

RE: Problems doing serial over USB with PPC 2003

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From: Jeremy Truelove (JeremyTruelove_at_discussions.microsoft.com)

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I'm surprised that no one else has encountered this problem at all. Does anyone know what the uniqueness is of an interface type value in the registry in relation to a driver. I've checked 4 different PPC 2003 devices and each has some sort of USB driver that lists that as it's interface in the active serialUSB driver. Although this driver is usually a different dll on each device it seems to always be doing the same thing.

When I rename the dll name of usb driver that is referenced by the serial over usb registry entry and I restart the device ActiveSync will not sync over USB although it will sync over plain serial. Once I change it back it syncs fine. So it appears that each OEM supplies a serial over USB driver to work with Activesync that implements some common functionality. I don't know if there is some special trick to get the device to receive data or what. I'm beginning to wonder if there is something we're missing in the enumeration process of the PPC. I did notice that when ActiveSync syncs with the desktop there is one additional command we don't have a START_DEVICE command after the last SELECT_CONFIGURATION command. If anyone has any thoughts on any of this please let me know.

Jeremy T.

"Jeremy Truelove" wrote:

> I have proprietary hardware that contains a host controller that can
> enumerate PPC 2003 devices. When a PPC 2003 device is attached to our
> hardware, our hardware enumerates the device then waits for the device to
> send data to it, specifically waits for a hex 5. Once it receives the hex 5
> it returns a hex 6. We have built in debug monitoring on our hardware that
> allows us to see all incoming and outgoing data. Using the serial over USB
> driver interface that's a part of the COM driver we can successfully send a 5
> down as well as any other data we want. The issue comes in when we send data
> from the host, i.e. a 6, back to the device running PPC 2003. No matter how
> long we read for on the device nothing ever comes back but the host is
> definitely returning data.
>
> Again we are using the Serial over USB driver included with PPC 2003 to
> communicate with the host controller. The drivers interface type is

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> 4294967295 and its key is Drivers\BuiltIn\SerialUSB. I did check and although
> the specific index the SerialUSB driver resides on changes i.e. COMx; the
> interface remains the same. Does anyone know if there is something special
> you have to do to read data being sent over USB on the device? Is data read
> on a different Com? Thanks for your help in advance.
>
> --
> *Jeremy Truelove*
> *Software Engineer*