

**From:** johnlu  
**Sent:** Wednesday, April 12, 1995 9:04 AM  
**To:** bens; paulma; adamr  
**Subject:** RE: Internet (aka Web Windows)

lots of overlap with conferencing too. we are already signed up to do the work to remote a window to another machine in both point-to-point and multipoint scenarios. and the office team is going to modify office to take greater advantage of this over time. we should certainly make sure that conference objects can be embedded in web places and vice versa. this would make every windows app today instantly "internet capable" which is a nice benefit.

we should focus on some scenarios with mass appeal so that this model becomes pervasive. 1:1 conferences aren't going to turn the internet on its head, the web is not a 1:1 place. we need to think thru how we do 1:many scenarios. for instance if i connect to the ms web page, maybe i see a list of free office training sessions. i can join one, and on my screen i get to see a live demo/walkthru of some office scenarios, with a voiceover using either conferencing voice support or robg's progressive audio stuff.

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**From:** paulma  
**Sent:** Wednesday, April 12, 1995 8:41 AM  
**To:** bens; johnlu  
**Subject:** FW: Internet (aka Web Windows)

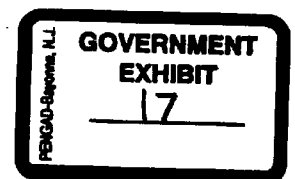
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**From:** Rick Rashid  
**Sent:** Tuesday, April 11, 1995 6:04 PM  
**To:** paulma  
**Cc:** danli  
**Subject:** FW: Internet (aka Web Windows)

Here's the mail I referred to. BTW, Dan Ling and I brainstormed some more after our meeting. We came up with some additional ideas and we're both going to think some more about it this evening. One area that this "Web Windows" could excel in would be in providing "shared" application spaces. It would be very possible for a server to send its graphics data more than one user simultaneously and get input from either or both. This would be a way to provide support for interactive shared applications which now are next to impossible on the net.

Maybe a brainstorming session with some key people would be in order?

-Rick

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**From:** Rick Rashid  
**To:** Bill Gates; Craig Mundie  
**Cc:** Nathan Myhrvold; Russell Siegelman  
**Subject:** RE: Internet  
**Date:** Tuesday, April 11, 1995 3:01PM



OK – Here is a crazy idea (which frankly has nothing much to do with ACT but does address the question of Internet and standards):

As an example of Bill's point, Dan Ling showed me this morning that Satan (the new internet "demon" :-)) actually uses HTML as a user interface. Other software may begin to do this. It's easy. It produces a reasonable looking machine independent UI rather quickly. It's dangerous from our perspective of wanting to make and preserve valuable standards. There are plenty of other examples.

On the other hand, the way people are increasingly using HTML as an "interactive" network interface is extremely limiting

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Today HTML interaction is largely limited to point and click URL selection and forms. While an amazing amount can be done that way, it is extremely simplistic and not very satisfying to someone who wants a really interactive network application.

At the same time, we have the existing systems like Citrix, JoshK's work, etc where the output of a Window's system gets transported across a network and displayed -- the moral equivalent of an X-Terminal. These systems have the advantage that they provide all of the richness of Windows interfaces remotely. For relatively uncomplicated things (such as Word Processors) the Citrix solution can work well even at relatively low 14.4 and 28.8 dialup rates -- at least that's what they claim. Certainly ISDN or direct internet access can be even better.

So here's the idea: make Windows the standard interactive application interface for the Internet.

A URL could point to either a running or explicitly spawned application with the protocol being a GDI-based protocol. The playback could be accomplished either through an explicit playback engine embedded in a browser (on a Mac or Unix system, for example) or directly through Window's actual GDI using a proxy approach. You could go as far as the Citrix people have in providing a complete remote "virtual windows machine" through your browser (the Citrix people claim to have experimented with this) or -- more likely -- you would provide a more special purpose way for individual applications to have their display windows mapped remotely. We could either develop this technology ourselves or license work others have done (say Citrix) as a starting point.

However it was done -- and there are a number of options -- the net effect would be to encourage application developers easily adapt their Windows apps (e.g. multimedia reference titles) directly for the Internet and it would encourage the user community to use Windows as the standard for interactive network applications. NT provides a number of security hooks that could be taken advantage of to allow "secure" applications to operate on a server and this could itself be viewed as a NT advantage. The browser software would be distributed for free. MSN would provide equivalent services (perhaps just through the internet) using its own NT servers, etc. I would certainly be a way to get out in front in a new area -- interactive internet applications and services -- with a strategy which maximizes use of our existing resources.

-Rick

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| From: Bill Gates  
| To: Craig Mundie  
| Cc: Nathan Myhrvold; Rick Rashid; Russell Siegelman  
| Subject: Internet  
| Date: Monday, April 10, 1995 3:00AM

| Message-Id: <9504101003.AA22722@itgmsm>  
| X-Mailer: Microsoft Mail V3.0  
| X-Ms-Attachment: WINMAIL.DAT 957 00-00-1980 00:00

| Given that we are looking at the Internet destroying our position as the  
| setter of standards and APIs do you see things we should be doing to use  
| ACT assets to avoid this?

| I admit I find it hard to focus lots of resources on trials and things  
| when the Internet is taking away our power every day and will have  
| eroded it irretrievably by the time broadband is pervasive on the course  
| we are on right now.

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