CASE STUDY

Optimising IT Infrastructure & Communications to Support a Growing Business

Our client is a leading multi-discipline resource and construction company specialising in the design, construction and commissioning of global projects. They have built an impressive portfolio of projects across a wide range of industry sectors, including Minerals & Processing, Oil & Gas, Materials Handling and Power Generation.

THE CHALLENGE

Our client had experienced very rapid growth and transformation as a result of their success and their IT infrastructure was no longer able to support the requirements of the business which was still growing. The company recognised the need to put the appropriate focus and investment on improving the infrastructure and engaged Multipro IT to assist with this.

Key Challenges:

- *Poor quality infrastructure*: The Company's head office had 4 physical servers, all reaching end of life, and therefore a substantial server refresh. The age of the servers at remote sites varied significantly from brand new tier-1 servers to very old "whitebox" servers.
- *Inadequate data communications*: The users accessed email via a Wide Area Network (WAN) connection back to the head office Microsoft Exchange server. The specific WAN connection at each site depended on service availability, with some sites connecting over Next-G. WAN connections had no mechanisms enforced to prioritise business critical data above less important traffic. Users often reported that WAN connections were unreliable and slow.
- *Lack of centralised management of corporate information:* Business critical information was dispersed in various locations with separate servers making it a challenge to control corporate information.
- *Reliance on each location to back up their information on schedule:* The existing backup solution was to USB disk with a reliance on site-users to perform the backups.

THE SOLUTION

Multipro IT first deployed a WAN optimisation controller to the head office, so that remote sites coming online with optimisation controllers would see an immediate benefit with improved WAN access. We deployed Multipro SitePods to four remote locations, replacing the existing old infrastructure at the remote sites with this easy to deploy, self-contained unit.

Multipro IT

The SitePods contain a firewall to establish a secure network tunnel to the head office via any WAN medium, a WAN optimisation controller to increase application access times over the WAN, a gigabit switch and a local file server pre-configured to replicate its file structure back to the head office.

The SitePod removed the need for users to perform backups at site, but still gave them the fastest possible access to their data. The use of Quality of Service on the WAN optimisation controller ensured that business critical data would be given top priority across the WAN connections.

Multipro IT then upgraded the head office datacentre, replacing the old servers with a number of the servers recovered from remote sites that were still relatively new, thereby minimising the overall capital outlay for our client.

Included in the datacentre upgrade, Multipro IT assisted the resource and construction company with a migration from Microsoft Exchange 2003 to Microsoft Exchange 2010.

The existing backup to USB disk solution was also replaced with a backup to disk to tape regime. The new backup solution ensures that our client can retain data on tape for years, and allows for rapid recovery from disk, if needed.

BENEFITS

Multipro IT implemented this solution based on industry best practice, ensuring the most productive and cost effective systems were delivered to end users. Key benefits include:

- The implementation of a Fibre Optic service allowing for a scalable WAN connection that will enable the company to increase its network bandwidth as required, as the business expands.
- The implementation of WAN Optimisation ensuring that the WAN links are used with the highest possible level of efficiency, reducing delays associated with WAN links and providing measurably improved application responsiveness.
- A four-fold reduction in network traffic directly associated with email across the enterprise.
- A three-fold increase in optimisable bandwidth capacity across the enterprise.
- The capability to manage operational use of our client's network allowing control over internet resources utilised by their staff.
- The consolidation of all business critical information at the head office datacentre allowing for centralised management of and control over the company's disaster recovery policy.
- The use of rapidly deployable modules for remote sites offering a feature-rich datacentre-like service within a small footprint.
- A modernised datacentre, offering a highly available, failure tolerant server farm to support the company's enterprise.
- Eliminating the need for users to perform backups at site
- Implementing a new backup solution to allow for rapid recovery from disk