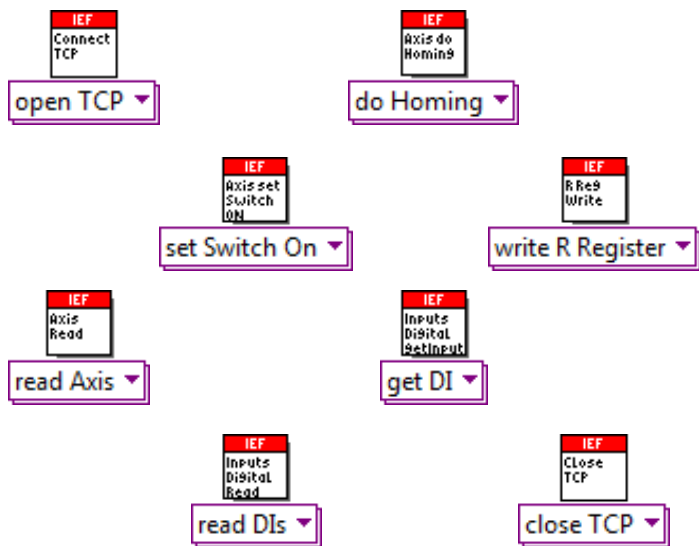
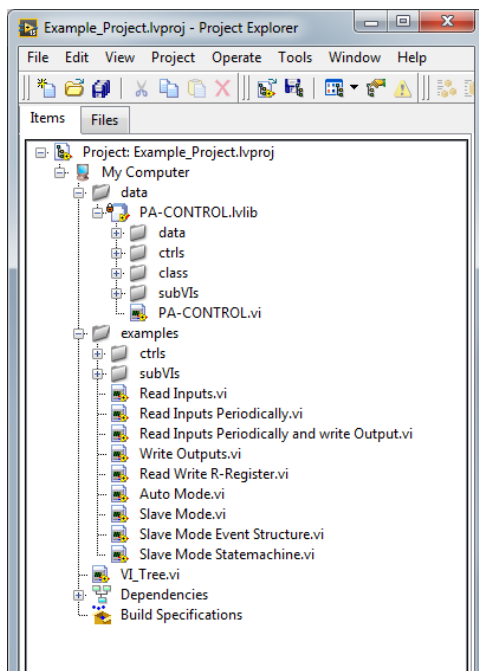


LabVIEW driver library for PA-CONTROL by IEF Werner GmbH - brief description -



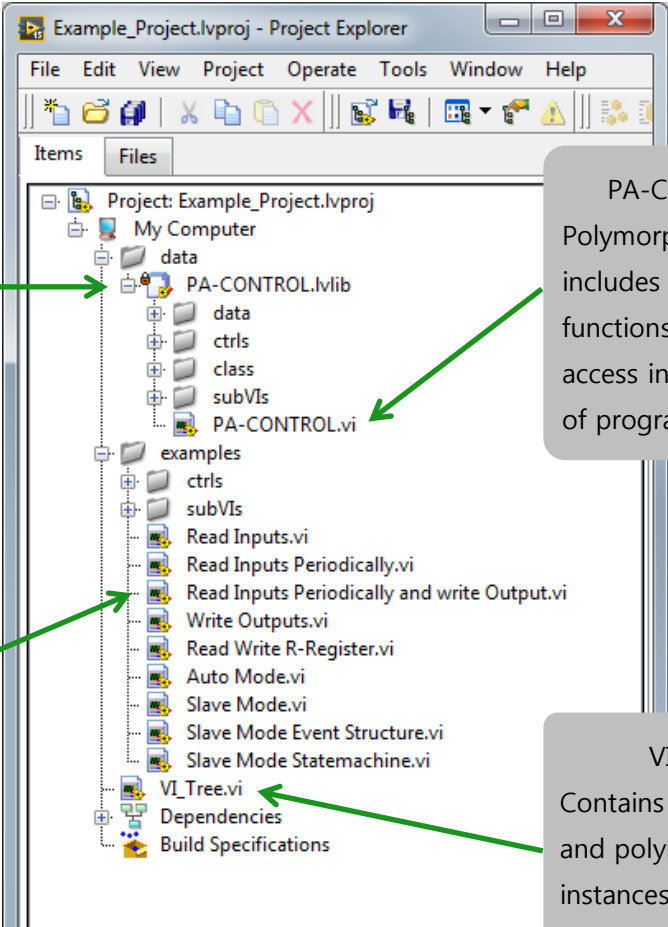
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Author: Andreas Ketterer

1. Example LabVIEW project

The example project is designed to make the development work more intuitive. The project is designed with LabVIEW 2015 and should be compatible with newer version



The screenshot shows the LabVIEW Project Explorer for a project named 'Example_Project.lvproj'. The project is organized into several folders: 'My Computer', 'data', 'PA-CONTROL.lvlb', 'examples', 'Dependencies', and 'Build Specifications'. The 'PA-CONTROL.lvlb' folder contains sub-folders for 'data', 'ctrls', 'class', and 'subVIs', along with the 'PA-CONTROL.vi' file. The 'examples' folder contains various example VIs such as 'Read Inputs.vi', 'Write Outputs.vi', and 'Auto Mode.vi'. The 'VI_Tree.vi' file is located at the bottom of the project tree.

PA-CONTROL.lvlb:
Library that contains all elements needed for PA-CONTROL.vi.

PA-CONTROL.vi
Polymorphic VI that includes all supported functions for an easy access in the process of programming.

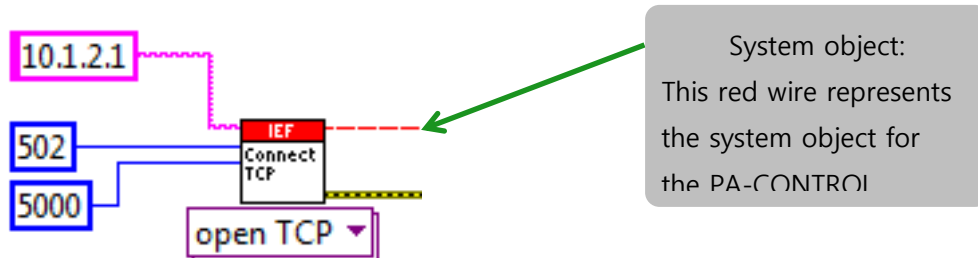
Various examples:

- Read Inputs
- Write Outputs
- R-Register
- Auto Mode

VI Tree:
Contains all examples and polymorphic instances of PA-CONTROL.vi.

2. System object

The "open TCP" function creates a connection to the PA-CONTROL, which acts as a TCP server. For each connection the "open TCP" function initializes an empty data object for the PA-CONTROL system. Every other function needs the system object as an input parameter.

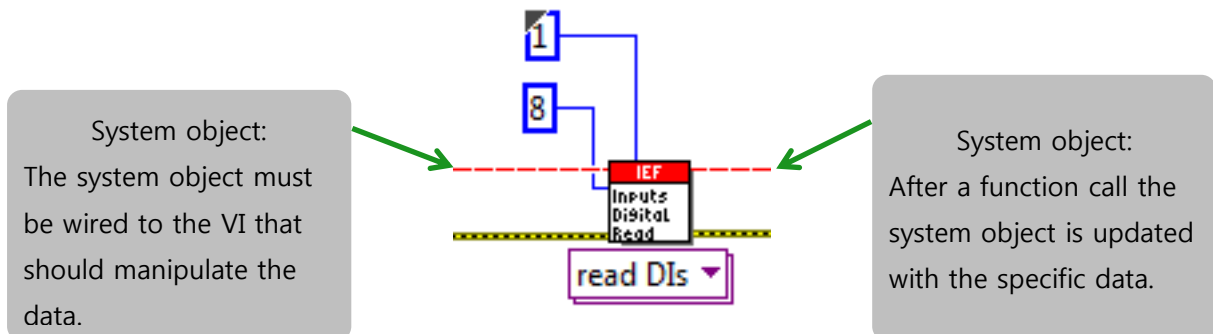


The IEF system object holds all data from one TCP connection.

"read" and "write" commands trigger a TCP message to the hardware.

"get" and "set" commands manipulate the data stored in the object in your LabVIEW application.

"do" commands manipulate the data stored in the object in your LabVIEW application and trigger a TCP message to the hardware.



Consider the following:

If you connect to the same system N times, you get N objects that hold the data individually.

3. Polymorphic VI

The central element of the LabVIEW driver library is the PA-CONTROL.vi, which can be placed on the block diagram and used as a starting point for programming. All supported functions are available via the polymorphic VI selector. Copy this VI several times, select your desired function and wire them together.

