

e-Learning Solution Provider's Storage Issues Addressed with Virtualization

Swan Solutions helps Massachusetts-based organization replace aging servers and increase storage capacity without any downtime

Industry: E-learning

Objective: Due to the nature of critical data stored in structured and unstructured locations, it was necessary to simplify and improve backup and recovery methods.

Challenges: Ageing servers, Heat footprint, Need for increase in storage capacity, Upgrade requirement without any downtime

Solution

- Single physical file server with high power and capacity
- Windows Server 2012 R2 and Hyper-V role and configure backups
- P2V conversions of aging servers and optimize performance

Service Provider : Swan Solutions (Mumbai)

Results

- Simplified process to restore data
- Reduced heat output and power utilization
- Low operating costs and eliminated expensive licensing

With virtualization, Swan Solutions has successfully deployed virtualization at a Massachusetts- based organization and leading global provider of end-to-end information technology services to enterprises across all industry verticals. The organization is CMMI level- 3 certified and specializes in enterprise data management solutions. Headquartered in Billerica, Massachusetts, it has a branch in Mumbai, India.

The organization had 128 end-of-life servers. They felt the requirement for an infrastructure upgrade and needed to ensure that their critical business applications remain in production. The amount of data being stored increased due to document-imaging using PDF's /word /excel /video. However, the storage of the existing infrastructure was limited, necessitating an increase in capacity along with room for future growth.

Objectives

Due to the nature of critical data stored in structured and unstructured locations, it was necessary to simplify and improve backup and recovery methods. Limited cooling was another serious consideration. The organization approached Mumbai-based Swan Solutions, who solved these issues and ensured scalability in the new environment. Their main objectives were to replace aging servers and reduce heat footprint, increase storage capacity and accommodate for forecast growth and minimize downtime and impact any project may have on production.

Solution

Swan Solutions analysed historical storage utilization and prepared an accurate forecast of storage requirements. Their engineers determined that purchasing a single physical file server with high power and a significant storage would meet the requirements. The computing power of the new servers enabled Swan to virtualize all the physical servers, which not only reduced heat output, but also reduced electrical consumption. "With the installation of Windows Server 2012 R2 and configuration of the Microsoft Hyper-V role, we were able to leverage built-in back up to eliminate the need to maintain expensive third-party backup solutions, tape drives, and tape media. Our engineers virtualized the physical servers in cluster, and due to the power of the host servers, we were able to implement more processor and memory resources to the newly virtualized servers," shares Sandip Gaonkar, Solution Architect (Microsoft), Swan Solutions. They also performed P2V conversions of aging servers and optimize performance.

Business Benefits

128 end-of-life servers were virtualized successfully. The process was completed with almost no impact to the business as the virtualization was performed out of business hours. None of the client workstations and end-users was impacted by the project as no reconfigurations were required on domain workstations.

The low cost of high capacity drives made it possible to increase available storage capacity by orders of magnitude and to address scalability well into the future. The need to reduce heat in the server room was realized by reducing the number of servers, ensuring no cost to upgrade the cooling in the room by efficiently reducing heat output of the infrastructure. The legacy backup solution with an expensive console and backup agents for e-mail, SQL, and Windows was retired, leveraging the powerful out-of-the-box hyper v replica Backup solution using inexpensive removable hard drives. The process to restore data in part or in its entirety was greatly simplified, and the recovery timeframe reduced significantly.

Contact Information

Swan Solutions & Services Pvt. Ltd

404 T-Square, 4th Flr, Saki Vihar Road, Andheri East,
Above Skoda Showroom. Mumbai 400 072 INDIA.

EMAIL: enquiry@swansol.com

WEBSITE: www.swansol.com

