

Re: PPP Mac Address

Source:

<http://www.tech-archive.net/Archive/Development/microsoft.public.win32.programmer.networks/2004-04/0290.html>

From: Scott Herriman (*sch_at_callwave.com*)

Date: 04/25/04

Date: Sun, 25 Apr 2004 16:30:47 -0700

> >>> *I'm curious about why Windows gives a PPP adapter a MAC address.*
In Windows 9X PPP adapters are grouped as Ethernet adapters. When using the MIB or IP Helpers APIs there is no way to distinguish a PPP adapter from an Ethernet adapter. However, the distinction is important when trying to differentiate a LAN interface from a dialup (PPP is more than likely dialup, but not always).

>> *Well my simple way of thinking is that the MAC address is the physical
> > address for the Ethernet layer so if an interface isn't using
> > Ethernet it really shouldn't need one.*

True, but it ends up that there is one and it is useful because of the "bug" mentioned above.

In Windows all Network Adapters appear as having physical interfaces (see IP Helpers). Therefore there is a field for a Physical Address. In Win 9X it appears that PPP interfaces contain a unique physical address beginning with 44-45-53-54-XX-YY. This changes on WIN2K/XP, the value is a bit different (I wonder why).

Thanks for all the comments,
Scott

"Eugene Gershnik" <gershnik@hotmail.com> wrote in message
news:%23a5kNACKEHA.268@TK2MSFTNGP11.phx.gbl...

> *Dave Lowther wrote:*

> > *"Eugene Gershnik" <gershnik@hotmail.com> wrote in message*

> > *news:e6zVyB3JEHA.2012@TK2MSFTNGP11.phx.gbl...*

> >> *David Lowther wrote:*

> >>> *I'm curious about why Windows gives a PPP adapter a MAC address.*

> >>>

> >>> *Why not?*

> >>>

> >> *Well my simple way of thinking is that the MAC address is the physical*

> >> *address for the Ethernet layer so if an interface isn't using*

> >> *Ethernet it really shouldn't need one.*

>
> *Not really. MAC could be viewed as a [reasonably] unique ID for an adapter.*
> *It is true that it comes from Ethernet but today it is used everywhere.*
>
>> *One could include all sorts of meaningless attributes but obviously*
>> *this isn't the normal way of doing things.*
>
> *Let's call it an "adapter ID". This is quite meaningful.*
>
>>> *Even for a new code its easier to give a MAC to every adapter than*
>>> *require the code to constantly check for its absence.*
>>
>> *I suppose it really depends on what these fictitious MAC addresses*
>> *are being used for.*
>
> *As an ID mostly, I'd guess.*
>
>> *I suppose one of the things I'm curious about is whether the MAC*
>> *address for PPP adapters is just a windows bodge, or, whether there*
>> *is some deeper meaning that I'm missing.*
>
> *Apart from being an ID I've never seen any other use for it.*
>
> --
> *Eugene*
>
>