

Straight Talking – Secure remote access closes in

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Virtual private networks that use internet protocol security used to be seen as a nightmare. But next-generation IPsec VPNs are changing all that.

Over the past 40 years or so, the way IT has been delivered to end users has changed dramatically. In the 1960s and 1970s, the mainframe dominated and computing resources were generally centralised.

By the 1990s, the client-server computing model came into use, providing a convenient way of interconnecting applications distributed across different locations.

Now, with the internet ubiquitous, we are all used to a highly distributed computing environment, with information obtained on demand via a wide array of computing devices, many of which are mobile.

This distributed computing paradigm allows for a highly mobile workforce, which has created demand for technologies that enable workers to remotely access their organisation's centralised network resources.

But hackers are increasingly targeting those networks, looking to steal valuable information. On top of that, with more than one billion users accessing the internet in 2007, there is a colossal amount of information being exchanged that could fall into the wrong hands.

In today's highly regulated environment, large fines are being imposed on organisations that lose personal data.

Those consequences mean technologies that provide remote access to computer networks must be highly secure. Over time, virtual private networks (VPNs) have become the de facto technologies for achieving secure remote access.

These commonly come in two flavours. On the one hand there are secure socket layer (SSL)

VPNs, which are easy to deploy, but which generally provide access to a fairly limited range of applications, primarily those that are web-based.

On the other hand, internet protocol security (IPsec) VPNs provide a level of network access that is comprehensive and offers an experience similar to being physically located in an office. But these VPNs have traditionally been cumbersome to deploy and manage.

These drawbacks are something most vendors of IPsec VPNs have been working on. One of the main problems with first-generation IPsec deployments was that they traditionally required a software agent to be installed on every device under management.

Installing this agent meant IT had to visit each device not just for initial set-up but for upgrades and maintenance. These demands added greatly to the complexity of the deployment and wasted manpower.

Next-generation IPsec VPNs now on the market aim to streamline remote access deployments. A key development is the management console through which software configurations, digital certificates, policies and software updates can be created and pushed to personal firewalls for each device.

This development allows software agents to be pushed over communications lines to end users without the need for manual intervention and preventing any tampering with security controls. Now that devices can be centrally managed, costs can be controlled better and fewer administrative resources are needed for managing the deployment. But it doesn't end there.

Vendors have been quietly adding a host of other features. Quocirca recently produced a report outlining what it believes are the essential elements to look for in today's versions of IPsec technology. These include:

- Centralised management capabilities, along with provision of personal firewalls.
- Authentication and access controls, backed up by provision of strong authentication capabilities for securely authenticating all users.
- Security controls, including network access control capabilities to ensure that devices under management conform to policies set.
- Logging and reporting capabilities to provide evidence that controls are working as they should according to policies.
- Support for a wide range of communication methods, including for mobile devices, as well as for all flavours of operating system in use.

With these developments, the headaches associated with managing large-scale IPsec deployments - which provide the most complete secure remote access solution available on the market - are largely a thing of the past.

Today's technologies can provide highly secure remote access in a wide range of scenarios at a much lower administrative cost than first-generation products.

About Quocirca

Quocirca is a primary research and analysis company specialising in the business impact of information technology and communications (ITC). With world-wide, native language reach, Quocirca provides in-depth insights into the views of buyers and influencers in large, mid-sized and small organisations. Its analyst team is made up of real-world practitioners with first hand experience of ITC delivery who continuously research and track the industry and its real usage in the markets.

Through researching perceptions, Quocirca uncovers the real hurdles to technology adoption – the personal and political aspects of an organisation's environment and the pressures of the need for demonstrable business value in any implementation. This capability to uncover and report back on the end-user perceptions in the market enables Quocirca to advise on the realities of technology adoption, not the promises.

Quocirca research is always pragmatic, business orientated and conducted in the context of the bigger picture. ITC has the ability to transform businesses and the processes that drive them, but often fails to do so. Quocirca's mission is to help organisations improve their success rate in process enablement through better levels of understanding and the adoption of the correct technologies at the correct time.

Quocirca has a pro-active primary research programme, regularly surveying users, purchasers and resellers of ITC products and services on emerging, evolving and maturing technologies. Over time, Quocirca has built a picture of long term investment trends, providing invaluable information for the whole of the ITC community.

Quocirca works with global and local providers of ITC products and services to help them deliver on the promise that ITC holds for business. Quocirca's clients include Oracle, Microsoft, IBM, Dell, T-Mobile, Vodafone, EMC, Symantec and Cisco, along with other large and medium sized vendors, service providers and more specialist firms.

Details of Quocirca's work and the services it offers can be found at
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