Virtualized Environment Transforms Media Distribution

PLAZAMEDIA harnesses power of FlexPod for reliable and cost effective Internet streaming of digital radio and TV content

EXECUTIVE SUMMARY

Customer Name: PLAZAMEDIA GmbH

Industry: Media

Location: Germany

Number of Employees: 230

Challenge
- Maintain competitive advantage in rapidly-changing marketplace
- Grow radio and TV audiences, and access new customers and revenue streams
- Achieve cost efficiencies and greater business agility

Solution
- FlexPod solution, enabling PLAZAMEDIA to harness power of digital media and compete with rivals, delivering exceptional radio and TV content

Results
- Fast, reliable way of reaching new audiences and ensuring high-end user satisfaction
- Uplifts of 70 percent in app performance and 200 percent in IT management efficiency with service-provisioning and change-management five to 10 times faster than before
- Savings of 60 percent on OpEx, 20 percent on licensing, 95 percent on cabling costs, and 50 percent on hardware

Challenge

PLAZAMEDIA GmbH is one of Germany's largest TV and news media providers, and a leading producer of sports TV. The organization is always seeking new ways to harness the power of digital media to improve its competitive advantage.

Historically, to support the company's broadcast and production objectives, hundreds of standalone servers using direct-attached storage were deployed. This disparate environment lacked scalability and flexibility, and slowed time to market. The absence of centralized management meant time-consuming and expensive IT administration. Other downsides were high cost of ownership and rising software license fees.

The planned launch of SPORT1.fm, a web-driven digital channel offering round-the-clock live sports, talk shows, news, and music, spurred the company to review its data center architecture. Live Internet streaming, such as that demanded by SPORT1.fm, requires extremely high levels of performance and availability, something that a fragmented data center was unable to support.

"The trends in media production are toward broadening linear baseband TV to include parallel, simultaneous online information services," says Chris Wieland, director of technology at PLAZAMEDIA. "So we knew we had to modernize our IT infrastructure to increase efficiency and remain competitive."

Solution

As a long-time Cisco® customer, PLAZAMEDIA was aware of FlexPod, a pre-tested and validated solution integrating Cisco Unified Computing System™ (UCS®) server technologies, Cisco switching, and NetApp storage, with VMware vSphere virtualization tools.

"After a comprehensive demonstration, we were convinced by the overall FlexPod concept, which offered ultra-quick provisioning backed by the strong commitment of Cisco and NetApp," says Wieland.

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Chris Wieland
Director of Technology
PLAZAMEDIA GmbH

The FlexPod solution is built on a Cisco UCS 5108 chassis using high-performance UCS B200 M3 Series Blade Servers. Switching is provided through a combination of Cisco Nexus® 5000 and 7000 Series Switches, with the Cisco Nexus 1000V Series Virtual Switch extending networking functions and providing greater visibility between VMware and virtual machines.

NetApp FAS3250 storage system and Clustered Data ONTAP software deliver agility through high-performance flash-drive support, in-built redundancies, and scalable storage. Integrated VMware vSphere enables virtualization and minimizes time to market by enabling users to quickly create and provision virtual machines.

Simultaneously, at its disaster recovery site, PLAZAMEDIA deployed a NetApp FAS2240 storage system, incorporating Cisco UCS technologies and switches and automated tape backup. Both primary and backup sites are linked as part of an active-active configuration.

PLAZAMEDIA began the transformation by consolidating standalone servers that had been set aside for the new digital radio station into a single FlexPod solution deployed at its primary data center. As well as migrating operating systems such as Microsoft 2008, the company has also used FlexPod to virtualize mission critical applications and data, including Microsoft SQL Server, Oracle databases and Linux-based applications such as custom video router and video server control, DNS, mail, and Nagios infrastructure monitoring.

Now, critical apps and information are continuously replicated across the company's primary and disaster recovery data centers, providing reliable backup, quick restores, and uninterrupted business continuity. In the unlikely event of outages, automatic failover helps ensure optimal continued performance of media streaming devices and applications.

Results

In the four months since its launch, the new digital channel SPORT1.fm has received 7.6 million requests for digital streams as well as 715,000 download requests. The high-performance and low-latency advantages of FlexPod help deliver a satisfying end user experience. "Overall application performance has increased by up to 70 percent," says Wieland.

Built-in snapshot technologies have led to a 90 percent improvement in the recovery time objective (the time or service level within which a business process must be restored after a disaster or disruption to avoid unacceptable consequences). "With FlexPod, we can guarantee high operating reliability," Wieland says. "Its redundancy concept is much simpler than with traditional server technologies, and availability is thus correspondingly higher."

PLAZAMEDIA has also increased go-to-market agility and flexibility. In the past, it had the time-consuming task of ordering, configuring, and deploying hardware to support new projects and initiatives. With FlexPod, IT administrators can launch new virtual machines in minutes rather than days. Wieland confirms: "Now it's very quick and easy to scale our computing resources to meet new demands."

Centralized operations, based on Cisco Prime™ Data Center Manager, enable the IT team to manage more effectively. "Efficiency levels are up 200 percent compared to the previous standalone solutions," Wieland says. "Configuration changes can easily be made on the spot and at the press of a button with absolutely no disruption to broadcasting."

Consequently, PLAZAMEDIA service provisioning and change management are five to 10 times faster than before, while server decommissioning can be accomplished at least 50 percent faster. Increased administrative efficiency has freed IT staff to concentrate on more strategic issues.

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The consolidation and retirement of standalone servers has released valuable data center space too. Overheads, including cooling and power, have been cut by 60 percent. The company has also saved 95 percent on cabling and another 50 percent on hardware, while application licensing costs have dropped by 20 percent.

Next Steps

The increasing resolution and higher production values of broadcast content mean traditional baseband is becoming harder to deliver economically. With the flexible and high-performing FlexPod platform, PLAZAMEDIA is well placed to migrate radio and TV services to IP.

"We are convinced that video signals in all resolutions will be transported over IP in the future," says Wieland. "Cisco is one of the world's leading manufacturers, with enormous technical expertise. It's also customer oriented and, because its people are very easy to work with, we always go to them to discuss future requirements."

For More Information

To learn more about the Cisco architectures and solutions featured in this case study, go to: www.cisco.com/go/flexpod

Product List

FlexPod Components
- Cisco Unified Computing System (UCS)
  - Cisco UCS B200 M3 Series Blade Servers
- NetApp FAS3250 and FAS2240 storage systems
- VMware vSphere Hypervisor

Routing and Switching
- Cisco Nexus 5000 and 7000 Series Switches
- Cisco Nexus 1000V Series Virtual Software Switches

Network Management
- Cisco Prime Data Center Network Manager

Applications
- Oracle
- Microsoft Server 2008
- SQL
- Linux
- Nagios infrastructure monitoring

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