

## Zappos.com keeps pace with rapid growth on IBM BladeCenter




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### Overview

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#### ■ **Challenge**

*To provide an IT infrastructure that supports the company's commitment to outstanding customer service*

#### ■ **Solution**

*A technology refresh that included IBM BladeCenter®, IBM System Storage™ N5500 Gateway and IBM System Storage DS8300*

#### ■ **Key Benefits**

*New levels of scalability, easier maintenance and management, and improved systems performance*

Since its inception in 1999, Zappos.com has seen phenomenal growth, taking the online retail market by storm and firmly establishing itself as a leader in online shoe sales. Zappos now stocks more than 3.5 million items, including apparel, accessories and 150,000 different styles of shoes. Headquartered in Henderson, NV, the company's gross merchandise sales reached nearly US\$600 million in 2006. With over 1,200 employees, the company serves a growing customer base of over six million people.

The Zappos corporate culture is distinguished by the company's almost zealous commitment to customer service and product selection, and technology plays a critical role in supporting that commitment. "With a business like ours, speed and uptime are main concerns," explains Kris Ongbongan,

systems administration manager at Zappos.com. "And as a growing organization, we also have to be able to scale quickly."

#### **Time for a technology refresh**

To help the IT infrastructure keep pace with the company's rapid growth, Zappos recently turned to IBM Premier Business Partner Sycomp for a technology refresh. The new IBM solution included two IBM BladeCenter H Chassis, for a total of 28 servers running Linux®-based operating systems. The solution also included an IBM System Storage N5500 Gateway and an IBM System Storage DS8300, which provides 25 TB of storage. The blades are configured to boot from centralized storage via iSCSI connection for maximum availability.

The new solution was deployed in conjunction with the company's move to a new data center. "It was pretty painless," says Ongbongan of the migration. "It was a flip-the-switch kind of thing."

The IBM solution is an important part of

the company's highly efficient IT infrastructure, which uses a minimum of hardware to provide IT services for the company, including processing approximately 20,000 orders per day.

### Measurable results

Ongbongan says he has seen a number of tangible benefits with the new IBM solution, and one of the most significant has to do with scalability. "Before we switched to IBM BladeCenter," he says, "scaling our Web servers was a manual process. We'd have to manually do installs and tests on every server. Now, we're able to get new servers up within five minutes." Zappos uses point-in-time Snapshot technology from the System Storage N series to deploy the new servers via iSCSI.

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– *Kris Ongbongan, systems administration manager, Zappos.com*

In addition to providing improved scalability and performance, Ongbongan says the BladeCenter servers are easier to maintain. "There are definitely fewer parts to worry about," he explains. "If we had 30 rack servers instead of blades, we would have 60 power supplies and 60 hard drives. That's a lot of moving parts to worry about."

*"The BladeCenter solution leaves us room to grow so we can easily expand."*

– *Kris Ongbongan, systems administration manager, Zappos.com*

"It's also a lot easier to manage configurations," Ongbongan continues.

"When we make changes to our configurations, they can be propagated quickly to all the servers. Before, it would take a few hours, but with point-in-time snapshots, it would probably take less than an hour."

### Room to grow

Ongbongan says the IT infrastructure is now in a better position to accommodate the company's exponential growth. "We have plenty of headroom now," he says. "The BladeCenter solution leaves us room to grow so we can easily expand."

### For more information

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