

# Home is Where the Connection Is

by Jo and Kevin Day

While logging into the office used to be a matter of convenience, remote connection is now a key part of the business plan for many practices. This article presents the pros and cons of various applications along with examples of how certain solutions may meet your firm's specific needs. Table 1 on the next page offers a comparison of remote connectivity features and benefits. (Note: All of these solutions require high speed Internet access on both sides of the connection for optimal performance).

For The Arkansas Financial Group, having a reliable remote connection became important when a key employee, Kristina Bolhouse, CPA, CFP, needed to move out-of-state to be closer to an ailing parent. Rather than lose Bolhouse's valuable skills, it was decided to implement a solution that would enable her to continue working with clients in Arkansas from her new residence—in Michigan. Cindy Conger, CPA/PFS, CFP, one of the principals, says they selected Microsoft Terminal Services to connect remotely with Bolhouse rather than continue using Laplink. When asked if she would implement the same solution again, Conger says, "Definitely."

## LapLink and pcAnywhere

LapLink and pcAnywhere are products that have been available for a long time and are used by many planners.

Each of these applications provides encryption to prevent outsiders from seeing your remote control session. They also make it easy to transfer files. However,

“While logging into the office used to be a matter of convenience, remote connection is now a key part of the business plan for many practices.”

there are some limitations with these products that the potential road warrior needs to be aware of.

First, LapLink and pcAnywhere require that the software be installed on both computers involved in the remote control session—for example, your office computer and your remote computer. This can be a problem if you are using an associate's computer or are in a cyber-café. In these situations, it may not be feasible to install LapLink or pcAnywhere on the remote computer, which means that you would need to connect your laptop directly to the Internet (not all cyber-café's allow this).

Both products have had new releases lately (LapLink Gold 11.0 and pcAnywhere 10.5) that attempt to address the issue of requiring the software to be installed on the remote computer.

PcAnywhere's Express feature allows you to connect to your office computer through a Web interface. This could definitely help in the case of connecting via someone else's computer, but this feature is not supported by pcAnywhere—this should be a warning flag if connecting via the Web will be your primary means of connection.

LapLink's Surf Up feature allows you to transfer files to and from your office computer through a Web interface, but does not work remotely.

## The Problem with Ports

The second issue with using LapLink or pcAnywhere for remote connection relates to network security. When you access your office computer remotely, you first connect to the Internet address—for example, [www.trumpetinc.com](http://www.trumpetinc.com)—think of this as the “main phone number” of your company. To connect to a particular software application, you then contact a specific port (think of this as an “extension” to the main phone number). Usually, the software automatically selects the correct “extension.”

What happens when your firm has a firewall? Most firewalls close the ports used by pcAnywhere or LapLink. While this is a good thing for network security, it can be a problem for connecting remotely. Generally, if you want to use either of these products for remote connection, you need to do one of the following:

1. Ask your system administrator (or Internet service provider) to forward calls to the ports used by pcAnywhere or LapLink to one of the computers inside your office. This is similar to forwarding an extension number in a phone system.
2. Make use of a software product known as a gateway to handle incoming connections. Gateway products are a viable solution, but they add a great deal of complexity to your office's connection to the Internet.

TABLE 1

Comparison of Remote Connectivity Features and Benefits

Name	Most Likely User	File Transfer	Cut and Paste	Pricing	Ease of Use*	Ease of Set Up*	Encryption Features	Collaboration	Free Trial Available	Web Site
pcAnywhere	Telecommuters; home to office connection	Yes	Yes	\$179.95 version 10.5	4	3	Yes	No	No	www.symantec.com/pcanywhere
LapLink	Telecommuters; home to office connection	Yes	Yes	\$179.95 version 11 or \$139.95 for download	4	3	Yes	No	No	www.laplink.com
NetMeeting	Telecommuters; logging in from home after hours	Yes	Yes	Free	4	3	Yes	Yes	Yes	www.microsoft.com/windows/NetMeeting
GoToMyPC	Frequent travelers; mobile laptop users; home to office connection	Yes	Yes	\$14.95/mo for single user w/ annual subscription	4	5	Yes	No	Yes	www.gotomypc.com
Terminal Services	Satellite offices	Yes**	Yes	\$15,000 and up***	5	2	Yes	No	No	www.microsoft.com/windows2000/technologies/terminal/default.asp
Citrix	Satellite offices	Yes	Yes	\$20,000 and up***	5	2	Yes	No	No	www.citrix.com/default.asp

\*Based on a scale of 1-5 with 5 being the best

\*\*Requires special configuration—see www.microsoft.com/windows2000/techninfo/reskit/tools/hotfixes/rdpclip-o.asp

\*\*\*Including additional hardware

Note that with option 1 you can remotely connect only to a single computer in your office. If you have multiple users, or you need to connect to more than one computer, additional configuration changes must be made.

The good news is that the latest version of LapLink includes a feature called the Firewall Connection Service, which addresses, in part, the firewall issues. Using this feature, it is possible to connect to several office computers behind your corporate firewall—as long as your remote computer is also not behind a firewall.

In summary, pcAnywhere and LapLink both meet the needs of the remote worker in terms of software performance and behavior, but the configuration of your net-

work security may limit the functionality or make it difficult to maintain. That said, there are some instances where these products will meet all of your remote connection needs—such as if you only need to connect to one office computer, and you are confident that your ISP will not change your firewall configuration without notice.

### NetMeeting

NetMeeting is a Microsoft product that enables collaborative meetings on the Internet and remote connection. In this regard, NetMeeting has all of the same strengths and weaknesses of the pcAnywhere and LapLink solutions, but is free.

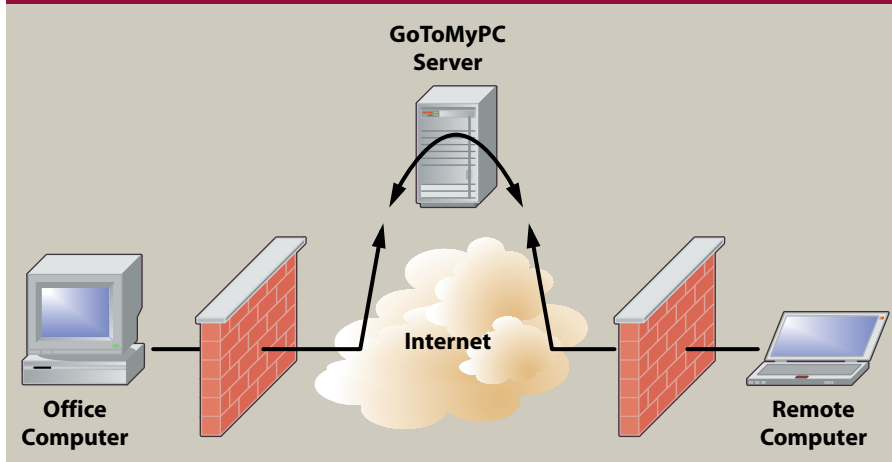
One side note about NetMeeting security: you must manually set the connection as secure, and you must have the same security level specified for each connecting computer. If the same security level is not specified, the connection fails, though it is not entirely obvious why.

### GoToMyPC

GoToMyPC is a remote connection service that you may purchase on a monthly or annual basis. Once purchased, you download and install a piece of software on the office computer. For the length of your subscription, you can access your office computer from any remote computer

FIGURE 1

## Getting Around the Firewall Problem



with Internet access via a simple Web page.

Probably the biggest advantage of GoToMyPC is that it works through almost any firewall connection. It accomplishes this by providing a central GoToMyPC server that both your office and remote computers access. Because outbound connections are allowed to pass through a firewall, both the office and remote computers are able to connect to the GoToMyPC server. This server then acts as a go-between, allowing the office and remote computers to communicate with each other, as shown in Figure 1.

With this system, there are a couple of concerns that initially arise. First, your remote connection travels through GoToMyPC's servers, which could, theoretically, create a security risk. GoToMyPC addresses this concern by using a dual layered encryption protocol that prevents GoToMyPC (or anyone else) from accessing your remote connection or pass codes. This encryption strategy provides as much, if not more, security as any of the other encryption options we have discussed. Second, if GoToMyPC's server ever becomes over-used, you could experience sluggish performance or an inability to con-

nect. Because GoToMyPC "hosts" the encrypted remote connection session, the installation process is very quick and simple—you do not have to involve your systems administrator or your ISP to get started. GoToMyPC has file transfer capabilities, though they are not as polished or convenient as the pcAnywhere or LapLink solutions.

One of the biggest disadvantages of GoToMyPC is the pricing model. Because it's a service, not a piece of software you can purchase for a one-time fee, you must pay an ongoing subscription fee. For some remote users the convenience of being able to access your office computer remotely via a Web page may well outweigh the ongoing subscription cost.

### Virtual Desktop Solutions

Microsoft Terminal Services and Citrix MetaFrame each create a virtual desktop from which remote users work. The primary advantage is that you don't need a dedicated office workstation for each user. This can save significant cost and space if you have multiple remote users who do not require the use of a dedicated workstation

while in the home office. The downside is that these products require advanced hardware and software that translate directly into significantly higher prices.

One final caveat on any situation with multiple remote users: the amount of bandwidth (the size of your connection) to the Internet has an upper limit. As more users access your central office computers through the Internet connection, the effective performance of each connection will be degraded. Be sure to talk to your solution provider about necessary bandwidth before implementing a particular solution; otherwise, you might wind up with an unexpected Internet access upgrade.



Jo and Kevin Day are principals of Trumpet Inc. in Phoenix, Arizona. They provide technology consulting and services to financial planning firms via the Internet. They can be contacted at [info@trumpetinc.com](mailto:info@trumpetinc.com) or <http://www.trumpetinc.com/>.

