MARIAN COLLEGE
INDIANAPOLIS

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— Mike Temaat
Network Engineer, Marian College

KEY HIGHLIGHTS

Challenge
Replace aging infrastructure, increase storage capacity, implement disaster recovery—while reducing IT infrastructure costs and improving system manageability.

Solution
The VMware Infrastructure has enabled Marian College to virtualize many of its critical servers and applications, including file/print servers, Windows Server 2008 and Windows Exchange 2007. The goal is to virtualize their entire production environment in phases. BlueLock provides external cloud services, enabling the College to backup its data cost effectively to a safe, off-campus location.

VMware at Work
VMware Infrastructure 3 Enterprise, featuring:
- ESX Server 3.5
- VMotion
- Virtual Center

Deployment environment
- BlueLock cloud computing services
- HP BladeSystem c3000s
- HP-LeftHand Networks iSCSI SAN
- Guest operating systems: Windows 2003, Windows 2008
- Virtualized Production Applications: Microsoft SQL 2008, System Center 2007 components, Windows Server Update Service (WSUS), Exchange 2007

BlueLock and Marian College

Marian College provides a liberal arts education to more than 2,100 students in Indianapolis, Indiana. But the college's antiquated IT infrastructure was in need of a complete refresh. The environment was not virtualized and there was no disaster recovery strategy in place. "We were maxed out on storage, both hardware and physical space, making it impossible to back up our data any more," explained Mike Temaat, Network Engineer at Marian College.

After considering proposals from a dozen solution providers, Marian College selected BlueLock, a national provider of full-service cloud computing solutions. "Several other providers could offer a piece of the solution, but only BlueLock could meet all of our IT goals—and much more—and still remain within our budget," explained Temaat.

"We engineered a solution for Marian College that we call the 'BlueLock Box', using HP BladeSystem c3000s and a HP-LeftHand Networks iSCSI SAN," explained John Qualls, CEO and president of BlueLock. "It is really just a turnkey internal cloud. It leverages compute, storage, replication, and VMware (the virtualization component) to meet all of the college's IT goals."

"We had tape and disk-to-disk backup on campus, but we wouldn't have survived a major disaster," explained Temaat. "We needed remote replication, but considered it was way out of our price range for the time being." By leveraging the design of the internal cloud and the fact that it connects seamlessly to the external cloud, Marian College gained the ability to simply 'turn on' the DR component to back up all data to one of BlueLock's remote datacenters.

"We leveraged virtualization and the things that we did for the replication component to encapsulate the campus and move it to the external cloud," explained Qualls. "We are able to provide DR at only 35-50 percent of the cost it would take to provision without the cloud. This is the real value of virtualization. VMware and the vCloud Initiative enable this kind of functionality."

"BlueLock has given us the ability to move faster than we anticipated and reach all of our IT goals—with the added bonus of DR, a smaller footprint, and greater flexibility," concluded Temaat. "We were able to step up to VMware because of BlueLock. It was a definite win for us all around."

Results

- Consolidated 15 distributed servers in two locations to a single rack. “BlueLock and VMware have given us the ability to consolidate and virtualize our infrastructure, which reduces costs, improves utilization, and enables us to establish cost-effective remote DR capabilities. It also reduces network latency because data is no longer distributed across different locations,” explained Temaat.
- Enhanced end user experience. “As a result of virtualization, our end user experience has dramatically improved. Our environment is much more stable than before,” stated Temaat.
- Improved manageability. “The virtualized environment is much easier to manage than the physical hardware. Having the flexibility to VMotion from one blade to another, take a blade down, restart storage, and update servers quickly and easily has been an amazing change. It enables us to increase productivity, yet keep things more up to date than ever before,” said Temaat.
- Achieved higher availability. “The VMware solution increases uptime, adds more flexibility, and provides the ability to increase storage seamlessly,” stated Temaat.

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