

Data center proof of concept gives convincing performance



The Challenge

Zones has been a preferred technology supplier to a service organization since 2010. In that time, the Zones team has executed a number of IT projects, including a system-wide migration to Microsoft Exchange Online. Zones' service and attention to detail throughout these projects created a trusted partnership between Zones and the IT leaders and systems professionals at the organization.

The organization's IT leadership began working on a major infrastructure initiative: A complete refresh of its existing server and storage infrastructure hosting the mission-critical applications.

The Solution

After months of investigating available solutions, the organization's IT team felt that the FlexPod solution proposed by Zones would provide the best balance of functionality and scalability.

Project:

Phased refresh of an organization's two primary data centers

Challenge:

Prove the viability of the Cisco FlexPod architecture proposed

Solution:

Design and build a fully functional proof-of-concept at Zones' Center for Advanced Technology Solutions near Chicago

Result:

Customer's IT team gained confidence in the FlexPod system and Zones' capabilities. This led to a large-scale FlexPod deployment at two data centers and satellite locations

The Solution *cont.*

Consisting of Cisco Unified Computing System (UCS) running the VMware ESXi hypervisor with NetApp Storage, the FlexPod data center platform offered the organization a pre-validated solution combining storage, networking, and server components integrated into a single flexible architecture. FlexPod is specifically designed to ease IT transformation to virtual infrastructure and cloud computing with maximum efficiency, minimal risk, and increased flexibility.

Just as important, the FlexPod architecture can scale up or out, and can be optimized for a variety of mixed workloads in both virtualized and non-virtualized environments, which would allow the organization to perform a phased transition over time.

While the organization's IT leaders were enthusiastic about the potential FlexPod represented, they wanted to see how it would perform when tasked with the demands of their specific requirements. The only way to do that would be to build out a fully functioning proof-of-concept.

Confident that the FlexPod solution was the right answer, the Zones team decided to invest approximately \$100,000 to build out a complete FlexPod proof-of-concept system at Zones' Center for Advanced Technology Solutions in Carol Stream, Illinois and let the organization's IT team spend a week putting it through its paces.

The Results

A team of Zones solution architects with expertise across Cisco UCS, NetApp Storage, and VMware virtualization were assigned to build out the FlexPod Proof of Concept for the customer. Working late into the evening Friday, and all day Saturday and Sunday, the components were racked and tested.

The proof-of-concept hardware and software components consisted of the following:

- > Cisco UCS Chassis with three half-width server blades
- > Cisco Fabric InterConnects
- > Cisco Nexus Network Switches
- > NetApp Storage Platform
- > VMware Virtualization Hypervisor
- > Windows Server for guest VMs
- > Citrix XenApp on-demand application delivery solution

The Zones Advanced Solutions Group team completed the FlexPod data center configuration including storage, networking, and server components integrated into a single flexible architecture. The design was essentially a scaled-down build of the enterprise FlexPod solution proposed for the organization.

On Monday morning the organization's 10-member team arrived at Zones' Center for Advanced Technology Solutions in Carol Stream.

The team included IT leaders as well as the contracted engineers responsible for maintaining the organization's IT systems. Inside, the team found an accurate, albeit scaled-down, replication of the proposed production environment hosting the organization's critical applications.

During the week of testing that followed, the organization's team ran extensive tests on the POC, experiencing the benefits of the FlexPod solution first-hand.

The system hit all their targets for functionality, and offered other advantages as well. The team realized that the FlexPod pre-designed and pre-validated base data center configuration would make for an easier and more cost efficient phased deployment, versus designing, specifying and building a data center solution from multiple vendors.

The sale was completed, leading to the phased transition to the FlexPod solution in the organization's two primary data centers. Shortly afterward, they realized that it could realize even greater efficiencies and capabilities by deploying additional FlexPod configurations in a number of their satellite facilities.

