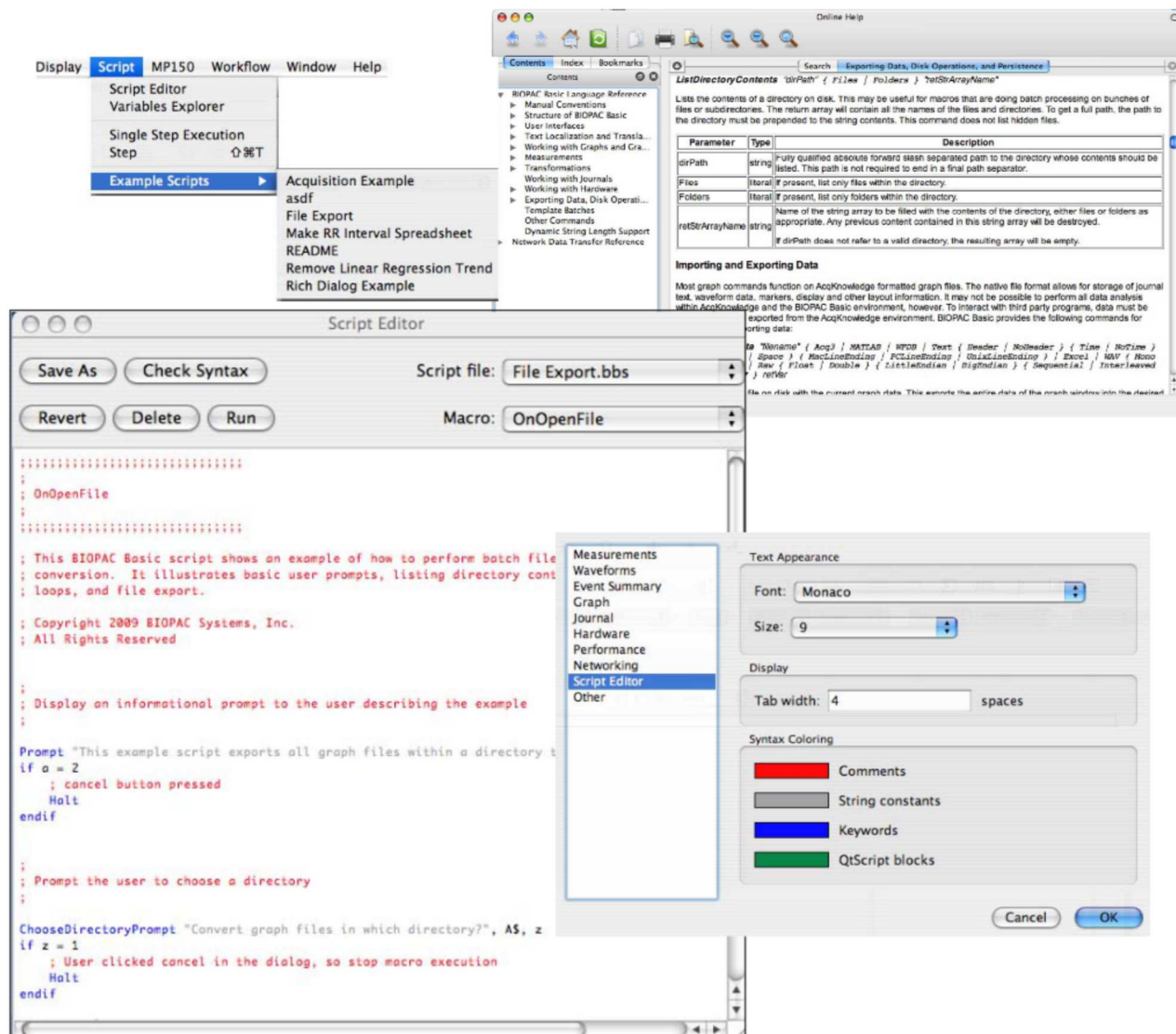# BIOPAC Developer Suites

Tools for Scripting, Network Data Transfer, Hardware & Software APIs

• Scripting • Network Data Transfer • Hardware API • Software API

BIOPAC Basic Scripting

New scripting language development option for AcqKnowledge 4.1 or above allows for viewing of runtime variables, creating new and editing existing script files, triggering of individual script functions for testing, and accessing breakpoints and single step functionalities.

- Single Step Execution mode halts execution after each individual line of a macro, allowing users to step through macros line by line for debugging and development purposes.

- The Variables Explorer window shows the contents of the scripting language variables.

BIOPAC Developer Suites

Network Data Transfer

Network Data Transfer (NDT) is a real-time data transfer system that allows access to the data being acquired into a graph by Acq*Knowledge* for use in an external application; the computer used to run the Acq*Knowledge* process andthe custom application may be the same computer.

- Allows third party applications—including the Vizard VR development environment—to tap into the data stream generated by the MP unit and Acq*Knowledge* during acquisitions.

- Provides networking facilities that allow for integration into a distributed application environment.

- Provides basic controls to allow external applications to query and control the Acq*Knowledge* application state.
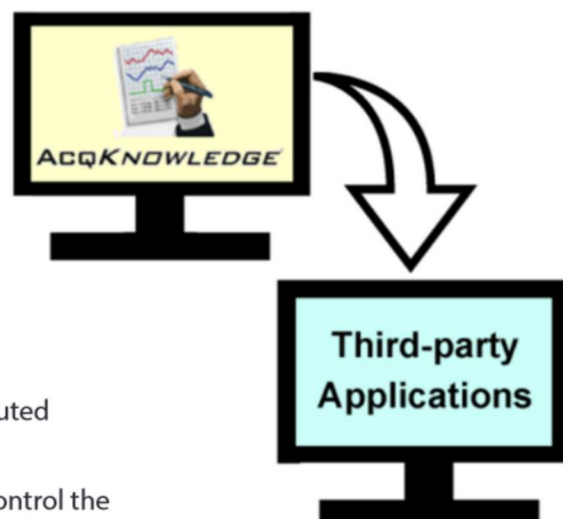
Hardware API Research MP160/MP36R or Education MP36/MP35 (Windows only)   Not available for MP40 or MP45

The hardware API gives developers control over BIOPAC MP160, MP36R, MP36 and MP35 acquisition units to

- Acquire data
- Acquire at different sample rates
- Set triggers
- Get the status of the MP unit
- Use the Analog Output channels
- Use the Digital I/O

The implementation of these functions is compiled into a Windows 32-bit DLL called "mpdev.dll." The interface is documented in C/C++ but any programming language that is able to utilize Windows 32-bit DLLs should be able to access the BIOPAC Hardware API. The hardware API includes sample projects for C/C++, C#, LabVIEW (v8.2), MATLAB, and VB.NET Site Licenses are available for the Hardware API; see BHAPI-9, BHAPI-24, and BHAPI-99 to extend the number of concurrent licenses.

Software API read-only access to Acq*Knowledge* 4.4 or above generated files (Windows only)

The BIOPAC File Format Application Programming Interface (API) is a software library to identify and parse information in BIOPAC's ACQ binary file format for programmers to use when creating applications for alternative analysis. Use the base functions in a variety of combinations for use in a new application.

- Initialize an ACQ file structure
- Close an ACQ file structure
- Retrieve channel information
- Retrieve samples by segment of a specified channel
- Retrieve all samples of a specified channel
- Retrieve a particular sample of a specified channel
- Retrieve samples by time slice of a specified channel
- Retrieve Journal Text
- Retrieve marker information
- Retrieve marker text of a specified marker
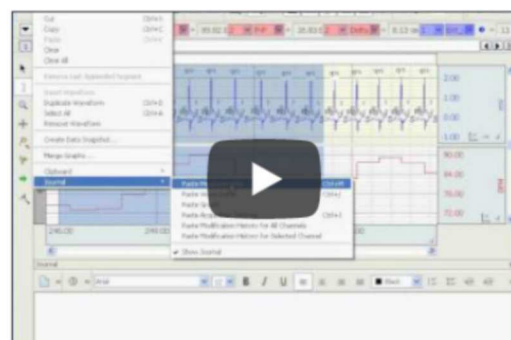
Video Tutorials Available!

Contact BIOPAC to learn more or request a quotation!