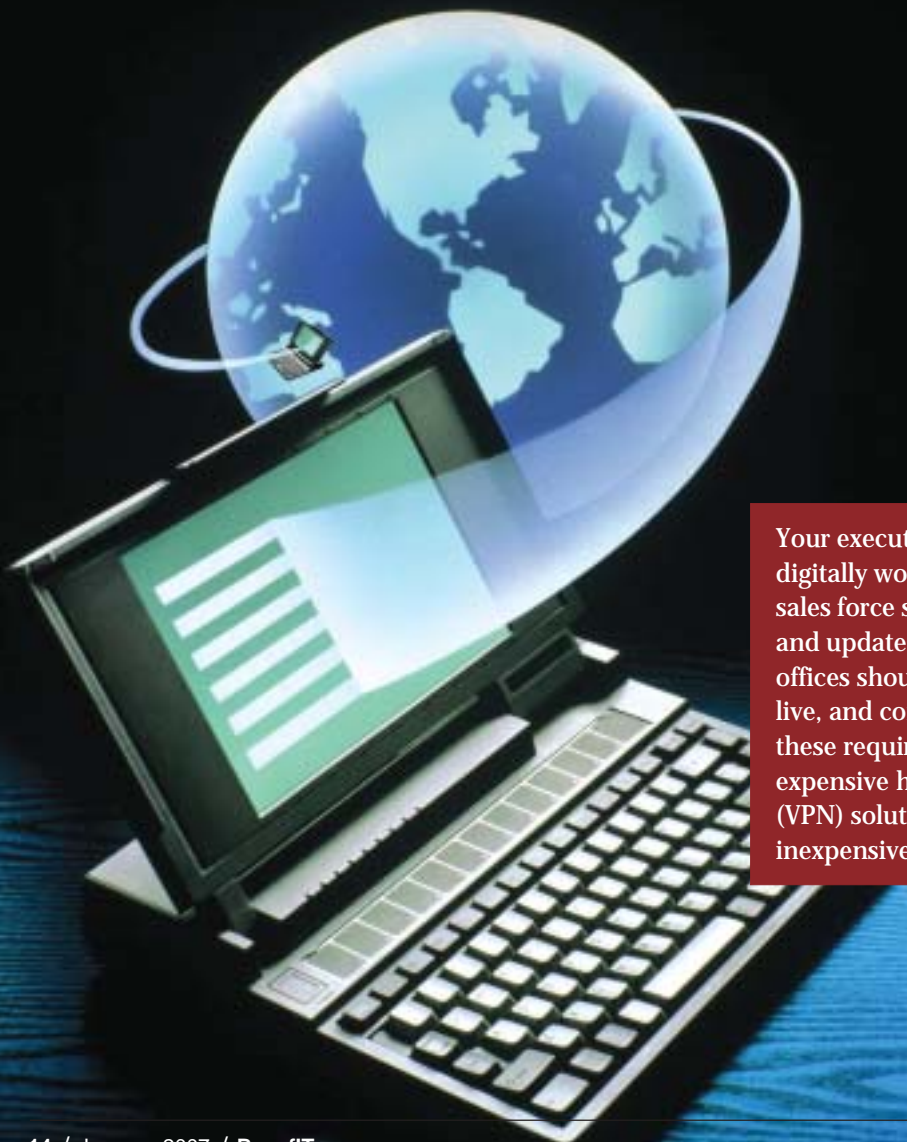


# Connect Cost-Effectively To Your Office From Anywhere



To be able to create a safe 'tunnel' from any computer in the world to your office network is a great feeling. It enables you to work from anywhere, anytime, without having to worry about carrying all your data with you in CDs and other disks. You can just log in from anywhere, access your office server or even your own computer and not only check e-mail but also use any data or applications you are authorised to. This is what techies would call a Virtual Private Network (VPN). But such a luxury always brings to mind monstrous costs, investments in high-speed leased line connectivity, expensive VPN equipment and so on. While huge enterprises do require such high-speed connectivity and rugged, hardened hardware-based VPN solutions, for most others a simple software-based VPN or remote access solution might suffice. That is precisely what Sphere Origins went in for—a software-based VPN solution.

## **Sphere Origin's experience with software-based VPN**

Have you watched "Saat Pher" on Zee TV and "Saathi Re" on Star Plus? These are shot by Sphere Origins, a company engaged in the production of Hindi television programmes. It is actively involved in ideation, development of story lines, channel liaison, overseeing

Your executives should be able to connect and digitally work with your office from anywhere. Your sales force should be able to connect from the field and update customer and sales records. Your branch offices should all be connected and working together live, and concurrently. The moment you mention these requirements, do IT consultants suggest expensive hardware-based Virtual Private Network (VPN) solutions? Ask them to tell you about the inexpensive software solutions as well.

of technical aspects, marketing, production, creative feedback, and so on. Obviously, the employees have to not only think on their feet but also work on the move!

Initially, Sphere Origins used a third party e-mail server, so its employees could log in to this e-mail server from anywhere to check their e-mail directly. However, they suffered from the nuisance of spam and viruses, and so the company decided to set up its own infrastructure for e-mail, file storage and Web hosting, on its own company server. This meant employees had to be allowed to access the server from any remote location while travelling. This could pose a serious security threat to the company server. So, a virtual private network was needed. But with two office locations and more in the offing, the worry was about the cost of software licences and that of VPN appliances and solutions. The other concern was whether this system could scale as the number of offices and users increased.

Sphere Origins finally zeroed in on a Nitix SE server solution provided by Net-iTech Asia Pacific, rather than invest in expensive VPN gateways. "It's good that we came across Nitix software. We are successfully using it and find it very efficient and easy to use. The software has improved our internal and external communications and has brought in value in terms of time and management efficiency," explains Sunjoy Waddhwa, managing director, Sphere Origins.

Adds Yatin Kantak of Net-iTech Asia Pacific, "Customers neither have time nor money to struggle with complex technologies. Our strategy is to give our customers a simple, robust, scalable and affordable system. We intend to make our technology simple. Connecting various locations should be as easy as using a telephone to dial someone. Nitix makes it very simple for a customer to understand as well as connect various locations using our VPN solution."

The Nitix OS includes within it a firewall, VPN technologies and a Point-to-Point Tunnelling Protocol for remote access and remote management of systems. This enables roaming users to easily connect to Sphere Origin's Nitix

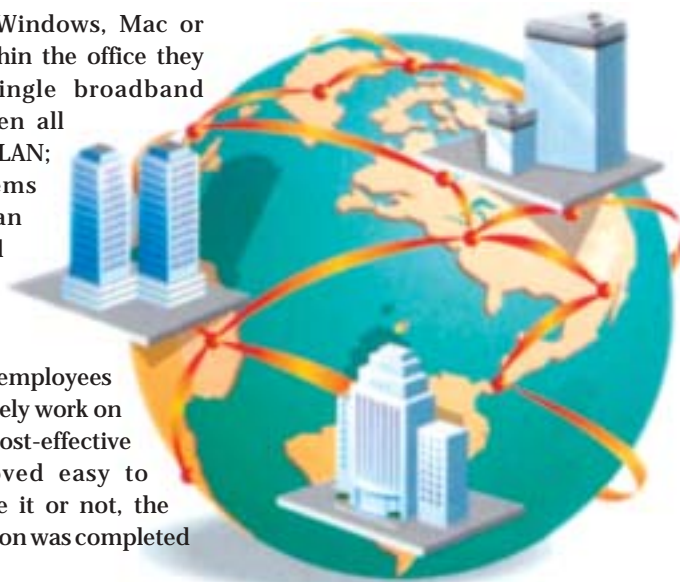
server using any Windows, Mac or Linux desktop. Within the office they can share one single broadband connection between all computers on the LAN; and the systems administrators can maintain and troubleshoot systems from wherever they are.

Sphere Origins' employees can easily and securely work on the move, with a cost-effective solution that proved easy to implement—believe it or not, the entire implementation was completed in just one hour.

### The soft side of the VPN story

Software-based VPNs come at a fraction of the cost of dedicated hardware solutions. In fact, sometimes you don't even have to make any special investment in them as you can use the in-built features that are available in most operating systems including Windows (Professional editions), various Linux distributions and others like Nitix OS. You just need to enable these features, configure user and server details, access rights, firewalls, and so on. Free business software such as OpenVPN (<http://openvpn.net/>) are also available.

These VPNs work more or less on the principle of your office's local area network (LAN), where you connect to your office's server through a browser



or a client program in your computer. The difference here is that users connect not over a local network but over the vast Internet, and authorised users can connect into the office network from any computer in the world. The VPN software will use various digital authentication and encryption techniques to secure the channel between the remote computer and the server. Technically, software-based VPN solutions are sometimes called Secure Socket Layer (SSL) VPNs.

In addition to letting roaming users access your office network from remote locations, software-based VPNs can also help connect branch offices together, so you can back up all data from a centralised location, users from one branch can access data from another, and so on.

### Remote desktops—Even softer than VPN software

Even cheaper and simpler to configure than software-based VPNs are remote access or remote desktop solutions. These allow you to 'access' the desktop of either your office server, your desktop computer in the office or even your home computer from any other computer, provided you are authorised and have a log in name and password to access the 'host' computer. Here, you basically retrieve the host computer's

“Connecting various locations should be as easy as using a telephone to dial someone.”

screen onto the remote computer. You view the host computer's screen and work on it just like you would on the host computer itself. Not only can you log in and work on that machine, you can even troubleshoot any problems in it. Therefore, remote desktops are a boon for administrators to sit at one place and manage all the users' computers in their organisation. Think of remote desktops as far-flung computers across the world connected to the monitor, keyboard and mouse on your desk, in your cubicle.

The biggest advantage in using these remote desktop programs is that the host computer and the remote computer need not be running the same operating system. In effect, you can retrieve the screen of your host computer that is running Linux onto a remote computer (could be even in a cyber café) running Windows and work on the screen as if you were working on your Linux machine.

While software-based VPNs require setting up of IP addresses, access mechanisms and so on, thereby requiring a little work in configuring the client machines, remote desktop solutions don't even need that!

Some solutions are entirely browser-based and you will require just a Web browser like Internet Explorer or Firefox, both for administration of the server (to set the authentication and access levels for each user, set security levels, firewall settings, and so on) as well as on the remote client computer, to login, access and work on your host

computer. Others might require the installation of a small program at the server and client computers.

Citrix Online's GoToMyPC Corporate is a commercially available, Web browser-based remote access software that is extremely easy to deploy and use. With this, you can even access your computer remotely from a mobile device like a PDA or a smart phone. A popular free business software for remote access is VNC (Virtual Network Computing). Although VNC requires the installation of a small tool on the client computer, its popularity stems from the fact that it is extremely small in size. You can download and install it in a jiffy even if you are working from a computer in the hotel lobby.

### The hard side of software-based remote access

If software-based remote access solutions were so much cheaper and also effective, then why would anybody go in for VPN appliances? For one thing, when the Internet is used as the medium for any communication, there are many security concerns. These include data and identity theft and the fear of somebody breaking into your 'tunnel' and listening to all the data going back and forth between your computer and the server.

In order to overcome these security risks, tight firewall settings and stringent user authentication levels are set on the servers or host computers to make sure no unauthorised person can

break into it. All these bog down the server as the number of users increase, making the communication between remote client and host computer extremely slow. Therefore, as the number of users increase, companies are usually recommended to go in for dedicated VPN appliances like those provided by Cisco, Aventail, etc, which implement tight security while remaining robust and fast even when the number of users grows.

### Ask your consultant what is right for you

All said, it is impossible to decide whether a software-based or hardware-based solution is best suited for you without entirely understanding your existing infrastructure and networks, current number of users and the expected growth in this number, nature of your business and the level of security required. Therefore, it is time for a chat with your IT consultant to discuss which mode of remote access is ideal for you. A user-friendly, cost-effective remote access solution can empower your employees to work on the move and catapult your organisation into a much higher sphere of success and profitability. ■

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