



New Features in ibaHD-Server v3.0.0

June 2022
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1 Important Information

This document describes the new features of ibaHD-Server v3.0.0.

The main new feature for this version of ibaHD-Server is the introduction of the WIBU license system. Some minor other improvements are also part of this version as well as critical bug fixes.

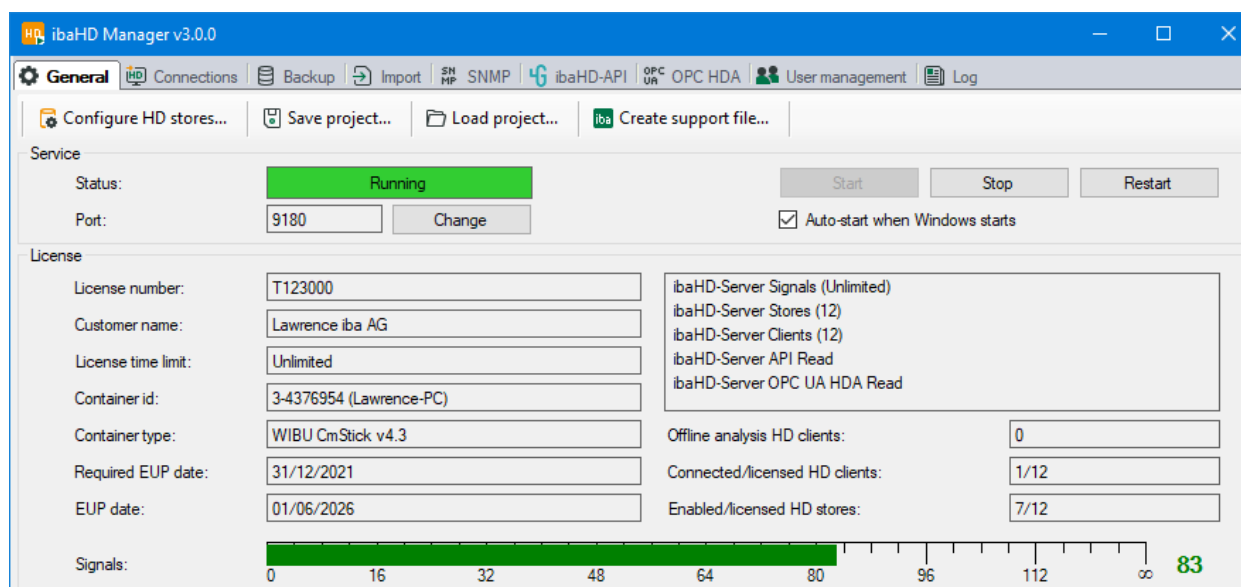
2 WIBU CodeMeter licensing

Up to now ibaHD licenses were stored in dongles from the company MARX. In ibaHD v3.0.0 the licenses can additionally be stored in license containers from the company WIBU. There are 2 types of license containers supported:

- CmStick: This is a USB dongle.
- CmActLicense: This is a so-called “soft container”. It is a file on disk that is coupled to some system IDs.

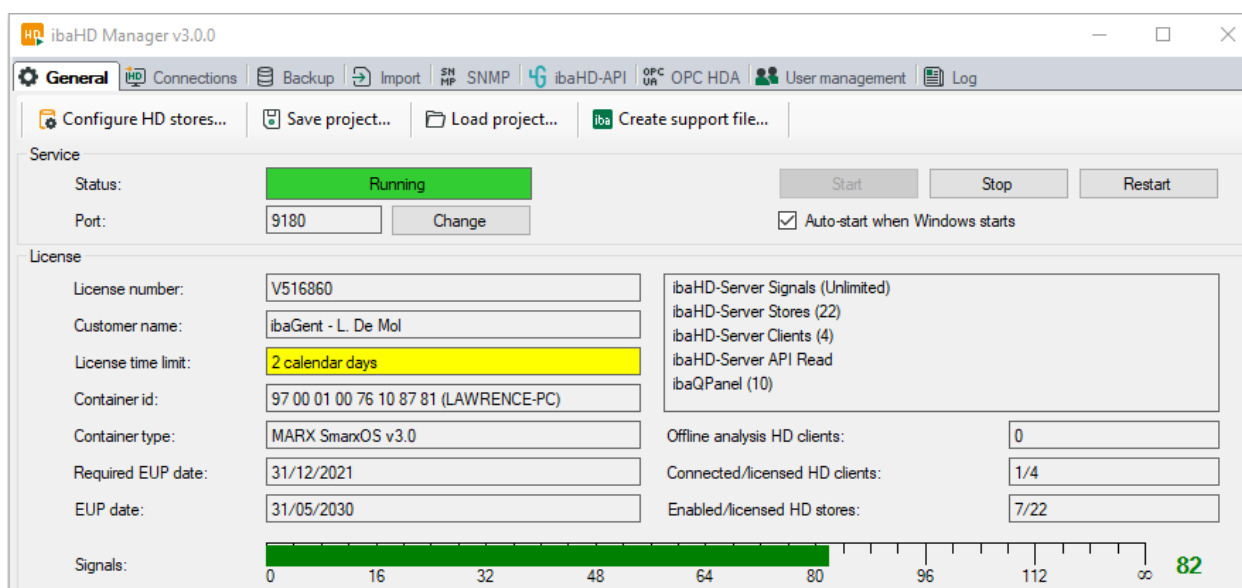
In order to use WIBU licenses the CodeMeter runtime needs to be installed. This is automatically done during the installation of ibaHD.

On the General tab of the ibaHD Manager you can get information about the used licenses.



The screenshot above shows a WIBU USB dongle with container ID 3-4376954. It is attached to PC Lawrence-PC. WIBU licenses can be shared across the local network. Visit <https://www.wibu.com/> to find the manual that explains how to share WIBU licenses and get more information about the license handling in general.

The available licenses at the WIBU CodeMeter Runtime container are provided as list at the ibaHD Manager. The License name is given and the quantity. The number between brackets corresponds to the number of available licenses, e.g. ibaHD-Server Stores (12) means that you have a license for 12 ibaHD stores. Demo licenses are marked in red. In case of a demo license the license time limit tells you when the license will expire. WIBU demo licenses have a fixed expiry date. MARX demo licenses have a number of usage days.



The screenshot above shows a MARX USB dongle.



The about dialog also shows information about the used license.

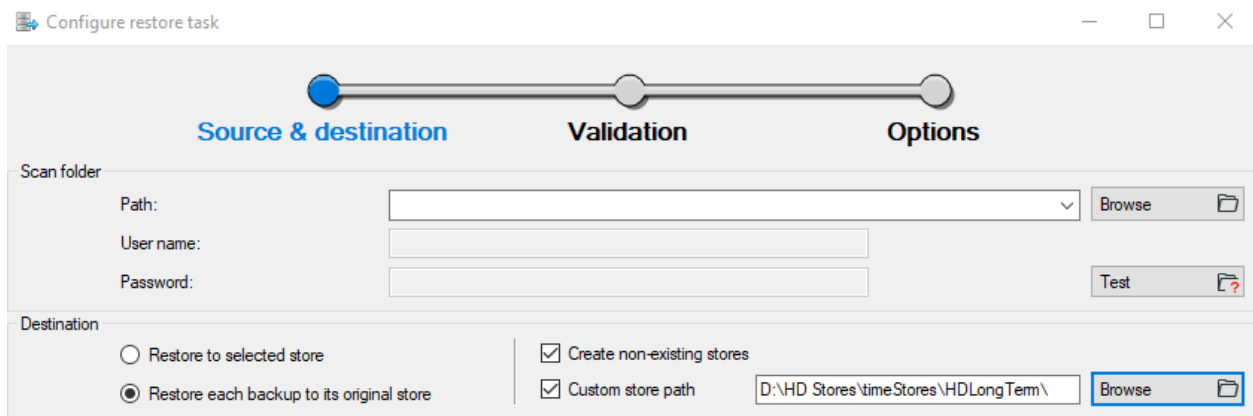
3 Optimized the Event store communication between ibaHD clients and server

When setting an Event store configuration, all configured signals will be serialized and send over the network to the clients. From ibaHD-Server 3.0.0, this configuration is serialized using a json format when connected with compatible clients (ibaPDA v8.0.0, ibaAnalyzer v8.0.0, ibaDatcoordinator v3.0.0). Older clients will still use the xml serialization. Json serialization results in a smaller configuration string which allows for bigger configurations and faster loading times.

4 Allow to restore backups into a new folder structure

If the user restores a backup and selects: 'Restore to its original store' the store would be located on the same drive in the same folder as the original store the backup was created from. When trying to move an ibaHD-Store to a different location using backups, this would require to create a new empty store in the target location, then configure the store to match the old configuration and then restore the backup to this new store.

In ibaHD-Server v3.0.0, it is possible to add a custom store path in the backup restore screen. The backup operation will then recreate the original store from the backup at this custom location.



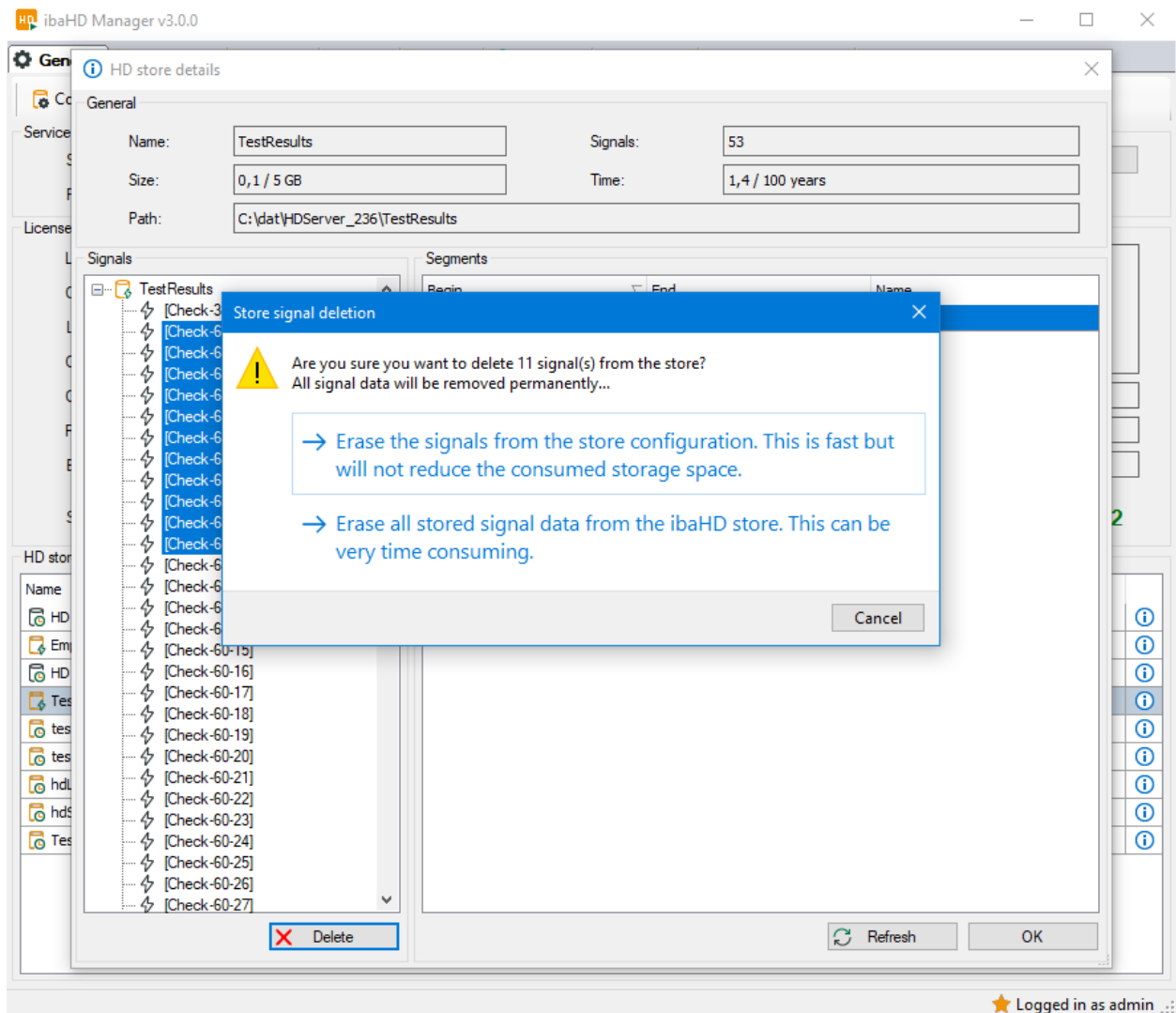
This screenshot shows the restore dialog with a custom store path configured. This option will only be enabled when the options “Restore each backup to its original store” and “create non-existing stores” are checked.

5 Erasing signal data

Erasing event signals would always remove all the signal data from disk. This is a very slow operation, especially in large, long running configurations.

In ibaHD-Server v3.0.0, it is also possible to erase the signals by just removing the signal from the index. The ibaHD-Server will not be able to locate the signal data anymore and the signal cannot be accessed any more but the data is still present in the segments. This will not result in a reduction of the used disk space until the time/sizecleanup removes the data from the segments.

As both options have benefits, the user is given the option to select either the slow operation to remove all signal data from disk or the fast operation to remove the signal from the index only. This can be seen in the screenshot below.




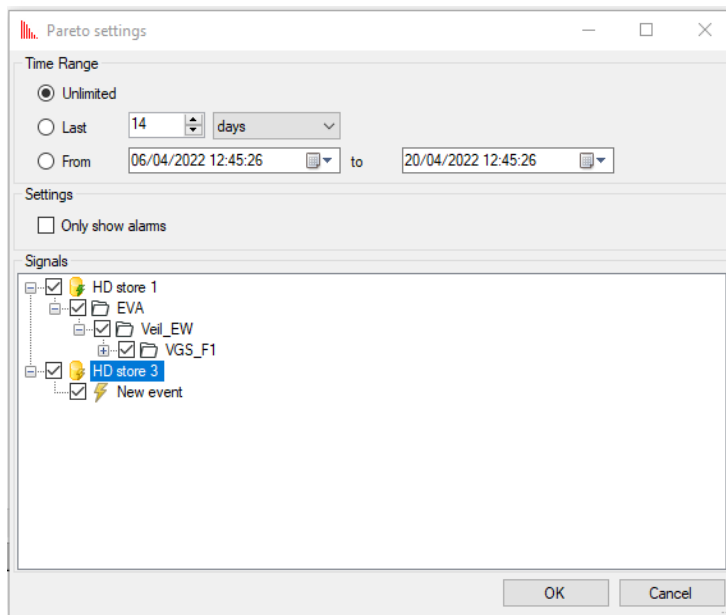
Erasing multiple signals can be done simultaneously by pressing the shift button when selecting the signals and then pressing the erase button.

6 Handling of unknown data

The ibaHD-Server will check at every startup if the store locations contain unknown segments. This allows to remove data that cannot be accessed any more and keeps consuming storage space. Now this data is first moved to a folder "UNKNOWN_DATA" in the store directory instead of permanently removing the files. This allows to recover any data that was lost due to some unforeseen circumstances and could avoid permanent data loss. The unknown data is stored for 14 days before being erased permanently from disk.

7 Event Table PDA: Pareto count

When using ibaHD-Server v3.0.0, the pareto count of events can be calculated and displayed in the HD event table. When clicking the pareto icon  in the toolbar of the HD event table, a popup appears where the pareto settings can be configured, see image below:



First, the time range can be selected in which the pareto counts should be calculated. The option “Only show alarms” if prepared for further functions and has to be unchecked. In the Signals tree window the events for which the pareto count should be calculated can be selected. The signals in the tree are only the currently selected signals in the event table properties.

When pressing “Ok”, the pareto counts will be calculated in the ibaHD-Server and displayed in the ibaPDA event table as seen below:

Count	Event	Folder	Message	Priority
17044	W1_B0_T2	VGS_F1	I 4.0	
8522	W1_B1_T2	VGS_F1	I 4.1	
6386	New event		test event	
4261	W1_B2_T2	VGS_F1	I 4.2	

To reexecute the pareto calculation or change the pareto request settings, the pareto icon can be pressed again.

8 License Tags

ibaHD-Server V3.0.0 supports licenses with number of signal tags of 128, 512, 4096 and 8192. These increments are similar to the ibaPDA signal tags now.

The new tag levels are available for MARX and WIBU dongles.