

Using modules under Labview

This document provides information in using the DLL's provided with J-Works USB modules under Labview. The basics of using the DLL is to import the DLL using the Labview import command. This generates a Labview VI for each of the function calls of the DLL. These vi's then can be used to communicate with the module. The screen shots shown in this document is for one of the dll's and actual dll names, header file names, function names and parameter names will be different for each of the unique modules.

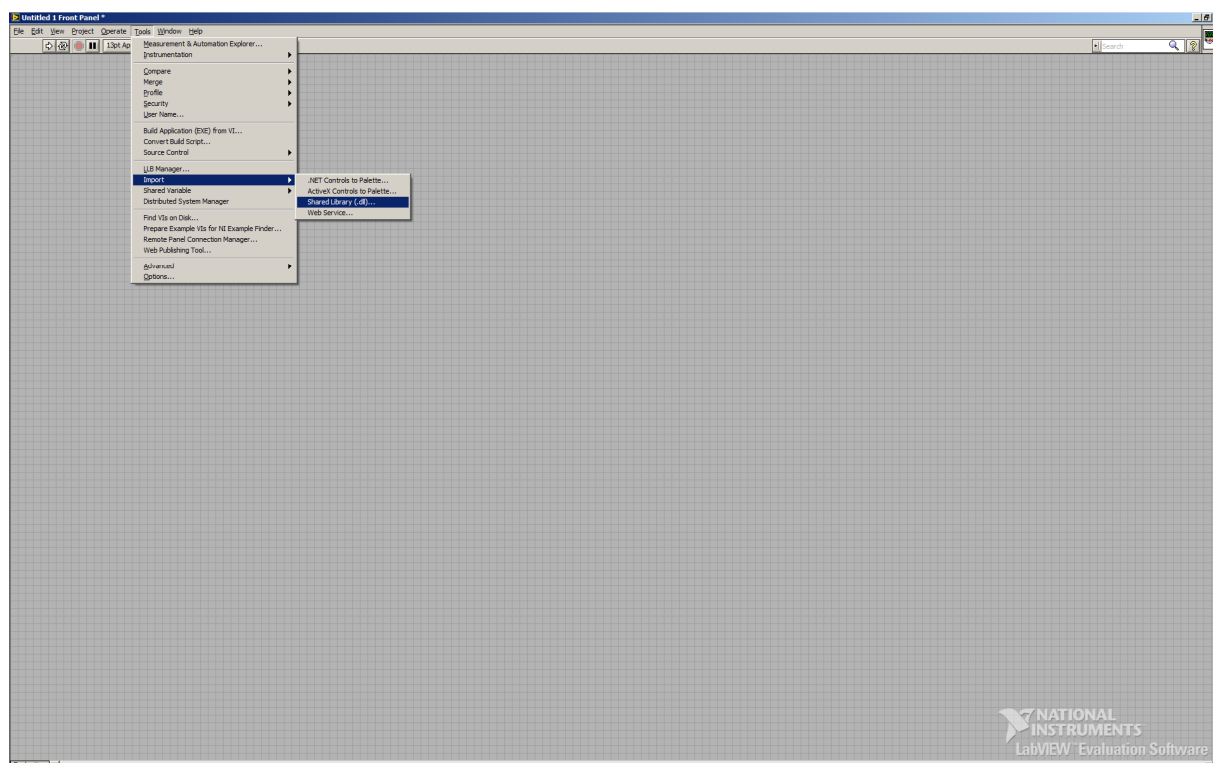
There are two files required from the CD shipped with the J-Works USB modules, one is the DLL file itself (extension of .dll). This is the older standard windows DLL, not the "Class Library" version. The other file is the header file (extension .h) for the dll, generally used in other programming languages. Both of these are usually located under the "DLL" directory. There can be two (2) versions of ".dll" files, one is the 32 bit and the other is the 64 bit. Use the one for the version of Labview you are running. Copy these files to a working directory of your choice.

The ".h" header file needs to be modified slightly before using it to import the DLL. Any place a type of "LPCTSTR" is used, it needs to be changed to "LPSTR", the first indicates a constant string, and most versions of Labview do not recognize that type.

Steps to import the DLL into Labview

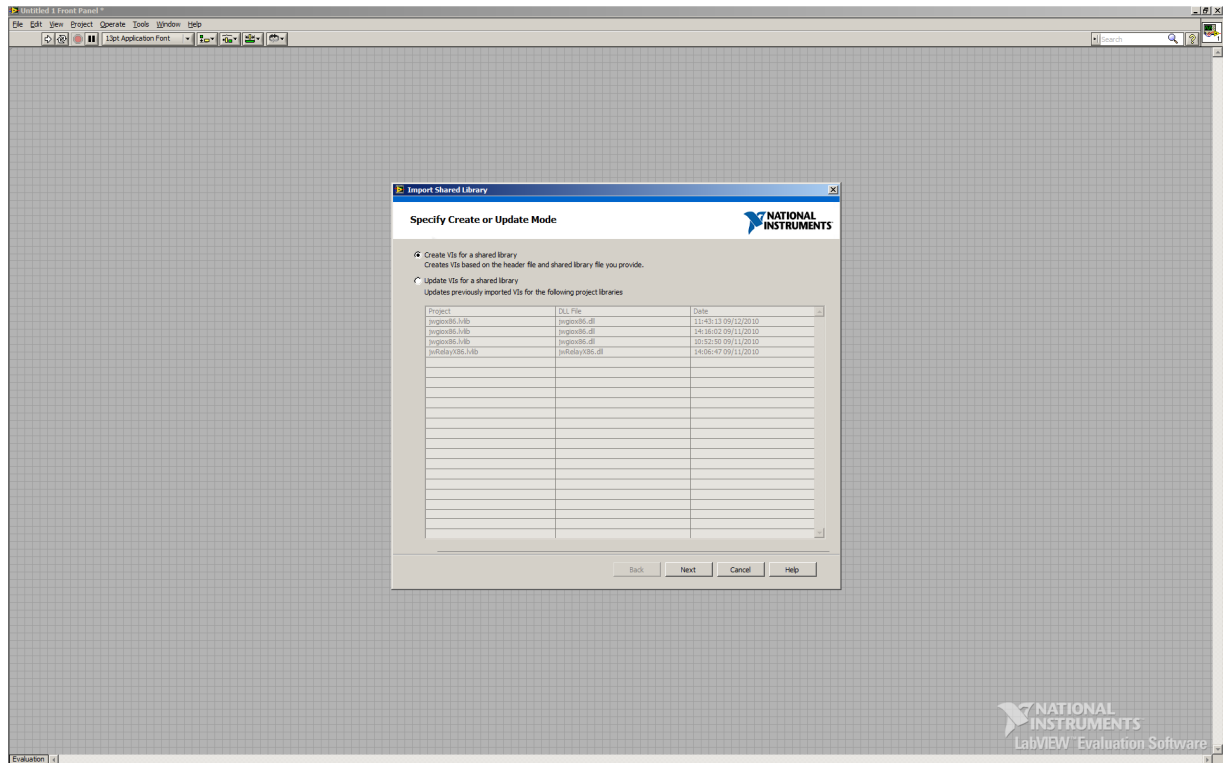
1.0 Start Labview

2.0 Under the tools menu select "Import



Using modules under Labview

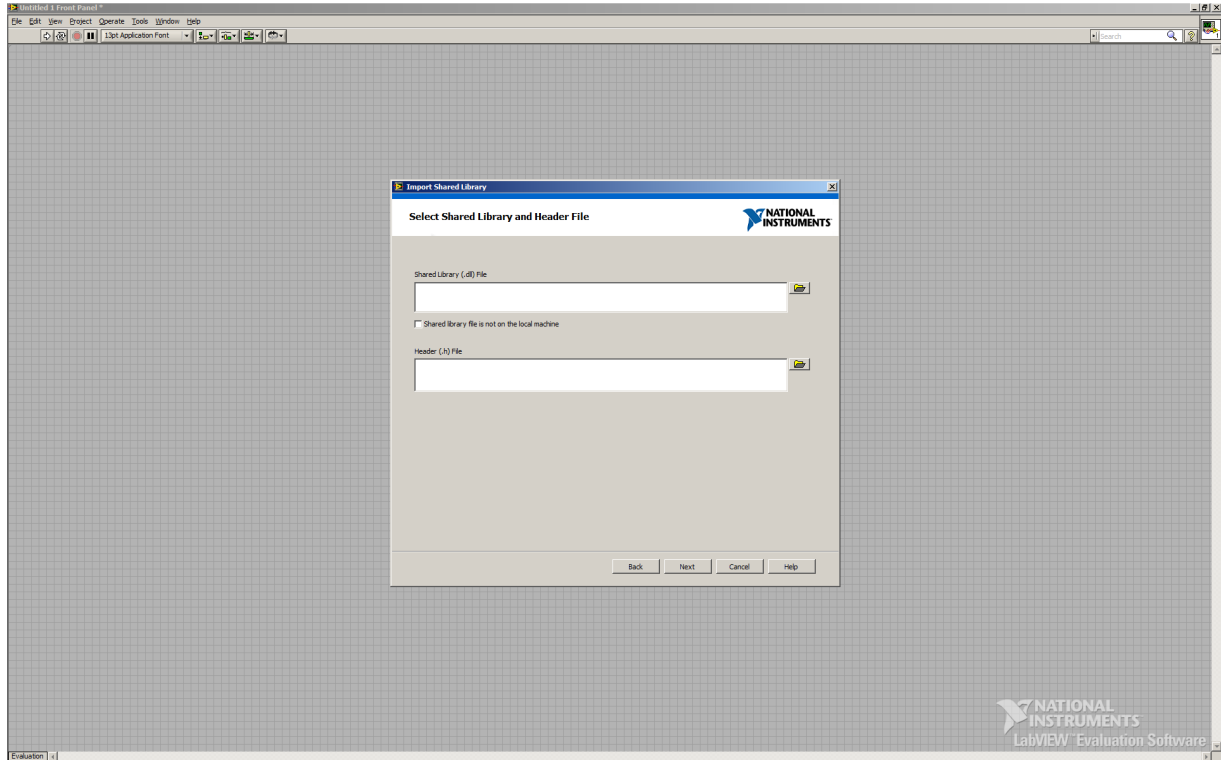
3.0 Select Create VIs for a shared library, click next



The files under the update table will not be the same as shown

Using modules under Labview

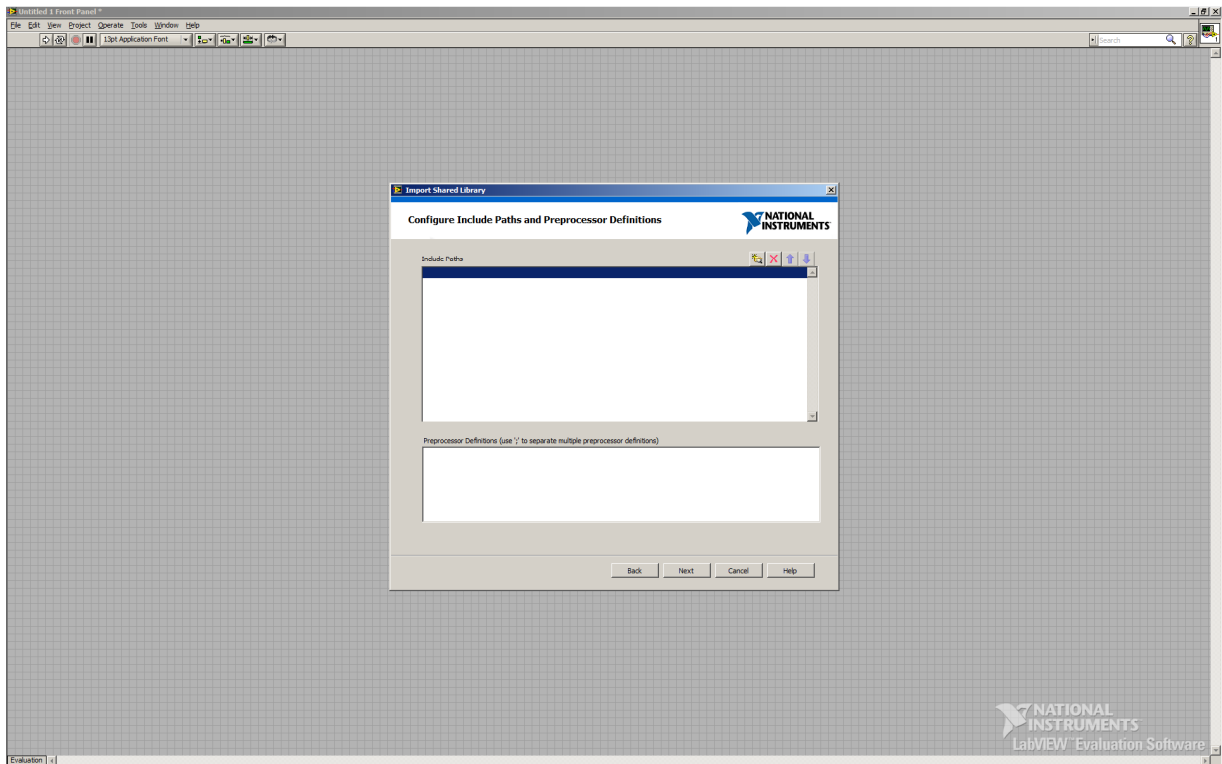
4.0 Browse to the location that your copied the .dll and .h files, and select them, click next



The .h file must have been edited to replace the “LPCTSTR” to “LPSTR”.

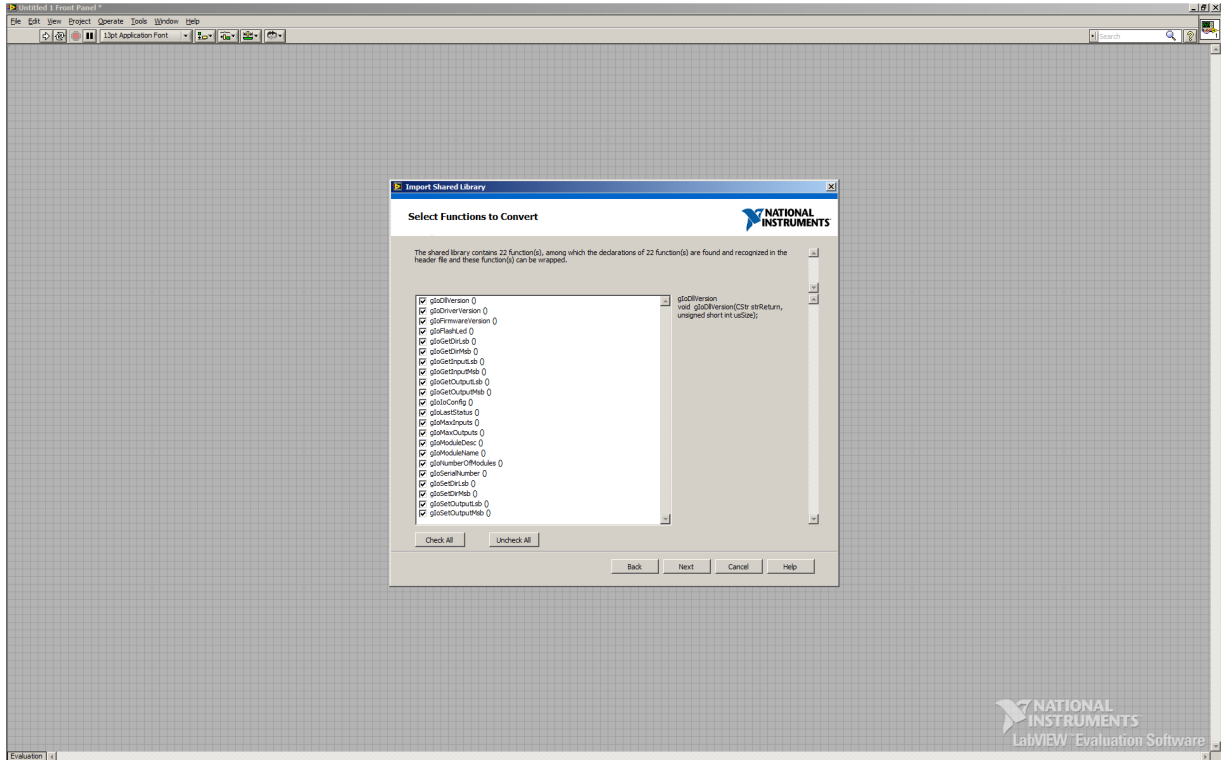
Using modules under Labview

5.0 Click next, on configure include path dialog



Using modules under Labview

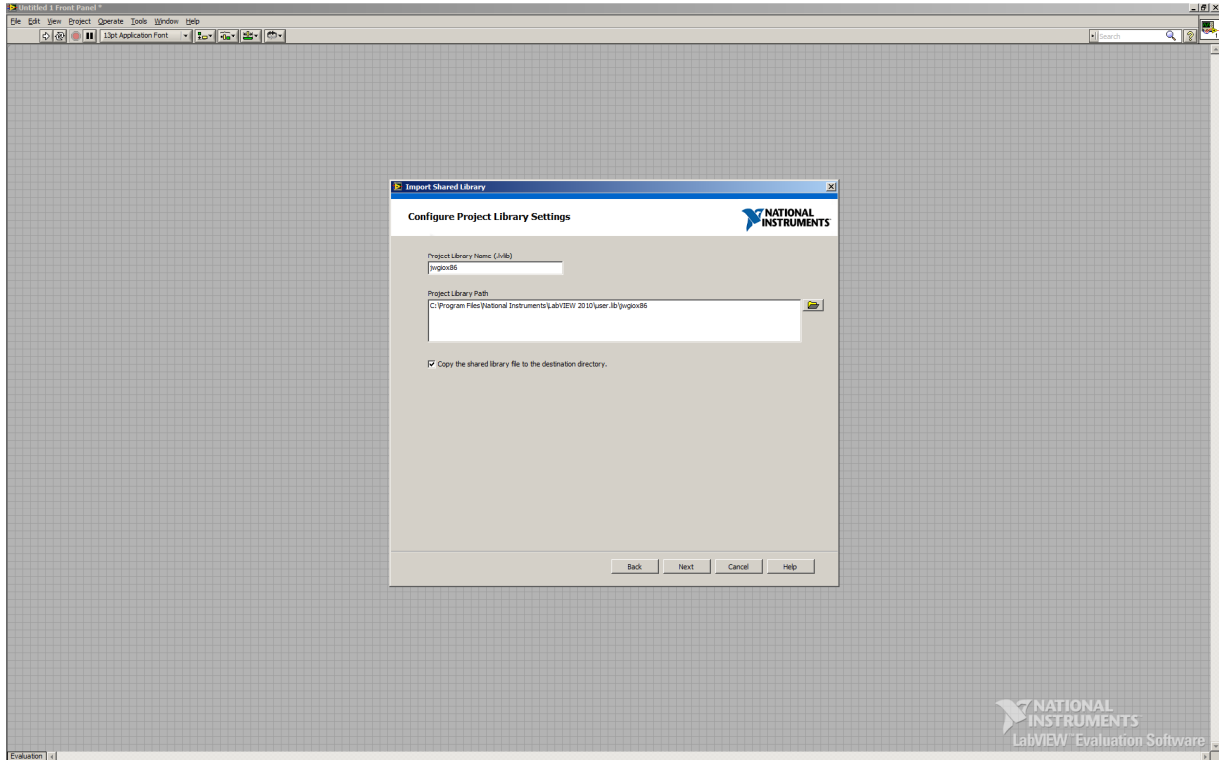
6.0 Click next



This is a list of all the available functions. If any are not checked, or shows errors, the most likely problem is that type used in the “.h” file is not supported by Labview and the “.h” file needs to be edited to a type that it supports. This list will be unique to each of the modules, and are the functions used to control the module.

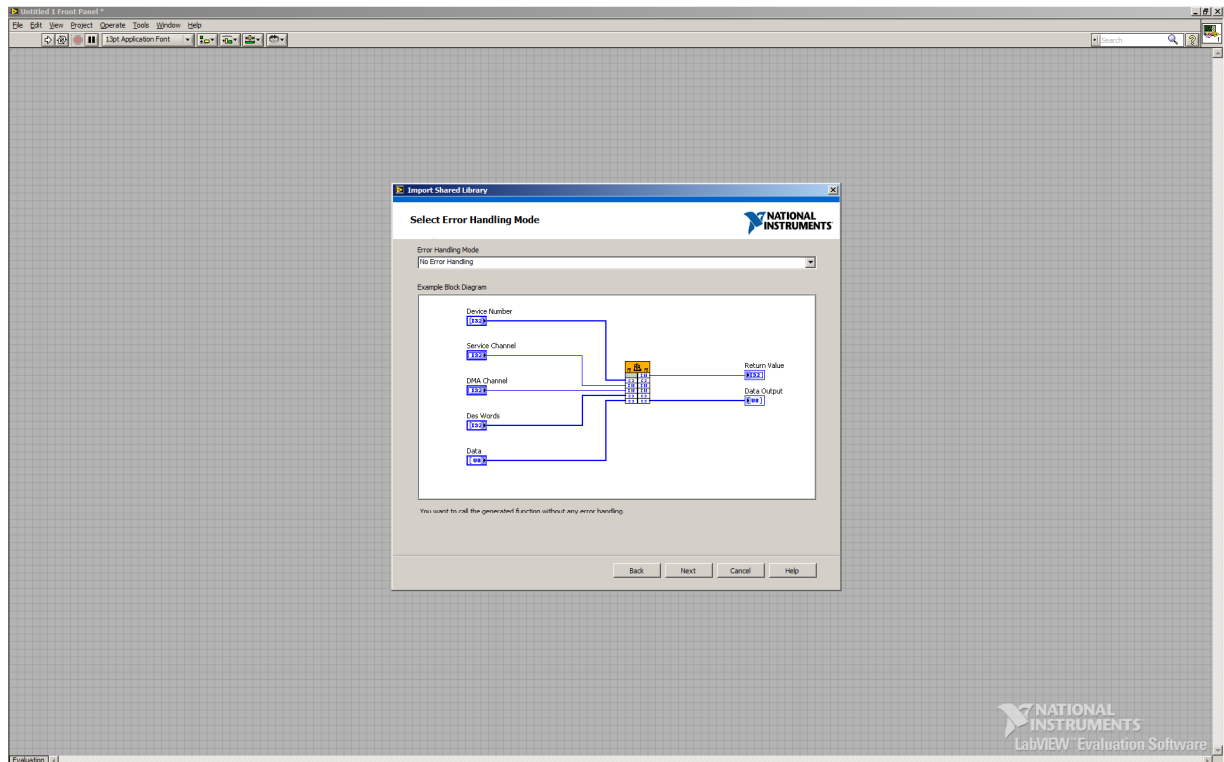
Using modules under Labview

7.0 Choose a project library name, and path, click next



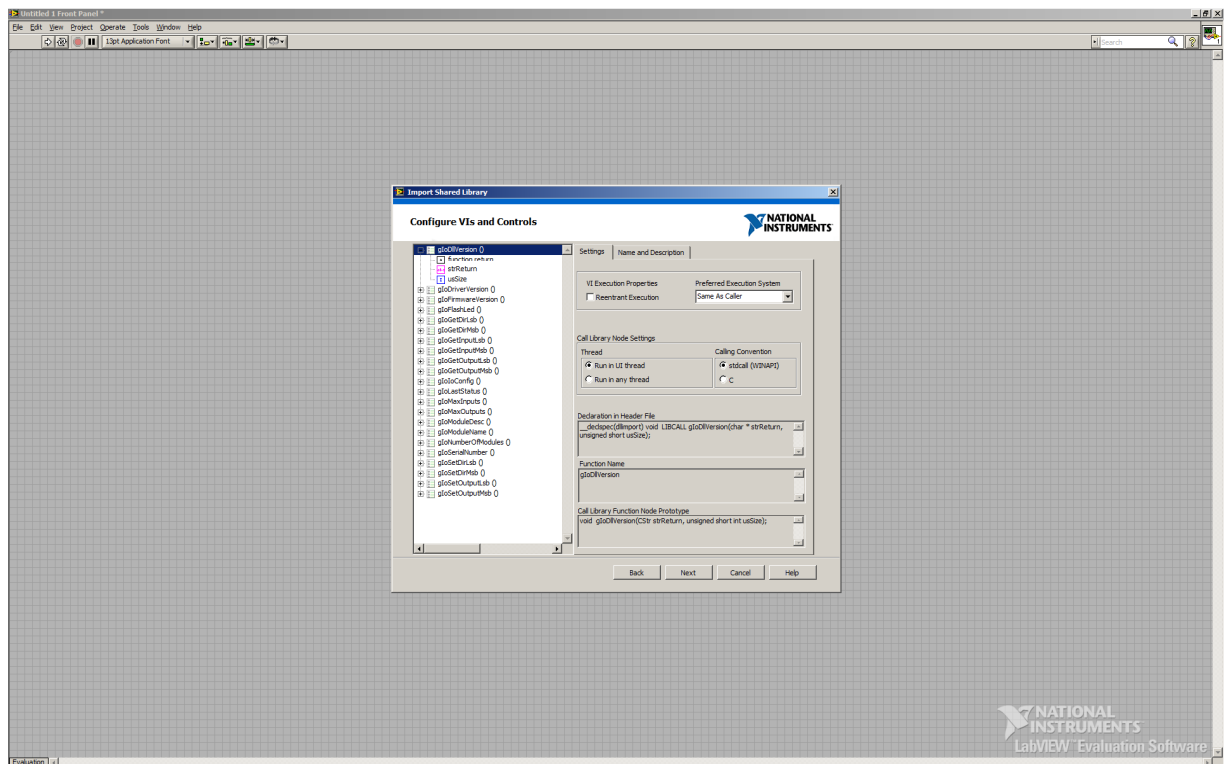
Using modules under Labview

8.0 Click next on Error handling mode dialog



Using modules under Labview

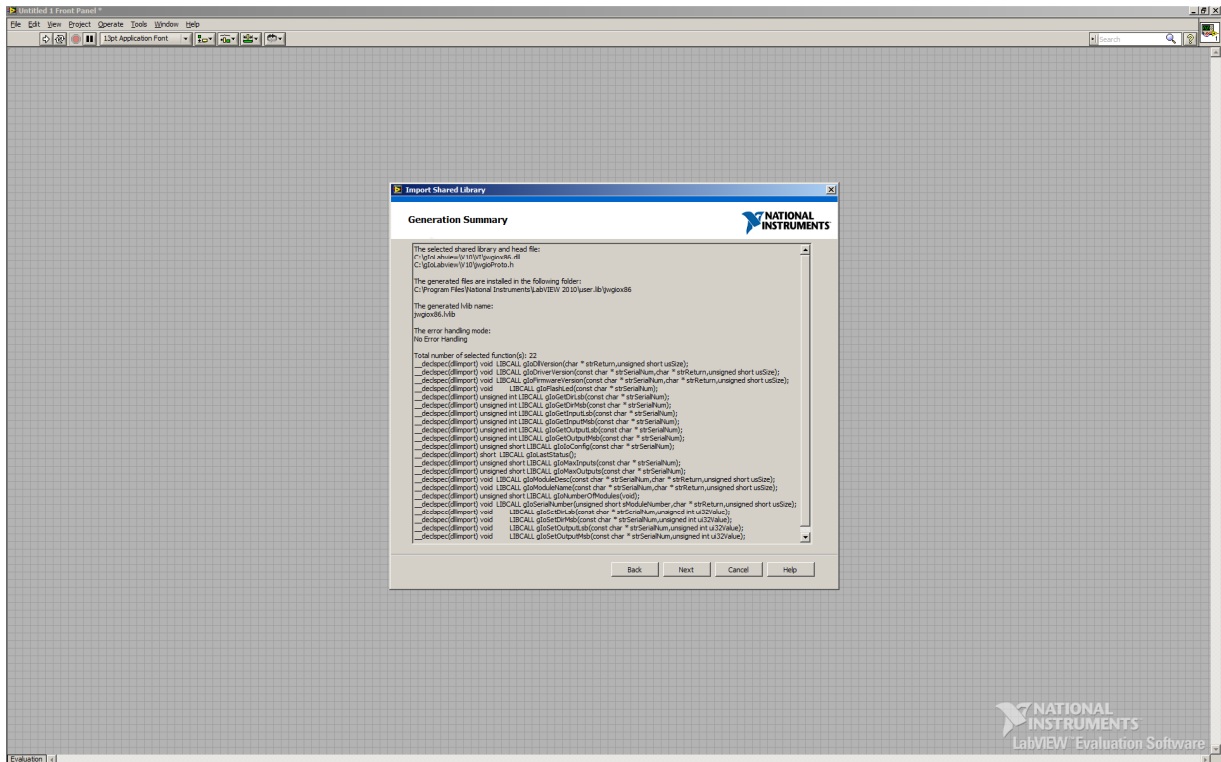
9.0 Click next on Configure dialog



Some of the parameter can be modified to clean up the VI's but not required. Typically the serial number parameter is shown as "input & output" and only needs to be input. Sizes of strings can be set to 32, and the size parameter can be made a constants of 32.

Using modules under Labview

10.0 Click next on generation summary



Using modules under Labview

11.0 The import is finished, and the created vi's can be used in your applications.

