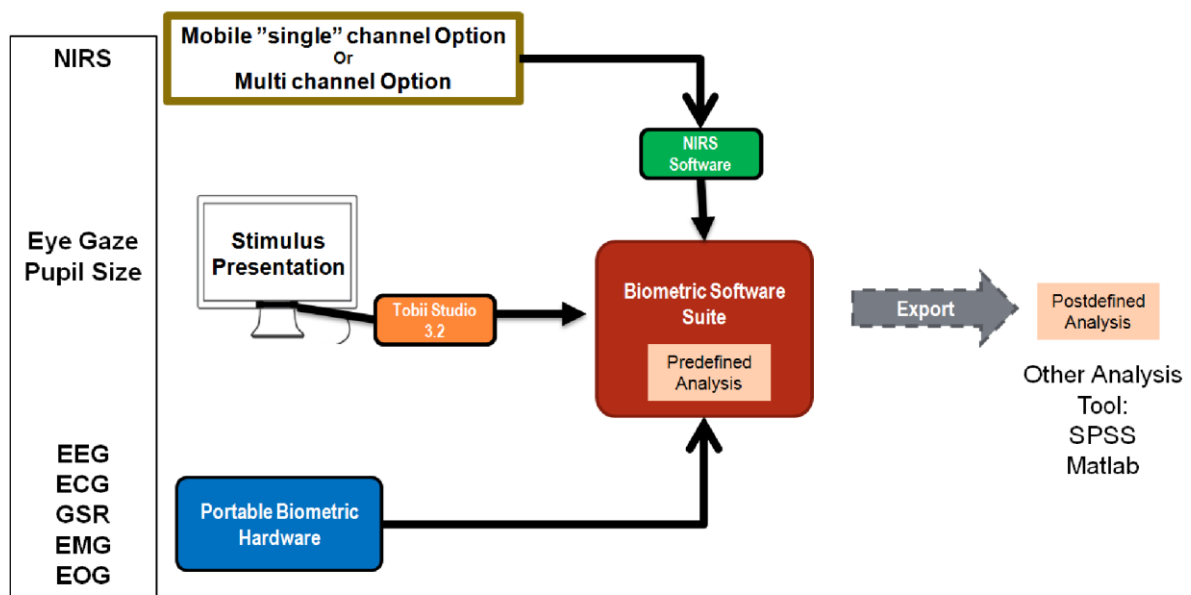


Biometric Software Suite

Overview

Biometric Software Suite builds a bridge between Tobii Eye Trackers and other independent devices for the synchronized collection of biometric data, such as EEG, ECG, EMG, GSR and NIRS with eye tracking data. A modular approach utilizes specific import profiles combined with automatic synchronization algorithms, thus assisting to combine data from these different instruments with specific eye tracking content like pupil width and vision triggered events such as saccades, fixations, and area of interest-dependent events.

The synchronized information can then be exported in a generic data format for further analysis into software tools like SPSS and MATLAB®. It is also possible to import the merged data as video material back into Tobii Studio for qualitative inspection in conjunction with an eye tracking experiment.



Due to its modular architecture, the Biometric Software Suite is also extendable by different plug-ins for data preprocessing and visualization. Interfaces to open source software packages R and Octave help to reuse already defined algorithms and extend the suite to a vast amount of available methods for signal processing.

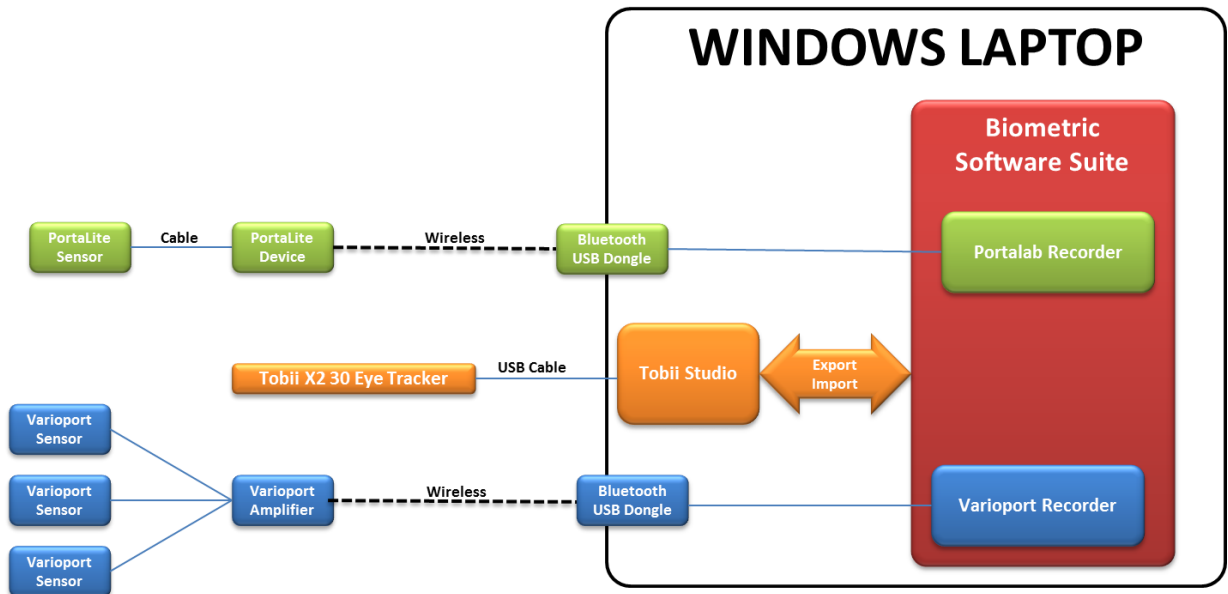
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Biometric Software Suite

Online Data Recording Scenario

Biometric Software Suite supports offline import of pre-recorded data as well as online data recording and synchronization from devices which supply information via open interfaces, such as TCP/IP during recording time.



The image below identifies an example of the combination of a Varioport recorder from Becker MediTec recording biophysical signals via multiple sensors together with the mobile NIRS system PortaLite from Artinis. Synchronization events are subsequently transmitted to Tobii Studio for import and combination with the eye tracking data.

