

Knowledge

smart thinking from Data Integration



DATA INTEGRATION

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Getting to grips with WAN costs

Atkins, the UK's largest engineering consultancy, has retained LAN-like performance for centralised applications and avoided hefty WAN upgrade costs with an optimisation solution based on Juniper's WX platform.

➤ Atkins' network of more than 100 branches throughout the UK is vital for maintaining close contact with its customers, but maintaining and supporting IT systems in so many branches is costly and time-consuming, so the company decided to embark upon a programme of IT upgrades and application centralisation.

The first stage of the centralisation plan was to replicate data stored in the branch offices back to the company's main data centre. Atkins knew that centralising services would add 3–4 times more traffic onto its WAN, so the project team needed to ensure that application performance and availability would not be degraded.

Increasing WAN bandwidth to cope with the extra traffic was not an attractive option; Atkins calculated that 80% of sites would need a WAN link upgrade, giving rise to estimated first year costs of £1.7 million and an ongoing rental increase of £900,000 per year. Moreover, simply adding bandwidth could not guarantee response times would be maintained because the latency aspect of application performance would not be addressed. So Atkins set about finding the 'best fit' WAN optimisation solution. Atkins shortlisted several suppliers to deliver the solution but eventually concluded that Juniper's WX platform gave the best results.

Phil Hedges, UK Infrastructure Design Engineer at Atkins, explains why. "Retaining application performance is one of the critical success factors

of our IT centralisation project. We needed a product that was capable of optimising not just TCP but UDP and GRE traffic as well. Juniper allows us to honour existing QoS settings on the WAN, but we can enhance them with more granular shaping where required. Given the number of sites we have to deal with, the ability to centrally deploy and manage the solution was also essential. We chose the Juniper technology as the most comprehensive WAN optimisation solution on the market. The caching and acceleration allowed us to retain user performance whilst at the same time centralising our applications."

Deploying Juniper WX accelerators has enabled Atkins to cope with the sharp growth in end-to-end WAN data throughput caused by the increase in backup traffic and data replication, without needing costly bandwidth upgrades.

Phil Hedges sums up, "Our objective was to roll out centralised enterprise applications without upgrading our WAN and to retain performance for our end users. Data Integration's solution has cost around one fifth of the £3.5 million that would have been required for WAN upgrades over the next three years and has enabled us to mitigate the risks of application performance degradation whilst we undergo this major IT centralisation project. In fact we are managing to centralise all our enterprise applications without the need for any significant WAN upgrades whilst retaining, and in some instances improving, application performance."


To read the full story, go to: www.dataintegration.com/atkins

If you are planning a data centralisation project, please ask your account manager about our Application Profiling Services and Application Optimisation Solutions.

For more information about anything in this newsletter, email info@dataintegration.com or phone **020 8875 6566**.

Data Integration sailing day


Data Integration customers go wild on the Solent.

 Last October we treated a selection of brave customers from Sony, Atkins and British Airways, to a day's sailing on the Solent. Despite the time of year the weather remained fairly calm and the group had a fun day sailing over to Cowes for lunch and back.



Beyond QoS: essential network services for effective VoIP applications

Underestimating the criticality of network identity services could spell disaster for your VoIP applications.

 DNS, DHCP, TFTP, NTP – these four acronyms are probably familiar to most data networking professionals and many members of the voice staff have heard of them, but they probably are not sure what they mean.

They represent protocol services, such as IP address assignment, domain name resolution and configuration file transfer that are essential to operate any network application and are increasingly important for effective VoIP or IP telephony systems. Not only do many data and voice network administrators underestimate the criticality of these services, many overlook the shortcomings of conventional approaches to delivering these services, like reliability, security and manageability that become increasingly cumbersome as new applications like VoIP are deployed.

On our website we have posted a webcast from our partner Infoblox designed to help people understand these systems and how they apply to VoIP and IP telephony environments.

The primary question discussed in the webcast is 'Are you ready for VoIP?'. QoS is not the only solution to meet users' needs, nor is more bandwidth the other solution. What about availability? Availability is the percentage of time that a function or service can be accessed and used successfully by the user. VoIP depends on a suite of network identity services to provide phones with addresses (DHCP), firmware and configurations (TFTP/HTTP) and reliable time (NTP). If these services are compromised, insecure or unreliable/unavailable, the VoIP service will fail as well, independent of the QoS implementation or buying more bandwidth.

Watch the webinar:

www.dataintegration.com/products/infoblox



Network identity acronyms

DNS – Domain Name System. This is the server that contains the directory associating the phone number with an IP address.


DHCP – Dynamic Host Configuration Protocol. This issues the IP addresses that are required by the phones, gateways, etc., for access and communications over an IP network.

TFTP – Trivial File Transfer Protocol. This is used to deliver firmware and configuration information to the IP phones and other devices.

NTP – Network Time Protocol. This provides the authoritative clock for the network devices and application.

Green agenda – electronic statement delivery

Replacing paper-based bank statements, bills and pay slips with email is one way to save paper and improve energy efficiency.

 Several high-profile UK companies including Marks & Spencer and HSBC have recently announced their plans to go carbon neutral. The IT community is also looking at ways in which technology can be used to reduce waste and energy usage.

One way that companies can reduce waste is by cutting the number of paper statements and bills they send out to customers or staff. By replacing paper-based bills with email, you eliminate the cost and energy usage associated with paper, printing and postage.

Data Integration, together with Voltage Security, has developed a Secure Electronic Statement Delivery solution that overcomes these issues, is consumer-friendly and integrates easily with CRM, ERP and billing systems.

To find out more, please email info@dataintegration.com or view our 10-minute webinar at: www.dataintegration.com/products/voltage

Voltage
security

Visit us at these events:

infosecurity[®]
EUROPE

24-26 April 2007
London, United Kingdom
www.infosec.co.uk

Stand K816


**LONDON
CONNECTS**

The 7th Annual London Connects Conference
The Road to Personal Public Services: How Technology is Letting the Customer Take Control
Tuesday 26th June 2007, QEII Conference Centre, London

See: www.dataintegration.com/events

New support services

Data Integration has launched two new ranges of support services – DI Reactive and DI Proactive.

 Our Reactive services provide break-fix hardware maintenance along with remote telephone assistance and software updates. DI Proactive services provide a 'menu' of additional services that enhance the DI Reactive support packages.

DI Reactive is available in four different service levels that have been developed to cover the majority of customer requirements. But whichever level of DI Reactive support you choose, you will receive:

- Telephone and email assistance from the specialists at our Support Centre

- Access to our secure Support Portal so you can track the progress of your open calls
- Software updates to enable new features and keep your product patched against the latest bugs and vulnerabilities

DI Proactive services include 24x7 monitoring, software update alerts, skills update service and pre-pay service tokens.

Please ask your account manager for more information.




DATA INTEGRATION



Traditional exterior, modern interior

Eton College may be steeped in history, but when it comes to IT it's very much in the 21st century.



 Eton College, the famous 560-year-old public school, has recently invested in a Gigabit network from Extreme. The new network, which is remotely monitored and supported by Data Integration, will deliver 100 Mbps to the desktop and underpin the school's plans for IP telephony and personalised learning.

As a boarding school, access control is a subject high on Eton's list of priorities. In the role of temporary guardian to all pupils during term time, the onus lies on the school to ensure that the network is used in line with school rules on learning and entertainment. Access rights are determined by a number of factors including the age of the pupil and their boarding house, which presents a unique management challenge.

The network and application access rights for each user at Eton College are held in Microsoft Active Directory and seamlessly applied across the Extreme network from any location. User rights are tied to MAC address authentication so that the school is also able to control how pupils interact with the network. For example, if a pupil breaks the rules regarding use of computing resources, the school is able to allow them to sign in to a PC in a classroom as part of a lesson but not from their laptop in their bedroom for recreational use.

"This level of access control sounds simple yet is relatively difficult to achieve as it's not a standard requirement on corporate networks," says Liam Maxwell, Head of ICT at Eton College. "In fact, once the network was installed we worked with Data Integration and Extreme Networks Technical Assistance Centre to develop additional software code to deliver exactly what we wanted at the edge of the network. The response from the TAC team was impressive; their understanding of our situation and their professional approach was excellent.

"We now have a network that means we don't spend all our time managing either the network or associated access lists and can concentrate on our ICT teaching responsibilities and delivering new technology that improves the school's educational capabilities. We can now see in real time exactly where everything is on the network and whether it's working properly; if there is a problem we can see exactly where it is and what it is. We're now much more in control. The network is no longer a stumbling block to be overcome when delivering day-to-day teaching or improving the service we offer to pupils."

To read the full story, go to:
www.dataintegration.com/etoncollege