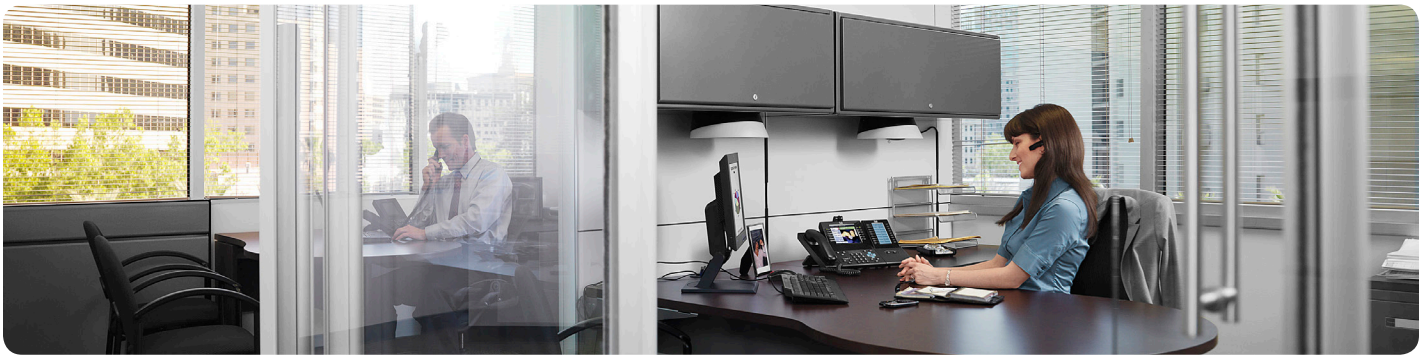
Customer Case Study

Midwest Distributor Virtualizes and Transforms Data Center



Executive Summary

Customer Name: Indoff

Industry: Office product sales and distribution

Location: St. Louis, Missouri

Number of Employees: 450

Challenge:

- Support expanded business with only four IT employees and small data center footprint
- Provision new servers rapidly in response to user demands
- Support open Bring Your Own Device (BYOD) strategy for mobile users

Solution:

- Cisco UCS B-Series Blade Servers in virtualized environment eliminate data center sprawl while minimizing power usage
- Cisco UCS C-Series Rack-Mount Servers provide redundant backup for robust business continuity
- Cisco Catalyst Switches help ensure high network availability

Results:

- Reduced power consumption by up to 20 percent, and cut cooling costs by more than 50 percent
- Saved US$80,000 in deployment of Oracle ERP suite due to reduced hardware demands
- Cut software maintenance costs by as much as 35 percent, saving estimated $50,000

Indoff cuts costs, boosts performance, and scales to accommodate business growth with Cisco UCS-based private cloud.

Challenge

Founded in 1971, Indoff is a distributor of business and commercial office furniture, supplies, interiors, and equipment. Beginning as a materials handling company in St. Louis, Missouri, the company has added promotional products and commercial printing divisions, growing at a rate of 10 percent per year to become a US$100 million distributor with a global reach.

Three years ago, Indoff was suffering from data center sprawl, and IT manager Shawn Faulkingham needed a way to control the proliferation of servers that were being deployed for an increasing number of business applications. When he reached 40 physical servers in the data center, Faulkingham began exploring virtualization. He purchased some large 4U multiprocessor boxes and created virtual machines using VMware ESX. He found, however, that the VMware ESX virtualization architecture created a large single point of failure.

At the same time, Faulkingham was challenged to support the IT requirements of more than 400 Indoff field sales reps with just four IT workers. The firm had a long-standing tradition of allowing sales professionals to Bring Your Own Device (BYOD) to work based on their individual needs. “Our mobile users needed to access their email and applications and business intelligence no matter which device they preferred: iPad, Android tablet, smartphone, or laptop,” says Faulkingham. “That was another big challenge.”

"Cisco, of course, is legendary for its solutions. And UCS works. It works in the toughest production environments, and it works extraordinarily well. For any business with a lean IT group, Cisco UCS is the way to go."

– Shawn Faulkingham
Director of IT
Indoff

Solution

At the time that Faulkingham was beginning his search for a data center solution, Cisco had just released its Cisco Unified Computing™ System (UCS™) platform. He was immediately interested.

"What really grabbed me was that Cisco was building all of the intelligence into the fabric," he says. "I loved that you could manage it all from one place. When I looked at the big picture, including overall costs, UCS won over other possible solutions by a very large margin."

Today, 90 percent of Indoff's IT architecture runs on Cisco® UCS. Faulkingham replaced the aging population of mixed-vendor servers with a series of Cisco UCS B250 M1 and M2 Blade Servers intended for supporting virtualization. For backup, he purchased a UCS C200 M2 Rack-Mount Server, along with UCS 2104 Fabric Extenders and 6120XP Fabric Interconnects.

In addition to UCS, the Indoff data center hosts Cisco MDS 9216 and 9120 Multilayer Switches for storage, as well as Cisco Catalyst® 3700 and 3500 Series Switches. To help put all of this in place, Faulkingham contracted with Cisco Services for a brief four-day design validation engagement, helping ensure a smooth implementation.

On the software side, Faulkingham chose VMware vCenter, replacing the earlier attempt at virtualization using VMware ESX. He runs Oracle JD Edwards EnterpriseOne using WebLogic application servers and Oracle Database 11g R2 database on this virtualized architecture. He also moved the firm's most important application, an internally developed mobile app used by all sales reps, onto the virtualized servers.

Results

Cisco UCS and virtualization have enabled Faulkingham to create a flexible, scalable private cloud for Indoff. This architecture has allowed him to provide a true BYOD policy that allows Indoff sales reps to use whatever device makes them most productive in the field. "UCS gave me enough compute power in the cloud to make BYOD management extraordinarily easy," he says.

The primary benefit of having a private cloud is the speed at which Faulkingham can now spin up new servers. "I used to need a four-week lead time to provision a new machine," he says. "Now I can have an additional server up within a day."

Power consumption has also dropped significantly. Since powering off most of the previous server population, he uses up to 20 percent less power and reduces cooling costs by more than 50 percent.

From a cost perspective, the UCS platform has already paid for itself, just by deploying Oracle JD Edwards EnterpriseOne. "When we did our ERP implementation, I needed to build out many, many servers and test workstations," says Faulkingham. "If I'd actually needed to buy physical hardware, my costs would have been astronomical." He estimates that he saved up to $80,000 in hardware costs on the ERP deployment alone. Adding to the return on investment (ROI) was an estimated $50,000 drop in maintenance costs. "Instead of paying maintenance on 40 servers, I only pay fees on the UCS system, which has reduced my costs by as much as 35 percent," says Faulkingham. He also saw a three-fold increase in the response time of Confluence and ERP applications. "My users definitely noticed the increase in speed," he says.

Product List

Data Center Solutions

- Cisco Unified Computing System (UCS)
  - Cisco UCS B250 M1 and M2 Series Blade Servers
  - Cisco UCS C200 M2 Series Rack-Mount Server
  - Cisco UCS 2104 Fabric Extenders
  - Cisco UCS 6120 XP Fabric Interconnects
- Cisco MDS 9216 and 9120 Multilayer Switches
- Cisco Catalyst 3700 and 3500 Series Switches

Services List

- Cisco Services

Applications

- Apache Server
- CentOS
- MySQL
- Oracle Database 11g R2
- Oracle JD Edwards EnterpriseOne
- Oracle Linux
- Perl
- Red Hat Enterprise Linux
- VMware vCenter

Faulkingham also does not worry about data thanks to a much more robust continuity plan. A virtualized backup solution called Veeam Backup takes snapshots of all virtual machines and writes all of the data to disk. Then Symantec Backup Exec backs up terabytes of Veeam Backup data across the system in a matter of hours. Previously, Faulkingham couldn't even guarantee a full backup. "Now, we're actually prepared for that ultimate disaster in which everything just disappears," he says.

Next Steps

Looking ahead, Faulkingham plans to deploy a virtual desktop infrastructure (VDI). He is also exploring the idea of using VDI and thin clients to eliminate PCs altogether from his WebLogic-based ERP application. "Cisco, of course, is legendary for its solutions. And UCS works," he says. "It works in the toughest production environments, and it works extraordinarily well. For any business with a lean IT group, Cisco UCS is the way to go."

For More Information

- To find out more about Cisco Unified Data Center, visit: www.cisco.com/go/unifieddatacenter.
- To find out more about Cisco Unified Computing, visit: www.cisco.com/go/ucs.

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