

## Re: Could this be implemented with an NDIS or TDI driver?

**Source:**

<http://www.tech-archive.net/Archive/Development/microsoft.public.development.device.drivers/2004-04/0660.html>

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> *As Thomas points out, the advantage to being above the  
> stack is that you see reassembled data.*

Not really an advantage. Anyway you see the portions of the stream as delivered to ClientEvent(Chained)Receive.

> *cause performance problems, and can be different on the  
> various versions of Windows.*

TDI is same on all Windows NT versions. Our kernel sockets code runs unmodified from NT4 to XP.

> *applications use Winsock, there are some, especially  
> certain ones provided by Microsoft, that use TDI*

Namely – SMB redirector and server, Services For Macintosh server, and IIS in w2k3 (<http://sys>).

> *Below the stack, you do have the issue of reassembly.*

Dropping out-of-order packets can help for the first time, though can possibly decrease performance a bit. Anyway I don't think it will cause much decrease, being nearly the same as the absence of SACK TCP option (not supported by MS till w2k).

Anyway such software is to guard user Internet access – rarely more than around 7Mbit/s – so, such a drop can go unnoticed.

> *However, depending on what you're filtering for, you may  
> be able to keep packet to packet state that lets you  
> avoid implementation of TCP reassembly.*

Yes.

microsoft.public.development.device.drivers: Re: Could this be implemented with an NDIS or TDI driver?

> *Windows*). *Because most VPN clients use DNE*

Microsoft's especially :-)

> *signature, you can avoid the time-consuming and costly*

> *process of certifying your driver with WHQL.*

There is no need in certifying the networking stack plugin with WHQL.

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