

All new IviumSoft

A new generation IviumSoft control and data analysis software has been developed. This new generation IviumSoft is both more stable and supports the latest electronic hardware and computer capabilities.

The layout and user interface of the new generation IviumSoft is exactly the same, so all functions are still where you would expect them. The new IviumSoft can be identified by its version number starting with 4, the previous generation IviumSoft had a version number starting with 2.

If your version IviumSoft is working well for you, there is no immediate need to update to the new generation IviumSoft. But to be able to use the latest features and improved stability, Ivium advises you to update to the new generation IviumSoft.

Main new features:

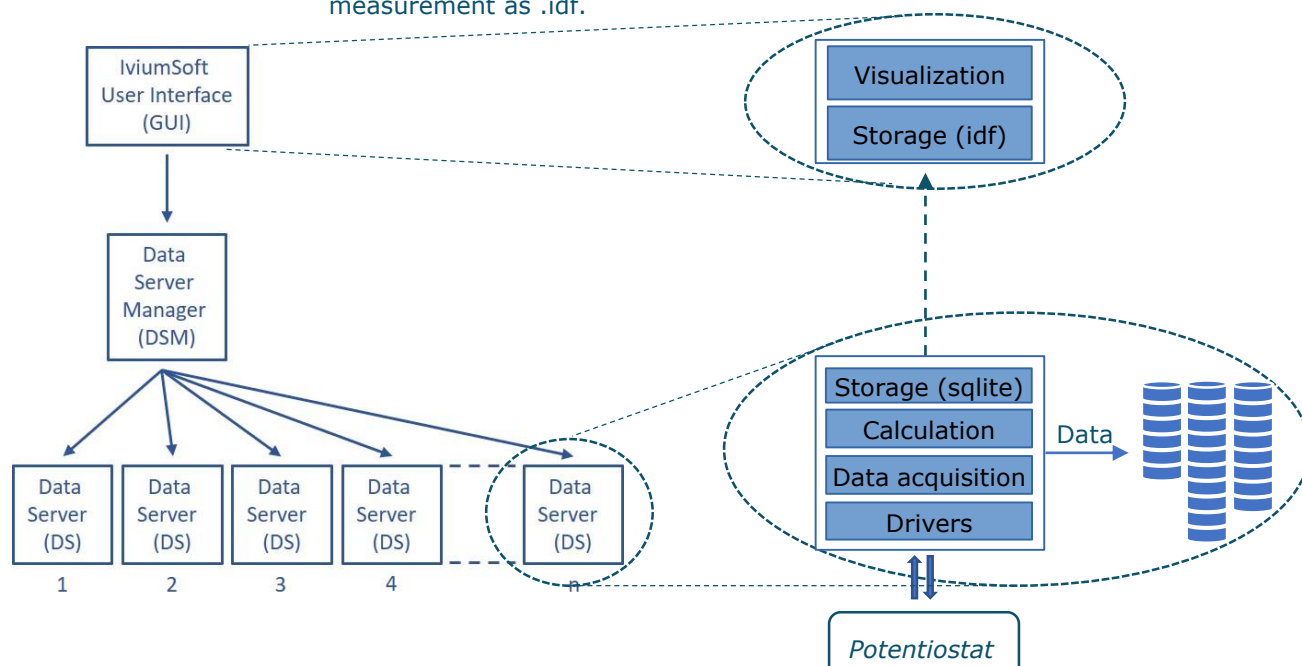
- **Split level operation for better system stability**
- **Data is stored real time in SQLite Data Base files**
- **CycliScan: battery testing module**

SPLIT LEVEL OPERATION

In the new generation IviumSoft the various processes are split into 3 levels. Each level can run independently. As a result, anomalies in one operation do not reflect on the other levels. In other words: if your IviumSoft crashes, the measurement and data acquisition will just continue. Restarting IviumSoft will resume the result representation as if nothing happened.

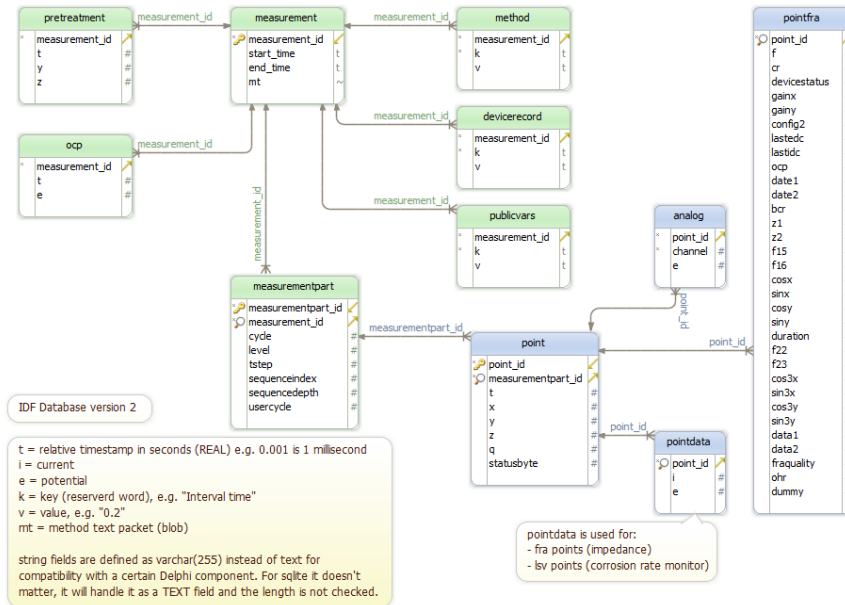
Three levels:

- Data Server:** Background operation for each connected potentiostat/channel that handles data acquisition and saves to disc automatically. Also the drivers and batch operation are handled here. Data is saved by the DS real time as SQLite database file.
- Data Server Manager:** Background operation that coordinates all Data Servers and communication to IviumSoft.
- IviumSoft:** Graphic user interface for interaction with the instrument, as well as data visualization and analysis. Data is saved by the GUI upon completion of the measurement as .idf.



DATA IN SQLITE DATA BASE FILES

Data is saved automatically to the computer hard disc in real time so that data is never lost. The data is saved in SQLite data base records. These records (files) contain much more data than available in the traditional .idf files, such as current range and overload information for each datapoint, labels to identify to which cycle the datapoint belongs, etc.



CYCLISCAN: BATTERY TESTING MODULE

To further support battery applications and our OctoStat battery cyclers a dedicated module has been introduced in IviumSoft for battery testing. Currently, the CycliScan module is available as a beta version. It can be enabled from the menu Options > Datahandling Options, by checking the relevant box at the left bottom of the pop-up window.

- Setting: Instrument E/I range settings
- Meas: Data acquisition settings
- Data: Battery data (capacity,density,etc.)
- Limits: Global safety limits (E,I,Temp,etc.)
- Report: Data and time stamp, remarks and notes

Task field:
Build your battery test routine here.
Charge/discharge, CC, CV, CR, CP, OCV, EIS, LSV, local limits, loops, go-to, profile, pulse, etc.

Task	Flow	Action	Mode	Apply	Limit	Options	Variables
1	Single	N	CV	E	0.000 V	select	Counter select
2	Single	N	CV	E	0.000 V	select	Transform select
3	Single	N	CV	E	0.000 V	select	Counter select
4	Single	N	CV	E	0.000 V	select	Counter select
5	Single	N	CV	E	0.000 V	select	Counter select

Number of tasks per scan Number of cycles the scan is repeated Dock or Undock the Edit window

Design a scan for this instrument; checks settings against instrument capability when instrument is not connected.