

## Straight Talking – Speeding up the net - is it possible?

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The best way to get reliable performance out of a wide area network (WAN) is to install your own high-speed gigabit fibre optic cables between all the locations in your organisation. This could provide seemingly unlimited bandwidth for your employees to use the applications they like and not have to think twice about the volume of content they send around the network.

In reality of course for all but the largest organisations this is not affordable - and even for them it is impractical to link every remote outpost to a private physical network. Even the NHS - which has given BT a few billion pounds to build such a network - is relying on public network connections to link in most surgeries, clinics and external organisations to its shiny new private backbone.

Nearly all businesses today are reliant on wide area computer communications to a greater or lesser extent and for many this means using shared networks. This often includes the internet, which is anyway a mishmash of privately owned networks - a 'virtual public network' if you like.

In theory the internet treats all traffic equally but despite the high-minded claims of the so called 'net neutralists', it is possible to buy high priority bandwidth on any shared network, including those privately owned elements of the internet. Virtual private network (VPN) providers use a mix of their own networking facilities and public ones to provide priority wide area services.

One trend that is contributing to the increase in network traffic is the growth of subscription-based applications that are accessed over the public internet, called software as a service or SaaS).

But whilst access to such applications might be via a public network, SaaS providers link their own internal hubs together using a private physical network. An example is WebEx which has built its own private MediaTone Network (MTN) to link all its hubs and ensure optimal. These are widely used for speeding up communications between branch offices. Cisco's

performance for its subscribers. If your WebEx session is slow, don't blame the internet, blame WebEx (or maybe its new owner Cisco which probably supplied much of the network equipment that runs MTN).

The reality is that for all organisations, wide area networking is going to involve a mixture of public and private physical networks, the performance of which is always going to be variable. But that does not mean there is nothing to be done - there are many ways to control and accelerate WAN traffic to ensure employees' communications remain reliable and employees productive.

Control means first making sure employees are focused on the things they should be doing and not inadvertently consuming bandwidth for non-work purposes such as browsing YouTube, downloading MP3 files or keeping up with the cricket via IPTV.

The simplest way to limit internet activity is with software from vendors such as Clearswift, Marshal, Secure Computing, Trend Micro or Websense. Such products allow network managers to ban certain types of activity and block specific websites or types of websites.

Some license their libraries of URLs which can then be embedded in appliances that act as a proxy for all internet activity. This includes the growing band of unified threat management vendors: SonicWALL, Symantec and many others. It is also possible to subscribe to managed services from vendors such as MessageLabs and ScanSafe which offer similar capabilities.

After traffic has been limited to only that which is essential to the business, there is still more that can be done. Web acceleration appliances from vendors such as Expand and Riverbed ensure traffic is compressed before transmission and that regularly used files are cached locally and not transmitted each time they are requested.

ISRs and Microsoft's ISA Server do the same sort of thing.

Other vendors such as Blue Coat provide multiple capabilities - allowing the bad stuff to be stopped and the good stuff sent on its way - in a single appliance. On top of all this, networking company Akamai will help navigate optimal routes over the public internet, claiming greater than 50 per cent performance gains for certain applications.

Ensuring secure reliable connectivity is just the start. Businesses also need to address performance. There is no shortage of products

and services to help get acceptable performance out of the mishmash of services that constitute any particular WAN. The main problem is working out which of the multitude of vendors to spend money with.

Find out more in Quocirca's free white paper A Short Guide to a Fast WAN:  
<http://www.quocirca.com/pages/analysis/reports/view/store250/item4133/>

## 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  
<http://www.quocirca.com>