

How to set-up communication between LabVIEW and a RS232 device connected to an Agilent Technologies E5810 LAN/GPIB Gateway

1) Make sure that no Agilent I/O Library is installed. If it is installed, remove it: Agilent I/O Library Suite needs to be installed as “secondary VISA library”. (See Documentation “side-by-side installation”).

2) Install NI-VISA

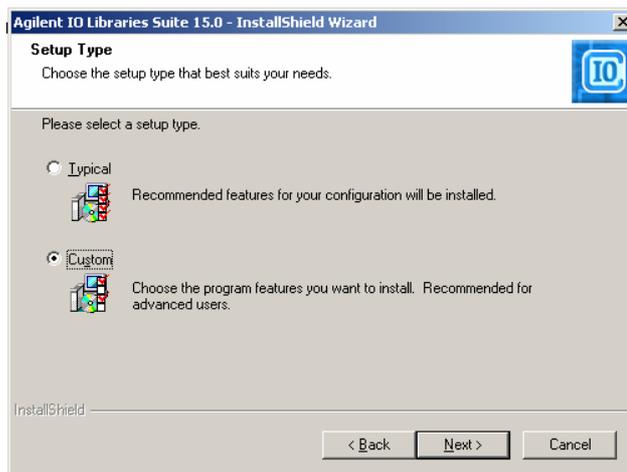
Info at <http://www.ni.com/visa/>

Download at <http://joule.ni.com/nidu/cds/fn/p/sn/n23:3.1637/lang/en>

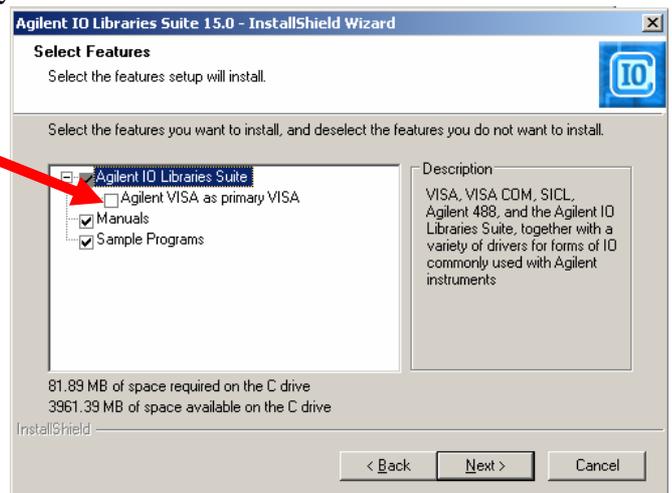
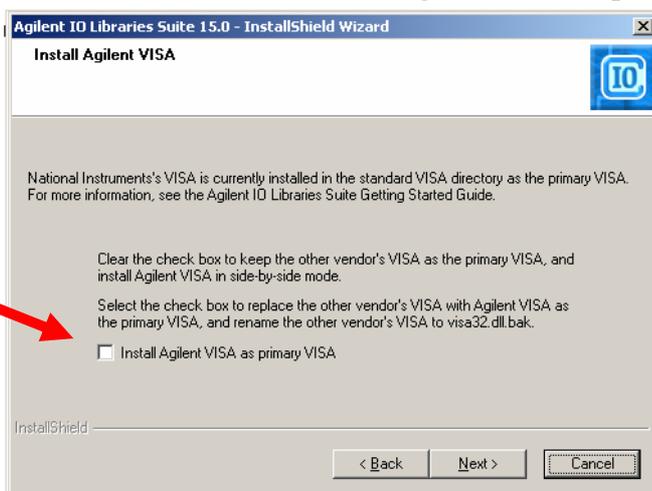
3) Install Agilent I/O Library Suite as “secondary VISA library”

(Note: I experienced troubles with Agilent I/O Library Suite 14.2 for which step 5 does not seem to work. Thus, I moved to 15.0.)

-) Use Custom installation



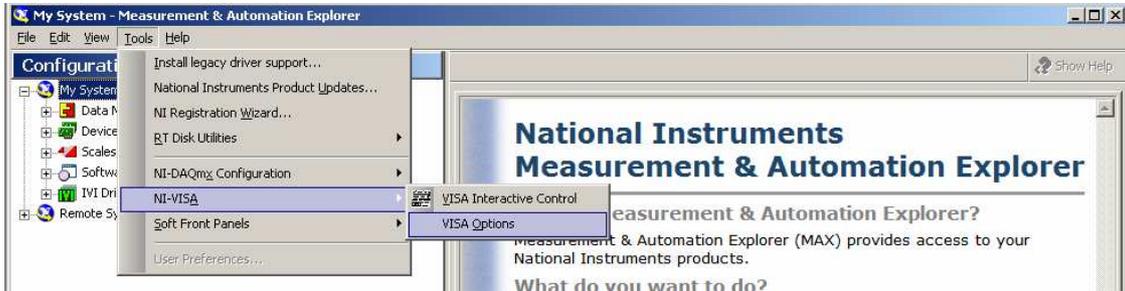
-) Clear “Install Agilent VISA as primary VISA”



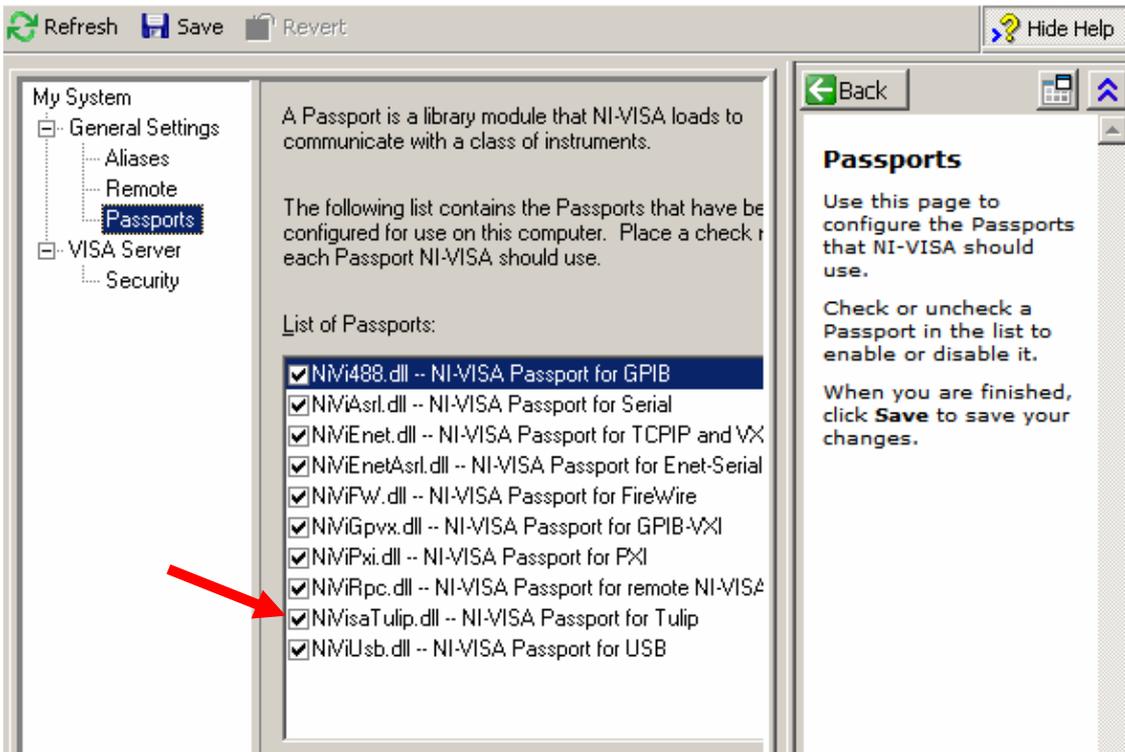
-) Complete installation

4) Open NI's Measurement and Automation Explorer (MAX)

-) Go to Tools → NI-VISA → VISA Options

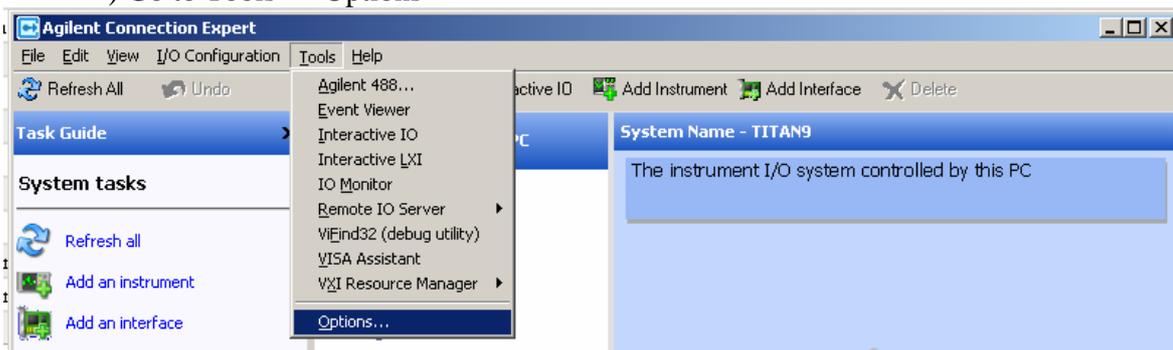


-) in General Settings → Passports: Check “NiVisaTulip.dll”, save and exit MAX (maybe even reboot system)



5) Open Agilent Connection Expert (which is part of the secondary VISA library)

-) Go to Tools → Options



-) in Agilent 488 Options: Check “Enable Agilent GPIB cards for 488 programs”



-) LabVIEW is now able to connect to any device configured in the Agilent Connection Expert

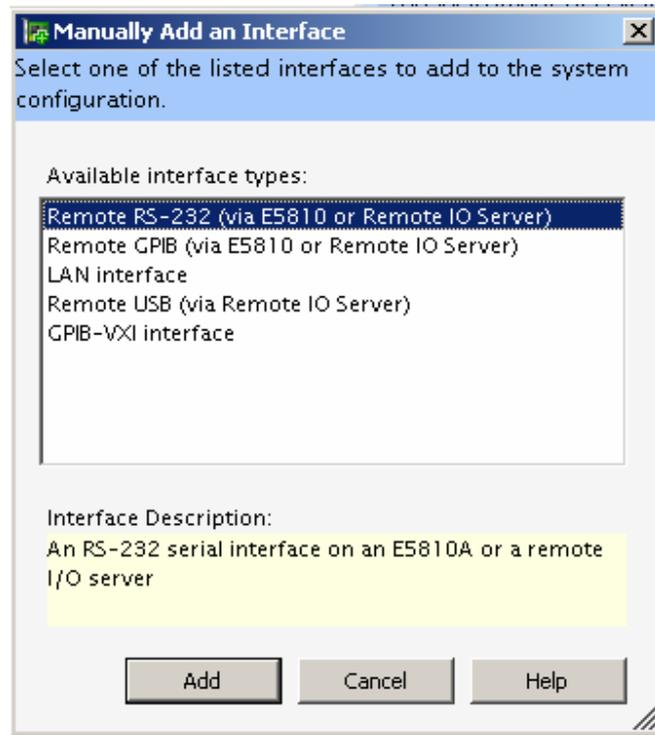
Example:

Add instrument to Agilent Connection Expert for an instrument which is connected to the RS232 port at Agilent Technologies E5810 LAN/GPIB Gateway

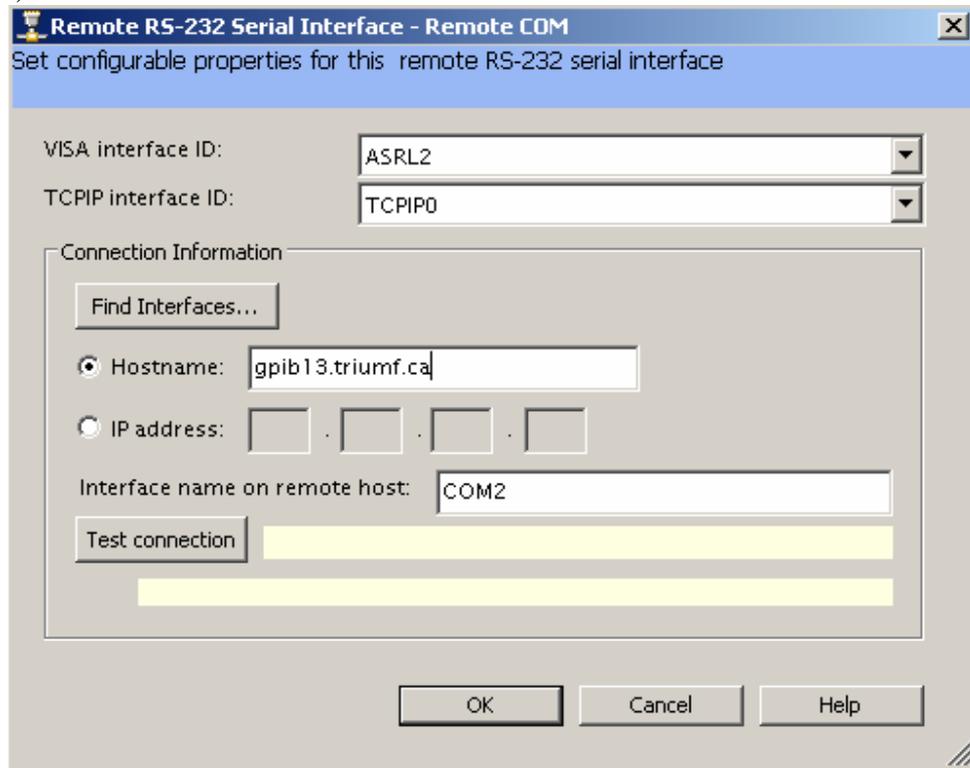
- 1) open Agilent Connection Expert
- 2) Add Interface



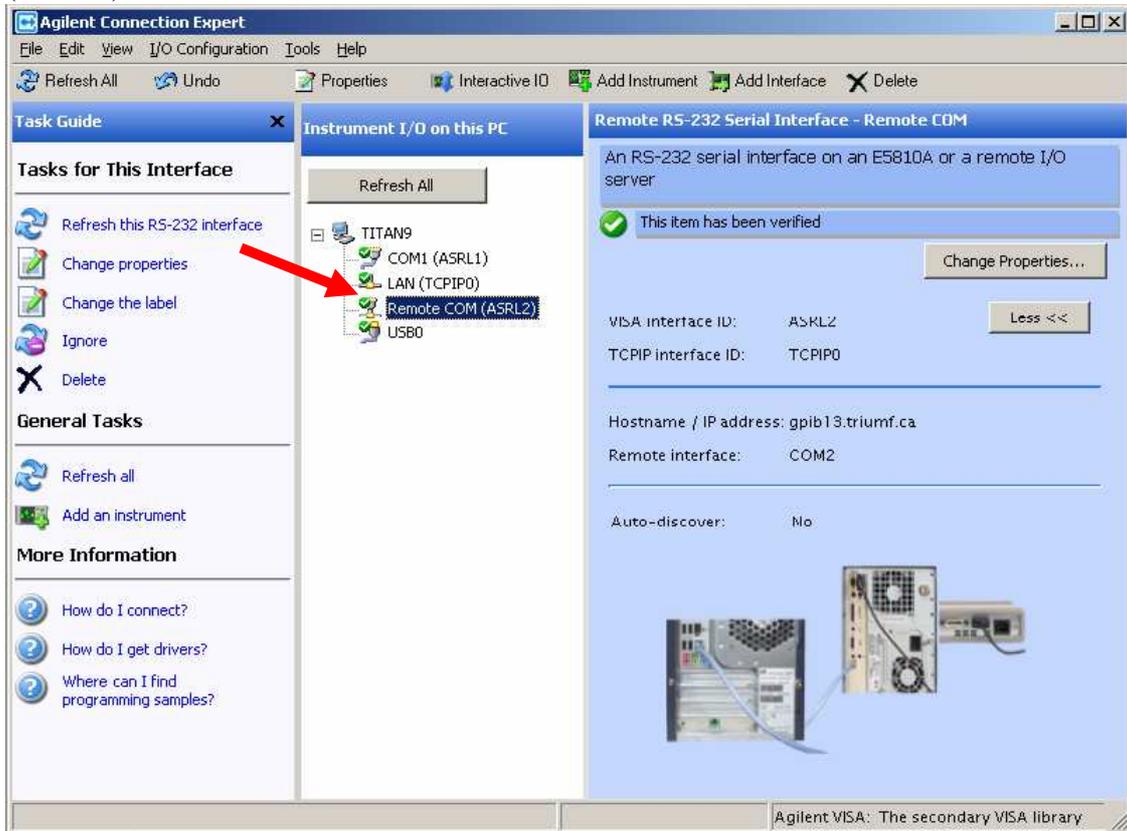
- 3) Add “Remote RS-232 (via E5810 or Remote IO Server)”



4) Set “Hostname” (here:gpib13.triumf.ca) and “Interface name on remote host”(here: COM2)



5) The instrument is now listed in “Instrument I/O on this computer” as “Remote COM (ASRL2)”



and can be accessed directly in LabVIEW as ASRL2::INSTR



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