



Smiley's Workshop 10: Supplement 2 - What Com Port am I using?

Smiley's Workshop 10: Supplement 2 - What Serial Port am I using?

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In Smiley's Workshop 9 we installed the Arduino drivers so that when you plug your Arduino board into the USB port of your PC the Arduino IDE can communicate with it. Figure 1 shows that there are two serial ports attached, one on COM4 and the other on COM6. The Arduino uses an FTDI FT232R IC for the USB connector. But what do you do if you have more than one of these ICs connected to your PC USB ports? I know that the one on COM4 is one of my BBUSB boards used in *Virtual Serial Port Cookbook* (great book – see www.smileymicros.com) and if I wasn't sure, I could just unplug it and the one remaining, COM6, would be the Arduino board.

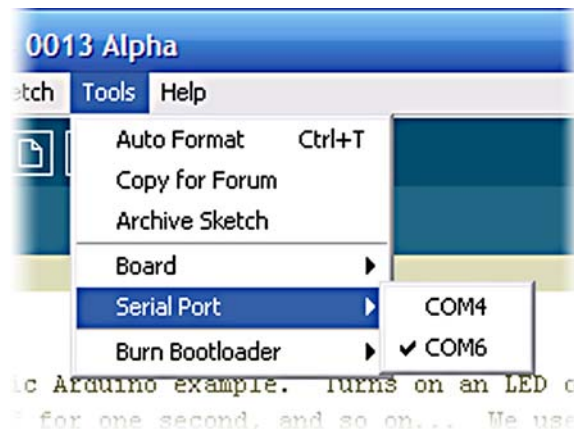


Figure 1: Selecting the Serial Port in the Arduino IDE

But our purpose in Workshop 10 is to move from the Arduino IDE to AVRStudio and AVRdude. As we saw there, we must know the serial port designation for our AVRdude script. Refer back to the Workshop Figure 9: AVRdude Upload and the text above it stating:

- Open Notepad or Word or some such program and type:
`avrdude -p m328p -c avrisp -P com3 -b 57600 -F -U flash:w:Blink.hex`

And below where I say:

- Note that this line assumes that your Arduino is sitting on com3. If you don't know how to find the com port it is using – *Smiley's Workshop 10: Supplement 2 – What Serial Port am I using?* (link below).



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And this is that supplement, so...

Open the Control Panel as shown in Figure 2 (for Windows XP):

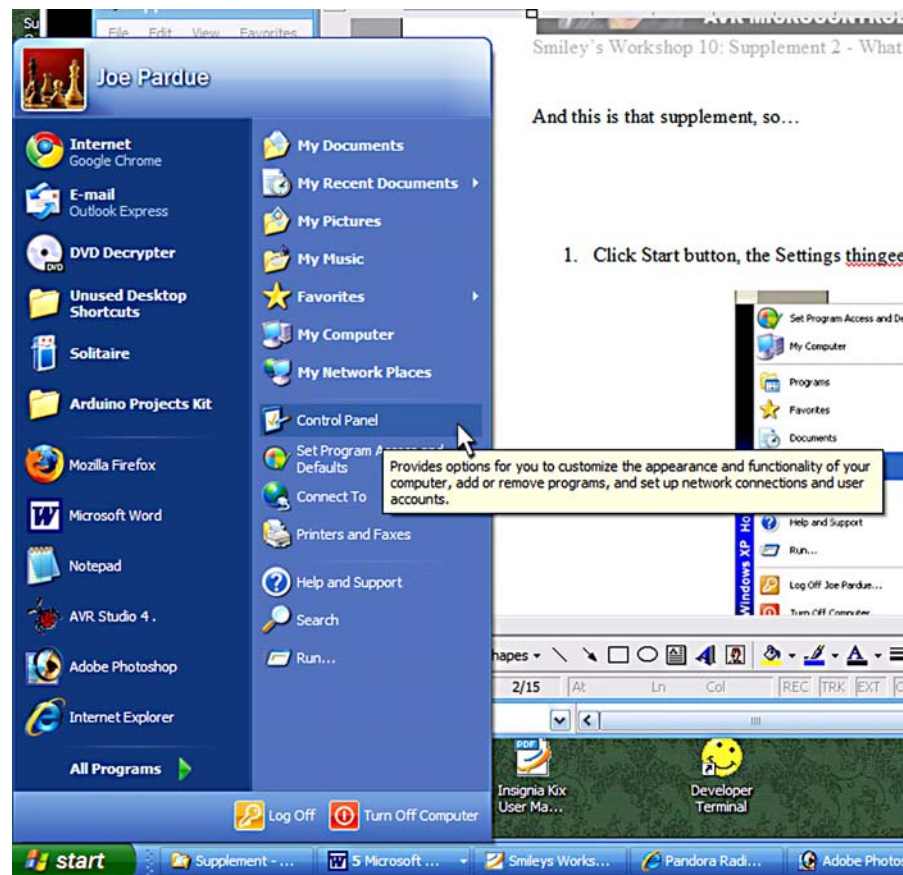


Figure 2: Open the Control Panel

Click on 'System' as shown in Figure 3: Control Panel System



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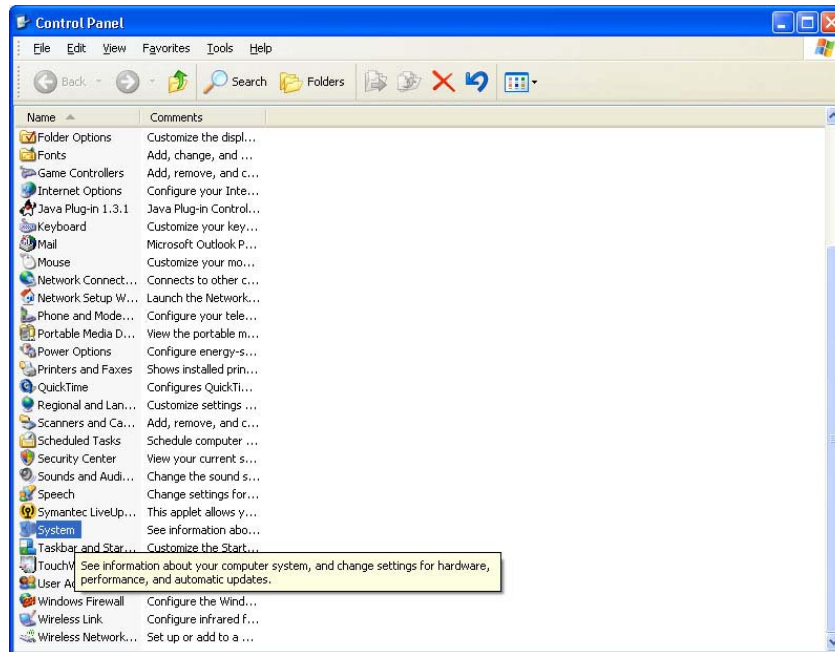


Figure 3: Control Panel System

In the System Window, click on the Hardware tab as shown in Figure 4.

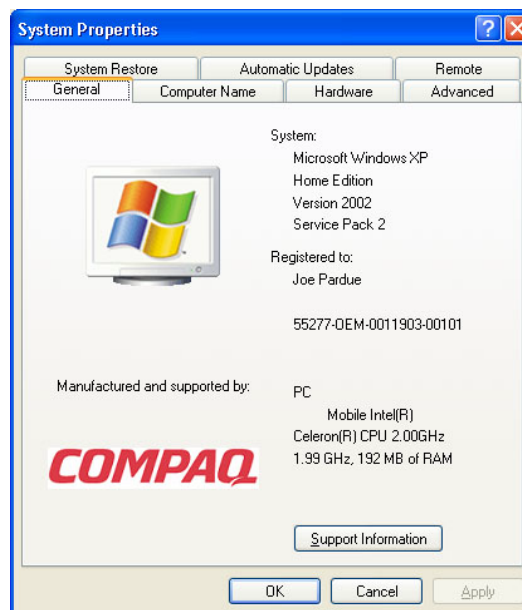


Figure 4: Control Panel Hardware Tab.



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In the Hardware tab panel click on Device Manager as shown in Figure 5.

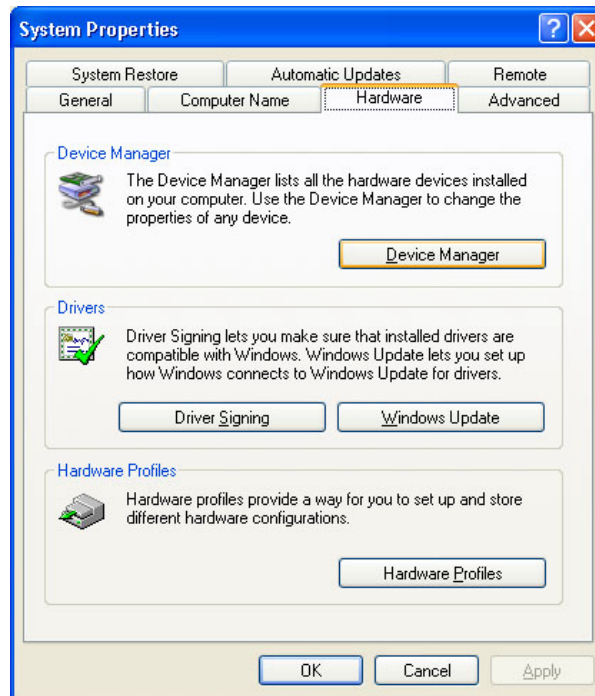


Figure 5: Click on the Device Manager Button

In the Device Manager Window click on the Ports (COM & LPT) to see the ports as shown in Figure 6.

Now you see that you have two Serial Ports to choose from. You can click on them and get more details, but if they are both FTDI virtual serial ports, the information will be the same. So you will need to unplug stuff until you have only one port showing, as shown in Figure 7: One Port Left.



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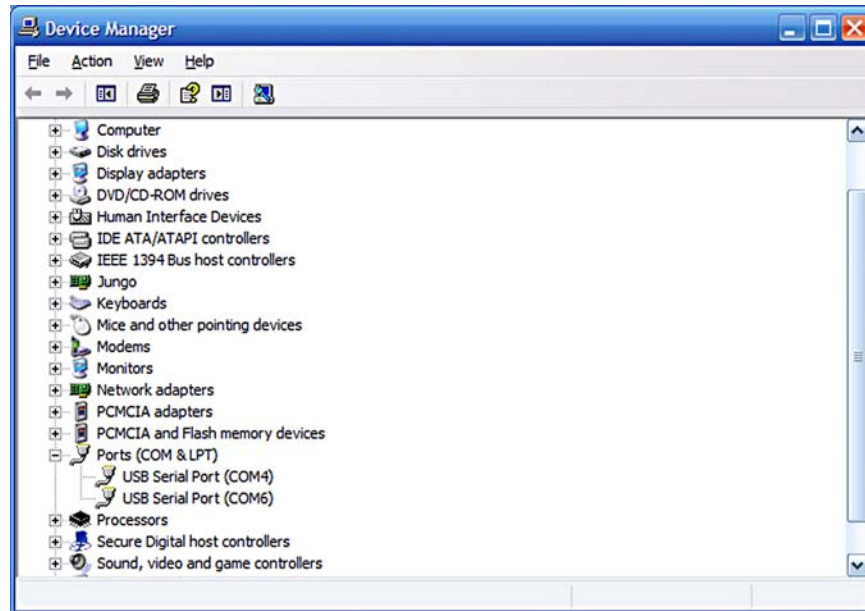


Figure 6: Ports shown in the Device Manager

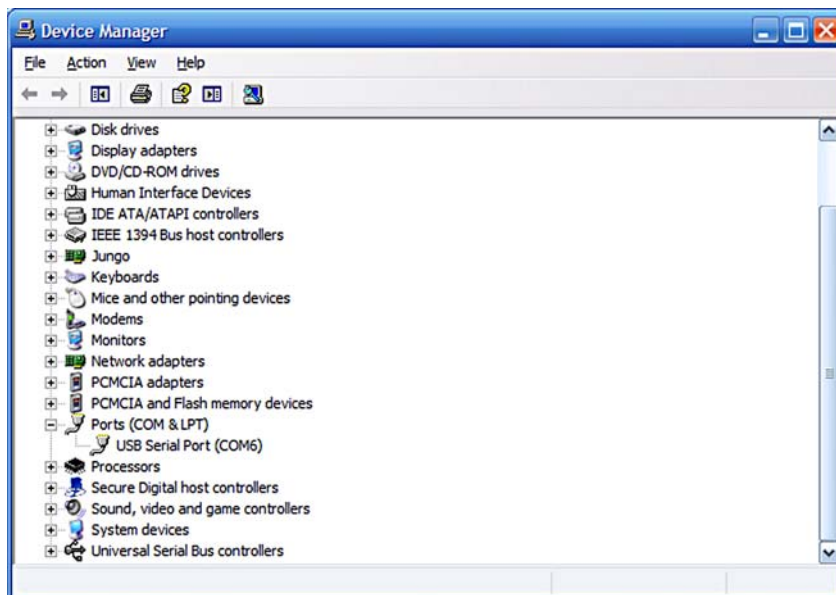


Figure 7: One Port Left.



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And that is the serial port name (COM6 in this case) you will use in the AVR Dude script.

Some other possible problems

The serial port is open by another program.

A serial port can only be open by one program at a time. So if you have that port open in the Arduino IDE or in some terminal software, such as my Developer's Terminal, AVR Dude won't be able to open it and you will get a cryptic failure message. I do this all the time.

You aren't following the instructions.

Now don't go pffftzz... since this is where most folks go wrong. You'd be surprised at how many folks think they did follow instructions, but didn't. If it doesn't work, please reread and retry everything. If you are sure you've tried everything, then if you are using your Arduino board in the context of Arduino, ask your question on the Arduino forum. If you are using it as an ATmega development board and are trying to use AVR Studio and AVR Dude, then ask your question on the www.avrfreak.net forum. There are folks there 24/7 who may help you and the answer will be public so other folks trying what you are trying may learn from it, but please do read the sticky thread at the top on using the forum and asking intelligent questions. Well-formed questions get lots of help – poorly formed questions get folks riled. And I prefer to be contacted directly only if you have found an error in the text or code, general questions should be asked in public forums so that other folks will be able to look them up when they have the problem.