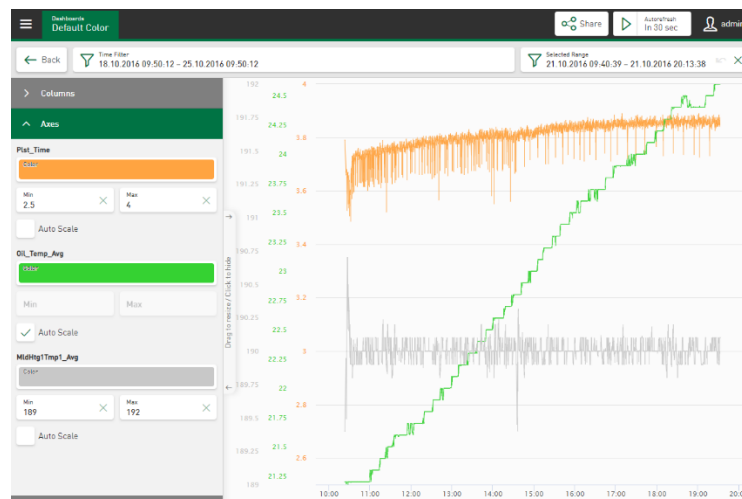


Signal colors from autonomous color mapping

A default color for a signal will now override this automatically assigned color and colorize the signal according to the assigned default color from the data source configuration.



Color assignments subsequently introduced in the data source configuration will also cause color changes in existing displayed charts for the signals concerned.

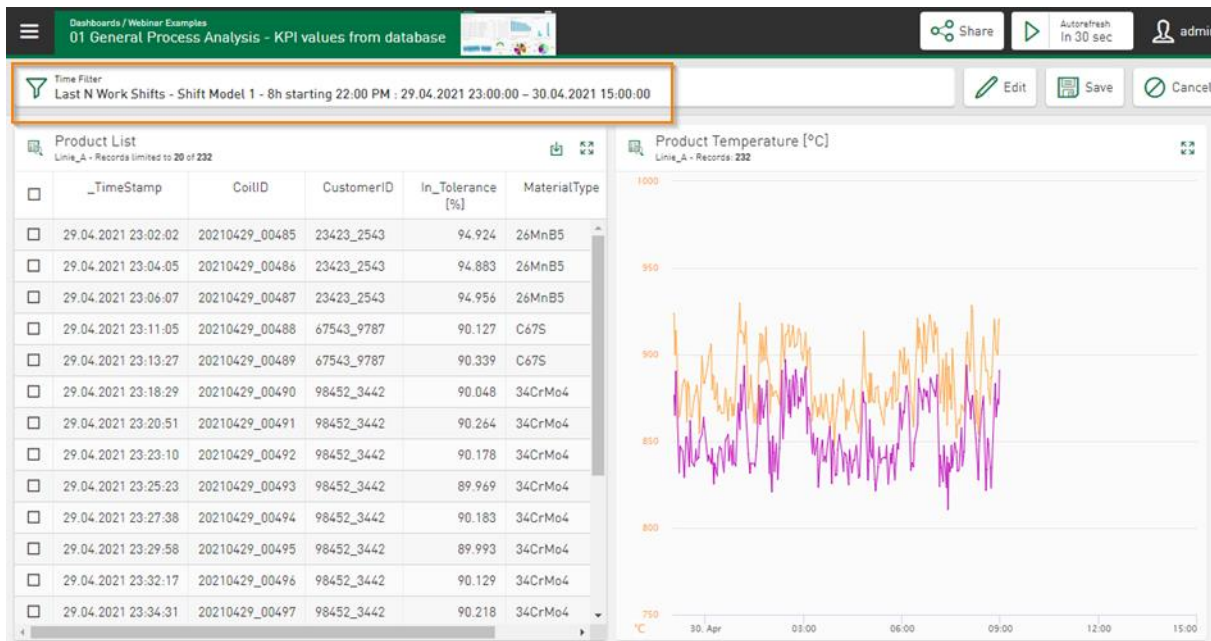


1.4.3 Effects on import

When a new color scheme is imported, the color assignments in the data source configuration and the colors in the display tiles are updated. This updates the sequence of colors from the scheme to the assigned colors in the data source configuration and subsequently also the color assignment in the display tiles.

1.5 Defined time ranges from the work shift can be used as relative filters

Time ranges defined as work shift can be used as filter criteria for the dashboard displays. Starting from the current working shift, the last N shifts are directly applicable to all dashboards as a visual filter.



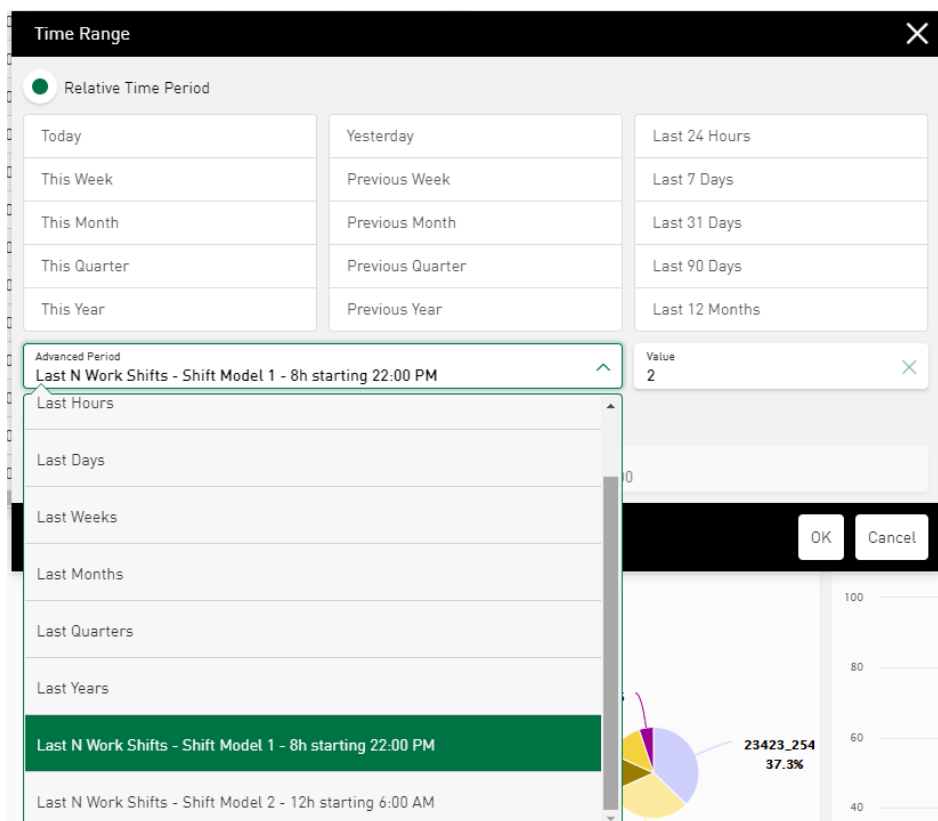
1.5.1 Requirements

Definition of a working time shift in the settings.

Settings			
Analysis Configuration			
Work Shift Definition			
Color Scheme			
<div> <div>+ Add</div> <div>Copy</div> <div>Edit</div> <div>Delete</div> </div>			
Name	Start Time	Duration	Number of Shifts
Shift Model 1 - 8h starting 22:00 PM	22:00	08:00	3
Shift Model 2 - 12h starting 6:00 AM	06:00	12:00	2

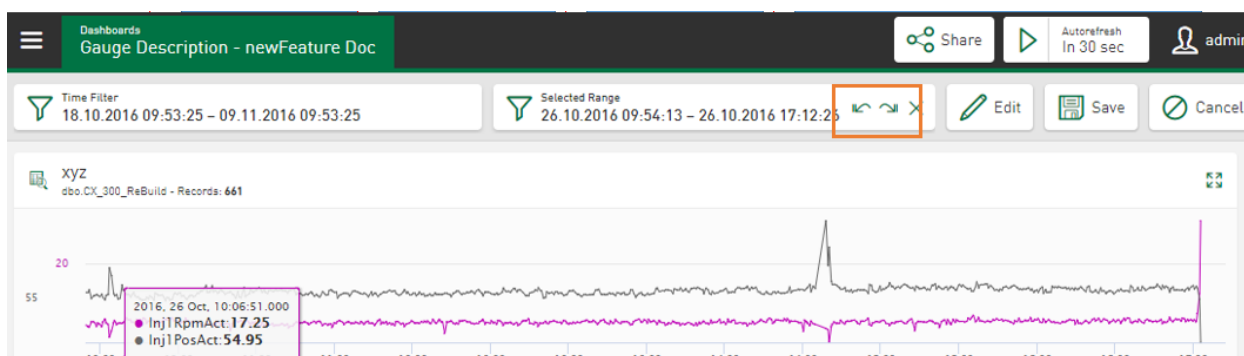
1.5.2 Usage

The dashboard time range filter for relative time ranges is displaying the configured work shifts. Equal to the use for displaying the last hour or minute starting from the current time, the time ranges of the selected work shift are applied as filters.



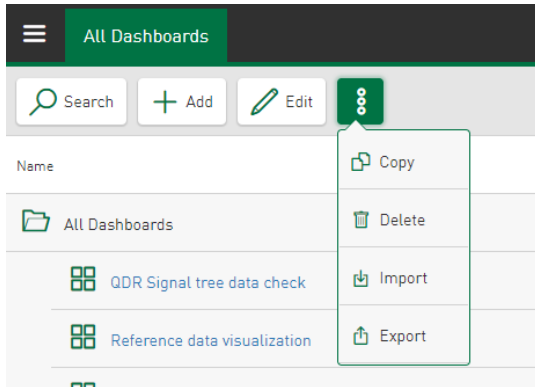
1.6 Zoom filter supports steps back to previous zoom range

By zooming in time-based graphs, a displayed area can be shown step by step with ever higher resolution. The additional dashboard filter shows the interactively selected time range. From this version v2.9.0 on it is possible to return to the previous zoom range in the same zoom steps back and forth.

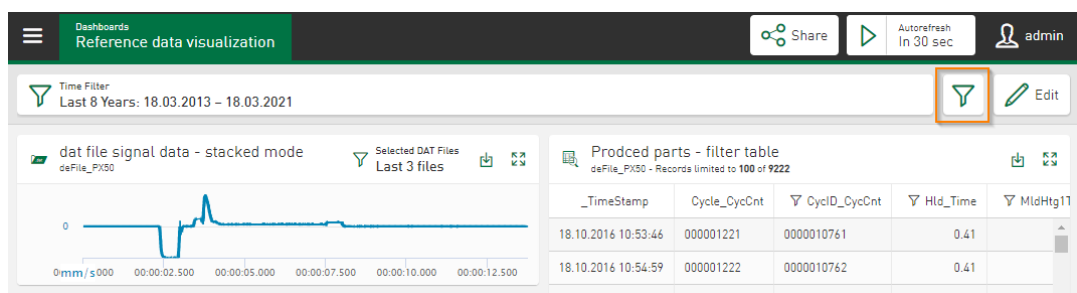
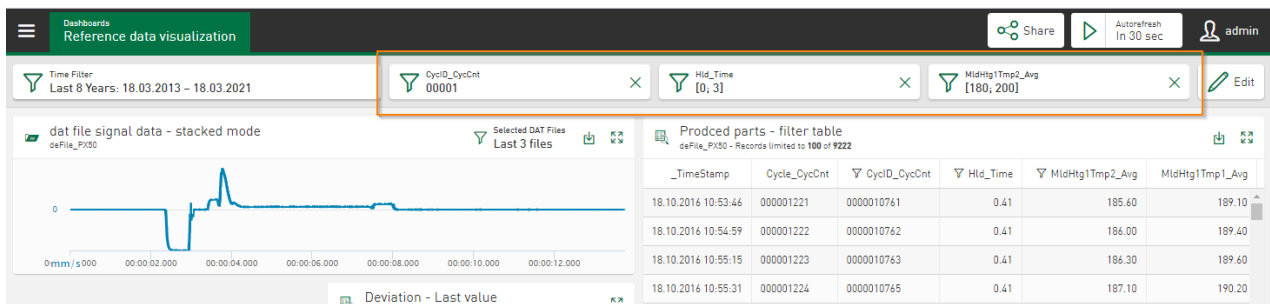


1.7 Dashboard filters and control buttons are joined in small displays

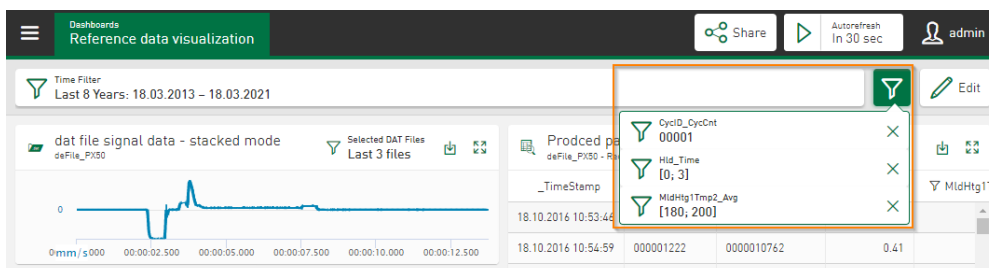
On the overview of configured dashboards the functions, Copy, Delete, Import and Export are joined in one context menu.



On dashboards, the current dashboard filters are automatically grouped under a filter icon if the width of the browser is not sufficient to display the currently configured filters.

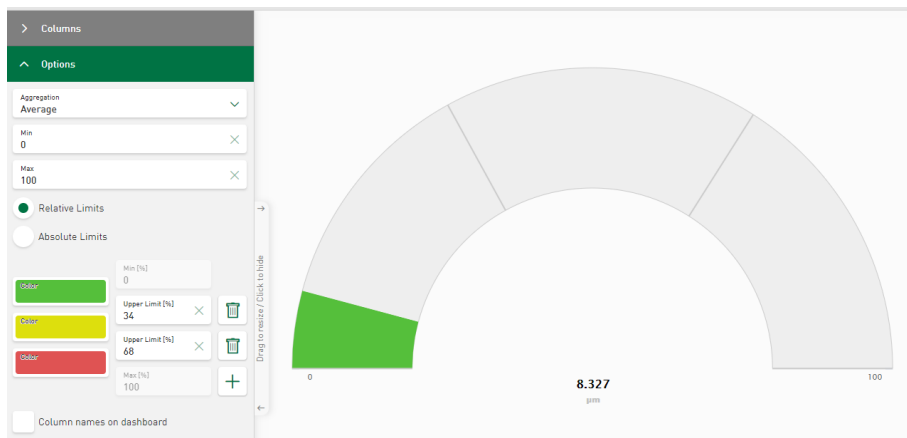


By clicking on the filter icon, the currently configured dashboard filters are displayed and can be individually changed or deleted by another click on the filter input fields themselves.



1.8 Gauge with configurable color changes

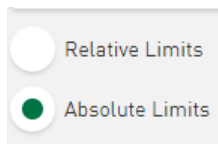
In this version the function of the tachometer instrument is extended. The colors and values for which a color change is defined can be set precisely.



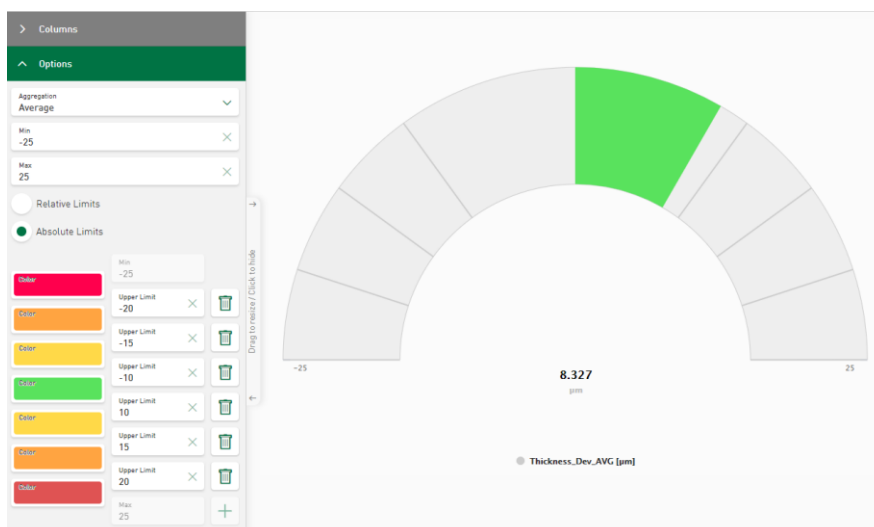
The colors and limits for the color change can be changed in the Options area.

The initial setting specifies color ranges with relative equal distribution of the ranges in the set value range. By clicking the [+] and [Del] buttons, ranges of values can be added or removed. The definition of the color for the range is started on the color selection button.

The ranges are initially set as percentage value ranges. It can be changed to absolute values. The currently set range limits are then converted in relation to the current minimum and maximum values.



A maximum of 7 value ranges can be defined. The display of the color bar starts at the value '0'. The set limits for the color change are displayed on the tachometer instrument.



Migration

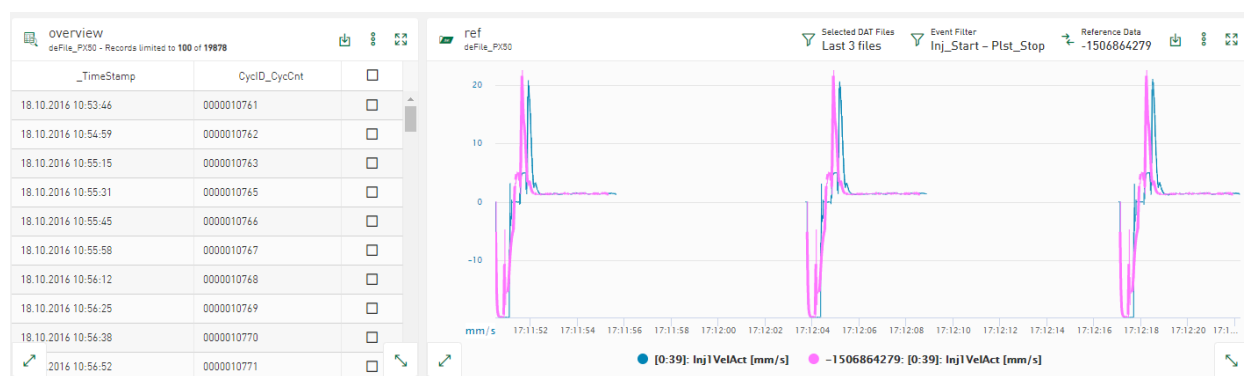
The gauge did not have any option to edit the color ranges. The color gradient was calculated as relative value based on the relative filling level in relation to the absolute minimum and maximum limits. When you update the ibaDaVIS your maximum and minimum values will persist and the option to use Relative limits is applied.

Also the gauge supported in previous versions the option to revert the coloring. This option is no longer supported. When you update the ibaDaVIS the default configuration of the colors is applied.

2 Improvements

2.1 Visualization of signals from reference dat files in appended mode

In this version the function to display signals from reference dat files has been implemented for the appended mode.



Since version 2.8.0 it is possible to display signals from dat files from different sources together in a line diagram that shows signals from dat files. The signals could be visualized in stacked mode and in envelope mode. Now it is possible to compare signals from reference dat files with signals from dat files from a current production in appended mode.

2.2 Stacked mode for Heat map

Signals grouped as vector from dat files can be displayed as heat map in stacked view in this version.



2.3 Grid cell improvements

2.3.1 Smaller size and better indication for values which cannot displayed on the full grid cell

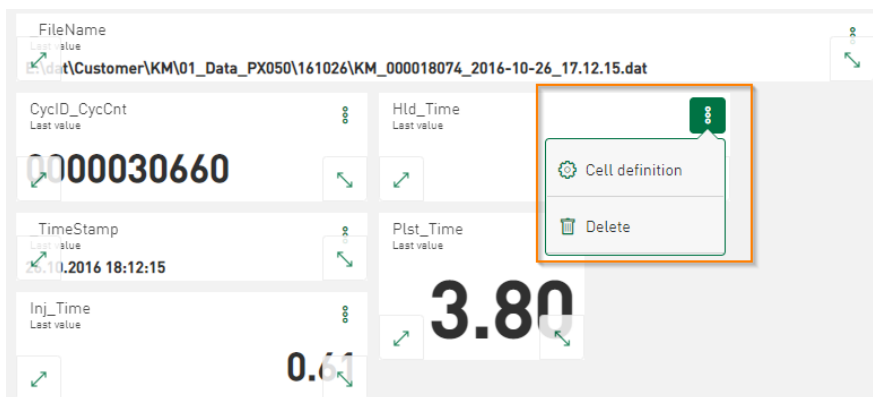
The individual grid cells can be selected smaller than before.

Product List <small>Link_A - Gridsquares limited to 10 on 255</small>							Last Product Details <small>Link_A - Gridsquares 355</small>			
<input type="checkbox"/>	▼ _TimeStamp	MaxTemp_In [°C]	MaxTemp_Out [°C]	AvgTemp_Out [°C]	MaterialType	Descargar	TimeStamp <small>Ultimo valor</small>	Length_File <small>Ultimo valor</small>	Length_Total <small>Ultimo valor</small>	MaterialType <small>Ultimo valor</small>
<input type="checkbox"/>	24.03.2021 17:21:32	991.1	943.6	891.6	34CrMo4	DAT PDF	24.03.2021 17:21:32	580.40 m	595.40 m	34CrMo4
<input type="checkbox"/>	24.03.2021 17:19:33	998.5	942.6	884.8	34CrMo4	DAT PDF	CoilID <small>Ultimo valor</small>	MaxTemp_In <small>Ultimo valor</small>	In_Tolerance <small>Ultimo valor</small>	Limit_2_Sigma <small>Ultimo valor</small>
<input type="checkbox"/>	24.03.2021 17:17:32	978.7	946.5	873.6	34CrMo4	DAT PDF	20210324_00...	991.15 °C	94.93 %	23.03 µm
<input type="checkbox"/>	24.03.2021 17:15:36	973.7	924.8	881.4	34CrMo4	DAT PDF	OrderID <small>Ultimo valor</small>	MaxTemp_Out <small>Ultimo valor</small>	ThicknessDeviation_Agv <small>Ultimo valor</small>	MatThickn_FS7Outlet_Set <small>Ultimo valor</small>
<input type="checkbox"/>	24.03.2021 17:13:39	987.3	948.5	868.9	34CrMo4	DAT PDF	A_52...	943.5...	0.44 µm	2.27 mm
<input type="checkbox"/>	24.03.2021 17:11:38	976.6	923.9	877.5	34CrMo4	DAT PDF				
<input type="checkbox"/>	24.03.2021 17:09:39	990.5	937.8	891.0	34CrMo4	DAT PDF				
<input type="checkbox"/>	24.03.2021 17:07:42	980.8	938.8	873.5	34CrMo4	DAT PDF				
<input type="checkbox"/>	24.03.2021 17:05:43	975.4	915.6	866.2	34CrMo4	DAT PDF				

The content of the cells is automatically adjusted in height and if the cell width is not sufficient to fully reflect the cell content, it is abbreviated and thus shows that the content is incompletely visualized.

2.3.2 Grid cell definition in separate dialog

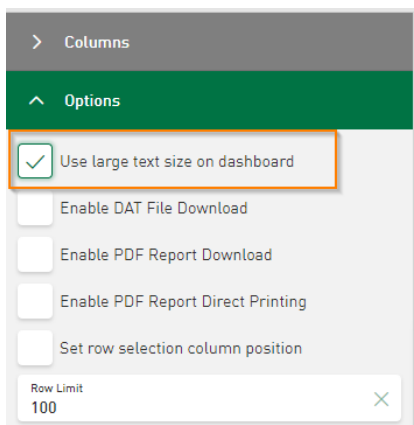
The cell definition and also the removal of individual grid cells is possible directly from the grid cell itself for better clarity.



By clicking on the new introduced button on the grid cell a context menu is displayed which provides the options for editing the grid cell content visualization or deleting the cell itself.

2.4 Row text size from full screen view applicable on dashboard view

The text size of the values shown on a table tile can be increased.



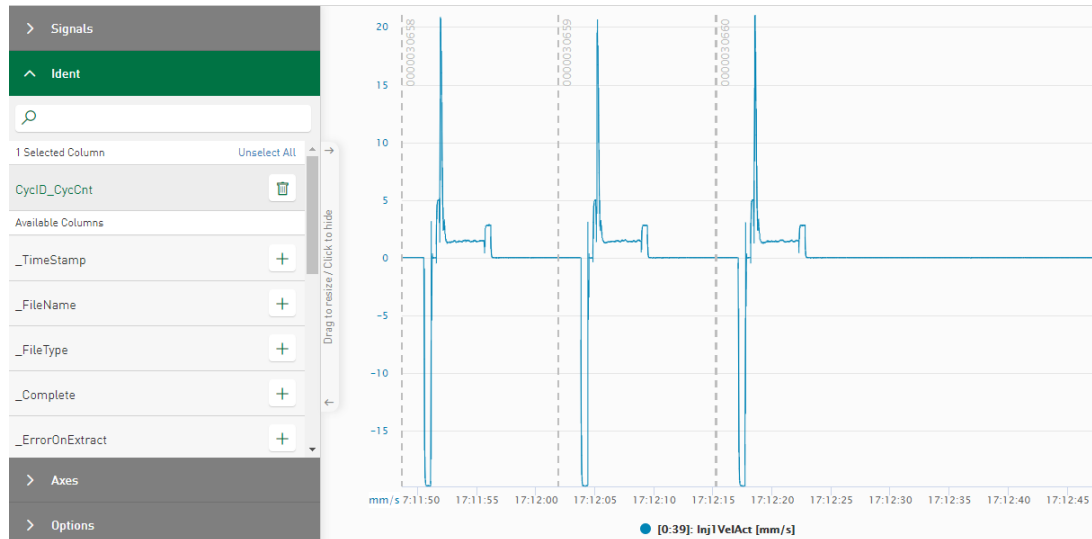
Usual row text size example deFile_PX50_ref - Records limited to 6 of 6			Large row text size example deFile_PX50 - Records limited to 100 of 19878		
_TimeStamp	CycID_CycCnt		_TimeStamp	CycID_CycCnt	
18.10.2016 11:30:54	0000010924	<input type="checkbox"/>	18.10.2016 10:53:46	0000010761	<input type="checkbox"/>
18.10.2016 14:45:34	0000011810	<input type="checkbox"/>	18.10.2016 10:54:59	0000010762	<input type="checkbox"/>
18.10.2016 15:45:57	0000012088	<input type="checkbox"/>	18.10.2016 10:55:15	0000010763	<input type="checkbox"/>
20.10.2016 18:05:28	0000016699	<input type="checkbox"/>	18.10.2016 10:55:31	0000010765	<input type="checkbox"/>
22.10.2016 17:34:33	0000021017	<input type="checkbox"/>	18.10.2016 10:55:45	0000010766	<input type="checkbox"/>
22.10.2016 19:19:48	0000021475	<input type="checkbox"/>	18.10.2016 10:55:58	0000010767	<input type="checkbox"/>
			18.10.2016 10:56:12	0000010768	<input type="checkbox"/>

Values in the table are displayed with a larger font. In the options of the table it is possible to apply the text size settings from the full screen view also on the dashboard view.

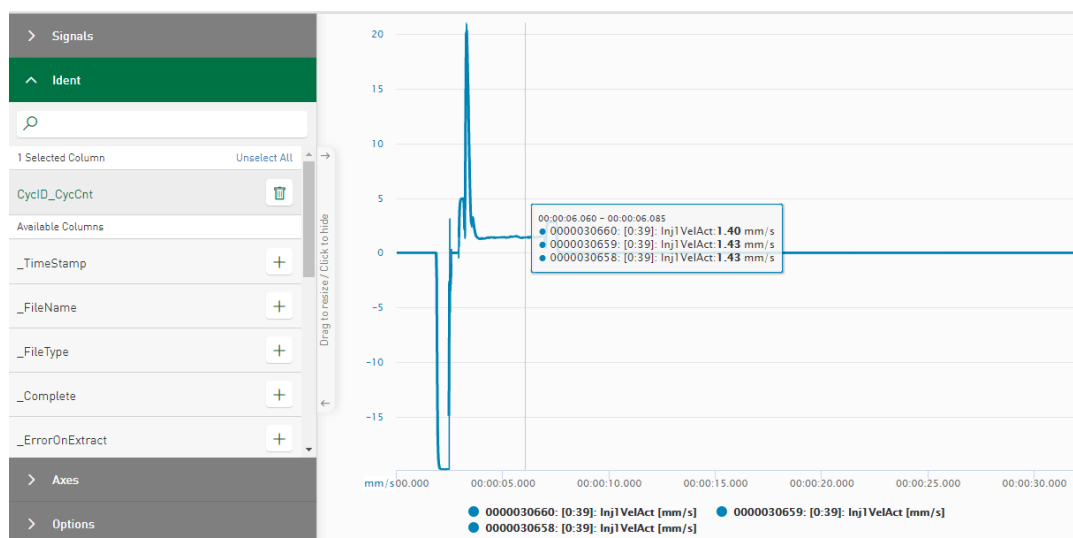
2.5 Visualize ident for displayed dat file signals in chart

The value of the dat file related ident is visualized in the chart for currently displayed dat files.

The ident is displayed together with the marker for the dat file start and end in the visualization mode appended.

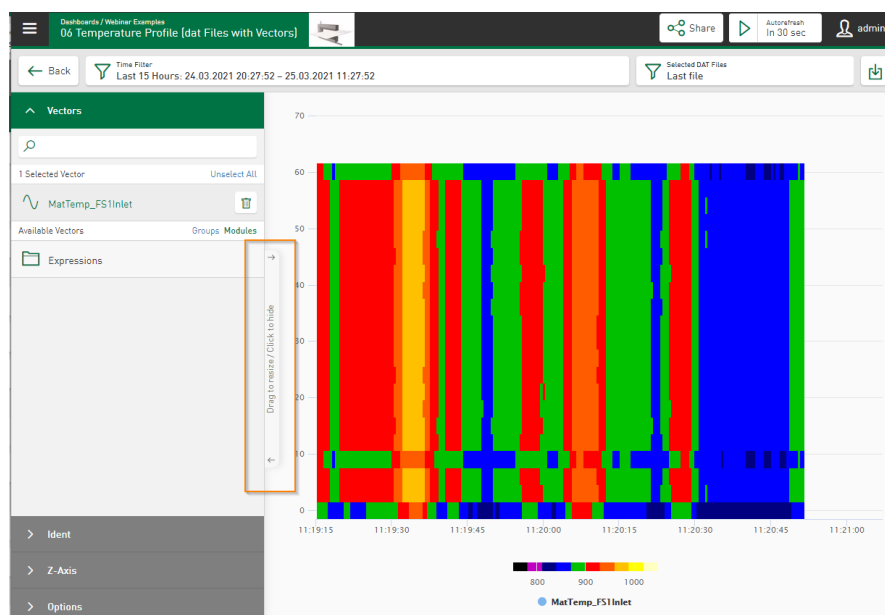


In the stacked mode the file ident is displayed in the tooltip of the crosshair and also at the chart legend.



2.6 Width of signal selection and configuration panel changeable

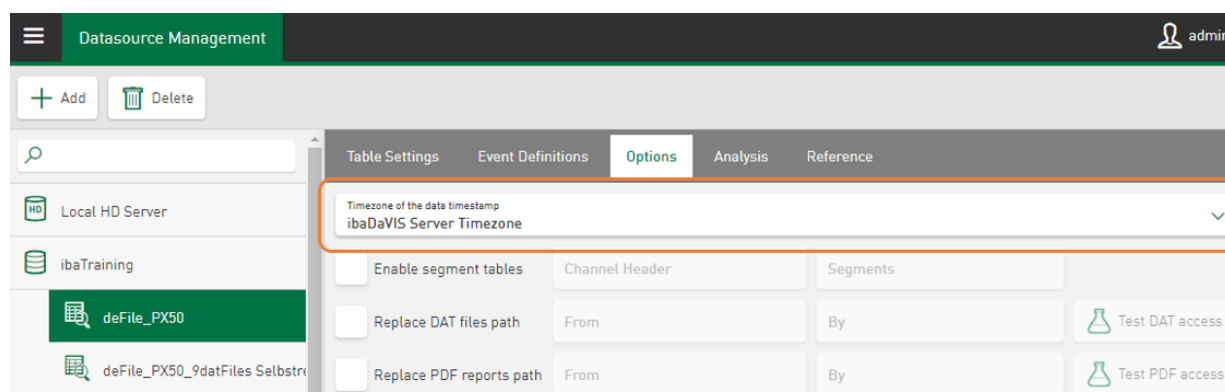
The width of the chart options and signal selection panel can be changed by dragging the panel. In case the signal names cannot be displayed due to missing space for the full name on the panel width, the width of the panel can easily be changed by dragging the panel at the control bar.



The panel control bar at the right border of the control panel

2.7 Definition of the Time zone per datasource

In each data source of the type general or iba table, the possibility to select another time zone is provided. In the initial state, the same time zone as the ibaDaVIS service is set for each data source. In case the data is recorded in another time zone and the time stamps in the table are in local time, time shifts are expected to affect the results displayed on the dashboards. The time offset issue can be managed by selecting the appropriate time zone for the data in the data source. For ibaHD-Server, no time prefix field is necessary, since the data is sent to ibaDaVIS with UTC format.



2.8 Change password permission

In this version a new user and group permission has been integrated. By default the permission to change own password is set for all users. It must be explicitly changed to remove the right for users or groups to change their own password. The permission to change password by group membership and the local right to change password is combined as an effective permission by means of the OR operator. Users who do not have effective permission to change their own password cannot change their password in the user profile.

The screenshot shows the 'User Management' interface. On the left, there is a sidebar with 'Local Users' and 'Local Groups'. The 'Guest' user is selected. The main area is divided into three tabs: 'User Permissions', 'Dashboard Permissions', and 'Datasource Permissions'. The 'User Permissions' tab is active. It contains a table with columns for 'Login Name', 'Email', 'Password', 'Confirm Password', 'Language', 'Unit system', 'Timezone', 'User Permissions', and 'Group Memberships'. The 'Guest' user's profile is shown. The 'User Permissions' section has a table with the following permissions:

Permission	Effective Permissions
<input type="checkbox"/> Manage Datasources	<input checked="" type="checkbox"/>
<input type="checkbox"/> Manage Users	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Manage Settings	<input checked="" type="checkbox"/>
<input type="checkbox"/> Change own password in user profile	<input type="checkbox"/>

The 'Change own password in user profile' permission is highlighted with an orange box. The 'Group Memberships' section shows a list of groups with checkboxes for each group's permissions.

The admin user always has the permission to change the own password. The user permission cannot be changed for the admin user.

2.9 Y axis labels turned about 90° when multiple y axis are displayed

The y axis labels of line chart, scatter chart and bar chart are turned about 90 degrees when multiple y axis are displayed in the chart. Multiple y axis are displayed when signals with different units or different scaling settings in y direction are visualized.

