S2USB485
USB to RS-485 and RS-232 Converter

S2USB485, Windows 7, and JCI's HVACPro

Introduction

Since a number of S2USB485 customers use the S2USB485 with Johnson Control's HVACPro software, we have developed this guide to assist those customers wishing to use Windows 7. Please note, that JCI has not formally released its HVACPro software for use under Windows 7 and so there could be operational issues with their software under Windows 7. Consequently, S Squared Innovations Inc. will not provide any support for HVACPro or its usage with the S2USB485 and so you are on your own should you wish to operate HVACPro with the S2USB485 on Windows 7.

Background

Johnson Control's HVACPro software is a very old program that was designed in the very early days of Windows. Consequently, it cannot be run directly under Windows 7, but only through "XP Mode" under Windows 7. "XP mode" is a virtual PC that is only available to Windows 7 Professional, Ultimate, and Enterprise as an add on module. To obtain "XP Mode" refer to the Microsoft's web site for the necessary files and installation procedure:

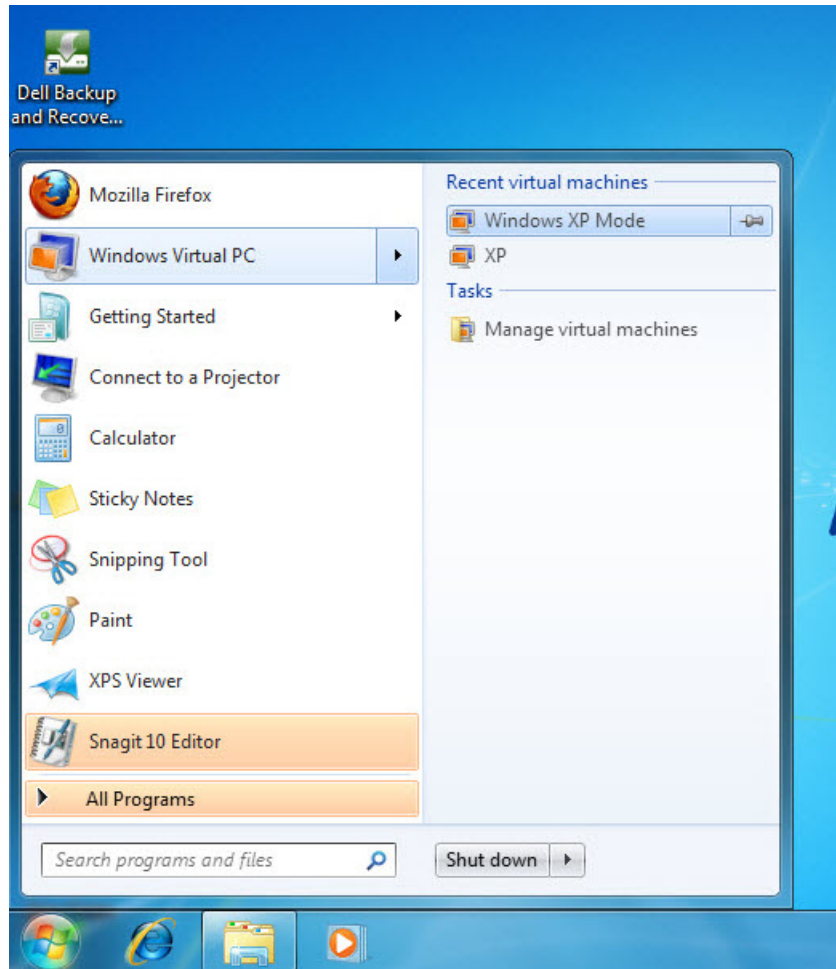http://www.microsoft.com/windows/virtual-pc/download.aspx

Please note that S Squared Innovations Inc. will not provide any support with regards to setting up "XP Mode" under Windows 7.
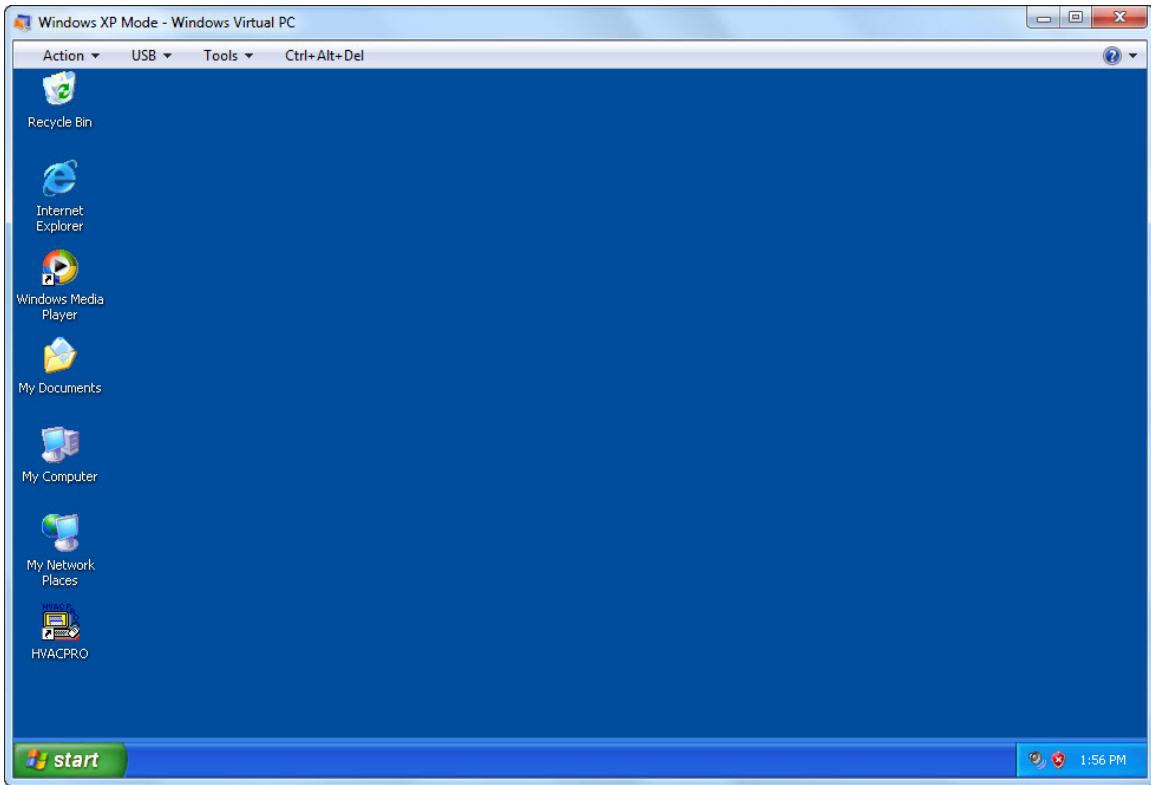
In order for you to use the S2USB485 Converter with "XP Mode" you must have already installed the S2USB485 correctly under Windows 7. More about this later, but if you have not done the Windows 7 installation, stop, and do so now.
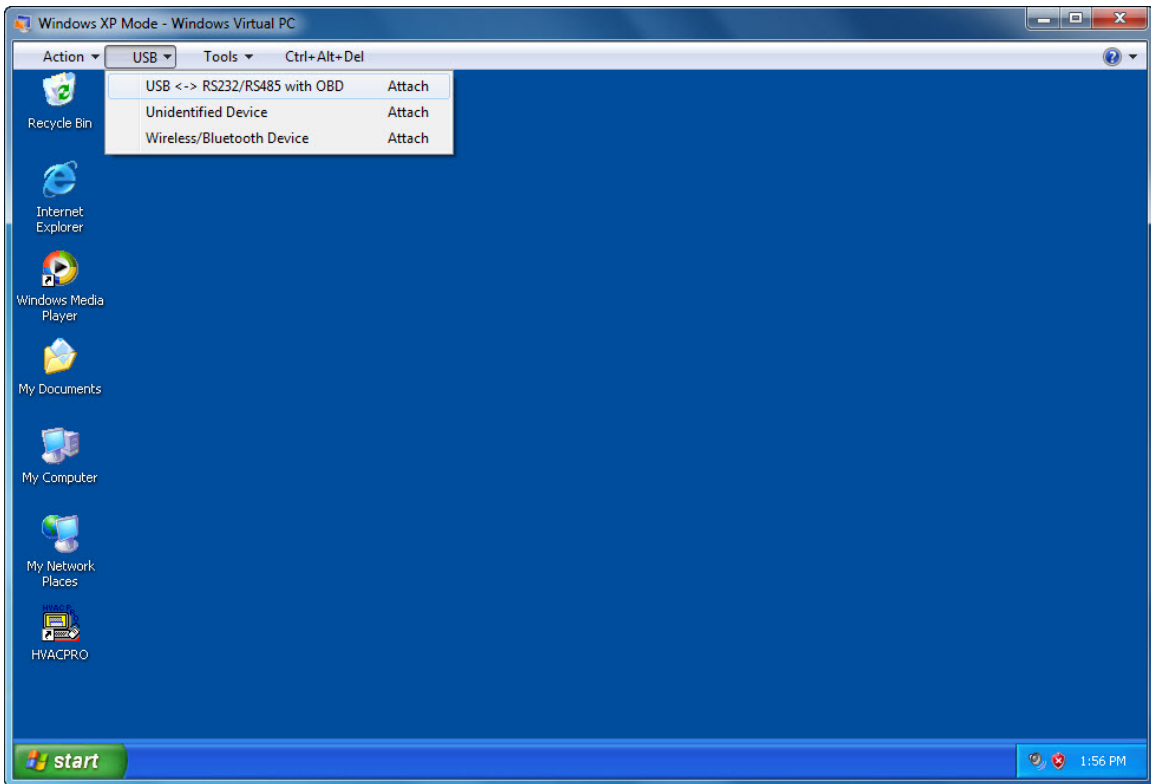
Starting "XP Mode"

Once you have correctly installed "XP Mode", you can "boot" XP from the "Windows Virtual PC – Windows XP Mode" selection from the main task bar page.
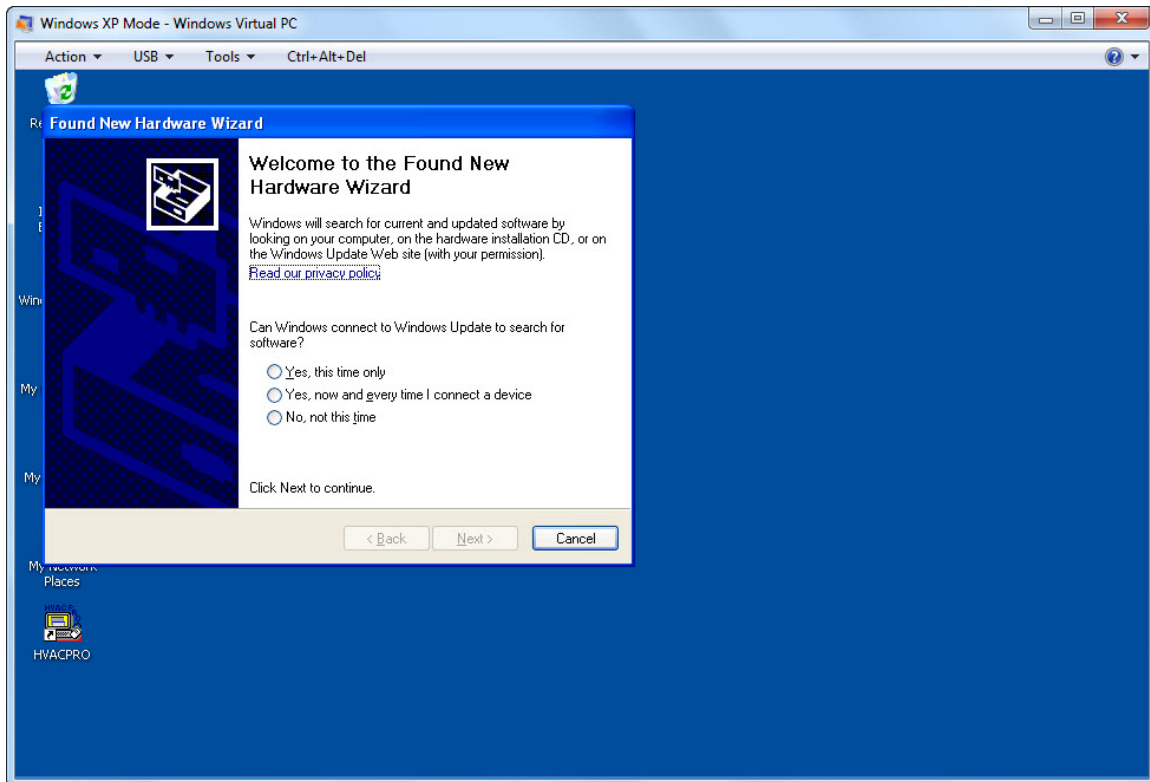
"Booting" XP mode will create a virtual PC running a Windows version of XP. Remember that this is a virtual PC and so the hardware (i.e. printer, USB ports, etc) are virtualized between your computer running Windows 7 and "XP Mode"

Assuming you have correctly installed the S2USB485 device under Windows 7, you will need to expose the S2USB485 that is under Windows 7 to the Virtual XP machine ("XP Mode"). To do this you select the "USB" menu item and "attach" (select) the "USB <-> RS232/RS485 with OBD"
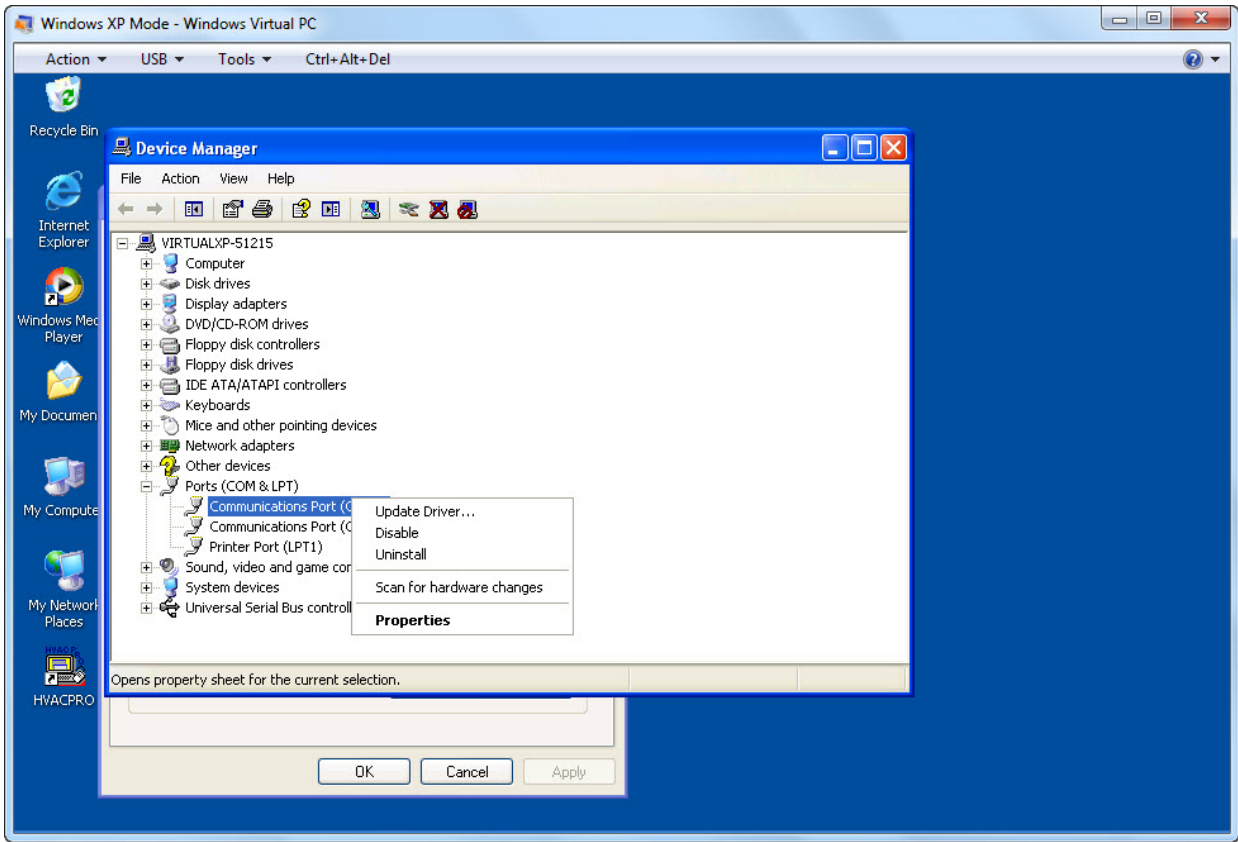
Once you do this, the virtual XP machine will detect new hardware and start the familiar Windows "Found New Hardware Installation" wizard.
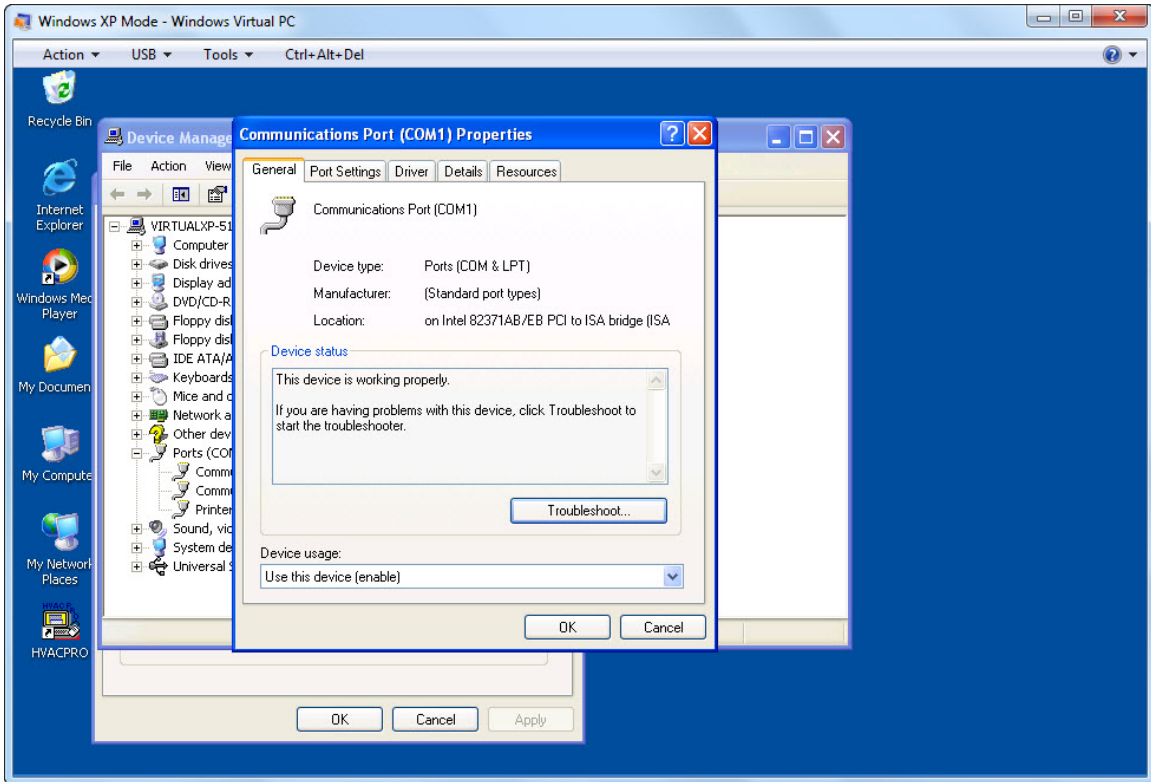

From here on you will install the S2USB485 just like you would under Windows XP. If you are unfamiliar on how to do this, then please refer to the "S2USB485 Installation Procedure.pdf" document located on the S2USB485 installation CD or from our web-site.
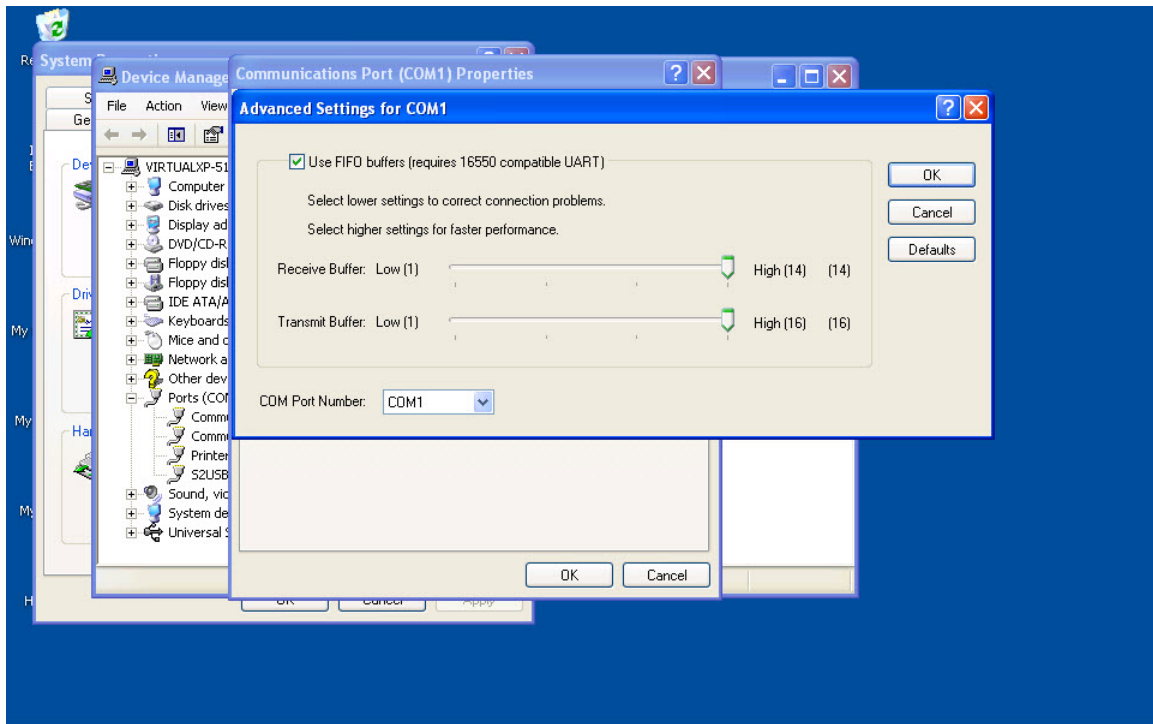
Once you completed the S2USB485 installation, changing of its COM port adds one extra step. In a number of cases, the Virtual XP will also virtualize COM ports that may or may not exist on your system. Consequently, you will need to change the Virtualized COM ports if they exist to something other than COM 1 or COM 2, as these are the ports that HVACPro can use. To do this, open the Virtual XP's Device Manager and expand the "Ports (COM &LPT)" entry. If you see COM1 or COM2 used by "Communications Port" then re-map these to a different COM port prior to changing the S2USB485's COM port

To change these ports, Select the "Communication Port" entry and right mouse-click on properties

Now, select the "Port Settings" tab, then press the "Advanced" button

And in the lower left corner change the "COM Port Number" to something other than COM1 or COM2, and press "OK", then "OK" again. Finally select the "Action-Scan for Hardware changes" menu option to update the Device Manager list.

Now that you have freed up COM1 or COM2, you are free to change the S2USB485's COM port to either COM1 or COM2. To do this, select the "S2USB485" entry within the "Ports (COM&LPT)" list and right mouse-click on properties. Now, select the "Port Settings" tab, then press the "Advanced" button. In the upper left corner you use the drop-down list to select either COM1 or COM2 and press "OK", then "OK" again. Finally select the "Action-Scan for Hardware changes" menu option to update the Device Manager list.

Now, you are done and your S2USB485 device is ready to be used under "XP mode" and subsequently can be used by HVACPro.

Conclusions

This procedure was tested and did work on two Dell Windows 7 machines. Whether it will work on all flavors of computers and Windows 7 versions is uncertain, but this document should prove as a good starting point for those users wishing to explore Windows 7 and HVACPro.