



## Aspen Solves IT Challenges with VMware Infrastructure 3

### VMware Infrastructure 3 Drives Server Consolidation and Optimization while Ensuring Simple Management and Increased Availability



#### KEY HIGHLIGHTS

INDUSTRY: **HEALTHCARE**

#### RESULTS

- 4:1 server consolidation ratio
- Higher hardware utilization rates
- Streamlined systems management and monitoring
- Provision of an agile and flexible server environment
- Decreased total cost of ownership through significant reduction in maintenance and labor costs
- Reliable disaster recovery practices
- Highly available IT infrastructure

*“Before we implemented VMware Infrastructure 3, we were spending unnecessary resources trying to manage our data center, which had become unsustainable from an operational standpoint. Virtualization allows us to experience direct business benefits through the ability to consolidate and centrally manage our servers, in addition to ensuring constant connection to applications and quick recovery of data in the event of an interruption to service. With VMware Infrastructure 3, we are able to achieve all of these capabilities with very simple administration and low overheads.”*

Pat Williams, Group IT Infrastructure Manager, Aspen Pharmacare

### Aspen Moves Away from Server Sprawl, Low Optimization and Complex Disaster Recovery Practices

Aspen Pharmacare is Africa’s largest pharmaceutical manufacturer and a major supplier of branded pharmaceutical, healthcare and nutritional products to southern Africa and selected international markets. The company is also the leading supplier of generic medicines to both private and public sectors in South Africa.

With more than 2,500 employees worldwide as well as regional offices in Australia, India, South Africa, the United Kingdom and the United States, information technology is extremely important to Aspen. Pat Williams, Group IT Infrastructure Manager, is responsible for ensuring that the company’s data centers are running efficiently to support critical business processes in a widely distributed environment.

To continue to succeed in the global marketplace and comply with good manufacturing practice (GMP) regulations, Williams needed to address the following challenges:

- Management of servers in widely distributed geographical locations
- Low average CPU utilization
- Complex and time consuming disaster recovery practices
- Improving the cost-effectiveness of IT operations

## Creating Healthy IT Systems with VMware Infrastructure 3

Aspen was typically using only five to 10 percent of the CPU capacity of its servers, as it was common practice to install only one application per server. This approach made it necessary to purchase and house additional servers to fulfil individual business needs, which was not necessarily cost-effective.

With the consulting advice of Workgroup, a specialist distributor of software products in the southern and South African IT markets, Williams chose to implement VMware® Infrastructure 3 Enterprise Edition for server consolidation and optimization, as well as reliable disaster recovery and management capabilities.

“Before we implemented VMware Infrastructure 3, we were consuming valuable resources managing multiple server platforms in distributed locations, which would eventually have become unsustainable from an operational standpoint,” says Williams. “Virtualization allows us to experience direct business benefits by consolidating and centrally managing our servers, in addition to ensuring constant connection to applications and quick recovery of data in the event of an interruption to service. With VMware Infrastructure 3, we are able to achieve all of this with very simple administration and low overheads.”

With VMware Infrastructure 3, Williams has experienced the following benefits:

- **Ease of management.** VMware Infrastructure 3 enables centralized management of the data center regardless of where the company's servers are located. Aspen can better utilize its skilled IT labor resources through the simplification and automation of tasks and resource intensive operations. In addition, patches and upgrades to hardware can be completed during business hours and without downtime, delivering 24/7 business continuity.
- **Server consolidation.** Aspen has proven a direct capital expenditure saving with a 4:1 server consolidation ratio, yielding significant reductions in terms of IT spending and support. Williams expects to reach a 10:1 consolidation ratio for utility-based applications.
- **Higher optimization levels.** With VMware Infrastructure 3, Williams and his team were able to increase server optimization levels by housing multiple applications within virtual machines on each physical server platform.
- **Robust disaster recovery capabilities.** The hardware-independence of VMware Infrastructure 3 allows for the rapid recovery of data, as any physical server can act as a recovery target for any virtual machine. In addition, the ability to migrate servers with VMware technology dramatically reduces the recovery time and complexity of system recoveries due to hardware failure.

### VMWARE VIRTUAL INFRASTRUCTURE AT WORK

- VMware Infrastructure 3 Enterprise Edition
- VMware ESX Server 2.5
- IBM Blade Servers
- Guest operating systems: Microsoft® Windows® 2003
- Four virtual machines per server
- Applications running in virtual machines include:
  - o Microsoft® Exchange
  - o SQL
  - o File and Print
  - o Active Directory

## Converting a Chronic Headache to a Painless State of Management

Prior to deploying VMware Infrastructure 3, Aspen was not able to manage its server environment efficiently. The practice of deploying a dedicated application server at the site where a service was required contributed to server sprawl across sites, making IT support more complex and expensive. In addition, IT staff often had to work overtime when planned maintenance was required: maintenance was scheduled outside of normal working hours to ensure that the company's manufacturing operations could work at the required levels of efficiency.

With VMware Infrastructure 3, Aspen has moved closer to becoming a 24/7 business. Now, if the company needs to apply a patch or complete a hardware upgrade, this can take place during normal office hours without any impact on levels of production. With the ability to clone virtual machines that are in production, Aspen can test updates in an isolated environment while the production server is still running, effectively eliminating unnecessary downtime. When testing is complete, the upgraded virtual machine can be pushed into production with minimal impact on production levels.

Similarly, with VMware® VMotion™, Aspen can move running virtual machines between physical server platforms, so the company can carry out essential maintenance on hardware platforms without taking applications offline. Aspen also uses VMware® VirtualCenter for rapid provisioning of virtual machines and the monitoring of physical servers and virtual machines.

"Recently, we had to apply a patch due to memory errors on a particular blade server, and my staff was able to complete this task during normal work hours without interference to the business," says Williams. "We've already almost paid for our entire implementation of VMware software through these benefits of high flexibility and availability, and the peace of mind we've achieved is priceless. With VMware Infrastructure 3, we are able to operate like we have one centralized, highly redundant and available server platform"

In addition, Aspen will be able in future to achieve direct business benefits with VMware® High Availability (HA) and VMware® Distributed Resource Scheduler (DRS), which are unique to VMware Infrastructure 3. VMware HA delivers high availability across the entire virtualized IT environment without the cost or complexity of clustering solutions, and VMware DRS dynamically allocates computing resources to meet business goals.

"VMware Infrastructure 3 is very simple to administer and install, and we look forward to taking advantage of the additional benefits of virtualization that we're just beginning to realize, such as consolidated backup and the use of resource pools. Our strategy is to run all of our Windows-based applications on VMware Infrastructure 3 to achieve what we believe will be the best IT experience on the market," concludes Williams.

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