



BENCHMARK
HOSPITALITY
INTERNATIONAL

“Benchmark was the first company in the U.S. to go into production with UCS which garnered both Benchmark and GreenPages national attention.”

KEY HIGHLIGHTS

Challenge

- No dependable 24/7/365 uptime for IT systems
- Needed redundant systems to maintain functionality and protect data assets
- Needed scalable IT solution that would work for hotels with 50 rooms to hundreds
- Needed established IT platform that could accommodate aggressive 10-year growth goals
- Needed a system that could book hotels before construction was completed

Technology

- Cisco UCS with 5 UCS B200 blade servers
- Cisco Nexus 7000 switch
- VMware ESX 4.0 and vCenter
- EMC 14 TB CLARiiON networked storage unit
- Citrix XenApp

Results

- 70 servers reduced to 10
- Extended life of 750+ existing desktops
- Ability to spin up a new machine in minutes
- Reduced power and cooling loads due to blade servers
- System redundancy resulted in improved reliability
- Zero downtime for hardware maintenance
- 15 minute reboots of physical boxes reduced to 30 seconds
- Simplified maintenance
- IT department able to tackle more strategic projects without increasing staff numbers

GreenPages Implements First Commercial Use of Cisco UCS; Efficiency, Redundancy, Scalability, and Lifecycle Improvements

Benchmark Hospitality

Benchmark Hospitality International is a hotel and resort management company based in Woodlands, TX. The company currently manages more than 30 properties across the United States, and one facility in Tokyo, Japan.

Customer Challenge

Due to the 24/7/365 nature of hotel operations, there is a significant need for stable, dependable technology systems. IT disruptions that may affect customer service and safety are not acceptable.

During occasions when weather or disasters might affect IT stability and data recovery, Benchmark Hospitality needed redundant systems to maintain functionality and protect data assets. Because some of the hotels they manage have anywhere between 50 rooms and hundreds of rooms, Benchmark needed a scalable solution that would work for all possible configurations.

Benchmark also needed a comprehensive IT solution that could grow with the company. With a goal to double their portfolio in 10 years, they were looking for efficient ways to establish proven IT platforms that could easily be integrated when adding a new property.

Also, when a new resort was added, there was no way to get the IT system in place until the physical building was complete. But with a virtual system, they would be able to start booking before the building was actually finished. They also wanted a solution for property owners which would bring value to the relationship with Benchmark as the management company.

Technology Solution

GreenPages designed a system based on four key technologies: Cisco UCS hardware, VMware virtualization software, data storage provided by EMC, and virtual applications delivered by Citrix.

The completed system has two Cisco “Unified Computing System” (UCS) chassis, each with 5 UCS B200 blade servers so that if one goes down, everything can run off of the other. All of Benchmark’s existing switches were replaced by a high-capacity Cisco Nexus 7000 switch. Because that switch is designed for datacenter use, it can handle lots of traffic—plus the life cycle is a lot longer because it’s expandable.

VMware ESX 4.0 and vCenter were the keys to making the project work by allowing Benchmark to turn everything into virtual machines. In the past, if Benchmark wanted to add a physical machine, they would have to order the machine, have it delivered, then load it up. It was a long, inefficient process. With VMware, Benchmark can spin up a new machine in minutes.

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Data storage for the system was provided by a 14 TB CLARiiON networked storage unit. Each array has redundancy, so you can lose multiple drives and still not lose data. SAN Copy provides high-speed data mobility, migration, and protection.

All of the applications used by the system are virtualized, and are delivered on-demand by Citrix XenApp. The functions provided by the system include property management, sales and marketing, point-of-sale, HR, and payroll.

Before deploying the solution, a test was done with VMware by setting up one server to see how it would fit into their environment. Benchmark's property management and point-of-sale systems had never been virtualized before, so a lot of testing was done on those solutions to ensure success.

Finally, the complete system was assembled and tested before going live. GreenPages brought the system up in a parallel environment to make sure everything was running correctly.

Successful Result

Improvements provided by the new system were easy to quantify. Benchmark's existing system of 70 servers was reduced to 10. Benchmark was also able to extend the life of its 750+ existing desktops. The blade servers in the UCS resulted in big reductions in power and cooling loads.

The redundancy designed into the system resulted in improved reliability and zero downtime for hardware maintenance. For example, once Benchmark had a memory module go out. Using VMware, they were able to move everything off of the bad blade, and work on the blade with no impact on the rest of the system.

With Benchmark's previous technology environment, they were upgrading often which caused significant downtime. Now everything can be moved to the other chassis which simplifies maintenance. Rather than 15 minutes spent rebooting a physical box, they can now do it in about 30 seconds.

Rather than expanding Benchmark's IT department to take on an expanding work load, the Cisco management interface allows their staff to do more with the same number of people.

Future Goals

Using the new system, Benchmark can now begin receiving business long before the new building is complete. Generating revenue from transient, wedding, and group customers can now happen before the resort actually opens; they can put the finishing touches on a new facility and have a conference arrive the very next day.

The new solution adds tremendous value to ownership groups providing them with lower hardware costs and access to global hospitality industry solutions, while tightly integrating with Benchmark's existing properties and overall core values and high service culture standards.