

Comstor deploys new Data Center

Comstor invests in Cisco's Unified Computing System for Data Center Consolidation and high performance

Profile

Comstor, a Westcon Group company

Westcon Group is a \$3 billion+ revenues specialty distributor focused on the data center, networking, security and converged communications marketplace. We have operations in 38 countries servicing resellers in 70 countries. Founded in 1985, Westcon's dedicated Cisco Comstor brand is one of the largest worldwide distributors of Cisco products having shipped more than \$1.8 billion of Cisco equipment in our last fiscal year. Our global presence has led to innovative approaches to address the requirements of cross border distribution. Recently, Westcon executed the industry's first Global Distribution Agreement with Cisco.

Challenge

In 2009, Comstor began evaluating storage requirements for its two data centers – one in the United Kingdom, and one in the United States. Using an outside consultant, Comstor did an internal analysis that determined it would cost approximately \$5 million to implement the storage strategy that would enable the firm to position its global operations for future growth.

William Hurley, Comstor's Chief Technology Officer, says that his team came to the conclusion that instead of just updating its storage capabilities at the two data centers, it made more economic and strategic sense for Comstor to consolidate those data centers into one location in Cincinnati, Ohio.

"Some of our IT infrastructure equipment was just too old and we knew it wouldn't survive the move, which is why we started to explore other options," Hurley said. "As it happened, we also had a parallel virtualisation project already in progress. Moving in that direction meant we'd be able to spin up servers for applications more quickly as we needed them."

To complete the feeling of perfect timing, in 2009 Cisco announced its Unified Computing System (Cisco UCS), a radical simplification of traditional architectures that dramatically reduced the number of devices organisations must purchase, deploy, and maintain. Cisco UCS delivers end-to-end optimization for virtualized environments while retaining the ability to support traditional OS and application stacks in physical environments.

Executive Summary

COMSTOR

- Industry: Technology Distributor
- HQ Location: Tarrytown, New York, USA

CHALLENGE

- Limited scalability of storage and server infrastructure
- Aging infrastructure in need of refresh
- Need to reduce total cost of ownership
- Need to scale infrastructure to support new initiatives

SOLUTION

- Cisco Unified Computing System as basis for data center consolidation and migration
- Cisco Services accelerated deployment

RESULTS

- Supported virtualized applications across entire business
- Increased business agility by simplifying management and provisioning
- Delivered significant reductions in total cost of ownership

Although Comstor's two data centers had previously used HP equipment, the launch of Cisco UCS prompted Hurley's team to examine the benefits of using the next-generation data center platform to unite its computing, networking, storage access and virtualisation in one cohesive system.

Solution

The Comstor team began to work with Cisco engineers to determine the scope and cost of the architecture required to consolidate the two data centers. According to Hurley, the biggest driver for Comstor was the robust virtualisation capability of the UCS platform.

"Server virtualisation is all the rage, but Cisco UCS puts more brains into the unified fabric – giving us greater capabilities when it comes to monitoring and managing server profiles – and it does so in a stateless environment," Hurley said, "This was critical because virtualisation enables businesses to reduce their capital costs significantly by putting multiple virtual servers on a single physical server. In the past, if a business had a new application, it would have to add a server to run the application, and the server could be operating for much of the time at capacity as low as 10-15 percent. Cisco UCS, on the other hand, allows for a higher rate of compression of virtualised servers on a single physical device, this provides greater flexibility and better price performance so I can spin my virtual images up faster and more densely when new applications are needed to run the business."

"As Comstor and Westcon grow, it will also help on our single global ERP system when we want to close the books, whether it is overnight batch processing or the spikes in computing demands for things like monthly and year-end closes."

Comstor was able to significantly lower the cost it would have taken to replace all 175 HP servers by going to the Cisco UCS platform with 24 Cisco UCS blades, Hurley said. "We were going to spend \$1 million for one-third of the computing power. Instead, we were ultimately able to invest that money to run our entire organisation. So for one-third the price, we were able to install an entire new platform."

The initial installation cost was just one consideration. Cisco UCS provides Comstor with more headroom to add applications, and to scale as its existing ERP platform is upgraded. In fact, the pricing of Cisco UCS was at the bottom of the list. It was ultimately the technological advances that Comstor's IT team simply couldn't ignore. These advances included: lower power requirements, a smaller carbon footprint, lower cooling costs, and the ability of Cisco UCS to monitor and manage the equipment through a single console.

Cisco UCS Manager simplifies integration with third-party management software, or in-house-developed tools, and creates a management architecture that can be extended. "We didn't know when we started how exciting Cisco UCS Manager was going to be, and how it would really help us get our applications into production much more quickly and efficiently," said Hurley. "In the past, we would have to use different management tools for each of the components within the data center – storage management, VMWare, the servers and the blades. Cisco UCS Manager enables us to provision servers and create service profiles that are managed and monitored through a single interface."

Product List

ROUTING AND SWITCHING

- Cisco Unified Computing System
- Cisco MDS 9100 Series Multilayer Fabric Switches
- Cisco Catalyst 4900 Series Switches

NETWORK MANAGEMENT

- Cisco UCS Manager

SERVICES

- Accelerated Deployment Service

Hurley added that the Cisco UCS platform also provides more agility for Comstor when it is installing new applications or performing maintenance. “Previously, it would have taken as much as two weeks for us to acquire, install, configure and get the servers up and running,” Hurley said. “Now, it can take less than four hours. That’s critical for test environments, because you can have as many as four images – test, pre-production, production, and performance. If you didn’t plan properly, each image could take even longer than two weeks.”

Cisco and VMware’s interoperability enables customers such as Comstor to achieve new levels of productivity. By running VMware’s VMotion on a Cisco UCS platform, Comstor can use virtualisation to move applications to another server almost instantaneously when maintenance is required, reducing application downtime to practically nothing. In the past, such maintenance requirements would have taken up the better part of a weekend, according to Hurley.

When Comstor desires to shut off or power down idle servers to conserve energy, Cisco UCS Manager helps with that, as well. “Quite frankly, we didn’t see that in the other platforms,” Hurley said. “You have so much more control over the entire environment using Cisco UCS Manager, and you are able to do it truly in a virtualised manner.”

Results

“By centralising our data center capabilities, we are able to realise both the scale and agility that our IT infrastructure will require to aggressively grow our business in the coming years,” says Dean Douglas, president and CEO of Westcon Group. “Not only do we offer the Cisco Unified Computing System to resellers, we are also an early adopter in implementing the solution within our own networking environment. We believe this lends an enormous degree of credibility as we offer cloud-based and virtualised data center solutions to the channel.”

Next Steps

Comstor is currently in the midst of a major migration of applications to the Cisco UCS Platform, and next plans to move its global ERP operations and e-commerce systems onto the platform in the new data center.

According to Russell Blackburn, Comstor Data Center Director for Europe, Comstor is one of the first Cisco customers in the world who have made the move to the Cisco UCS platform.

As a distributor of the platform, Comstor now plans to share its expertise and experiences with its customers so they too can successfully leverage the Cisco UCS platform, including Cisco UCS Manager.



“The only way IT organisations will have projects approved by executive management is if they can demonstrate the cost savings and return on investment, Cisco UCS is really designed to address that issue on a scale not seen before”, comments Blackburn, “The experience we gained, along with the cost and management savings is the reason we have designed and built our soon to be announced demonstration facilities. These facilities will provide a flexible lab environment where the reseller and the end-user can come together to learn about virtualisation, the Unified Computing platform, how their applications would perform on the Unified Computing platform and how that platform will interact with other manufacturer’s products”.

For more information

- To find out more about Comstor, visit www.comstor.com
- Insights, observations and recommendations on important issues facing today’s business and technology leaders, visit Bill Hurley’s, Westcon Group CTO, blog <http://westconcto.wordpress.com/>
- To find out more about Cisco Unified Computing System, visit www.cisco.com/go/unifiedcomputing
- To find out more about Cisco Services, visit www.cisco.com/go/services

Comstor UK,
A division of Westcon Group
Merchant’s House
Love Lane
Cirencester
Gloucestershire
GL7 1YG
United Kingdom

Tel: 01285 647001
Fax: 01285 627113
www.comstor.co.uk

