USB Serial Port Mapping for Windows

1.00

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Date	Revision	Author	Change
03/28/13	1.00	DH	Change Initial creation
03/20/13	1.00	DII	Initial ordation
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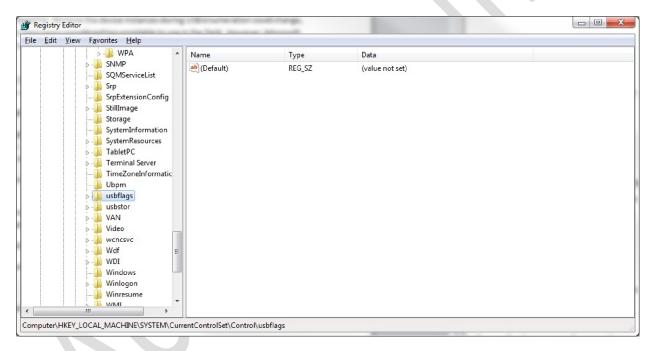
1 Overview

USB serial port adapters have been notoriously problematic, getting remapped to other COM ports sometimes simply by rebooting. Because the device instances during USB enumeration could change, USB serial port adapters have been considered too unreliable to use in the field. However, Microsoft has provided a means to address this specific issue in Windows.

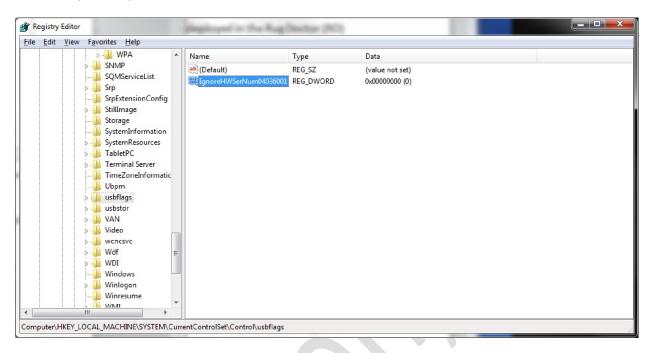
2 Registry Solution

Run regedt32 and browse to the following registry key:

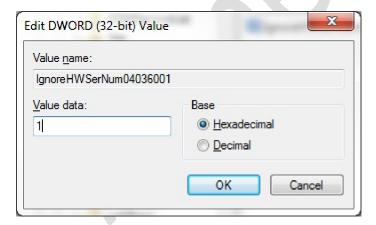
HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\usbflags



Add a REG_DWORD registry entry IgnoreHWSerNum appended with the Vendor and Device ID of the USB serial port adapter.



Set the registry value to 0x0001 to force the USB driver stack to ignore the serial number of the device. Instead, device instances are tied to the connected USB port.



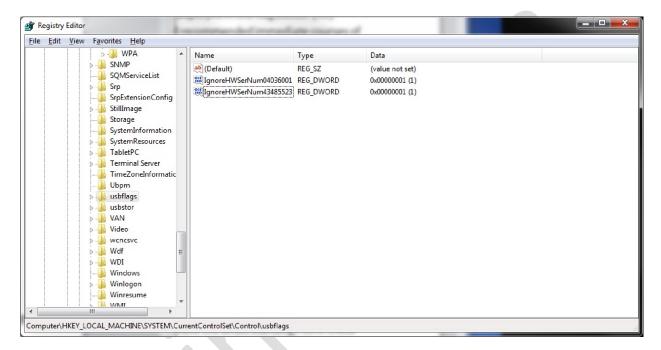
For example, I have two USB serial port adapters with VID/DID 0x0403/0x6001 and one with VID/DID 0x4348/0x5523.

First, create the following REG_DWORD registry entries:

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\usbflags\IgnoreHWSerNum04036001

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\usbflags\IgnoreHWSerNum43485523

Modify both registry values to 0x0001.



Reboot the system.

As long as the USB serial adapters do not move to a different USB port, the assigned COM port number wills no longer change.