

# Sedgemoor College Ltd

## *Sedgemoor College leaps into 21st Century Networking*

### INDUSTRY

Children's Specialist Education and Residential Services

### REQUIREMENTS

- Update to a common operating system and applications for all PCs without the expense of complete hardware renewal
- Upgrade LAN and implement server-based network including central email system, centralised backup system and centrally managed anti virus software
- Deliver new Management Information System to all users across 24 sites without the need for expensive private circuit leased lines

### SOLUTION

- Citrix-based
- 'Thin client' server-based application delivery
- Stable, resilient and reliable server hardware platform
- File and Print server network
- Centralised email system
- Centralised backup system and anti virus software
- Secure VPNs
- HQ leased line to Internet
- Remote offices ADSL Broadband Internet connections

### RESULTS

- All requirements met
- All time lines achieved
- All within budget
- Streamlined network and management systems
- Improved user experience
- Unanimous acceptance and approval
- Reduced maintenance, support and training costs

Sedgemoor College Ltd, based in Ilminster, Somerset, is the UK's leading provider of Children's Special Education and Residential Care facilities. Sedgemoor started trading in the South West in 1988. Since then it has grown into a national provider, with over 65 residential properties and 14 schools providing highly focused care and education services to children with a wide array of behavioral difficulties and complex health needs.

The Executive of Sedgemoor were acutely aware that their current IT systems were either non-existent or obsolete and in urgent need of a cost-effective solution to meet the growing demands of its staff and customers. Because of budgetary restraints, they also had to use as much of their existing hardware inventory as possible to save on costs. BOM IT Solutions happened upon Sedgemoor with a timely telephone call.

### *The Problem*

Sedgemoor College grew organically over the years, acquiring property and housing the organisation needed to fulfil the objectives it had been set by the Board. Because of this organic growth, little thought was given to the IT infrastructure required for such a fast growing business. The result was that the Ilminster Head Office and the remote offices had no common hardware, software or communication platforms, making communication between different offices and personnel difficult, time consuming and very frustrating.

With regard to IT infrastructure, only the HO had any form of Local Area Network (LAN), which consisted of 50 PCs; the other 120 PCs in the remotely located offices operated on a standalone basis and were running outdated and incompatible operating systems. Therefore the vast majority of communication across the whole of the organisation was paper-based.

This situation was further compounded by the lack of a number of key applications and processes normally found within an organisation of this size and complexity. Primarily, these were the lack of a centralised policy in relation to critical data backup, email and anti virus applications, and the lack of a common operating platform. Internet connectivity consisted of, in the main, dial up accounts and was restricted to a few key users.

The solution Sedgemoor required was a ground-up build of their IT infrastructure, from common operating platforms and applications through to a complete server-based network that delivered all key processes and applications to every individual PC within the organisation. In addition, the network had to deliver connectivity to a new Management Information System to all users who required access.

### *System Requirements*

BOM IT Solutions approached Sedgemoor's problems within a consultative and structured framework. The company has many years of experience in advising businesses on how to plan and implement far-reaching IT infrastructure projects. Because of this experience, BOM IT staff brought a high degree of empathy and guidance to the project, and enabled the Sedgemoor staff to understand better the change processes involved.

## **SYSTEMS AT A GLANCE**

- Citrix Presentation Server 3
- IBM xSeries rack mount servers (x345s and x335s)
- Windows 2003 network operating system
- Exchange 2003 server email system
- Ultrium Auto Loading tape backup drive and Symantec Norton Anti Virus
- NetScreen Hardware Firewalls

From the initial planning meetings, the project broke down into three key component parts:

- 1** Design and build of a new server-based network, with associated broadband and LAN connectivity to enable all remote sites to communicate with HO.
- 2** Full upgrade to all PCs within the organisation with new, compatible operating systems and applications, whilst at the same time moving the hardware to 'thin client' architecture.
- 3** Deployment of business critical applications across the complete network for local and remote backup, email server access and group anti virus protection. Other elements in this key area included centralised office application software to enable document sharing, collaboration on projects and access to the new Management Information System.

## ***Sedgemoor's Concerns***

As mentioned, the College had limited funds to employ on the project and many of the techniques and processes traditionally deployed in company-wide IT infrastructure projects on this scale were beyond the allocated budget.

BOM IT engineers had to construct an innovative and complete solution that met both current and future needs of the College. To allay the fears of the College's Executive, their three major areas of concern were:

- The potential expense of renewing PC hardware across the whole organisation.
- The potential expense of updating and renewing various software licenses.
- The potential cost of connecting all the remote offices to the HO's LAN through a traditional Wide Area Network (WAN), normally using private leased lines which carry high installation and ongoing rental costs.

## ***The Solution***

Throughout the consultation period, the BOM IT engineers continued to evolve different network topologies that would fit the profile of the Sedgemoor project. Regardless of the cost restraints, making sure the network would function as required was their key objective; cost could be looked at once a viable network topology had been constructed.

The BOM IT group proposed a solution that met both the cost and network needs of Sedgemoor - a Citrix platform running on a series of IBM servers.

Citrix as a network platform enabled a number of the initial concerns of the College's Executive to be eliminated from the table. Because of the ability of a Citrix platform to consume little bandwidth, standard ADSL connectivity to each of the remote offices was all that was required to connect them to the HO LAN. This was a major concern for the College; private leased lines are (as previously mentioned) an expensive option. These types of connections are only really required where significant amounts of data, files in megabits and beyond, are transferred on a regular basis (for example, by graphic designers or architects).

The second concern to be met by the Citrix solution is that none of the existing PCs had to be replaced or go through an expensive upgrade. This was achieved by the fact that all of the office applications, office documents, email and any other type of application were hosted (kept) on the IBM servers running the Citrix software platform.

The PCs became what is referred to as 'dumb terminals', and there was no need for the individual PCs to have any of the applications residing on them. Therefore the processing power they currently had installed was sufficient to perform all the tasks required by the user. All the processing power was held on the main servers back at company HO and only requests from the terminals to

retrieve or update information on the applications being used by the user were transmitted across the network.

### **Conclusion**

The installation of the Citrix platform delivered the Windows XP operating system, the latest MS Office applications suites, an email system and Sedgemoor's Management Information System to all the PCs across all sites.

BOM IT Solutions successfully delivered the full system on time and within budget. The system has streamlined network and management systems, improved user experience, and reduced maintenance, support and training costs. Central management has proved a great advantage in controlling administration overheads, previously a major drain on resources. The system has been in use for over two years, and meets not only with unanimous acceptance but with positive approval throughout the organisation.

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#### **FURTHER INFORMATION**

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