New Features in ibaAnalyzer v8.2

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iba AG

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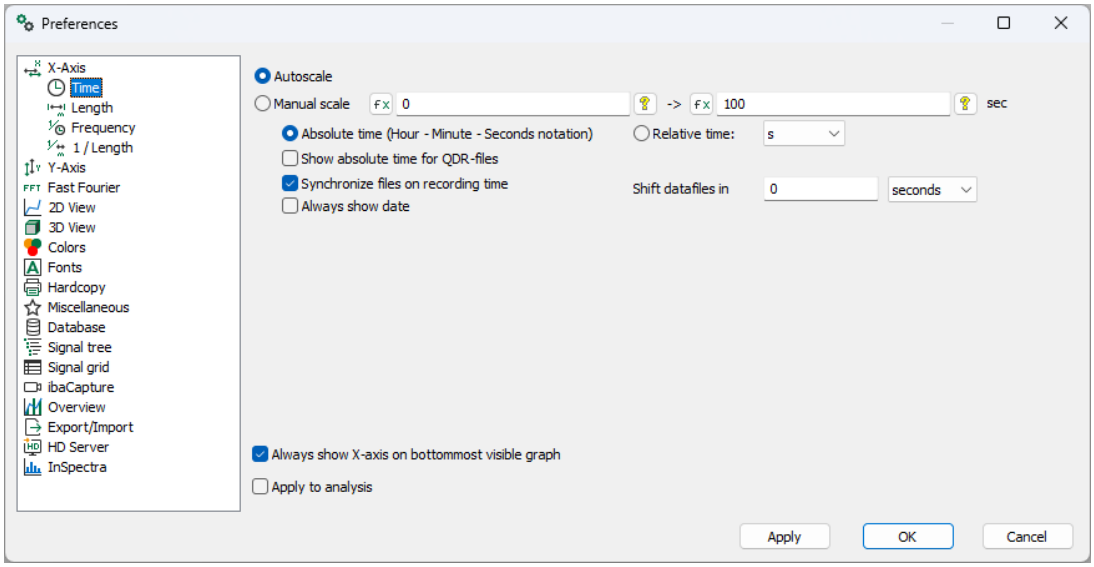
1 Preferences and Graph Setup arrangement

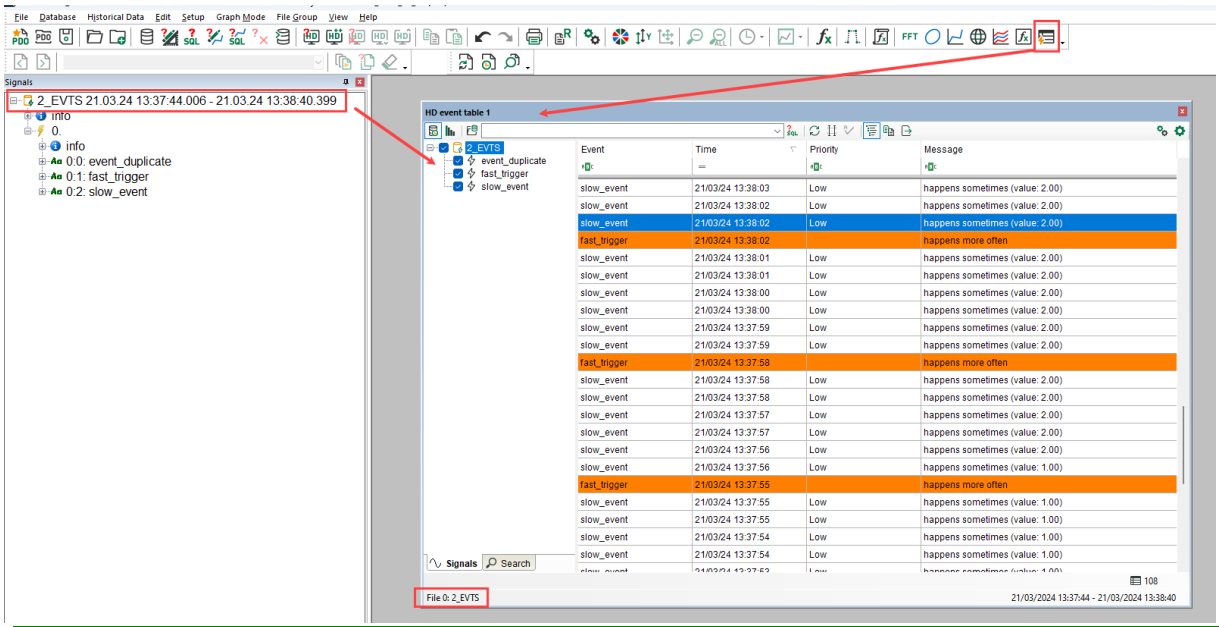
For better overview, the settings dialogs for ‘Preferences’ and ‘Graph Setup’ were re-structured. Instead of tabs, the different categories are reported in a list on the left side of the dialog.



2 ibaHD Event Table

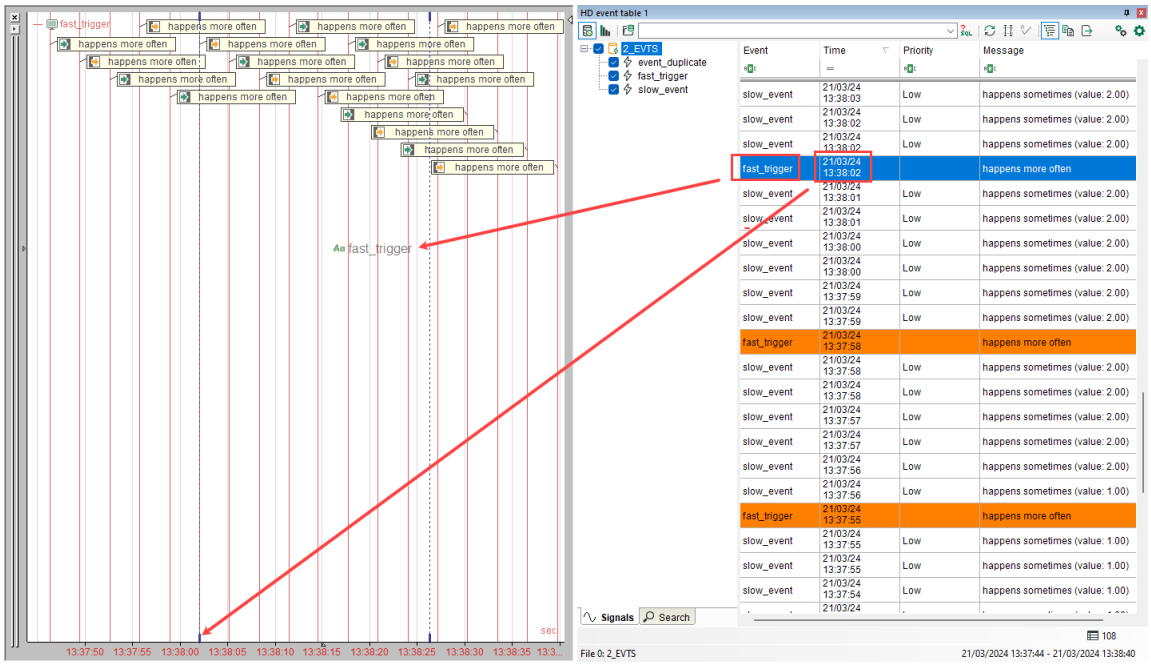
The ibaHD Event table is available as separate view in ibaAnalyzer which can be docked, renamed, etc. like all the other views. Any event query from the ibaAnalyzer file tree can be used as a source for the table.

To show the events in the table, open a new table and drag any event query from the file tree onto the table. It is also possible to drag single events or groups of events onto the table. In this case the complete event store is available in the view but only the selected events are shown. The table has a separate tree where events from the HD store can be selected.



As usual, events can also be shown as text signal in ibaAnlayzer. With the new event table, it is also possible to drag an event from the table onto any trendgraph. Further, the text flags for the events contain an additional icon to indicate if it is an icoming or outgoing event.

A double-click on one of the events in the table causes the X1 Marker to move to the position of the event within the trendgraphs. The size of the zoom range is kept constant which causes the zoom window to relocate with the marker (panning).



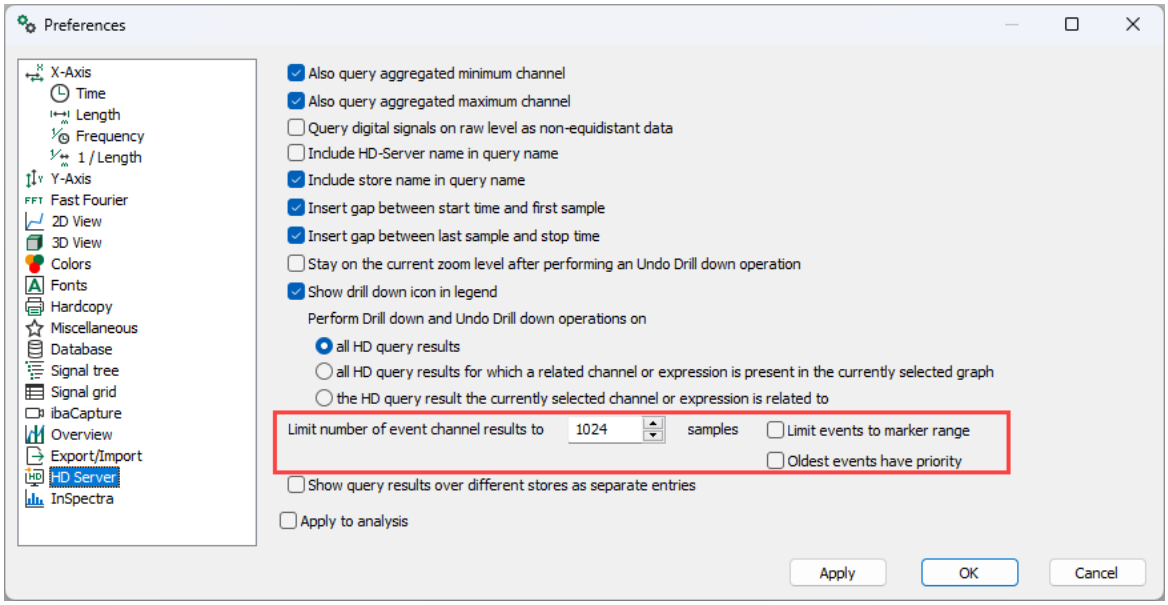
In general, the table offers the same functionality like in ibaPDA, please refer the the manual of ibaHD-Server or ibaPDA respectively. Due to the fact that ibaAnalyzer is meant for post-mortem analysis and no live view or interaction, there are some differences, though:

- Events cannot be acknowledged from ibaAnalyzer. The acknowledgement column shows an icon to indicate acknowledged yes/no only.
- The settings “General -> Live alarms/events”, “Alarm”, “Commands”, and “User interaction” as well as corresponding functions are not available in ibaAnalyzer:

2.1 Use marker range to limit HD events

Previously, when the maximum number of shown events was exceeded, only the most recent events were shown in the ibaAnalyzer trend graphs. When working with the new event table, the currently shown time-range is relevant.

By activating the button  above the table (or using the setting in the Graph setup), events are only loaded from the marker range and then the configured limit for the number of queried events is applied. The newest events within the range are queried by default. An option is available in the Graph setup to load the oldest events first.



3 File Group Trend Query

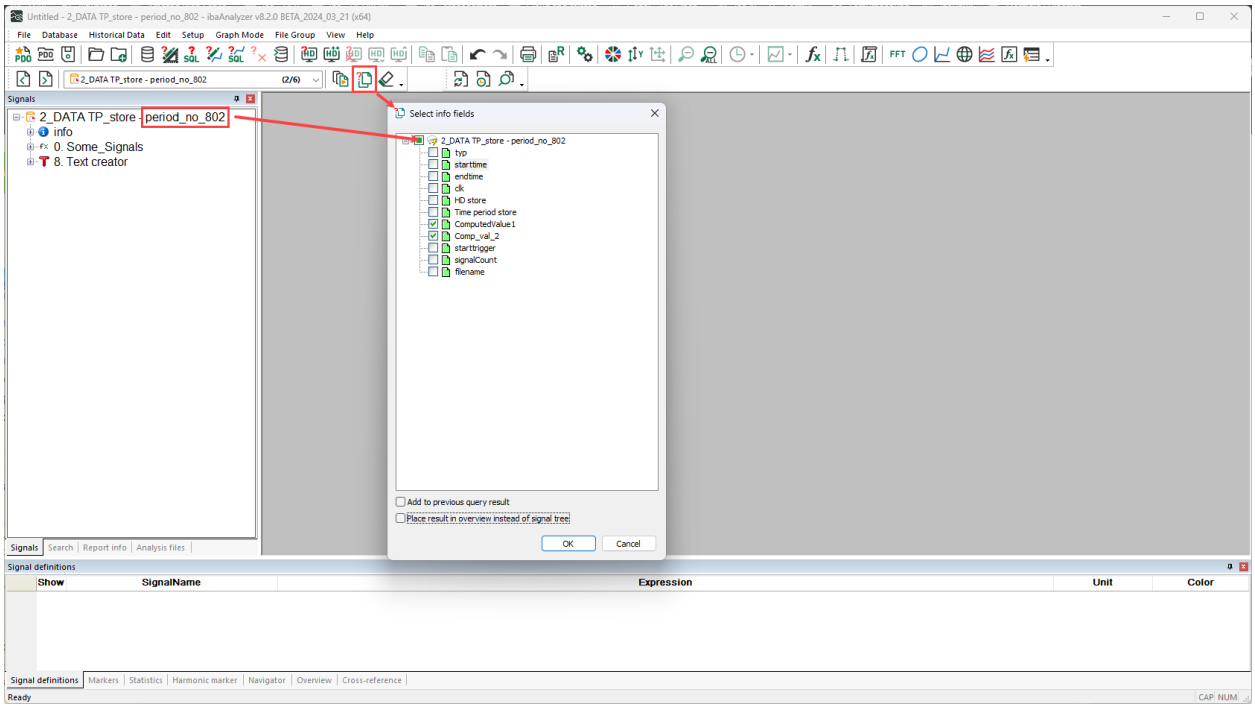
It is now possible to query the infofields of the elements within the file group as a trend. This works for all elements with global infofields including dat-files, HD-queries, and time periods.

Note

For the trendquery to work, the requested infofields need to be available from all elements in the file group. This is usually the case for dat-files from the same recording or time periods from the same time period store.

As soon as any elements are loaded into the file group, the trendquery button becomes available. The button opens a dialog where the infofields which should be queried from all elements can be selected. Note that the currently selected entry in the file group is used to populate this tree. The entry used is also shown in the root node within the dialog.

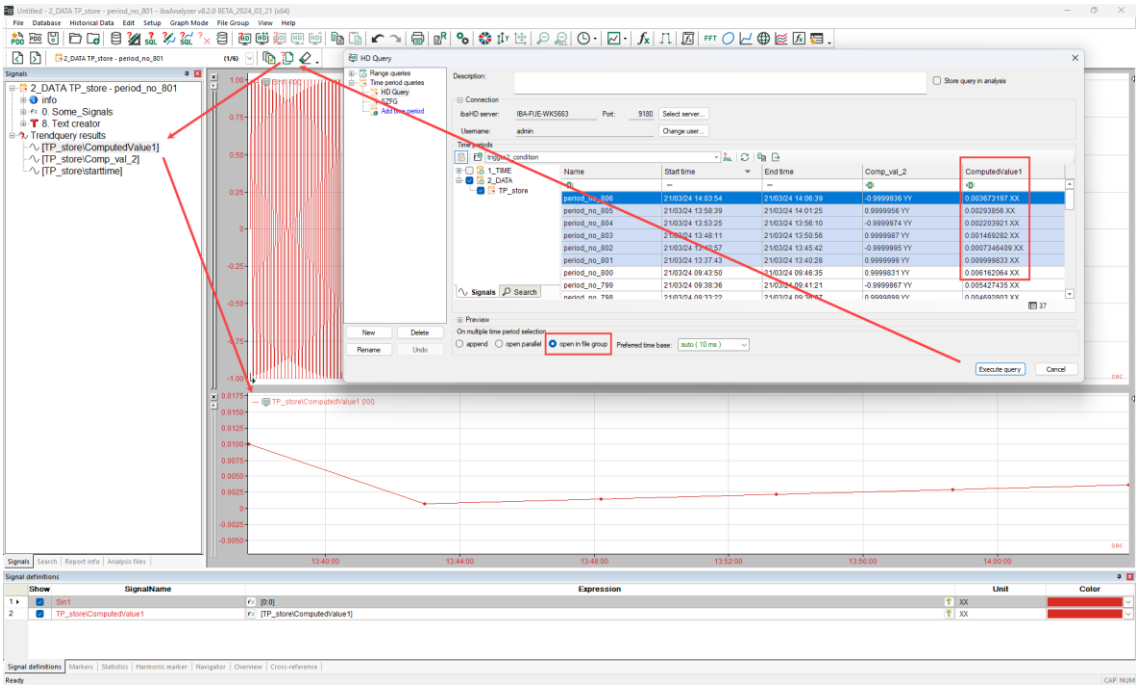
Note that the infofields shown in the dialog (and also the values resulting from the query) are shown in a hierarchical tree view, if any structure is present.



The resulting trend uses the starttime of the dat-file or time-period to place the corresponding data point. Like for the existing DB trend query, the trend can be added to the signal tree or to the overview tab.

Example

This feature enables ibaAnalyzer to get the infofields from a time period store as a trend. While in the HD time period query dialog, the infofields can be shown in the time period table, the values of a single column can be made available as signal now. Use the “open in file group” option for the time periods and the new file group trendquery.



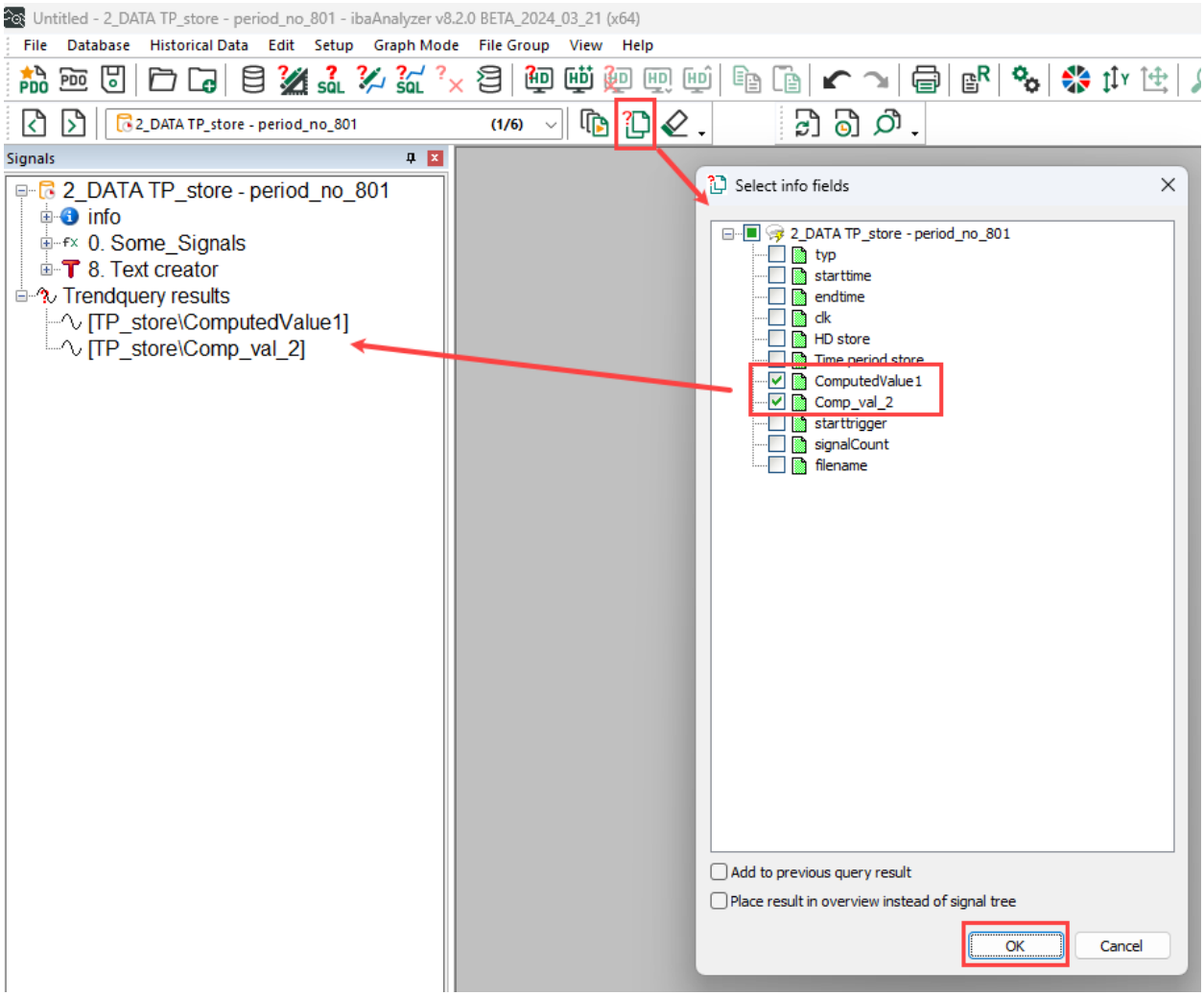
3.1 Result in signal tree

Standard behavior (the option “Place result in overview instead of signal tree” is not checked).

The result is shown in the signal tree under a separate category “Trend query results”. By default, existing query results are overwritten with a new query. If the option “Add to previous query result” is active, results are added instead.

In case of time periods, the signal name contains the name of the time period store prepended to the infofield name and meta data like units and comments are available if configured on time period level.

The trendquery results can be used like any other signal for interactive analysis.

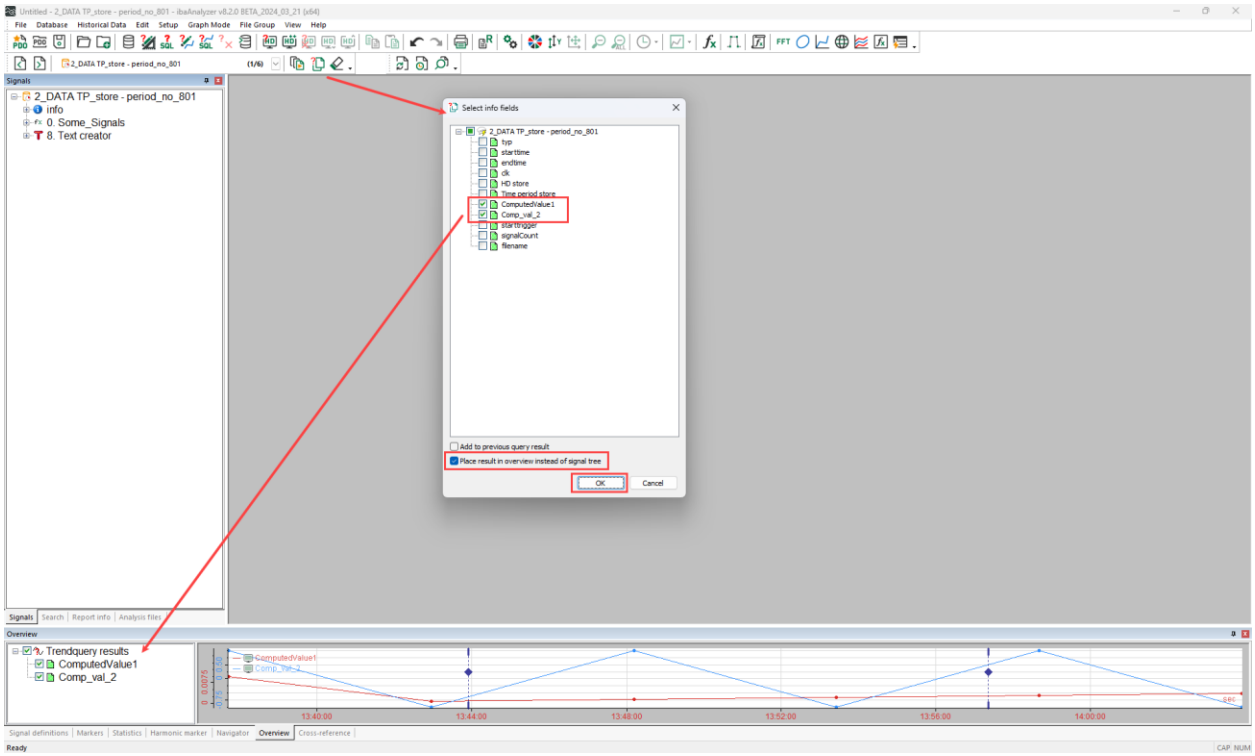


3.2 Result in Overview

If the option “Place result in overview instead of signal tree” is checked, the result is placed in the “Overview” tab. The overview tab offers a separate file tree from where the shown trend can be selected.

The overview tab has only a single graph which shows the selected trends and includes two diamond markers. With a double-click on one of these markers, the corresponding file or time-

period belonging to the nearest data point is opened in the file-tree. An additional context menu option is available to open multiple files or time periods between the markers.



4 Data Extractor Options

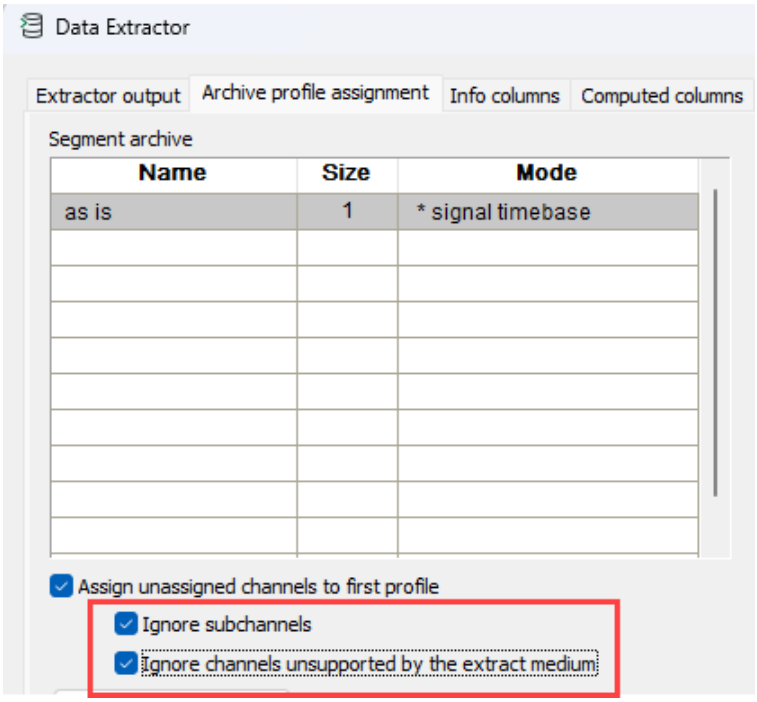
The option “Assign unassigned channels to first profile” can be used to easily extract all signals of a datasource using the first profile. Two additional options are available:

Ignore subachannels

When this option is active, subchannels like e.g. min/max channels queried from ibaHD-Server are not extracted.

Ignore channels unsupported by the extract medium

When this option is active, channels which are not supported by the destination file format, like for example ibaCapture synchronization channels for non-iba formats, are not extracted.



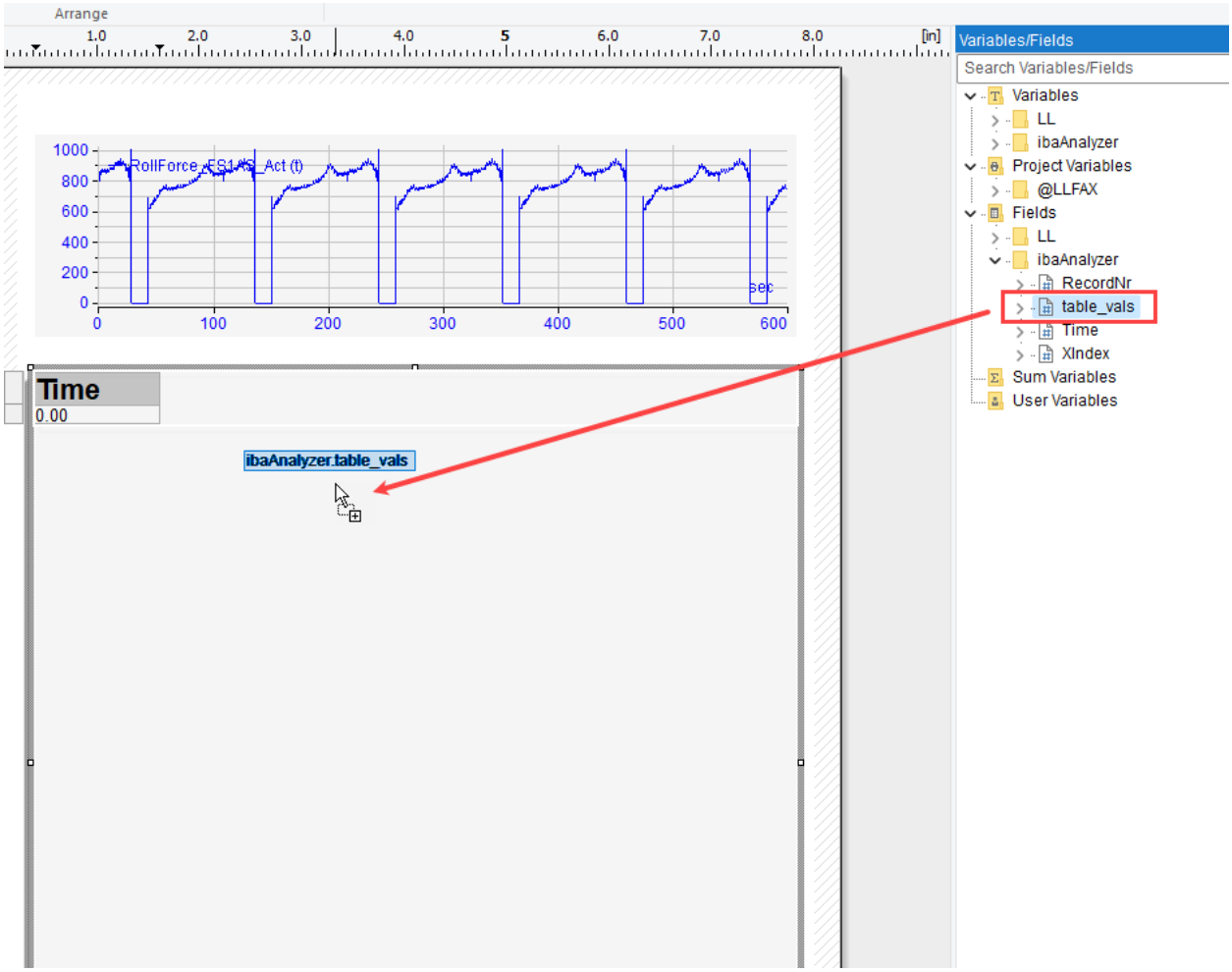
5 Update of the Reportdesigner

The report designer has been updated to the latest combit ® list&label software version. Please refer to the list&label website for a full list of new features.

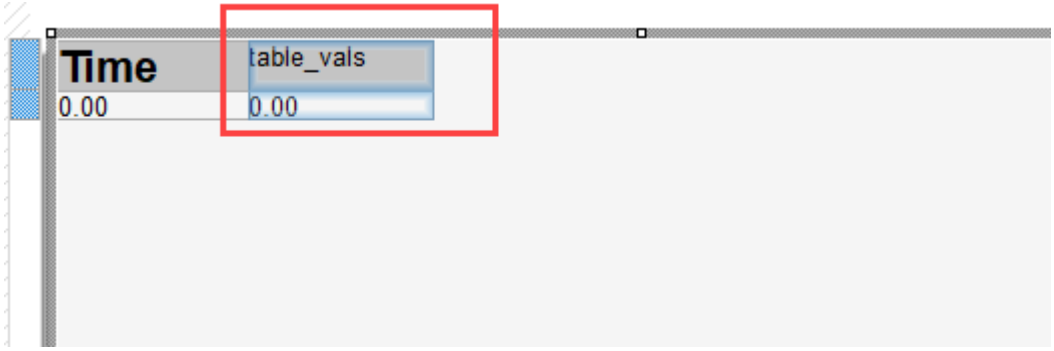
Especially for the usage in the ibaAnalyzer-Reportgenerator, we mention some highlights.

Improved table generation with field variables

If there is a table available in the report configuration (e.g. created by the project wizard which is available now independent of 32/64 bit installation), field variables can simply be dragged and dropped onto the table.

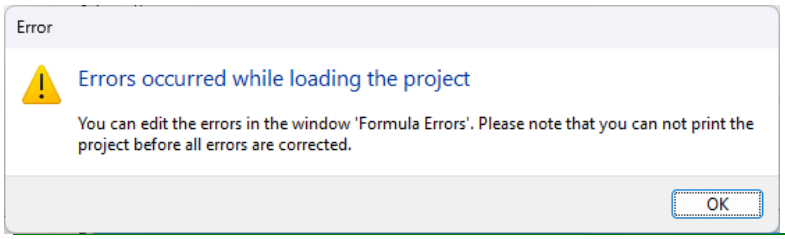


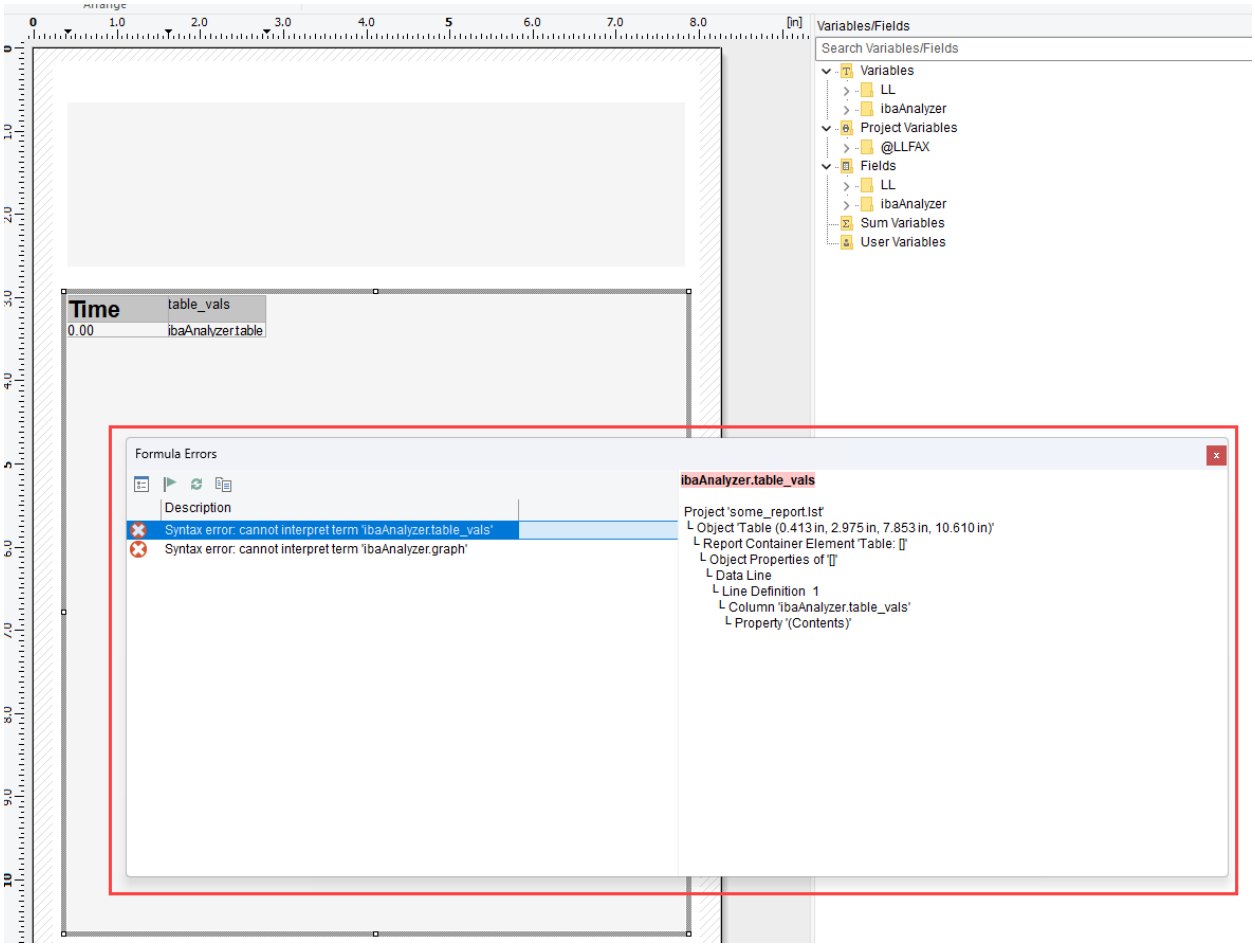
As a result, the variable will be added to the table with a header and value line.



Overview for correcting wrong expressions

If there are errors found in the configuration (e.g. because variable names changed), a corresponding error message is shown and an overview of found issues is shown in a separate dialog.





From the dialog you can navigate to the place where the issue is identified by double-clicking on the entry. Within the dialog there are options to manage the already corrected expressions or to update the error list.

6 Miscellaneous

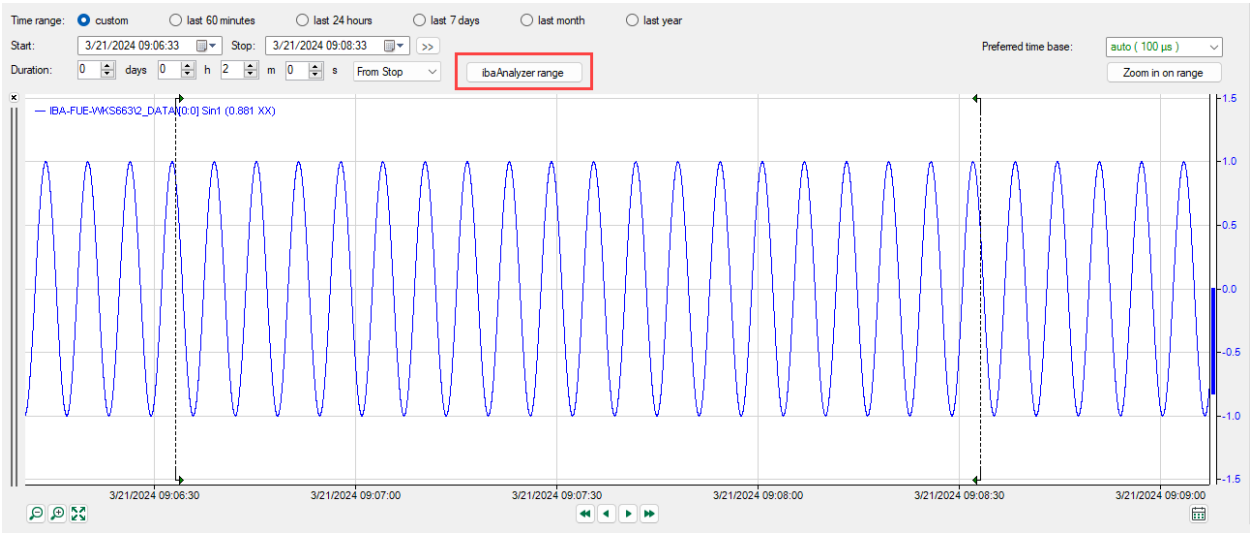
6.1 Drag and drop of modules and groups

Modules and groups can now be dragged and dropped from the file tree.

Dragging a module or group is equivalent to multi-selecting all signals within the module or group. This simple way of multi-selection can be used in combination with all trendgraphs and views.

6.2 Use ibaAnalyzer time-range for HD query

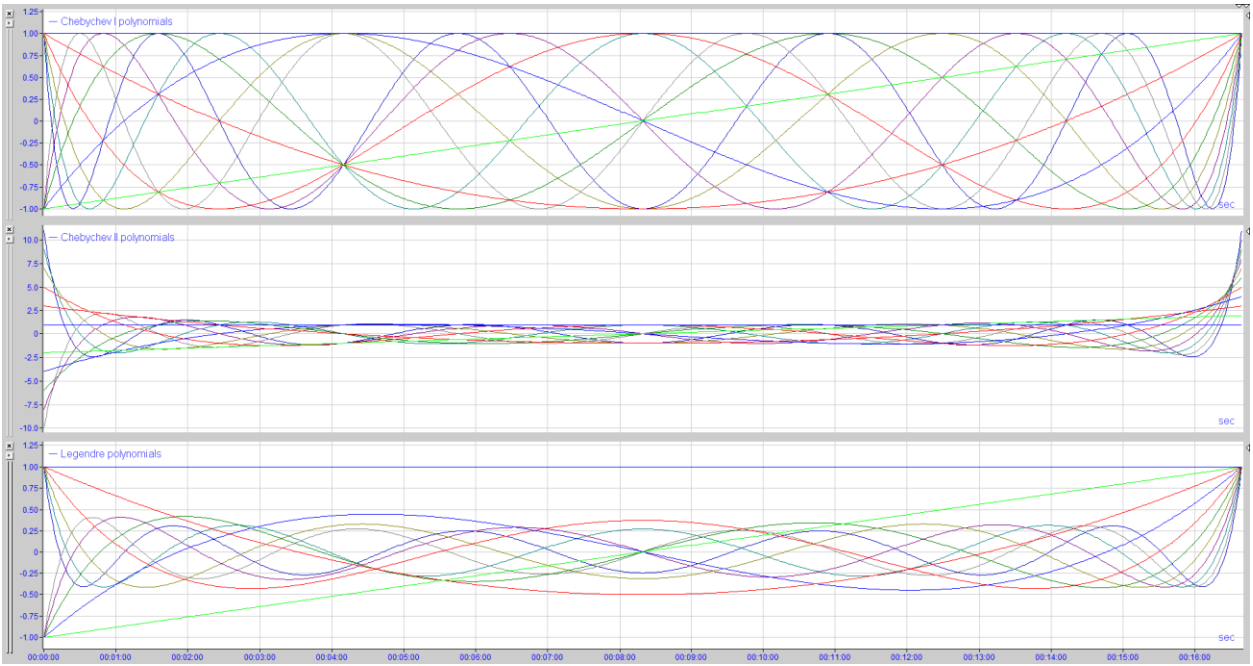
HD range queries have a new option to set the current ibaAnalyzer time range as query range. This makes it easy to query new data from the time-range currently loaded in ibaAnalyzer.



6.3 Polyonmial interpolation

The functions “LsqPolyCoef”, “Polynomial”, “VectorLsqPolycoef”, and “VectorPolynomial” were extended so they can also calculate or evaluate coefficients for Chebyshev (type I and II) and Legendre polynomials. All functions have an additional (optional) argument to select the type of polynomial. The parameter ‘PolynomialType’ can take the values

- 0 = Lagrange (default)
- 1 = Chebyshev I
- 2 = Chebyshev II
- 3 = Legendre



6.4 Additional parameters for legends and marker labels

When using paramterstrings for markers and legends, new parameters ‘%py’ (for markers) as well as ‘%py1’ and ‘%py2’ (for legends) are available.

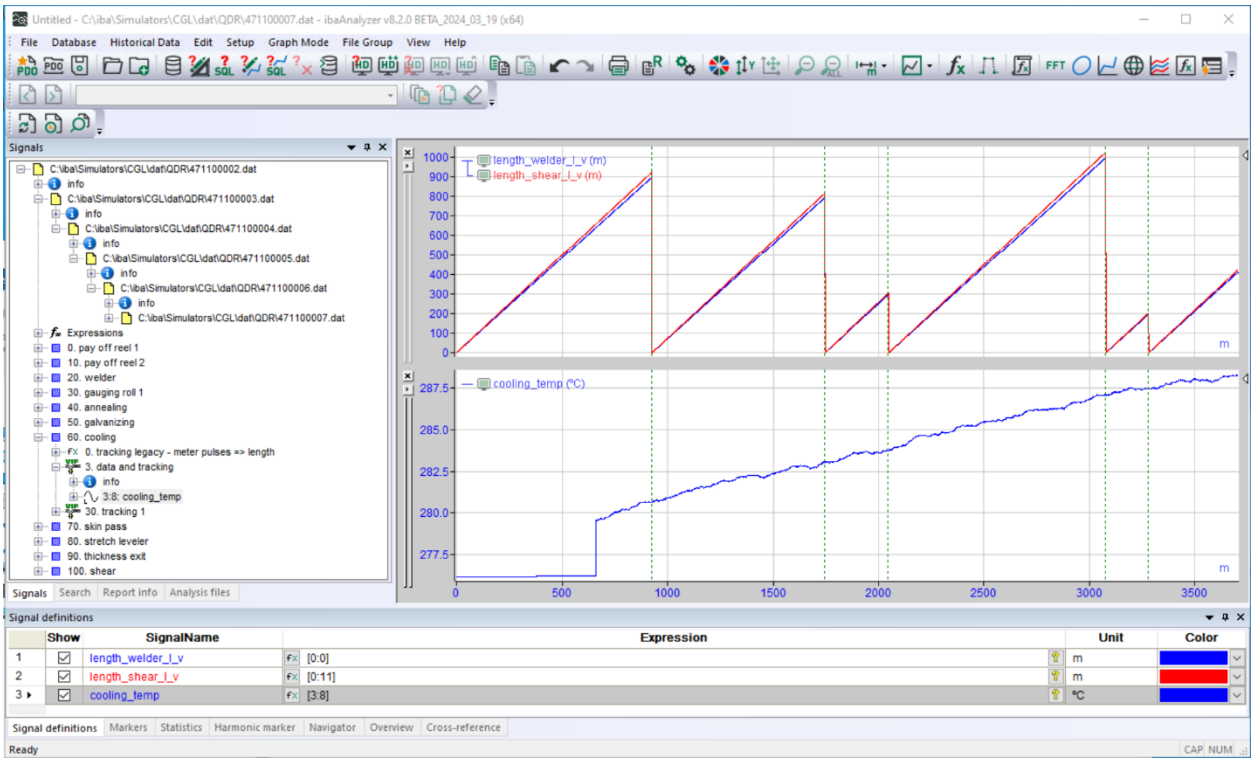
With these parameters, the values of the parent channel (every subchannels has a parent channel) are shown. This is for example useful when working with events where the event (with message text) is the parent channel of the computed values channels.

Note that the parameters ‘%y’, ‘%y1’, ‘%y2’, ‘%py’, ‘%py1’, and ‘%py2’ work also in combination with text channels now.

6.5 File separators for appended QDR files

For appended files, file separators can be shown to mark where the individual files end.

This feature is now also available for QDR files when length-based data are shown from appended files.



6.6 ibaAnalyzer-Maps

With the release of version 8.2.0 of ibaAnalyzer, the product

33.010007 - ibaAnalyzer-Maps

has been discontinued. Consequently, the maps-view in ibaAnalyzer is available now without additional license check.