

## Managed Data Networks - your time has come?

By Simon Marshall, freelance journalist and senior consultant at Futurity Media, September 2004.

*Benefit from increased cost control, resilience, focus and future proofing*

Acres of newsprint have been devoted to the subject of Managed Data Networks (MDNs). But does it warrant all the interest? It looks very much like it. Over the next few pages this article looks at the subject of MDNs, examining the issues that make companies seriously consider them, what the knock on effects are and why they're going to be a hot topic for the foreseeable future. It's not hard to see the attractions of a MDN. Essentially, an outsourced Wide Area Network (WAN), it provides an opportunity to exploit new applications without incurring new operational costs. Economies of scale also mean that a provider will be able to offer you a fully operational network at a much lower cost than you could hope to achieve by doing it yourself.

### Modern times, indeed

The standardisation of technology, recent

improvements in broadband coverage and competitive prices have helped make MDNs appear an attractive proposition to a whole range of businesses that would otherwise have looked the other way. Of course, standardising technology doesn't mean reducing choice. MDNs come in three main types - Frame Relay, IPVPN and Evolved Ethernet - so it's possible to choose the solution that best meets the needs of your organisation. You won't find yourself saddled with paying for functions your business simply doesn't need.

Whichever option you choose, you should expect to work hand-in-glove with your provider: it's this approach that's been behind the successful delivery of value added services in recent years.

### Old-fashioned benefits, though.

MDNs bring four principal benefits to any organisation: cost control, resilience, focus and future proofing. The first

of these benefits is due to MDNs' ability to deliver more bandwidth and functionality for the same budget. In fact, a business will typically experience a 25% increase in bandwidth when compared to a legacy based data network. In addition, there are other ways to make your budget go further, by cutting your capital expenditure and paying for your new network with a monthly fee.

### Down with costs.

For most companies, the impetus for switching over to MDNs comes from the opportunity to control the costs it represents. This is because the service provider leases the equipment to you, depreciation becomes a thing of the past. Fixed costs through leasing and the inclusion of maintenance and support costs in the contract mean that costs needn't head skywards just because your network's usage takes off.

### Now you see it...

Companies typically find that their budget buys them more bandwidth when they buy their service in. That said, it's important to check that the pricing in network tenders is



completely transparent and that there are no hidden costs (i.e. project management costs are included). This applies particularly with respect to upgrade costs, something that will be an issue when considering deploying converged applications in the future.

Resilience should be the benefit that you're never aware of. Most providers these days monitor their networks around the clock and have back-up systems ready, just in case. Good news, then, if you depend on business critical applications. Should anything happen, single supplier management means that your IT director only has one supplier to chase up to effect a solution. For a lot of companies, managing the network can be just one entry on someone's job description. Outsourcing lets your staff concentrate on areas where they can ensure applications run smoothly; desktop support, for example. Specialisation by a supplier

works in your financial favour, too. Focusing on maintaining and running networks means that they can keep the price that they charge down, usually to the extent that it dramatically undercuts the potential in-house cost to your organisation.

In a world where technology quickly becomes obsolete, a managed network means your company can stay ahead of obsolescence, by opting out. Your service provider bears all the capital investment costs and responsibility for ensuring you can benefit from the latest networking technology as and when it comes on stream.

### **A new-fangled tangle.**

Many companies find the prospect of untangling themselves from their own network an attractive one. After years of unplanned growth, many have found they've evolved a network in which user friendliness is nonexistent. Maintenance costs have spiralled with each layer of complexity and

to make things worse, they may find themselves trying to run network solutions from suppliers who weren't interested in being compatible with their competitors. MDNs cut through these problems at a stroke, leaving you with the relatively simple task of managing your operational costs and overseeing the introduction of new technology, instead of its installation.

Often a network has become so hideously complex that it simply can't cope with the number of applications running on it. Network configurations that merely 'do the job' by optimising network performance, may compromise business critical applications. At worst they can bring the network to a complete halt, resulting in lost productivity.

### **Far and away the best solution.**

Remote working is another concept enjoying a lot of currency at the moment. A managed network is the perfect way to implement a

remote solution. Given the increase in demand for this option from employees and the growing emphasis given to it by the Government, this is an option that will become a more important factor in the decision to take up a Managed Data Network option in the future.

*Over 70% of organisations in Europe will have achieved some network convergence by 2006\**

#### **All together now....**

One of the more interesting benefits of MDNs is that it allows network convergence. What this means is that voice, data and multimedia traffic can be run across a single network. Analysts, Yankee Group, claim that 39% of European enterprises have already implemented convergence or are in the middle of implementing it, while another 37% are planning to do so over the next 24 months.

Some MDNs offer a business a readymade route into convergence. Which means you can start channelling

different forms of traffic across a single network as and when you're ready. You don't have to wait for the future to start delivering, either. For instance, you can now run Voice over **IP** between sites and the addition of Video over **IP** will allow you to reduce costs, by using your data network to carry this type of traffic.

#### **How much do you want to be together?**

Mergers and acquisitions are also triggers for MDNs. And while companies may look for synergy in a partner, network compatibility is something that's rarely discussed. So the issue becomes one that can't be avoided any longer, the complexity and cost implications of unravelling and connecting two distinct networks are enormous. The avoidance of these issues and ability to add extra sites to the network have helped make the switch to a MDN an ever more popular option.

#### **No more big MAC issues.**

Another reason for a company to leave its old network behind is its sheer inflexibility. Changes commonly referred to as Moves, Adds & Changes (MAC) become increasingly difficult as a network grows in complexity. The MDN option means that the MAC issues are dealt with by the service provider, who should also be able to provide advice on network configuration.

#### **A pain in the bottleneck?**

A major cause of network headaches is the bottlenecks and single points of failure capable of bringing a network crashing down. MDNs provide a more resilient network, simply because it's in the service providers' interests to minimize downtime through 24/7 monitoring of their network.

#### **Hello, real world.**

IP MDNs are so useful, why hasn't every organisation in the land started adopting them? The simple answer is that despite the publicity about MDNs, out beyond the



offices of IT companies, there are still a couple of potent urban e-myths holding businesses back.

### **Hurry up and wait.**

The most common misconception is that switching to a MDN will involve massive disruption and a lot of downtime. Most responsible service providers deliver a tailored service and project manages the switch, ensuring the right resources are online at the right time.

*A managed service can alleviate the MAC problems caused by incompatible technologies*

Moving over from the old network will be carefully planned. This is why both networks are often run simultaneously, to test for potential problems.

You should expect to be able to tailor your managed network agreement to suit your organisation's specific needs. For instance, if being in control of your routers is a particularly important issue

your service provider should be able to accommodate you.

### **Numbers crunched.**

MDN s are also generally thought of as being a more expensive option to running the network in-house. That's not generally the case. You can rely on market forces to create all the incentive your service provider needs to deliver a faster, more reliable and more cost effective option. They're able to do this by leveraging the economies of scale that managing multiple organisations' networks can bring. You also benefit from reduced capital expenditure and lower support costs.

Any service provider worth their salt will also be able to put together a convincing business case for moving over to a MDN simply by looking at your existing network. They'll be able to tell you what can come off the balance sheet by offering you a router buy-back and lease scheme, for example. They may also be able to offer you flexible terms of payment,

such as initial lump sum and smaller subsequent monthly fees, if it fits in with your procurement strategy.

### **Better in than out?**

MDN s are typical of outsourced contracts, in that they have a knock on affect on internal departments. In-house network engineers, for example, will see their role move over to the service provider. To counteract this, many companies only look at the unmanaged network option, preferring to keep that side of things in-house.

### **Swings and roundabouts.**

The problem with keeping your network entirely in-house is that network management invariably becomes more difficult as more applications become dependent on network performance. There are also a limited number of network specialists available. As companies switch over to new technologies, the lack of such a specialist will be felt

increasingly acutely by those opting down the DIY route.

### **Now's the time.**

Although your organisations WAN will meet your networking requirements for the foreseeable future, you will become aware of an industry wide push towards adopting the newest IP technology. No longer at the cutting edge of technology, many companies have successfully adopted Multimedia and Voice over IP applications. This combination of maturing technology and supplier experience means that companies contemplating the MDN option face a surfeit of options. You'll find that your telecoms suppliers can help by offering the flexibility to structure a solution to meet your needs. Another advantage of the maturity of this solution is that there are plenty of early adopters from

who you can learn. Then it's a question of talking to some reputable service providers. It's who you know that matters.

Choosing to go with a MDN is not a decision to be made lightly; the strategic implications are just too big. It's important to find a supplier capable of matching your requirements for a cost effective, future proofed solution. Given the intimate nature of the relationship, it's important to pick a supplier who you can build a long term solution with.

It's a partnership thing. Finding a supplier willing to work as your partner will very often yield the better results than one happy to play a subservient role. By fully understanding your requirements they will be in a position to manage the implementation stage so that it's a much smoother process. This could mean adopting a more sharing attitude, where you jointly

assess strategic issues, such as how to migrate to a new infrastructure, or an operational issue, like configuring applications for the network.

### **Would like to meet...**

There are a lot of MDN service providers to choose from. It's important to identify the most experienced providers, to ensure continuity of service. In addition, identify ones with networking skills, resources and tried and tested solutions that are supported by comprehensive service level agreements.

*To talk to Blue Saffron to see how they can help you move to a Managed Data Network, call:*

0844 560 0202

*Alternatively, email: [info@bluesaffron.com](mailto:info@bluesaffron.com) or for more in depth information on implementing a Managed Data Network, visit [www.bluesaffron.com](http://www.bluesaffron.com)*

\*Source - the Yankee Group, 2004

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