



New Features in ibaDaVIS v2.10.0

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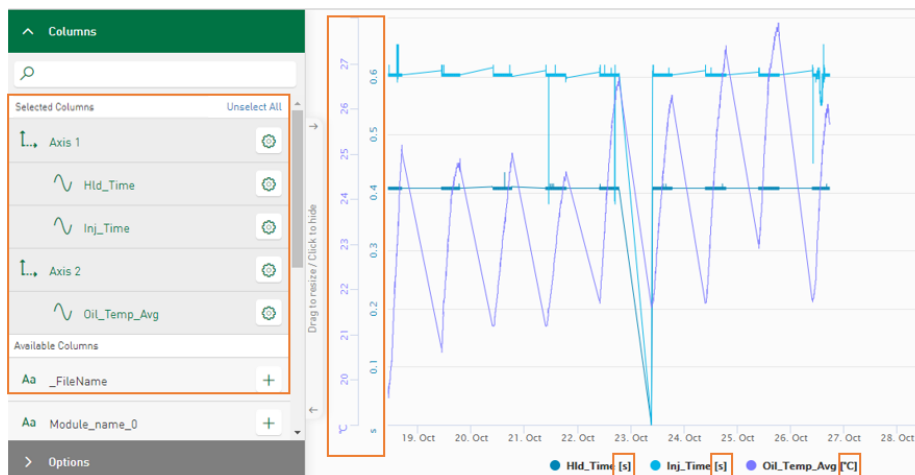
1 New Features

1.1 Selected signals are displayed as axis and signal tree

Selected signals or columns for bar charts, line charts or scatter charts in the selection area reflect the y-axis relation as in other iba software tools. One can add or remove signals to a y-axis by simply dragging the signal to another y-axis.

1.1.1 General changes

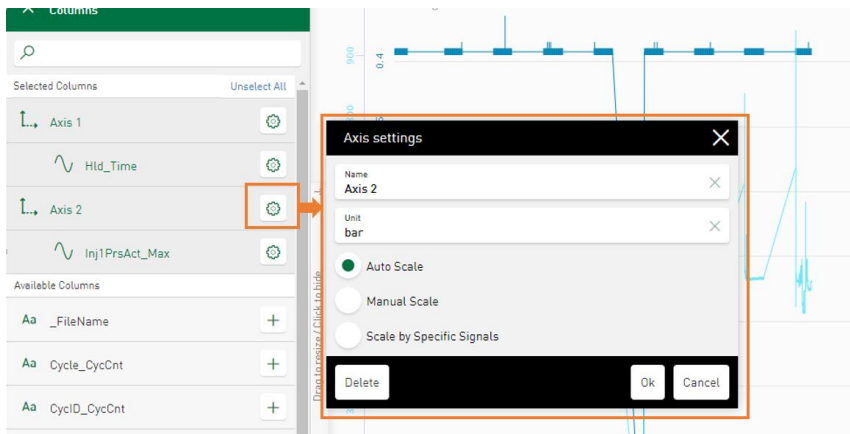
A new axis is created in the area of the selected signals and the signal is added to this axis. The next selected signal is also added on a new axis. Signals that have the same unit are joined on the same axis by default.



The individual signals settings and also the axis settings can be accessed when tipping on the gear icon next to the signal name or the y-axis label.

1.1.2 Y-Axis settings

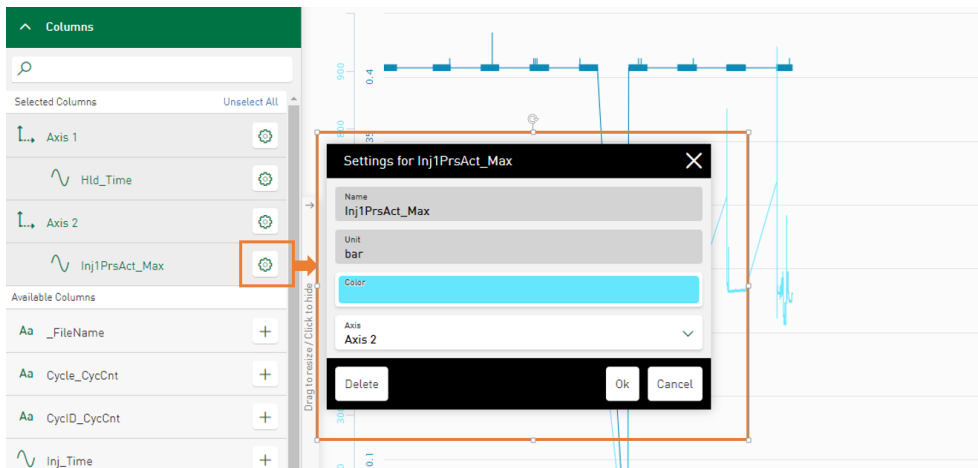
Y-Axis settings like the displayed axis label, the unit text and the applied scaling settings can be modified per axis.



When the y-axis is delete also all related signals are removed from the chart and the tree of selected signals.

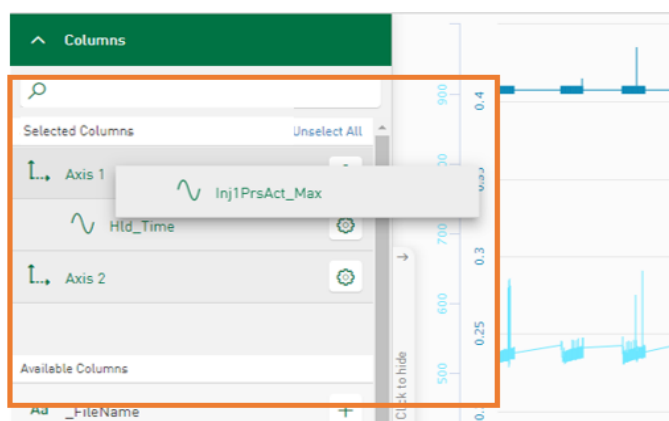
1.1.3 Signal settings

Signal settings like the display color and the related base axis can be selected at the signal settings dialog.



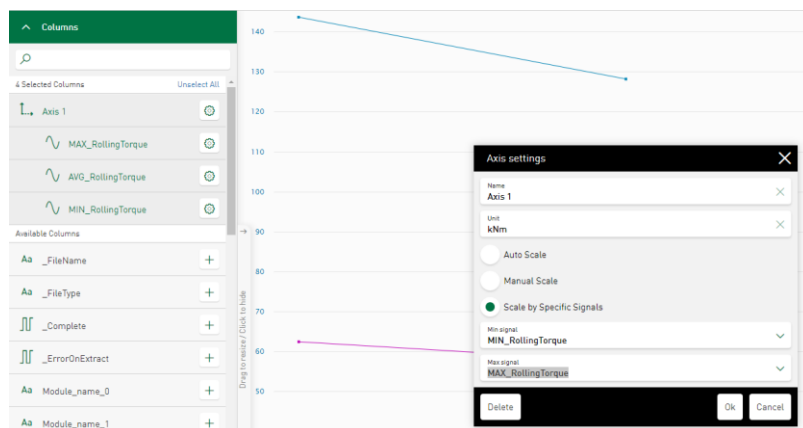
1.1.4 Change signal sort order

The order of the signals which belong to one y-axis can be change by dragging them to a new position in the signal tree.



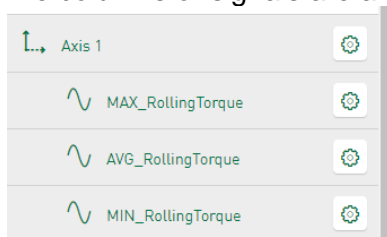
1.2 Dynamic scaling for trends and signals

Automatic y-axis scaling of the displayed signals is based on other selected signals is supported. The options to use automatic scaling or to enter fixed minimum and maximum values for the scaling of the y-axis are still supported.



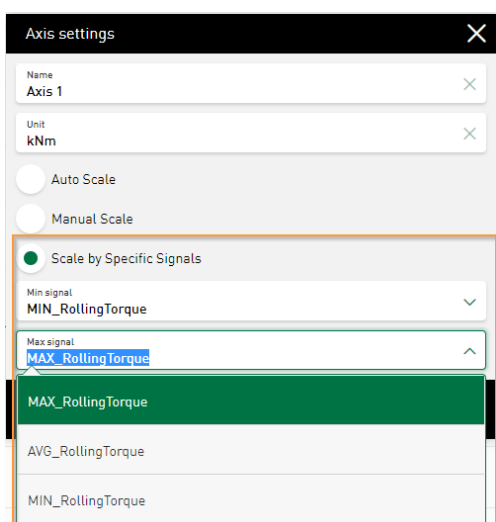
1.2.1 Requirement

The columns or signals are all added to the same y-axis in the signal tree.



1.2.2 Configuration

Check the option to *Scale by specific Signals* and select the minimum and the maximum signal for the automatic scaling of the y axis based on the evaluated minimum and maximum values from the selected signals or columns.



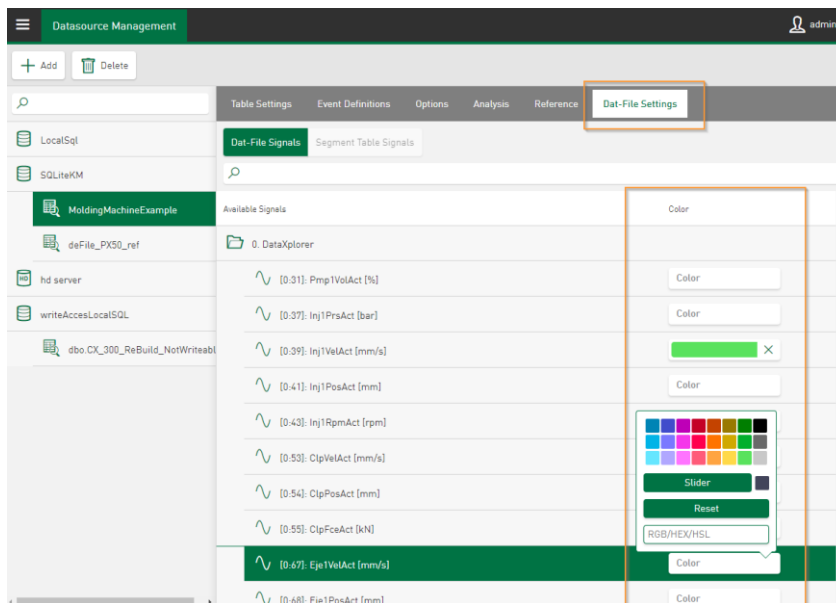
The chart will be updated after pressing OK to close the y axis settings.

1.3 Default color for signals from dat files

As for columns from databases or signals in ibaHD-Server a default color can be defined for signals from dat files too. The signals will be displayed using the defined default color in any line, bar scatter chart of histogram.

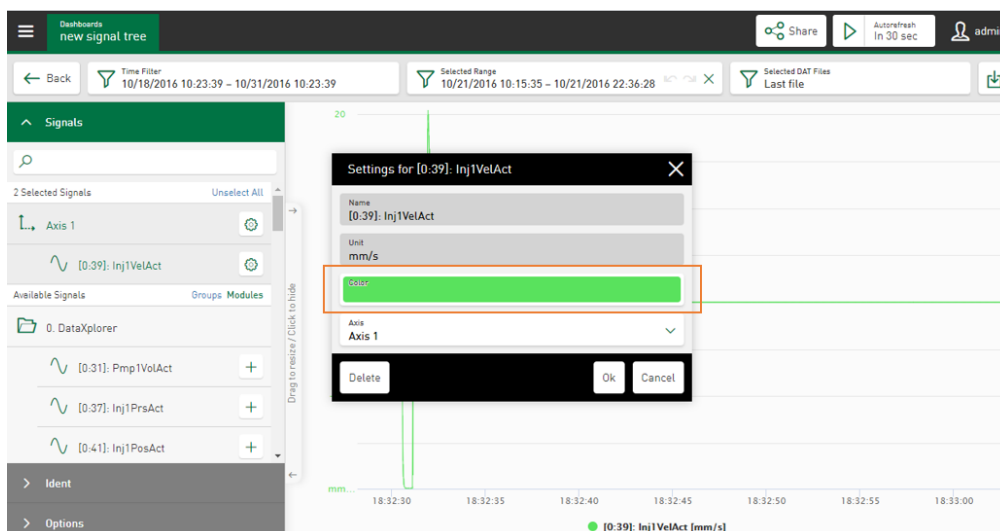
1.3.1 Configuration

In the Datasource Management, a new dat file settings page has been added for each configured data source of type ibaFile table. The page shows the signal tree of the last valid dat file of the ibaFile table. One can select a default color for the signals of the dat file. The selected color is applied to all diagrams for signals of the corresponding data sources.



1.3.2 Usage

In any line chart or histogram displaying signals from dat files from this configured data source, the default color settings for the signals are used to visualize the signal trends.



The signal color can be changed if required any time at the signal specific settings (line chart) or chart options (histogram).

1.3.3 Connection to the color scheme

Changes to the color scheme are applied to default color settings for database columns, signals and events from ibaHD-Server, and signals from dat files.

1.4 Add comments or update values in database tables

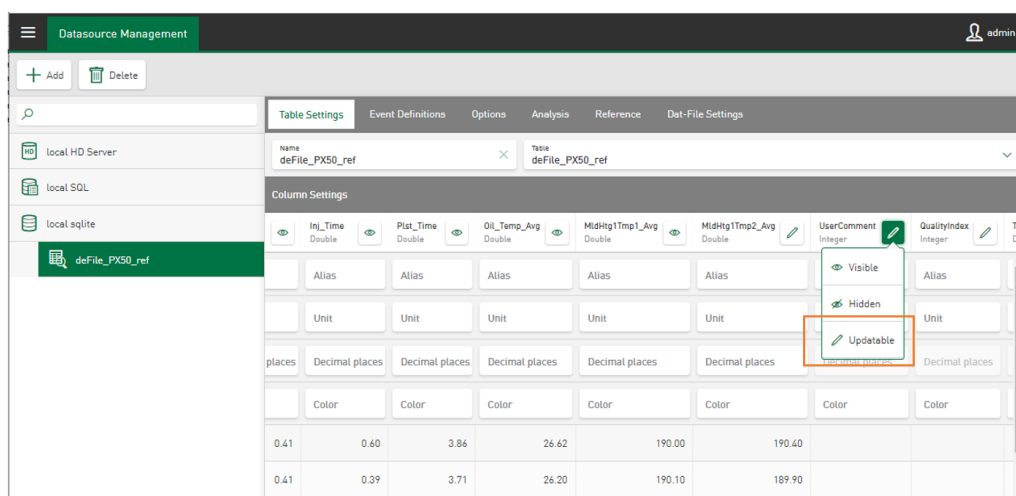
Mark columns in your database as updatable at the ibaDaVIS Datasource Management. Users which are allowed to update content can add comments or change values of selected records directly at the dashboard. The ibaDaVIS provides the function to log the time and the user which updated any value at the table automatically.

1.4.1 Requirements

The login used to connect to the database must have the permission to write to the database table in question.

1.4.2 Configuration Datasource

Select the table at the data source management. Mark the column as updatable by clicking on the visible button at the columns header and select the menu item *Updatable*.



The iba specific table column like the `_FileId`, `_TimeStamp` etc. cannot be marked as *updatable*.

1.4.3 Configuration User management

The permission to update content is introduced as permission per configured datasource. The permission can be given per user or per user group. At the datasource permission page.

Name	Group Permission	User Permission	Effective Permission
SQLiteKM			
deFile_PX50_ref	-	None View Update	Update
hd server			
HD GenEvents	-	None View	-
HD store Vector example 4	-	None View	-
HD write data	-	None View	View
local SQL			
dbo.CX_300_ReBuild	-	None View Update	-
dbo.CX_300_ReBuild_files	-	None View Update	View

1.4.4 Usage

The tile table provides the function to update table content record wise. A clickable pen icon is displayed at table rows when the current logged in user has the permission to update the datasource content and any of the selected columns is marked as updatable.

_TimeStamp	Oil_Temp_Avg	MidHtg1Tmp1_Avg	Plat_Time	QualityIndex	UserComment	Update
10/18/2016 10:30:54	19.70	190.00	3.63			
10/18/2016 13:45:34	22.40	190.10	3.87			
10/18/2016 14:45:57	23.30	190.00	3.61			
10/20/2016 17:05:28	24.60	188.60	2.66			
10/22/2016 16:34:33	26.20	190.10	3.71			
10/22/2016 18:19:48	26.62	190.00	3.86			

When tipping or clicking to the pen icon the input dialog will provide the updatable columns and allow the user to enter comments or change the updateable values. The database table content is updated directly after closing the dialog.

Update

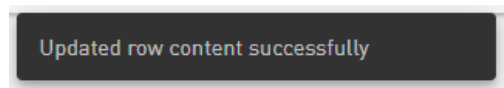
QualityIndex: 123

UserComment:

Ok Cancel

1.4.5 Feedback and Logging

When updating values the success of the update operation is visualized as popup message at the lower area of the dashboard. In case the update operation failed the error message is displayed at the popup message.

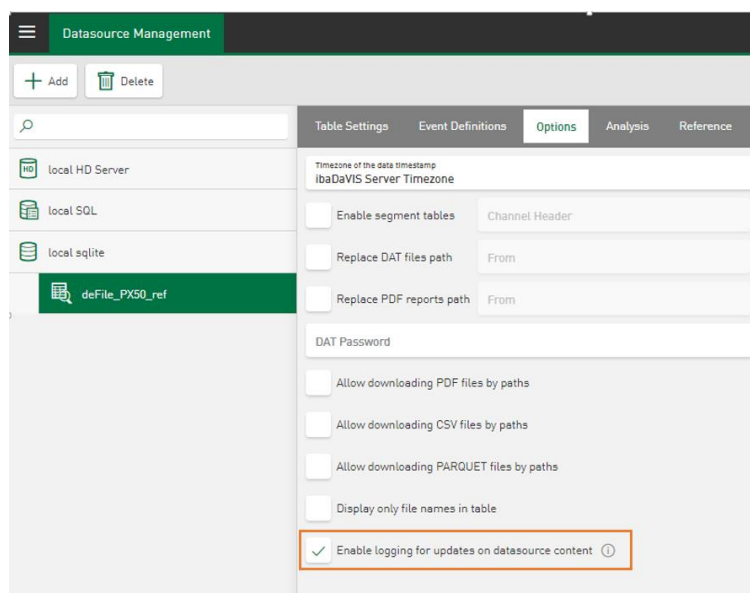


The error messages and more details can be found at the ibaDaVIS log file in case of the failed update action. Standard folder:

`C:\ProgramData\iba\ibaDaVIS\log`

1.4.6 Enable the logging for value updates

At the datasource management the logging for user triggered updates can be enabled. The time stamp and the user name of the user who updated the table data will be registered in two additional columns.



The columns are added automatically to the file table with default names *TOM (Time Of Modification)* and *UOM (User Of Modification)* when the datasource settings is saved.

deFile_PX50_ref (KM_RefTest)									
Structure									
	Name	Data type	Primary Key	Foreign Key	Unique	Check	Not NULL	Collate	Default value
1	_FileId	int						NULL	
2	_TimeStamp	datetime						NULL	
3	_FileName	varchar (255)						NULL	
4	_FileType	char (8)						NULL	
5	_Complete	int						NULL	
...									
17	MidnightImpAvg	real						NULL	
18	UserComment	VARCHAR (50)						NULL	
19	QualityIndex	INTEGER						NULL	
20	TOM	DATETIME						NULL	
21	UOM	TEXT						NULL	

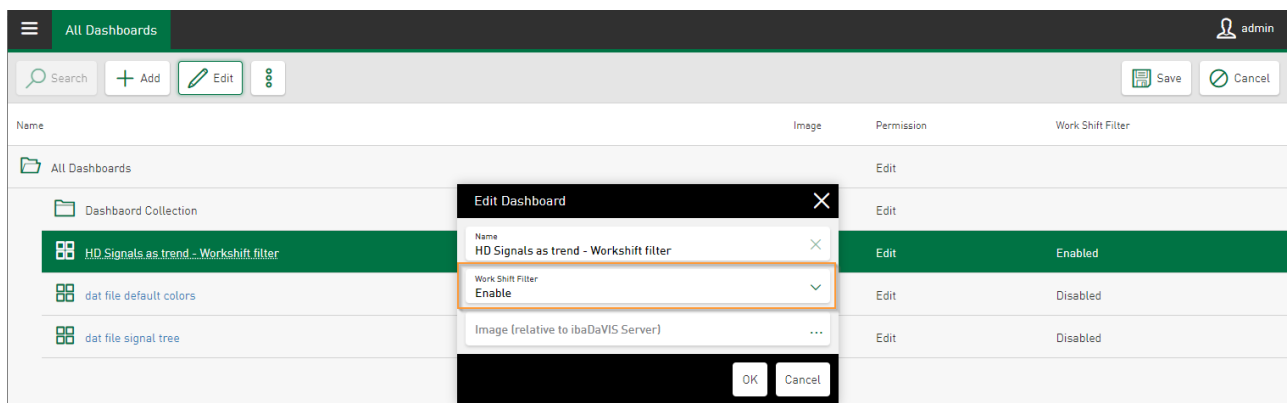
The creation of non-existing columns *TOM* (*Time Of Modification*) and *UOM* (*User Of Modification*) will fail if the current used database login does not have the permission to alter the datasource table schema.

1.5 Enable Work shift filter and select the shift model at the Dashboard

The configured work shift models can be enabled as filter per dashboard. Instead of adding one specific work shift model as permanent filter to one dashboard, all work shift models can be applied as dashboard time filters.

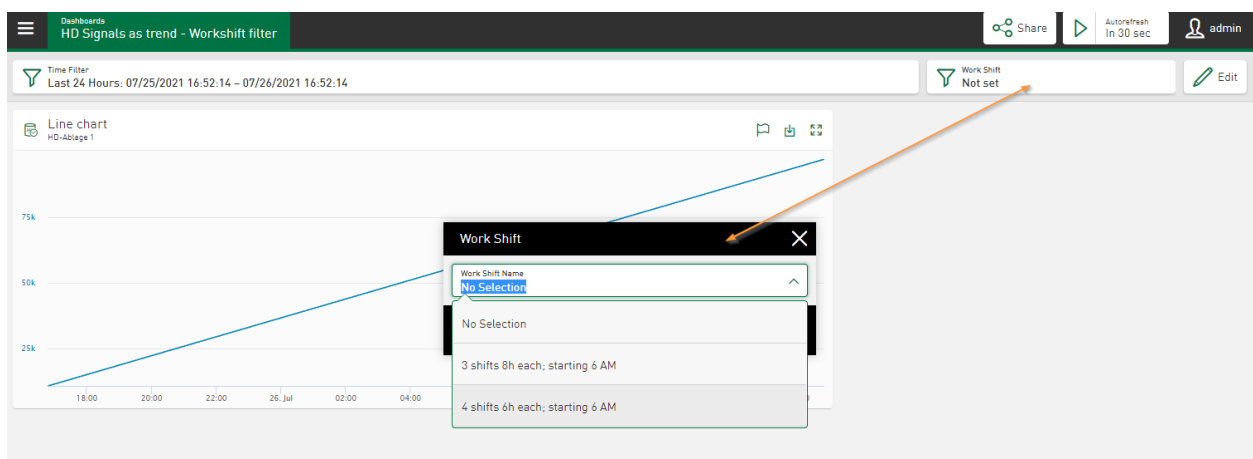
1.5.1 Configuration

Enable the work shift filter of the dashboards when you add or edit a dashboard at navigation page.

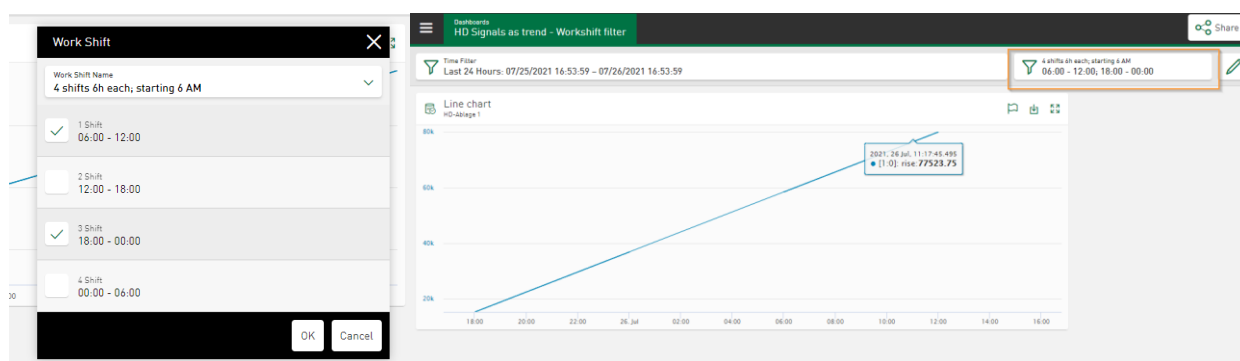


1.5.2 Usage

On the dashboard one additional filter is activated as dashboard filter. The dashboard filter provides the configured work shifts as options. Based on the selected work shift model the corresponding work shift time periods are selectable as time filter.



Selection of the work shift model

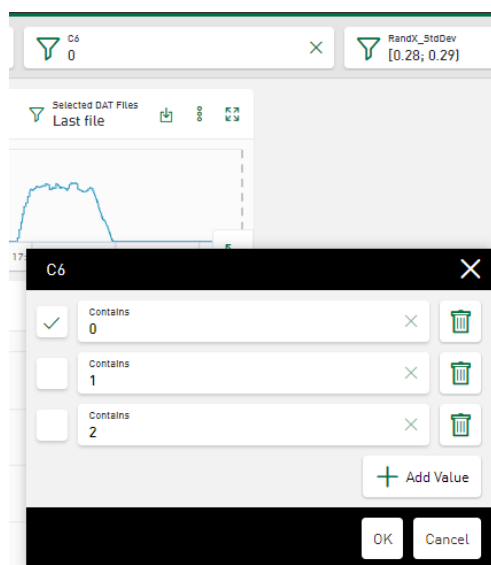


Selection of the work shift time ranges as dashboard filter and the selected work shifts as dashboard filter.

1.6 Make filter values permanent available

Make filter values permanent available by deactivate the current filter values in the list of applied filters. The deactivated values will not disappear from the filter value list. They can be reactivated anytime and be included in the dashboard result. The value range filters at the histogram, the filters created using a pie chart, bar chart or even the table support the function.

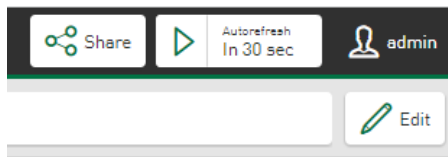
By deselecting the checkbox in front of the filter values or ranges you temporarily deactivate the value for the next dashboard update.



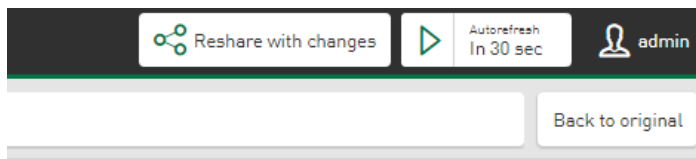
When you open the filter field again the deactivated values are still present and can be reactivated as filter any time.

1.7 Share and Reshare a dashboard

You can share a dashboard with other ibaDaVIS users. A shared dashboard contains the current dashboard filters and, in addition, the currently selected rows of the table tiles and the zoom filter for the file signals.



Other ibaDaVIS users can change the filters and share the content again using the *Reshare with changes* button. The original dashboard and also the shared dashboard instances are staying unchanged.



2 Improvements

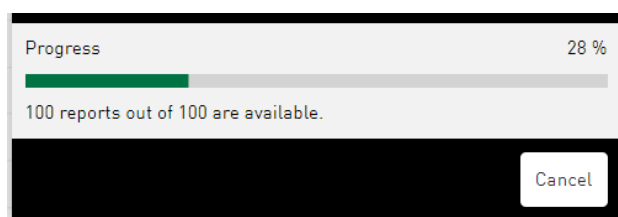
2.1 Print multiple selected reports at once

The table tile displays a printer icon at the tile header when the option to print directly is checked. You can print multiple selected reports at once when you click to the printer icon.

A screenshot of a table tile. The header shows a printer icon highlighted with an orange box, along with other icons for download, settings, and zoom. The table has columns for '_TimeStamp', 'Print', and a checkbox. The data rows show timestamps and corresponding print icons and checkboxes.

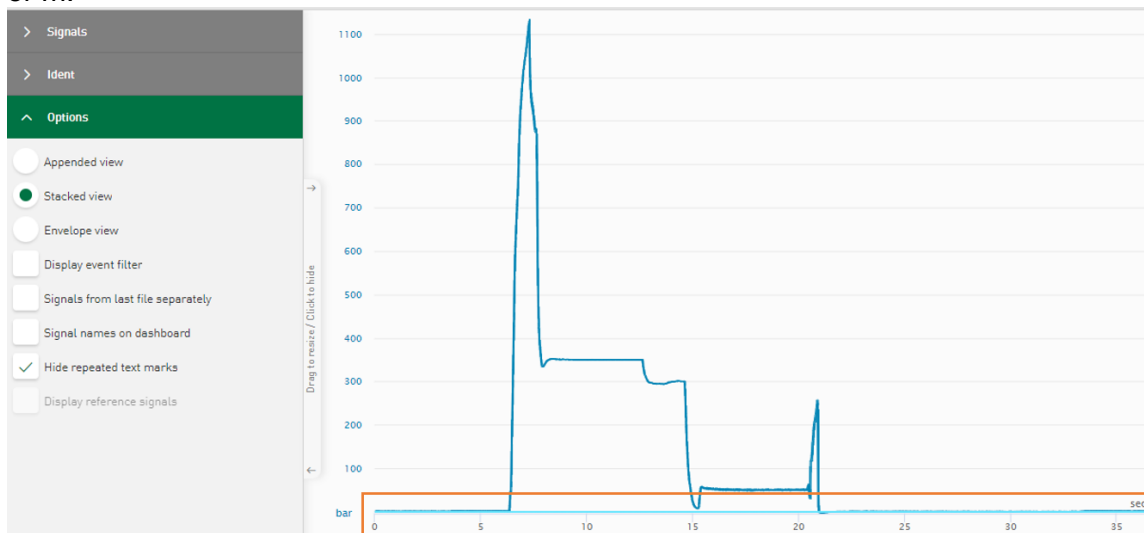
_TimeStamp	Print	<input checked="" type="checkbox"/>
08/15/2016 21:32:15		<input checked="" type="checkbox"/>
08/15/2016 21:35:14		<input checked="" type="checkbox"/>
08/15/2016 21:38:09		<input checked="" type="checkbox"/>

The introduced dialog informs you about the current progress and allows you to cancel the print action early.



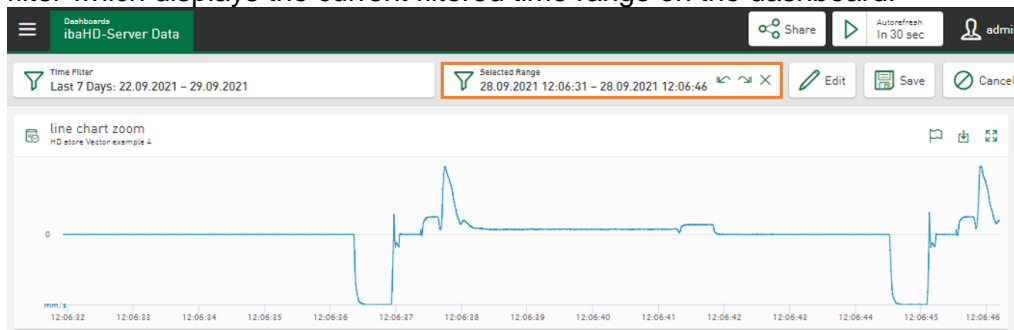
2.2 Optimized labels at the x-axis when dat file signals are displayed in stacked or envelope mode

When the signals of dat files are displayed in stacked or envelope mode the x axis labels are displaying the relative time or distance in seconds or depending on the related length unit as *cm* or *m*.



2.3 Improved zoom behavior

Any interactive zoom action e.g. in a line chart data is creating an additional dashboard time filter which displays the current filtered time range on the dashboard.



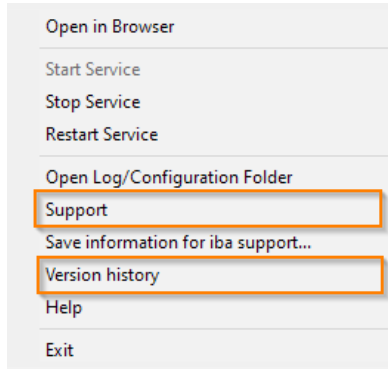
The zoom-out-button of the interactively created zoom is always usable.



The zoom-out button of the interactively created zoom is always usable. Tapping or clicking will zoom out a larger time range, either the last saved zoom range in the history or doubling the currently displayed time range. When the zoom time range becomes larger than the total time range, the interactive time filter is removed as a dashboard filter.

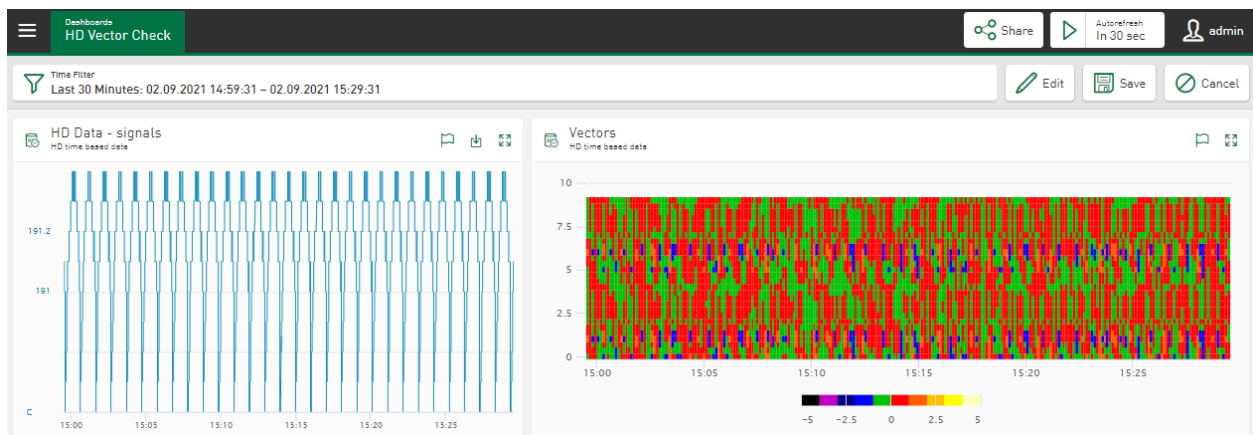
2.4 ibaDaVIS status App provides link to local iba Support address and version history

The context menu is enabled to the version history of ibaDaVIS in your standard web browser directly. The same function is implemented to open the support page which list the local iba office and partner.



2.5 Heat map supports signal vector data from ibaHD-Server

Time-based signals in ibaHD-Server which are grouped as vector e.g. for temperature distribution or flatness profiles can be visualized as Heat map on the dashboard.

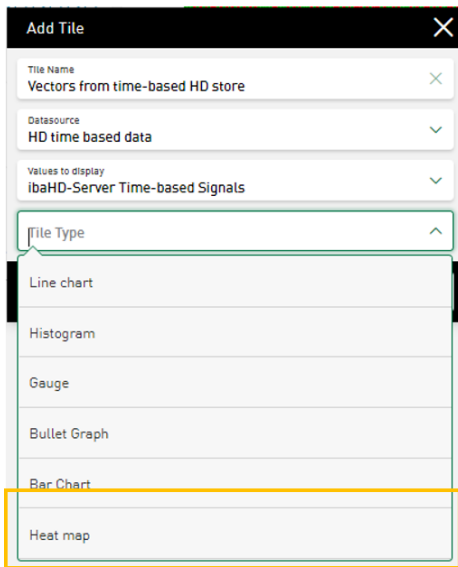


2.5.1 Requirements

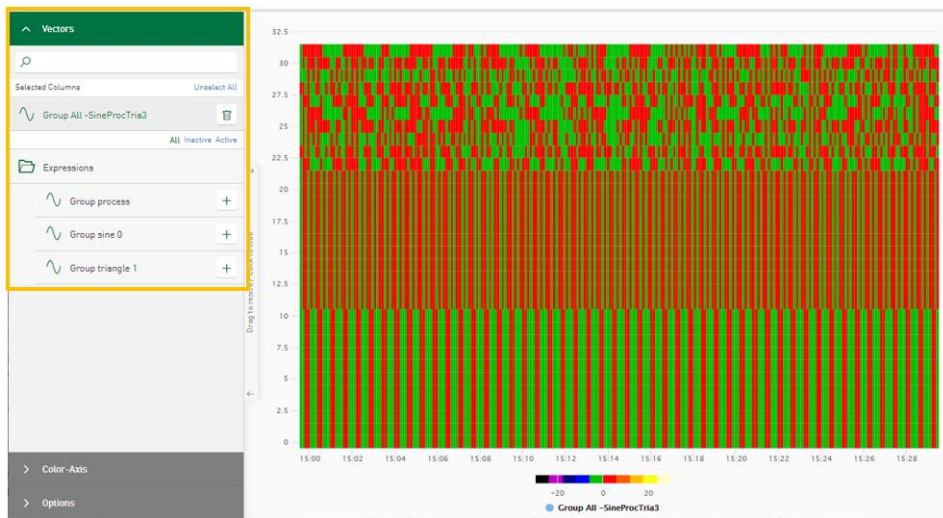
The time based signals in ibaHD-Server are grouped as vector. Find more information at the Manual *ibaPDA_P2_IOManager_General_1-3_v7.0.0_en.pdf* - chapter 7 Groups and vector signals.

2.5.2 Configuration

Add a new tile to the dashboard and select the time-based HD store which contains the grouped signals as data source. Go on by entering a tile name and select the Heat map as tile type.



The configured vectors are provided as selectable Columns at the tab Vectors



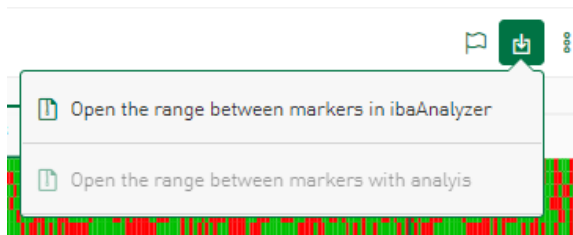
You can select one of the available vectors by name.

2.5.3 Heat map markers and interaction with ibaAnalyzer

It is possible to activate the markers on the heat map which visualizes time-based HD data.



You can open the time range between the markers directly in ibaAnalyzer just by downloading a file which contains connection information, the HD store and time range information. You start the interaction with the ibaAnalyzer as at the line chart which show ibaHD-Data using the context menu at the download icon.



It is possible even to include an analysis file into the download and open the HD data and the analysis at once in ibaAnalyzer.

2.6 Display file names without file path

The option to display only dat file names is accessible in the datasource management for ibaFile tables.

When you check the option to display the file names only, the displayed information at the dashboards is reduced to the file name only. The belonging file paths are not shown.

<input type="checkbox"/> Display only file names		<input checked="" type="checkbox"/> Display only file names	
iW da limited to 100 of 19878		imp Limited to 100 of 19878	
_FileName	Inj_Time	_FileName	Inj_Time
E:\dat\Customer\KM\01_Data_PX050\161018\KM_000001221_2016-10-18_09.53.46.dat	0.62	KM_000001221_2016-10-18_09.53.46.dat	0.62
E:\dat\Customer\KM\01_Data_PX050\161018\KM_000001222_2016-10-18_09.54.59.dat	0.62	KM_000001222_2016-10-18_09.54.59.dat	0.62
E:\dat\Customer\KM\01_Data_PX050\161018\KM_000001223_2016-10-18_09.55.15.dat	0.62	KM_000001223_2016-10-18_09.55.15.dat	0.62
E:\dat\Customer\KM\01_Data_PX050\161018\KM_000001224_2016-10-18_09.55.31.dat	0.62	KM_000001224_2016-10-18_09.55.31.dat	0.62
E:\dat\Customer\KM\01_Data_PX050\161018\KM_000001225_2016-10-18_09.55.45.dat	0.60	KM_000001225_2016-10-18_09.55.45.dat	0.60
E:\dat\Customer\KM\01_Data_PX050\161018\KM_000001226_2016-10-18_09.55.58.dat	0.61	KM_000001226_2016-10-18_09.55.58.dat	0.61
E:\dat\Customer\KM\01_Data_PX050\161018\KM_000001227_2016-10-18_09.56.12.dat	0.60		

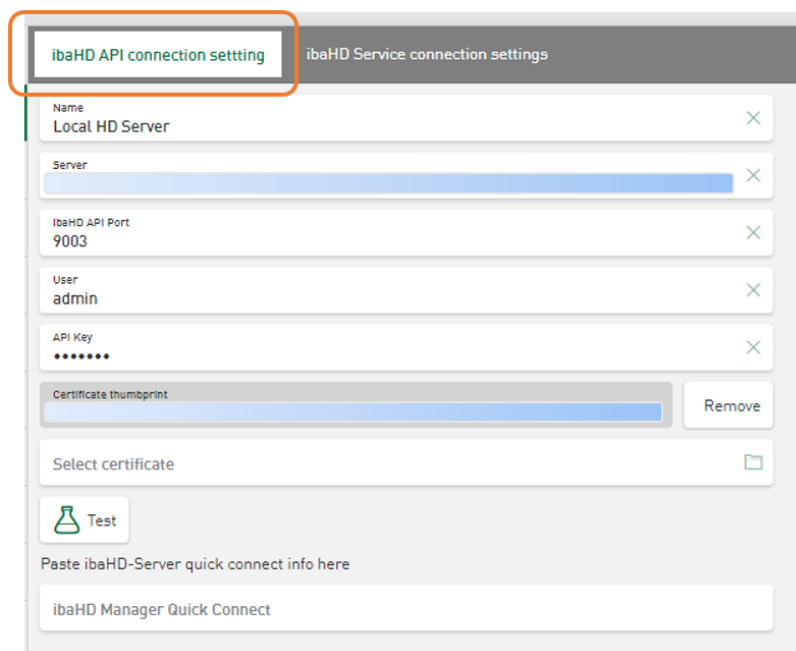
2.7 Grid cells as table

The tile type grid supports a new visualization style for the data. The visualization style can be switched from the cell style to a modus to display content in “table style”.

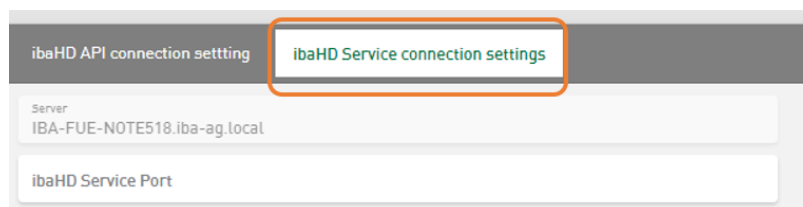
Grid cells - default style	table style
deFile_PXS0 - Records: 19878 _TimeStamp Last value 10/26/2016 17:12:15 MidHtgITmp1_Avg Last value 190.00 Oil_Temp_Avg Last value 25.69 Inj_Time Last value 0.61 Hld_Time Last value 0.41	deFile_PXS0 - Records: 19878 _TimeStamp Last value 10/26/2016 17:12:15 MidHtgITmp1_Avg Last value 190.00 Oil_Temp_Avg Last value 25.69 Inj_Time Last value 0.61 Hld_Time Last value 0.41

2.8 Changes at the ibaHD-Server connection page and ibaHD-Server-Read-API support

The page for the ibaHD-Server connection settings has been revised. The connection settings concerning ibaHD-Server-API are displayed on the first page.



On the ibaHD Service connection settings page, the connection settings of the ibaHD Service are displayed for further analysis with ibaAnalyzer and offered for possible modification.



No input is required to apply the ibaHD Service Port standard 9180 which is used by default.

2.9 Sort order of pie chart segments can be changed

The pie chart option to sort the displayed segments has been added. The pie chart segments can be ordered by category name in descending or ascending, maximum or minimum value.

