

SMB Virtualisation: Building an Infrastructure for VMware Essentials Plus

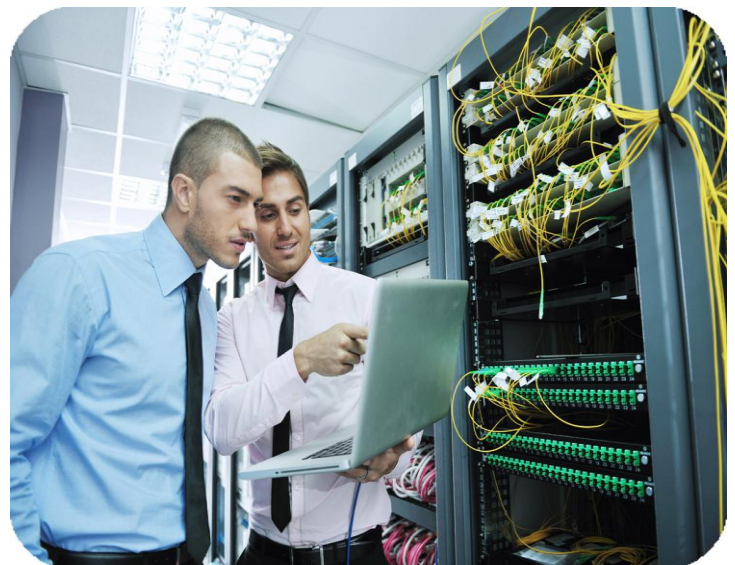
MCI Diventi is a Value Added Reseller (VAR) specialising in the delivery of industry leading IT infrastructure to businesses and public sector organisations nationwide. Based in Sheffield, MCI Diventi has an excellent reputation for delivering high performance solutions in conjunction with outstanding value for money.

MCI Diventi works in partnership with industry leading vendors to deliver best-of-breed solutions in the network and datacentre arenas. Our in-house expertise allows us to take a 'cradle-to-grave' approach in the delivery of our solutions, from pre-sales design and business justification to the decommissioning and trade-in of legacy hardware.

Challenge: Migrate Microsoft SBS 2008 to standalone virtual servers, improve manageability, increase availability and develop backup strategy.

Solution: VMware Essentials Plus, HP ProLiant Servers, HP P4000 Virtual SAN Appliances, HP Insight Control Management, Cisco Catalyst Switches, Barracuda Backup Server with Cloud Backup Service, Microsoft Volume Licencing, Pre-Sales Design Services, MCI4Service Microsoft Consultancy.

Result: A scalable, resilient and easily managed virtualised platform to support growth and development of the customer's business for years to come.



Challenge

A loyal Cisco networking customer whose business provides remote medical imaging analysis services to NHS Trusts nationwide asked us to provide a proposal for developing their server infrastructure to improve manageability, availability and backup strategy. Already having a good understanding of their business, their IT environment and its unique challenges allowed us to tailor a bespoke solution to fit their requirements perfectly.

Case Study

Solution

In partnership with MCI4Service, Microsoft consultancy services were used to determine that migrating from SBS to a full Active Directory domain would facilitate much better management of remotely located servers and clients on the customer's wide-area network (WAN). One of our own Microsoft Certified Professionals was used to specify an Open Value licensing solution to ensure compliance with what can be very confusing licensing policies, especially where virtualised environments are concerned.

Breaking the SBS server out into several discreet MS applications of course meant the number of servers would be increased. Virtualisation was an obvious solution to minimise the amount of new hardware required while at the same time helping to fulfil the customer's desire to improve manageability and availability. VMware Essentials Plus was chosen for virtualising the environment as it provides advanced functionality at an excellent price-point for SMBs. A qualified pre-sales expert with certifications from vendors including HP and VMware was used to ensure the customer received a best-fit solution designed by someone with the appropriate knowhow.

To achieve high-availability in a virtualised environment a shared storage solution is necessary. HP P4000 Virtual SAN Appliances (VSAs) were selected for several reasons. Firstly, being virtual appliances no dedicated hardware is required, the VSAs run in memory on the VM host servers and the data is stored on the server's internal hard disks. No dedicated SAN hardware means both costs and rack space are reduced. Secondly, as this is the customer's first SAN, the P4000 'single pane of glass' Centralised Management Console makes administering the SAN extremely simplistic. Lastly advanced features such as synchronous replication, snapshots and thin-provisioning deliver fault-tolerance, array based backup & restore and efficient use of physical space respectively.

Replacing the existing Symantec backup solution with a Barracuda Backup Server enabled local D2DAny backup of an unlimited number of servers and the seamless integration of cloud backup using Barracuda's own UK based cloud storage facility.

MCI4Service were again used in the deployment phase of the project to ensure the solution was implemented in-line with industry best practises and to aid with the migration of data from the SBS Server being replaced.

Result

The strength of the existing relationship with the customer which initially grew around Cisco networking projects meant MCI Diventi were an obvious choice when it came to overhauling their server environment.

Our breadth and depth of technology expertise alongside our partnerships with industry leading manufactures allowed us to design and deliver a comprehensive IT infrastructure solution for the customer to confidently build their business operations upon.

The customer now enjoys the benefits of a high-performance, highly-available, virtualised infrastructure. Virtualisation maximises resource utilisation and facilitates rapid provisioning of new services, whilst in conjunction with the P4000 VSAs ensures unplanned downtime is kept to an absolute minimum. Windows Server 2008 Datacentre licensing means the customer can provision new servers without having to purchase additional Windows Server licences and removes concerns around non-compliance. Active Directory group policies, HP Insight Control and VMware vCenter allow the customer's internal IT staff to easily administer their network. A blend of SAN, NAS and cloud based backup means the customer can easily make rapid restores whilst having the peace of mind that their data will be safe in the event of a disaster.

Outlook

MCI Diventi have demonstrated they have the requisite skills and personnel to design and implement a solution involving all of the technologies concerned. The project was so successful, a very similar design was chosen as part of our own internal infrastructure refresh programme.

MCI Diventi are now actively seeking clients with similar challenges and objectives to deliver this proven solution to.