Re: Does Windows treat USB/HID differently between desktops & lapt

Source:
http://www.tech−archive.net/Archive/Development/microsoft.public.win32.programmer.kernel/2009−02/msg00092.ht

- *From*: "JimW" <someone@xxxxxxxxxxxx>
- *Date*: Sat, 7 Feb 2009 09:14:34 −0500

Alexander,

Thanks for responding to my posting.

We're using Cypress EZ−USB. This device has been trouble free for a couple of years.Only recently are we seeing problems when people began using it with laptops.

I don't understand your term "retire". Could you clarify your question?

Thanks,
Jim

"Alexander Grigoriev" <alegr@xxxxxxxxxxxxx> wrote in message
news:OQrLIjNiJHA.3716@xxxxxxxxxxxxxxxxxxxxxxx

> What USB chip you're using? Does it retire data only after it sees IN token with alternate data toggle? Because if the host drops your data because of CRC error, you'll never know that otherwise.
>
> Your different results for different platforms could be because you see different physical layer performance with them.
>
> "Jim Walsh" <JimWalsh@xxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message
> news:742DD434−5B29−4615−8B76−5FBC7D0D4D53@xxxxxxxxxxxxxxx
>
> > Leo,
> >
> > Some other thoughts on HID polling of our device.
> >
> > The IN reports sent by my device all contain a sequential number. My receiving program checks that number to be sure that there are no duplicates and that the reports arrive in order with none missing.
> >
> > When I first began developing this, I did find that, although the reports always arrived in the correct order, there were times when a report would be missing. Especially if there was other USB/HID activity, e.g. active mouse. However, when I increased the number of InputBuffers being used by

Windows to
service my device to 500, that problem disappeared.

As far as I can see, the HID polling of our device is very reliable.

Jim

"Leo Havmoller" wrote:

> 1. I don't really understand your response. Could you elaborate.

In your endpoint descriptor, you specify a desired bInterval, but there is
no guarantee that the host can honor it in all cases.
In general HID I/O is not a reliable communication mechanism. Reports may be
dropped for various reasons.
There are bugs in the Windows HID drivers that cause randomly dropped
reports, especially Windows 2000, better in XP, almost never with Vista.

> 2. What is peculiar is that we only see the problem on laptops, even > when
> they have attached power supplies. I know that the power that we are
> drawing
> from the computer is only 10% of the maximum spec.

This has nothing to do with laptops or their power supply.
It just a coincidense that you havent run into it before.

Leo Havmoller.

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