



ibaPDA

New Features v8.14.0

Release Notes

Issue 1.0

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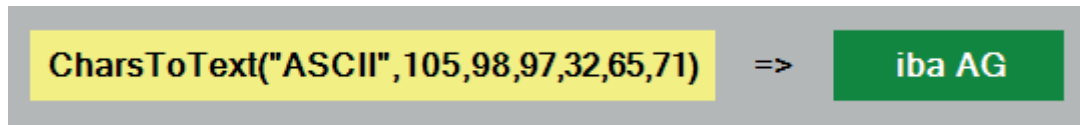
Issue	Date	Author	Changes
1.0	06-2026	rm	New features and improvements in ibaPDA v8.14

New features in version 8.14.0

The following new functions and improvements are available in *ibaPDA* from version v8.14.0.

Analytics: New function CharsToText

This function builds a text string out of single character codes, which are provided as numerical values based on a selected encoding. The encodings ASCII, UTF-8 and UTF-16 as well as other codepage ids are supported. The number of characters to be concatenated in a string is limited to 999. Decimal as well as hexadecimal values are supported. Of course, analog signals may be used as arguments of the function, transmitting the numerical character codes.



Generating readable text from sources which can only process numerical values is made easier by this function.

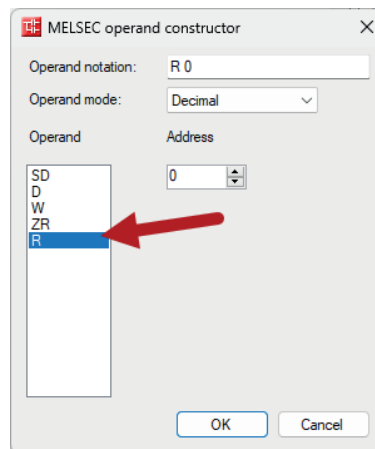
Supporting MQTT 5 broker

The MQTT interface and the MQTT data store now support also MQTT 5 brokers. The MQTT 5 standard offers new features, which are implemented in *ibaPDA* step by step. *ibaPDA* v8.14 supports the following features:

- Session expiry
Time limitation of client sessions after the connection to the server got lost.
- Flow Control
Adjustable property "Receive Maximum" for a stable and efficient connection between broker and client.
- Topic alias
Negotiation of an alias number for each topic between broker and client for the sake of a better bandwidth utilization.

Melsec-Xplorer: New operand type

The interface *ibaPDA-Interface-MELSEC-Xplorer* now also supports the operand type **R** (File register block switching method). This operand type can be selected in the MELSEC operand constructor like all the other types.



Playback module: New playback options and diagnostic module

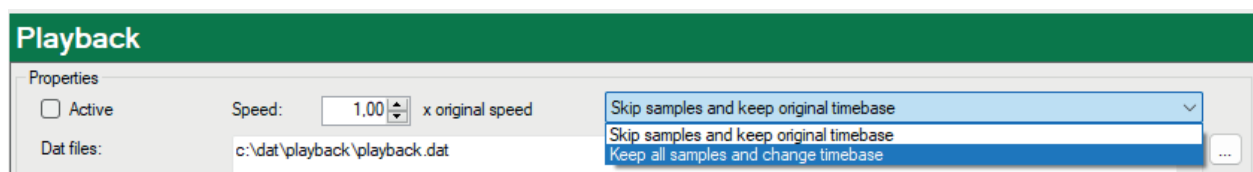
New options are available for playback of data files in *ibaPDA* by using the playback function. If you want to replay the data files faster than the original timebase suggests, you have the choice between two methods:

- Skip samples and keep the original timebase

This is the previous behavior.

- Keep all samples and change timebase

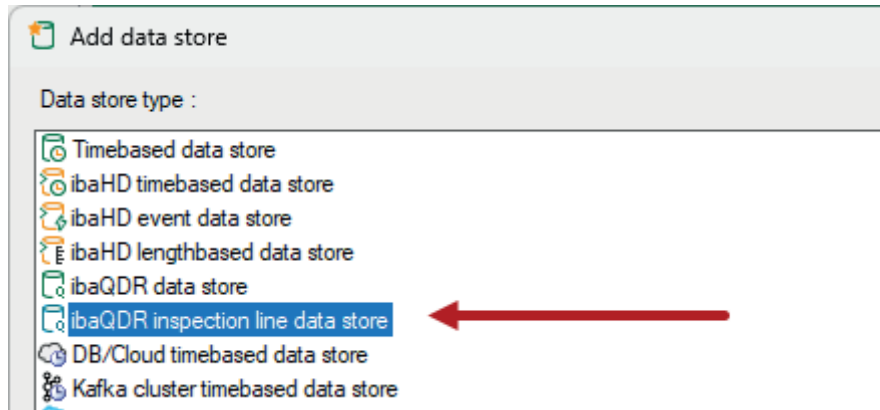
This new method guarantees that each sample is read from the data file. To ensure this at higher replay speed, the timebase is subsequently reduced with regard to the requested factor. For example, if you have a data file with a timebase of 10 ms and you want to replay it ten times faster, the timebase will be reduced to 1/10, i. e. to 1 ms.



As for other interfaces you can now add a diagnostic module for the Playback. The diagnostic module provides information about replay speed, current position in the file and total playback time as analog signals and the pause status as digital signal.

ibaQDR New data store type for inspection lines

There is a new data store type *ibaQDR inspection lines data store* available, dedicated to ensure the correct acquisition and length-based mapping of quality data in inspection lines.



This new data store type for *ibaQDR* systems contributes to the special technological characteristics and operation modes of this plant type.

You will find more information about this in the documentation of *ibaQDR*.

I/O Manager: Module overview

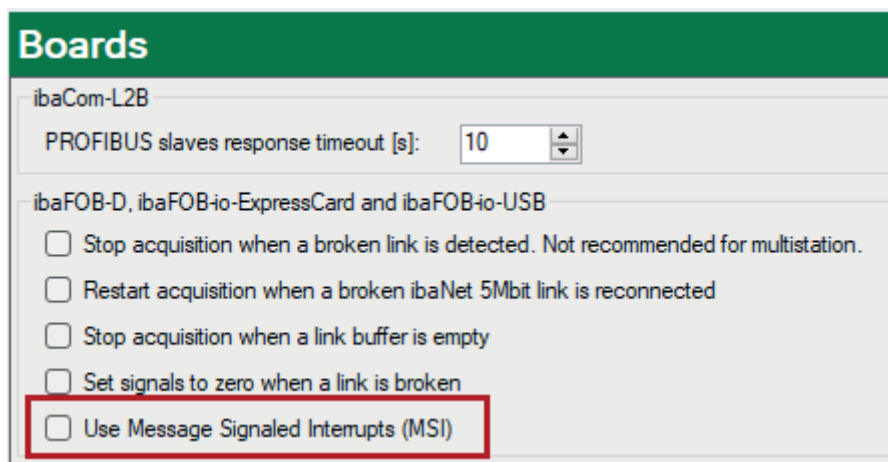
You can now add a column "Samples/s" in the table of the *Module overview* in the *I/O Manager*. The values in this column show the number of samples per second for each module. The values result from the number of active signals of a module divided by the timebase, given in seconds. Furthermore, you can adjust the layout of the table according to your needs by showing or hiding columns or column groups.

ibaFOB-D board: Supporting MSI

The *ibaFOB-D* boards now support "Message Signaled Interrupts (MSI)".

The firmware version E2 or higher is required. You'll find the current firmware in the download area on our website in the *Hardware* category.

MSI is disabled by default. You can enable it in the *I/O Manager*, section *General - Boards*, if needed.



ibaHD-Server: Improved handling of start triggers

In case, another start trigger fires while an *ibaHD timebased data store* is running, you can now decide whether *ibaPDA* should ignore this trigger or start another recording.

ibaInCycle, ibaInSpectra: Import of reference curves for auto-adapting

Reference curves provided as CSV or TXT files can now be imported for the auto-adapting module in *ibaInCycle* or *ibaInSpectra*.

Reference curves, that are available in *ibaAnalyzer*, can be extracted into a CSV or TXT file by using the extractor feature. You can import these files into *ibaPDA*, in the *Edit reference curves* dialog of an InSpectra- or InCycle auto-adapting module. You can also export reference curves or spectra directly out of *ibaPDA*.

Simatic: TIA Portal V21

TIA Portal V21 is now supported.

Request-S7: Merging of licenses

The licenses *ibaPDA-Request-S7-DP/PN/ibaNet-E* and *ibaPDA-Request-S7-UDP* have been merged. Systems, that have the *ibaPDA-Request-S7-DP/PN/ibaNet-E* license only, can now use Request-S7 over UDP without further license. Of course, the corresponding interface license *ibaPDA-Interface-UDP* is still a requirement. The previous limitation of 2 UDP-connections per Request-S7-UDP license has been removed. Hence, no step-up licenses are required anymore if you want to use more than 2 connections. The new license product name *ibaPDA-Request-S7* comes into effect immediately and the order number is 31.001310.

ibaMAQS: New modules

The following new modules in the ibaMAQ System are now supported and can be configured in the *I/O Manager*:

- *ibaM-EIP-S-1G* (bus module for EtherNet/IP, Sniffer mode only)
- *ibaM-8DI-24V* and *ibaM-8DI-220V* (input modules for 8 digital inputs)

Discontinued: Sigmatek-Xplorer

The interface Sigmatek-Xplorer for *ibaPDA* is no longer available.

The function was completely removed from the code, so that the current and future versions of *ibaPDA* are not downward compatible in this regard. If you have configurations using the Sigmatek-Xplorer interface, a change to another interface is inevitable.

Discontinued: Universal and fan module for ibaInSpectra

The two module types *Universal module* and *Fan module* for *ibaInSpectra* applications are no longer available for new configurations. Existing configurations with these modules can still be used.