



# MOOSE VIEWS

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## Moose Views

is a monthly newsletter prepared by Moose Logic to bring you information and tips on maintaining a trouble free network.

Issue 11

October, 2006

# Help! My Computer Is *Haunted!*

You start seeing strange pop-up ads that seem to come from nowhere, even when you aren't surfing the web...

Your web browser's home page mysteriously changes on its own...

Your CD drawer starts opening and closing by itself and strange files suddenly appear...

You find emails in your Sent Items folder that you didn't send....

Some of your files are moved or deleted or the icons on your desktop or toolbars are blank or missing...

## Could It Be That \*Gulp\* Your Computer Is HAUNTED?

Probably not, but you are most likely infected with spyware. Around Halloween, we tend to think about unseen things that terrorize us at night; but spyware is probably the hidden ghost on your computer that is doing a lot more harm than keeping you awake at night.

Spyware is Internet jargon for hidden programs advertisers install on your PC without your permission to spy on you, gather information, and report this information about you and your online activities to some outside person.

Spyware is NOT harmless; it can be responsible for delivering a boatload of spam, altering your web browser, slowing down your PC, and serving up a bounty of pop-up ads.



In some of the more extreme cases, spyware can also steal your identity, passwords, e-mail address book, and even use your PC for illegal activities.

Most spyware finds its way onto your computer network via file downloads including free programs, music files, and screen savers. While you \*think\* you are only downloading a legitimate program to add emoticons to your e-mails, you are unknowingly also downloading a heaping spoonful of spyware programs. In fact, you may have unintentionally given your permission if you didn't carefully read the "end-user license agreement" for whatever it was you downloaded and installed! And all it takes is one employee downloading a questionable file to infect your entire network.

## How Does Spyware Work?

Spyware piggybacks the download and runs undetected in the background collecting information about you and sending it back to its originator until it is removed. Although spyware has malicious components, it is not illegal, and it is not considered a

*Continued on page 4...*

# The Citrix Corner—Presentation Server

Last month we announced “The Citrix Corner” as a regular feature that we’ll be running for the next several months, to bring you up to date on the breadth of the Citrix product line. We also made reference to the “What’s Best?” concept that was first presented by Citrix CEO Mark Templeton at the 2005 iForum conference in Las Vegas, and that is the vision behind the growing product line. This month, we’re going to talk about the Citrix Presentation Server – the latest incarnation of the technology Citrix is best known for: running applications remotely on a Terminal Services platform.

The concept here is simple: instead of installing and running the application locally on a client PC, the application is installed on a centrally located, powerful, server-class machine. This server can support multiple simultaneous instances of the application, each running in its own protected space. The client PC, which can be in the next room connecting over the local area network or can be halfway around the world connecting across the Internet, sends keystrokes and mouse movements to the server, where the user’s very own instance of the application is running. In return, the server sends display updates back to the client. To do this, the client PC needs only a very simple piece of client software,

which can be pushed down from a Web site, or even deployed as an ActiveX control or Java applet.

Now, we should be very clear that Citrix Presentation Server (which we will call “CPS” from here on to save space) is a set of extensions and enhancements to Microsoft Terminal Services. That means that the underlying Operating System (today, anyway) is Windows Server 2003, with Terminal Services installed. It also means that you need to comply with Microsoft’s Terminal Services licensing requirements in addition to Citrix’s licensing requirements. So the obvious question is: Why put CPS on top of a Terminal Server? Why not just run native Microsoft Terminal Services?

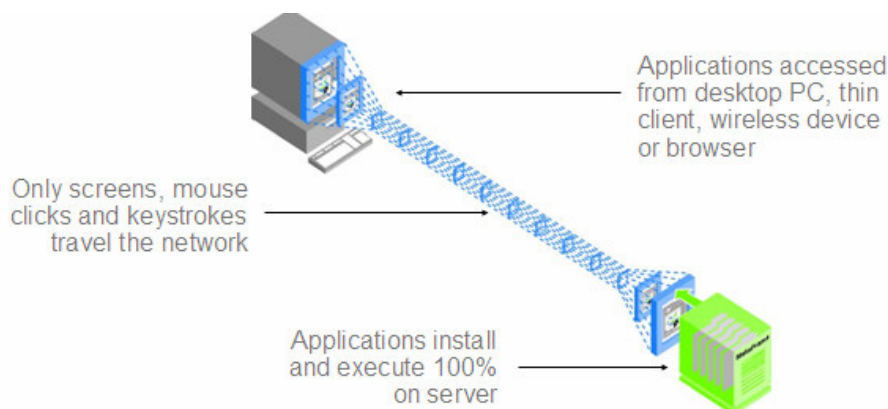
If you want the full answer to that question, take a look at the 11-page feature comparison chart that we have helpfully enclosed for your reference. But the short answer is:

- ◆ Server performance and optimization.
- ◆ Application performance and responsiveness – particularly over slower or highly latent connections, like cellular modems and Internet connections.
- ◆ Client-side printing performance.
- ◆ Seamless client experience – remote applications look and feel just like applications that are running locally on the client PC.

- ◆ Manageability and scalability. Once you have more users than can be comfortably supported on a single server, you’ll start to *really* appreciate the management tools Citrix brings to the table.

But perhaps a more fundamental question is: Why deploy Terminal Services at all? Why not just install everything on desktop PCs? There are several forces that drive Terminal Services deployments:

- ◆ The first, and most obvious, is remote application access for traveling workers or telecommuters. If you’ve ever tried to run a locally-installed application that accesses some kind of back-end database across a VPN connection, you know that it can be extremely painful to drag the data back and forth across the VPN connection – even at DSL speeds. So the improved performance of CPS can allow users to be productive when they would otherwise be only frustrated.
- ◆ Citrix believes that the answer to the “What’s best?” question for client/server applications is to virtualize the deployment of the client piece via CPS. Why? Because it allows the client software to run on a powerful, server-class machine that is, more likely than not, connected to the back-end server on a high-speed Ethernet switch. So the performance of the application is determined by the power of the CPS, not by the ultimate users’ client device, and the client/server communications will be consistently faster and more stable.
- ◆ Some deployments are driven by security and regulatory compliance. Because we can administratively control whether a user can save information on the client device’s hard disk, or print to a



client-attached printer, an organization can be assured that critical business data, or data that is required by law to be held confidential (e.g., HIPAA regulations), *never leaves the corporate network*, regardless of where the ultimate client is located.

- ◆ Disaster recovery and/or business continuity. Organizations with multiple locations can centralize application deployment into two or more Citrix “server farms,” and users can be automatically re-routed from one server farm to another if a disaster makes one set of servers unavailable. Other companies have chosen to centralize their applications onto Citrix servers in a commercial co-location facility – because most co-location facilities have high-end fire suppression systems, generator backup for commercial power, multiple Internet connections, etc.
- ◆ Rapid application deployment. It’s typically much faster to install or upgrade applications in one place (the Citrix server or servers) than it is to touch every PC in the enterprise. This is particularly the case with large organizations or organizations with multiple, and geographically dispersed, offices.

- ◆ Extending the life of desktop PCs. Because the performance of the application depends on the horsepower of the CPS, not the client PC, the lifespan of the client PC can often be significantly extended, or it can even be replaced with a solid-state “Windows terminal.”

Last but not least, if you’re considering a Citrix Presentation Server, you’ll need to choose the correct **version** of the product – of which there are four, each of which contains a somewhat different feature set:

- ◆ Standard – this version is designed for fairly small deployments that can be handled by a single server. The Citrix licensing is based on the number of **concurrent** users who will be running applications on the server.
- ◆ Advanced – this version is designed for mid-sized, multi-server deployments. The biggest difference (but not the only one) between Standard and Advanced is dynamic load-balancing at the application level, which allows multiple servers to work together to automatically direct a user to the “least busy” server when launching an application. Also licensed based on **concurrent** users.
- ◆ Enterprise – this version has all the

“bells and whistles,” including management tools that assist in easily deploying applications across multiple servers and tracking server performance parameters. Also licensed based on **concurrent** users.

- ◆ Access Essentials – this version is specifically designed for small businesses. It has a very attractive price, and **bundles** the Microsoft Terminal Services CAL in with the Citrix license. Because of this bundled approach, Access Essentials is licensed based on the number of **named users** who will be accessing the server – because that’s how the Terminal Services CALs are sold. It is also strictly limited to a maximum of 75 named users, and only a single server.

The Citrix Presentation Server Comparative Matrix enclosed with this newsletter explains exactly which features are included in each of the four versions described above. A full explanation of all of these features and the value they bring would take far more space than we have available here. If you want more information, or want to explore whether CPS can bring value to your organization or which version is right for you, give us a call at 206-774-0619, or email us at [info@mooselogic.com](mailto:info@mooselogic.com). Although Moose Logic today has a broad range of expertise, we’re still proud to be “the Citrix guys.”

## How To Send And Receive Large Files When E-mail Won’t Work

If you want to share audio, video, or large graphic files with others, but can’t send it via e-mail because of the large file size, you may want to look into znail ([www.znail.com](http://www.znail.com)), an almost-free web resource for transferring large files.

After setting up an account, you simply upload the file you want to share via your web browser.

Then you send your friend an e-mail with a special link to retrieve the file. If your file is under 5 MB, the service is free. For \$1, znail will increase your storage space to 20 MB, and if you spend \$10, you’ll get 50 MB of space to use for an entire year.

There are a few drawbacks, but overall, this is an incredibly cheap and easy way to share large files with others.





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- Storage Solutions
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Networking Infrastructure Solutions



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## Is My Computer Haunted, continued from page 1...

virus because it doesn't replicate itself or destroy data.

One of the most dangerous aspects of spyware is its ability to cloak its existence. Hackers and the authors of malicious spyware and malware programs go to great lengths to create programs that are difficult to identify and remove. They are also highly experienced at finding tiny, overlooked loopholes in your security to access and infect your network undetected. That means a malicious program can be downloaded and doing its dirty work on your network long before you are aware of it.

## How To Get Rid Of Spyware

Some spyware and malware CAN be easily removed using a program such as Spybot's Search & Destroy (you can download it for free at:

[www.safer-networking.org](http://www.safer-networking.org)) or Ad-Aware

(you can download it at:

[www.lavasoftusa.com/support/download](http://www.lavasoftusa.com/support/download)).

However, not all malicious programs can be removed – or even detected – using the above software. Many programs integrate so deeply into the operating system that it takes a skilled technician several hours to fully diagnose and remove the malicious program. In some extreme cases, we have had no alternative, but to wipe the hard disk clean by deleting all of the files on it and re-installing the operating system.

Obviously this is NOT an ideal situation and we do everything within our power to avoid it. Unfortunately there are some malicious programs that are so intelligent that there is simply no other way of removing them.

Of course you can use Spybot or Ad-Aware as a first attempt at cleaning your machine; however, if you continue to notice that your computer runs slowly, or if you continue to see crippling pop-ups or any of the other tell-tale signs discussed earlier, you will need to seek the help of an experienced computer technician.

The best approach, of course, is not to get your computers infected in the first place! The leading vendors of anti-virus software these days have optional anti-spyware modules as well. If yours doesn't, give us a call. We can help you select the right vendor, or put you on our MooseGuard™ centrally managed anti-virus / anti-spyware service, powered by Trend Micro.

## We'd Love To Hear From YOU!

Is there an article or a feature you would like us to include in this newsletter? Do you just want to "sound off" about something or share your opinion with our other subscribers?

Let us know!

Call us at: 206-774-0619

Or send email to:

[feedback@mooselogic.com](mailto:feedback@mooselogic.com)

## Halloween Humor:

A tourist in Vienna is going through a graveyard and all of a sudden he hears some music. No one is around, so he starts searching for the source.

He finally locates the origin and finds it is coming from a grave with a headstone that reads: Ludwig van Beethoven, 1770-1827. Then he realizes that the music is the Ninth Symphony and it is being played backward! Puzzled, he leaves the graveyard and persuades a friend to return with him.

By the time they arrive back at the grave, the music has changed. This time it is the Seventh Symphony, but like the previous piece, it is being played backward.

Curious, the men agree to consult a music scholar. When they return with the expert, the Fifth Symphony is playing, again backward. The expert notices that the symphonies are being played in the reverse order in which they were composed, the Ninth, then the Seventh, then the Fifth again.

By the next day, the word has spread and a throng has gathered around the grave. They are all listening to the Second Symphony being played backward.

Just then the graveyard's caretaker ambles up to the group. Someone in the crowd asks him if he has an explanation for the music.

"Oh, it's nothing to worry about" says the caretaker. "He's just decomposing!"