New Features in ibaDaVIS v2.3.0

Author: iba AG - Fürth

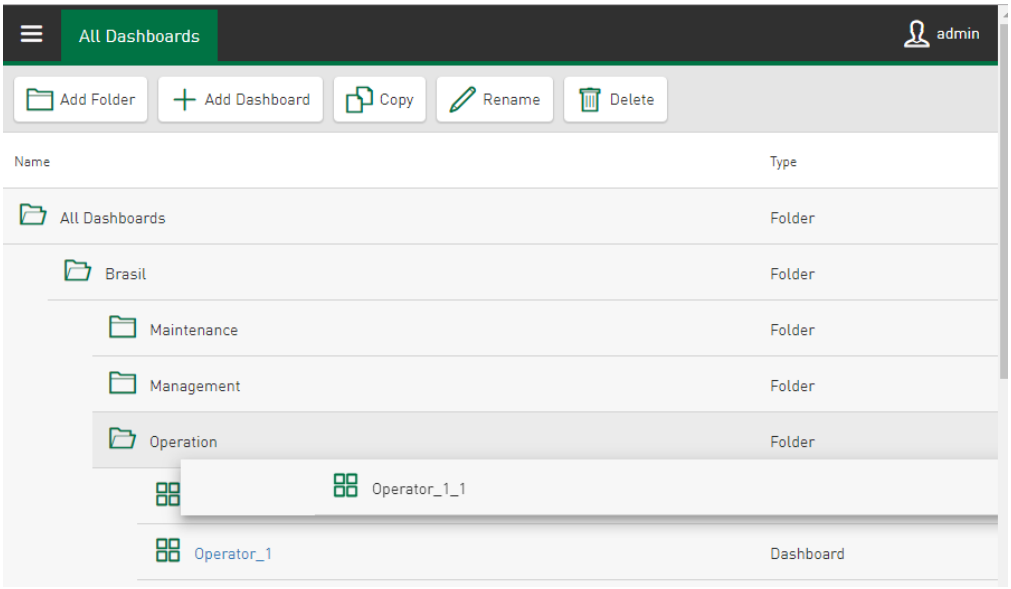
Date: July 2019

Table of contents

1 New Features

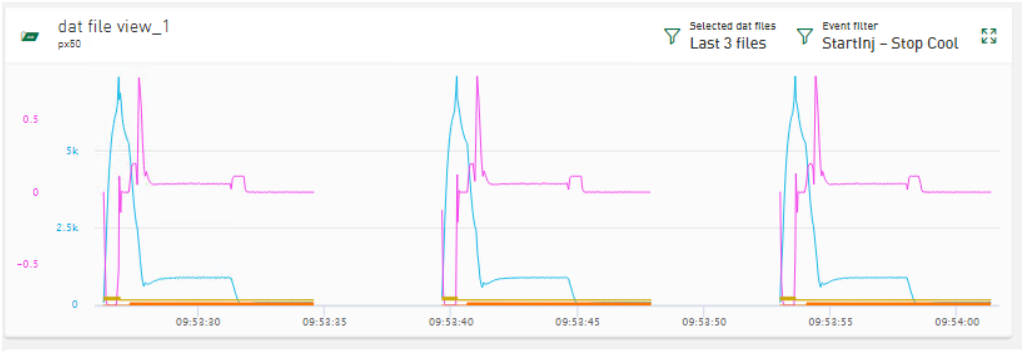
1.1 Organize dashboards by drag and drop

On the dashboard management page you can create folders and dashboards according to your needs. Use the icon in front of the folder or dashboard name to move dashboard or folders to a new position in the dashboard tree. Folders and dashboards are displayed in alphanumeric order.

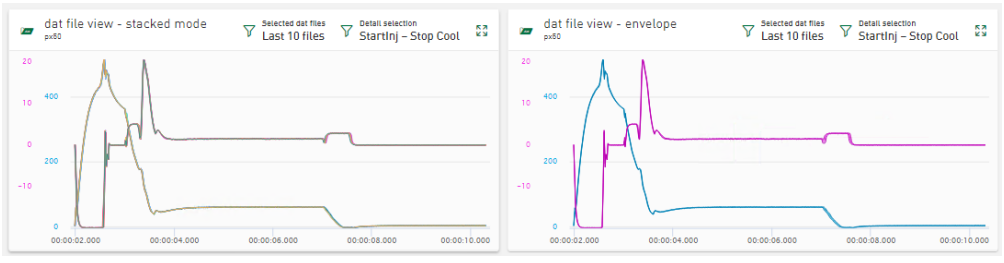


1.2 Event filter for dat file signals

In this version of ibaDaVIS you can use rising or falling edges of digital signals as events. The defined events can be applied in the dat file view as zoom filters to visualize specific process details on your dashboard.

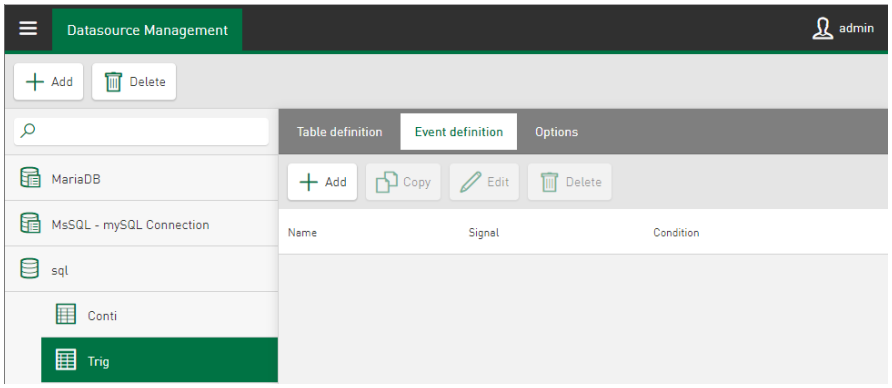


The visualized signals are synchronized on the same start event, when the visualization mode is selected to *Envelope* or *Stacked* view.



1.2.1 Configuration

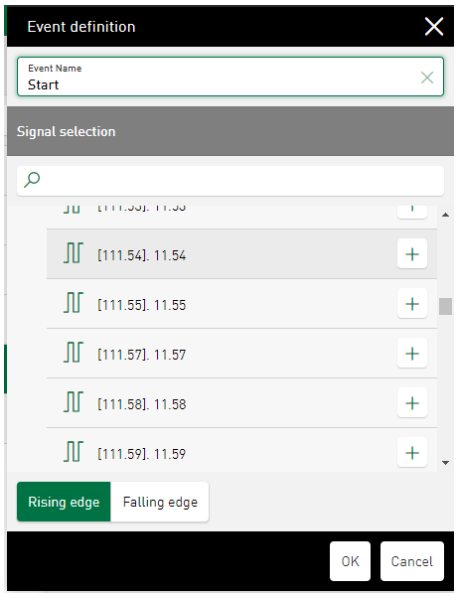
Select your *Datasource Management* and open the *Event definition* tab of one defined table.



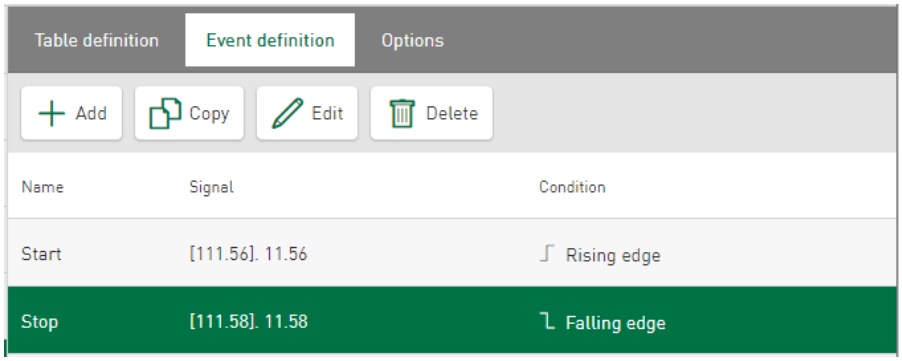
Click *Add* to an event for the current selected table.

Required properties to define an event:

- *Event name* – Logical name which indicate the usage e.g. process start / end.
- *Signal selection* – Select one of the provided digital signals from the signal tree of the last added dat file
- *Edge type* – Select rising or falling edge as condition



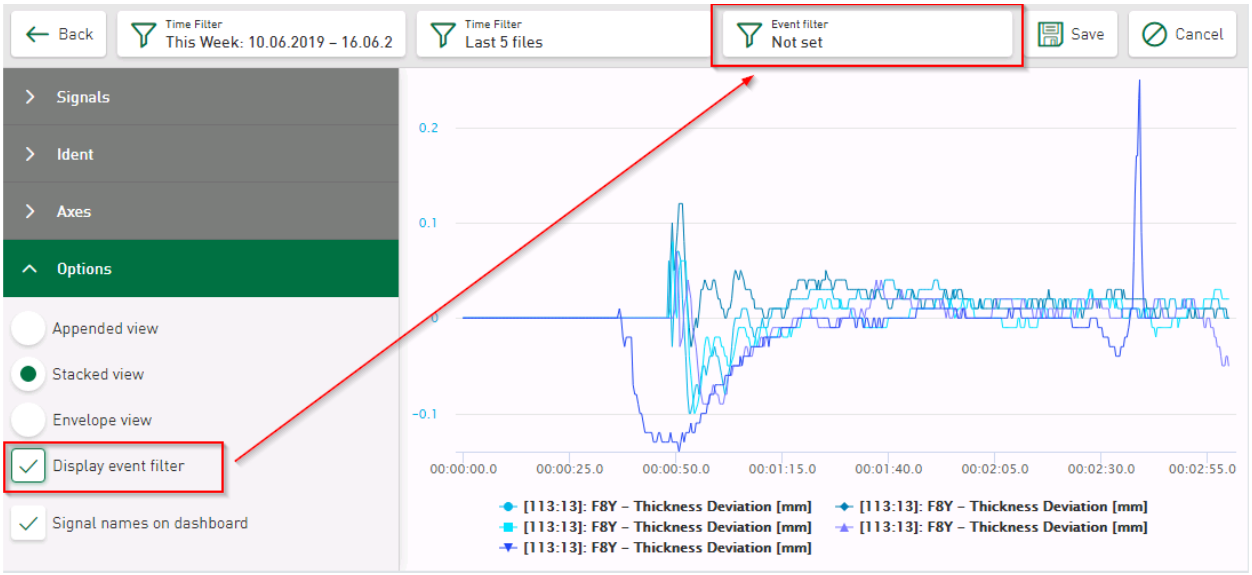
All configured events related to the current selected data source are displayed in a list *Event definition*.



Save the current settings and go back to your dashboard. Add a new *Dat file view* tile to your dashboard or open an existing *dat file view* in full screen mode.

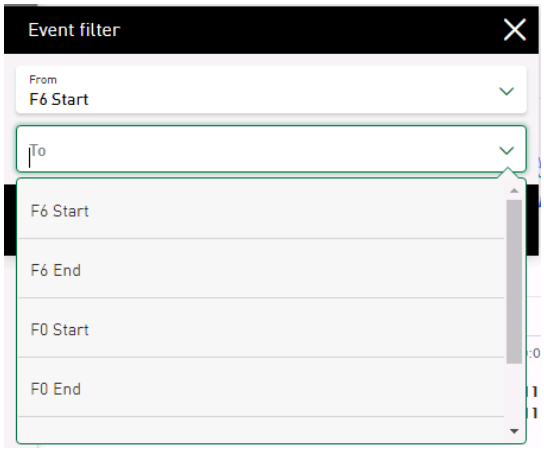
1.2.2 Display the events in the *dat file view* as filter

The *dat file view* offers the option to display the configured events as additional “From ... To …” filter. Check the option *Display event filter* to set your configured event as a filter in the filter bar.

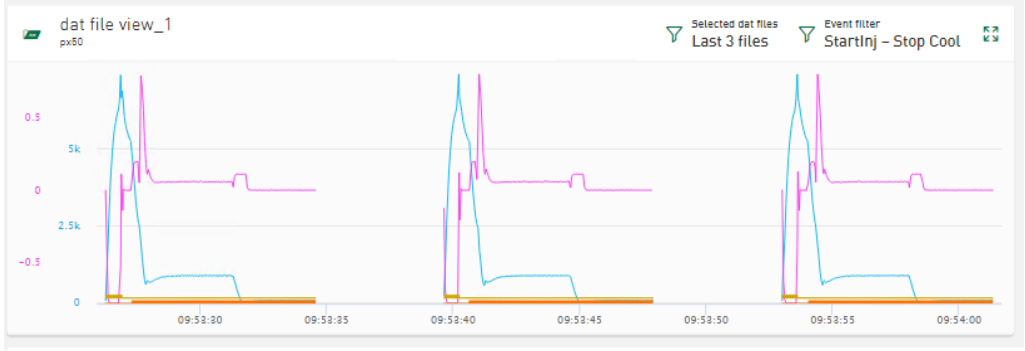


1.2.3 Usage of the *Event filter*

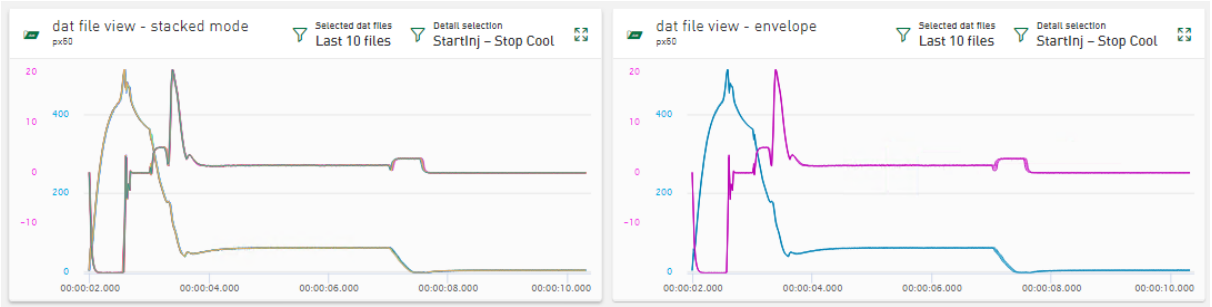
Now you're able to select the configured events as start or stop events to limit the visualized range of the signals from the currently selected dat files.



Appended mode – Signals of the dat files are displayed in the ranges from selected start event to selected stop event.

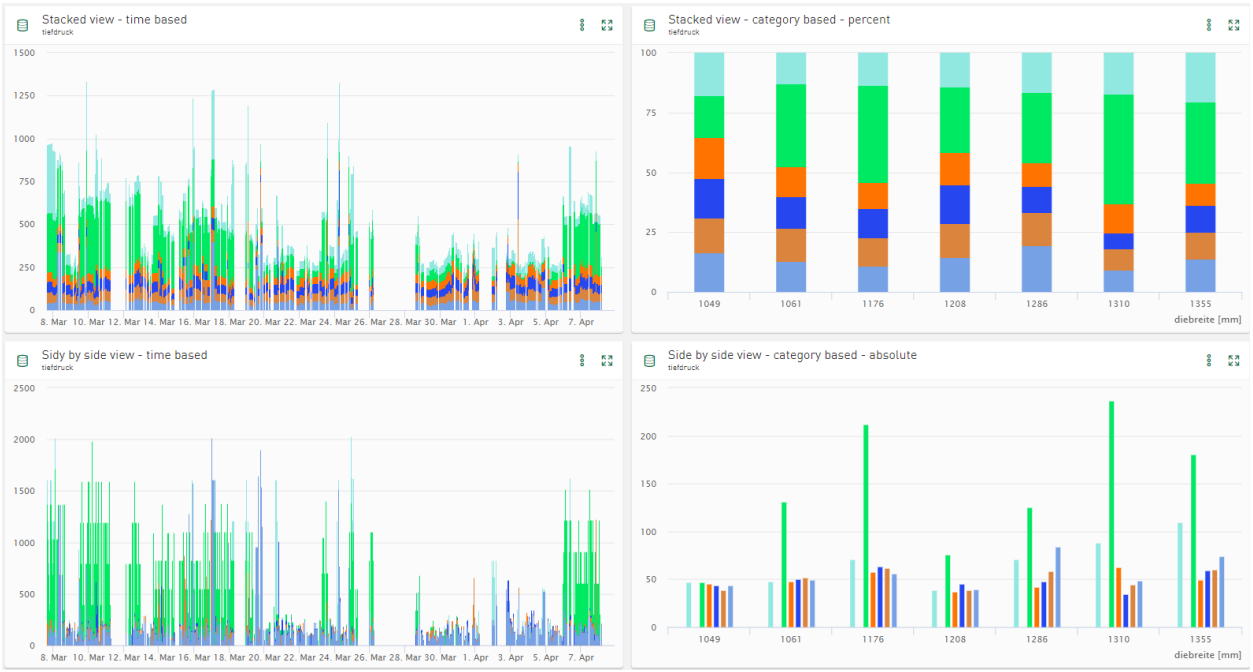


Stacked mode and *Envelope* - Signals of the selected dat files are synchronized and displayed in a range starting from the same start event to the selected stop event.



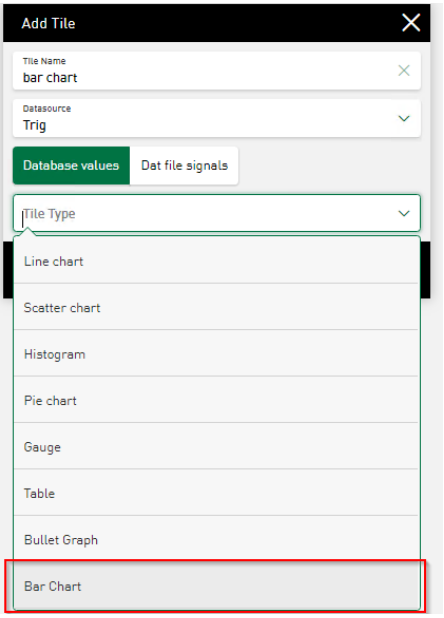
1.3 Bar Chart

In this version of ibaDaVIS the tile type *Bar chart* is added. KPI values from a database can be visualized as bar chart sorted by time or grouped by a selected category. The data can be aggregated or sorted and displayed in bars which are shown side by side or as stacked graph.

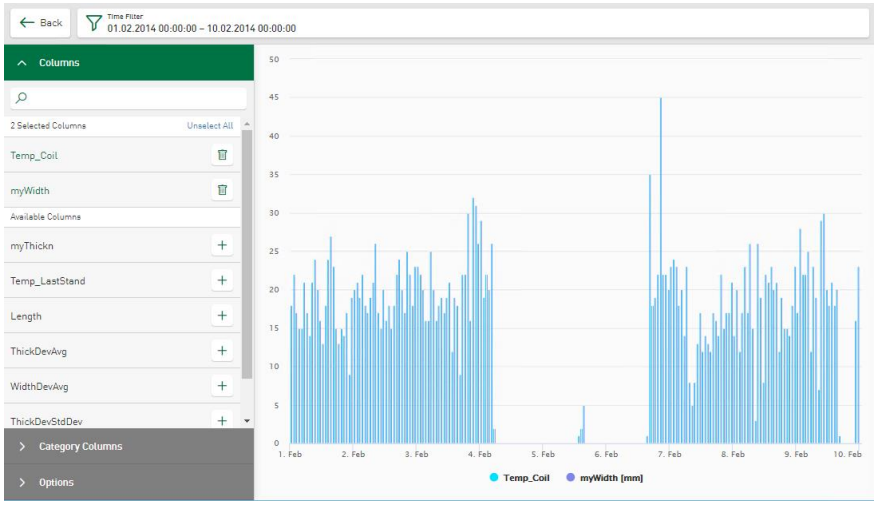


1.3.1 Configuration

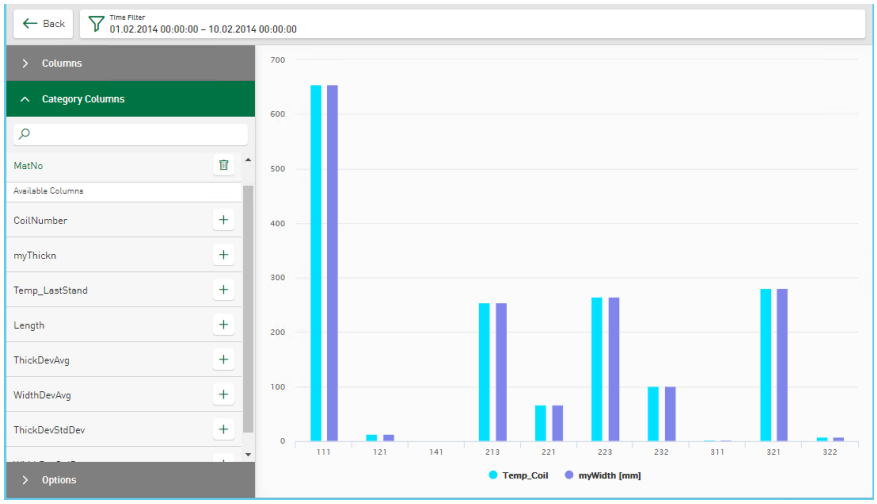
You can add a *Bar chart* for database values by selecting the tile type *Bar Chart* when you add a new tile to your dashboard.



Select the required columns from the given list. The data is presented as time based bar chart.

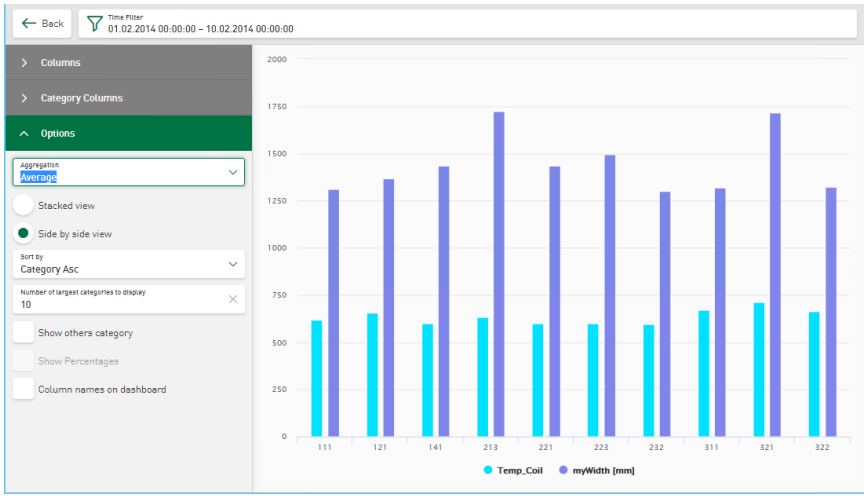


Select a category column to group the visualized data e.g. by material.



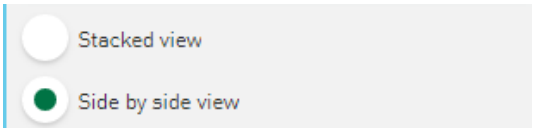
1.3.2 Options

The default aggregator *Count* is applied to the visualized data. In the *Options* tab, you can change the aggregator e.g. to the aggregator *Average*.

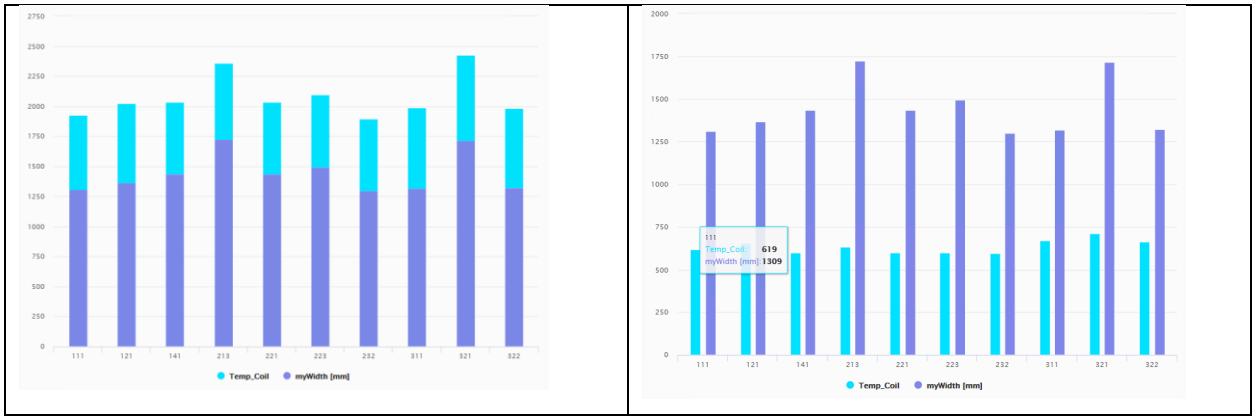


Supported aggregation methods: *Count, Average, Sum, Maximum, Minimum*

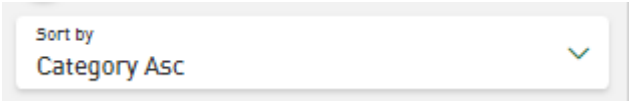
The bars are displayed in side by side view by default, but the visualization of the bars in stacked view is also supported.



Switch between *Stacked view* and *Side by side view*



Select a category column to enable the sort option. The default sort option is *Category Asc*.



Supported sort options:

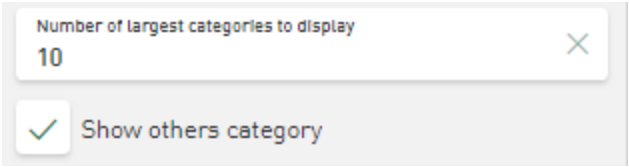
Category Asc – Sort alphanumerically by category in ascending order

Category Desc – Sort alphanumerically by category in descending order

Max value – Sort the visualized categories according to the maximum value in descending order

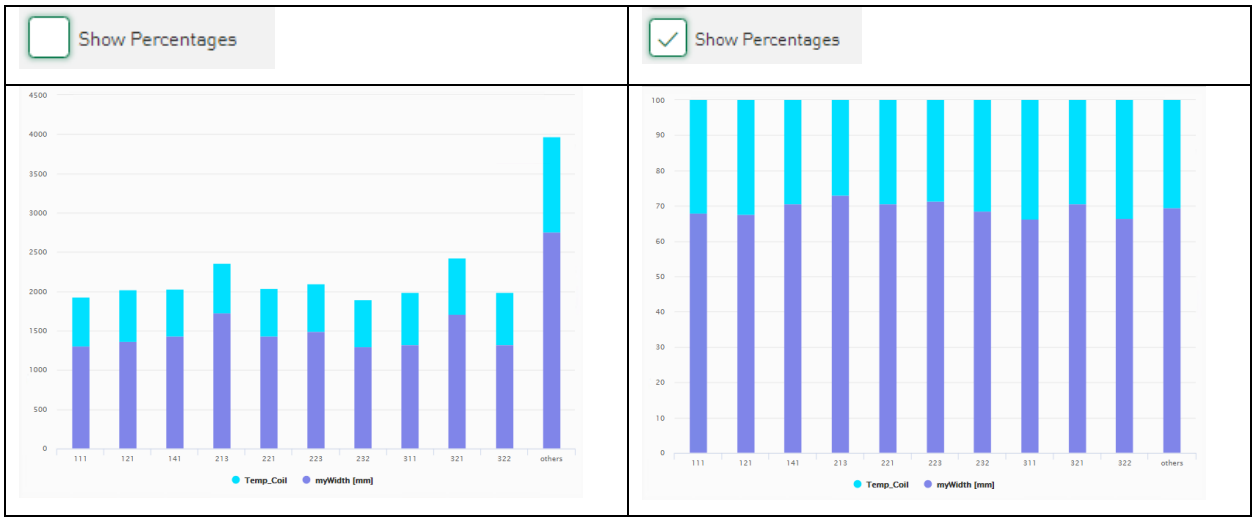
Min value - Sort the visualized categories according to the maximum value in ascending order

The default value for the number of visualized categories is 10. Change the number to display more or fewer categories as bar in your *Bar chart*.



Similar to the *Pie chart* you can choose to visualize the *others* category, containing all the remaining values that did not fit into the configured number of largest values.

The checkable option *Show percentage* is enabled when your *Bar chart* is displaying data as *Stacked view*. This option enables you to compare the percentage values in relation to the total.



1.3.3 Filter

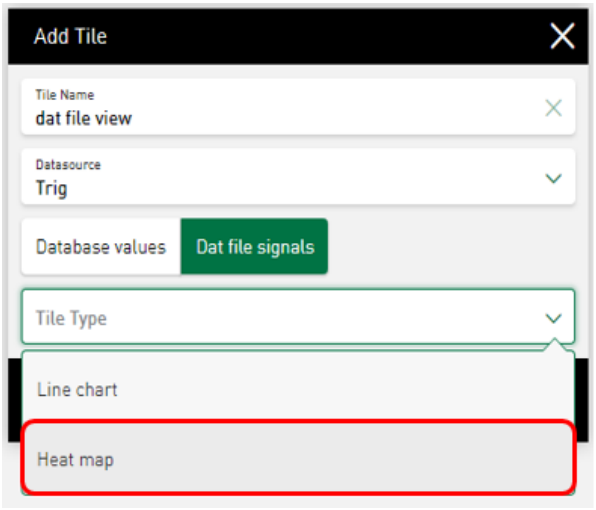
The visualized bars are clickable. The selection of individual bars or the zoom in the time based *Bar chart* creates a filter at the filter bar according to the selected bars from the chart.

1.4 Heat map for signals grouped as vector

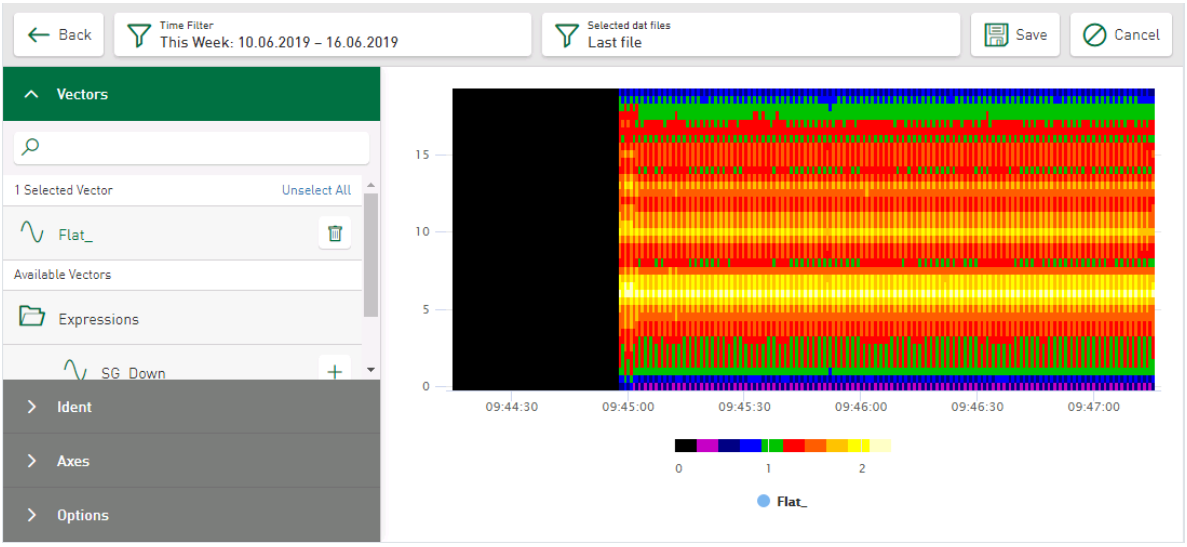
In this version you can add a *Heat map* to visualize signals from dat files which are logically grouped as vector. This is useful for signals from flatness or profile inspection systems. The *Heat map* can be applied on time based and length based vectors.

1.4.1 Configuration

Add a new tile with tile type *Heat map* for dat file signals.



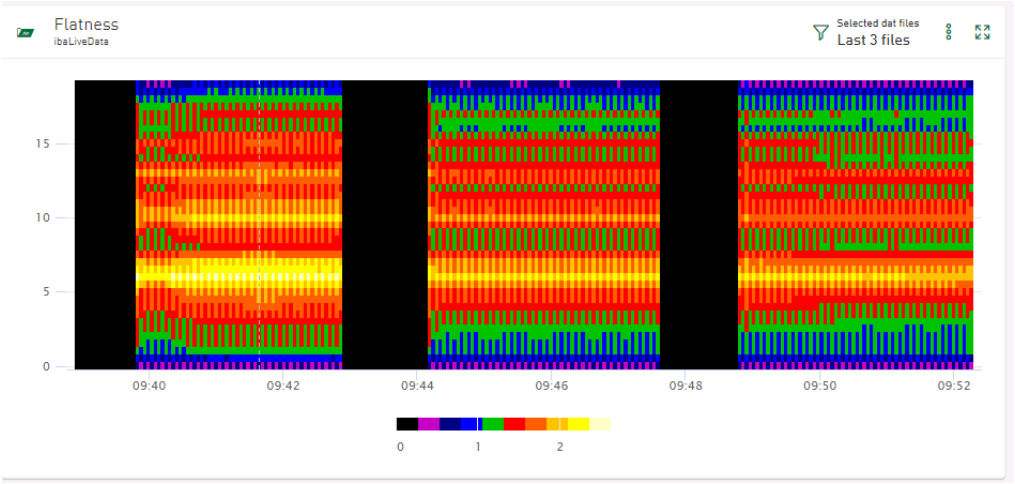
Select the vector group from the signal list and immediately the *Heat map* will visualize the signal vector using the ibaAnalyzer standard colors for 2D plots.



As in the other dat file views it's possible to select an ident column from the data source. The current ident will be displayed in front of the signal name of the visualized vector group name.

As for the dat file view a tile specific filter is applicable. Signal data of the last dat file is displayed by default. Click *Selected dat file* on the Heat map tile header to change the number

of dat files taken into account for the data visualization. Like the *dat file view* tile the *Heat map* tile can have a connection to tiles of the type *Table*. If you click on the checkbox at the end of the row in the T*able* the *Heat map* tile will show data of the selected dat file which is referenced in the table. This feature is supported when the *Table* and the *Heat map* are using the same datasource.

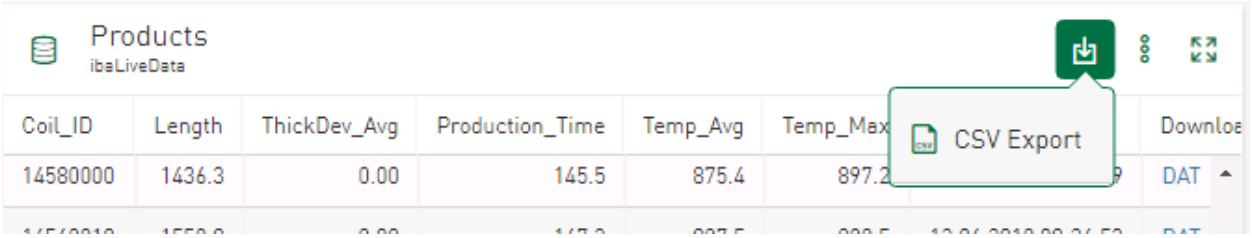


1.4.2 Requirements

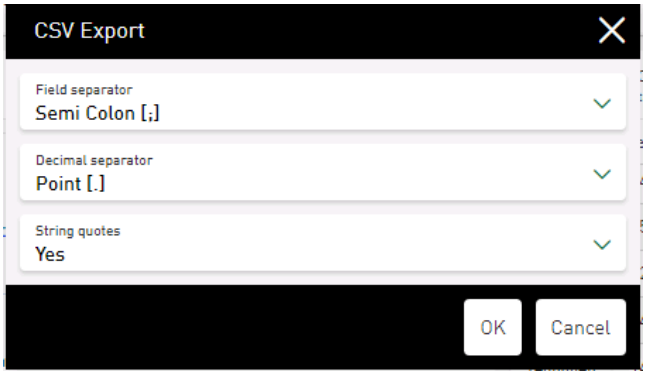
Signals which are grouped as vector can be visualized as heat map. The colors are the same default colors which are used in ibaAnalyzer and ibaQPanel. It's possible to visualize time based and length based data.

1.5 Export csv files with user defined separators

The separators for the exported CSV file can be edited.

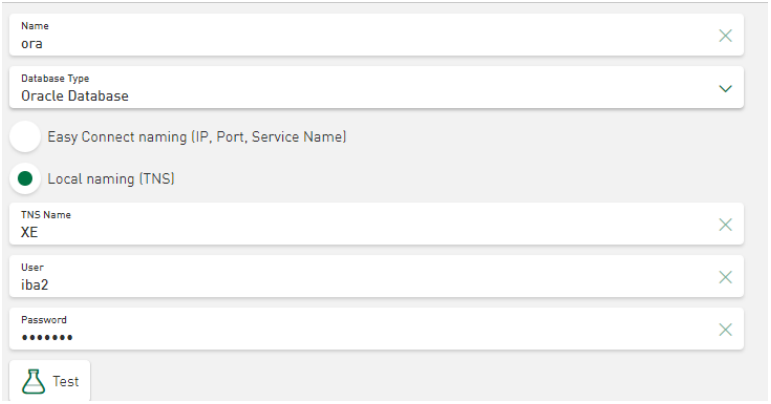


After clicking to the CSV Export control the modal dialog with the currently used separators is displayed.



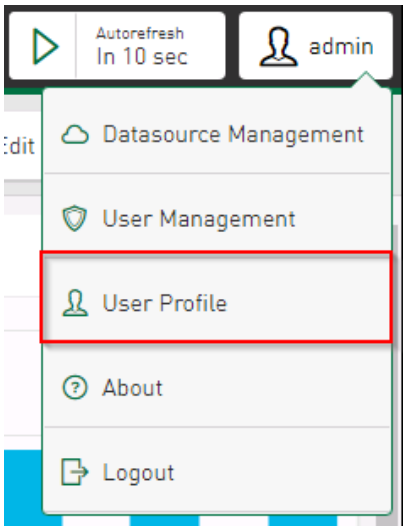
1.6 Use TNS for Oracle® DB connections

Oracle® databases can be connected using the local naming (TNS) method. In the datasource configuration you can switch between the local naming and the Easy Connect naming method to get connected to your Oracle® database. The local naming is selected as default connection method.

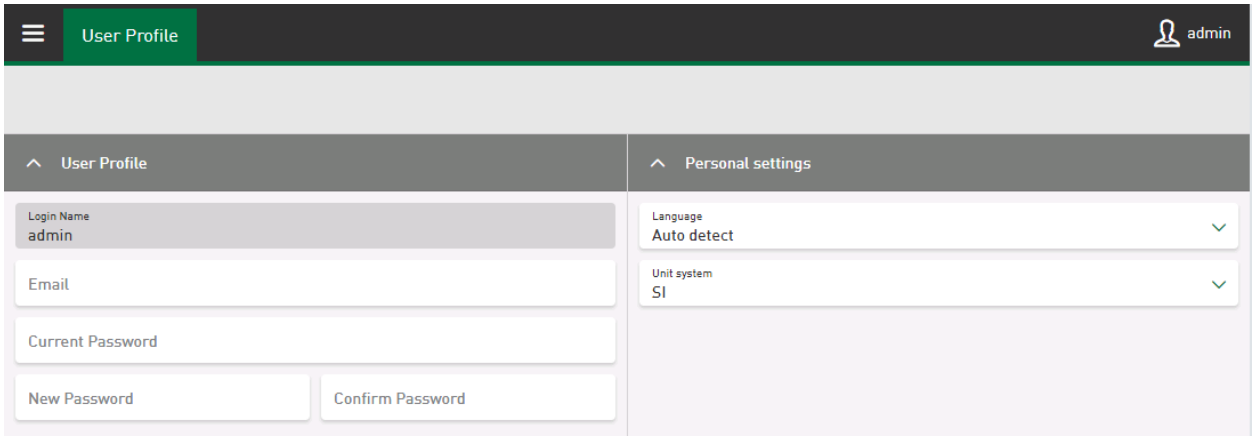


1.7 User Profiles

In this version *User Profiles* are introduced to ibaDaVIS.



The user is allowed to change his own password and switch the displayed application language for his user profile. The switch from SI units to US units is also provided as feature at the *User Profiles*.



The conversion of the displayed signals from dat files is done automatically. E.g. a signal which is visualizing a temperature in *°C* will be converted to *F* when the profile is set to US units.

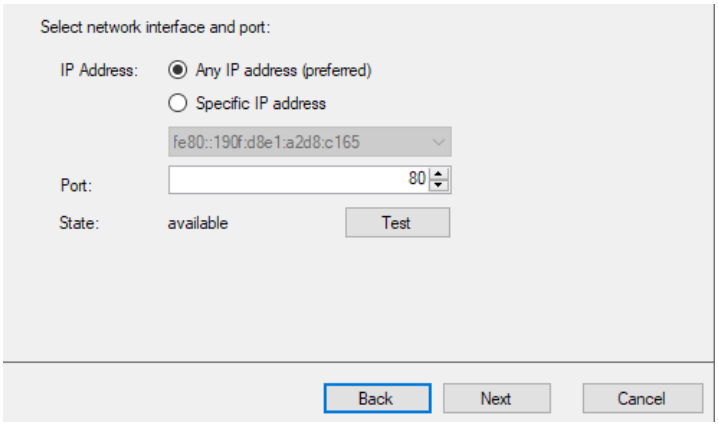
1.7.1 Supported units

The *units.JSON* file at *C:\Program Files\iba\ibaDaVIS\wwwroot\units.json* contains the currently supported convertible units. You can extend the list of converted units related to your needs based on the JSON format.

For more information please contact the **ibaSupport**.

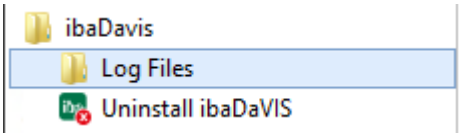
2 Improvements

2.1 Installer provides Any IP address (preferred) separately



2.2 Short cut in Programs folder

Windows Start menu provides a shortcut to the ibaDaVIS log files and a shortcut to uninstall ibaDaVIS at the separate ibaDaVIS folder.



2.3 Auto refresh without flickering

The Auto refresh mode got improved. The data management to actualize the tile contents got improved.

2.4 Apply alias names directly on dashboard tiles

A new given or changed alias name for a data base column name is applied directly to the columns in all tiles on your dashboards. A reselection of the column using the new or changed alias name is not required.

2.5 Change the application base color

In this version you can change the base color for menus and icons to any other color than green. The JSON configuration file supports the following record to change the color e.g. to blue:

"theme": {"primaryColor": "blue"}

Colors can be named according to supported X11 color names in hex code.

List of all supported colors:

https://en.wikipedia.org/wiki/X11_color_names

Or

https://www.w3.org/TR/2018/PR-css-color-3-20180315/

ibaDaVIS Service restart is required to apply the changed configuration file.