Future-Ready Infrastructure Powers Premium Entertainment Experience

Cisco UCS enables Cisco Media Solutions Group to deliver next-generation content service.

EXECUTIVE SUMMARY
CISCO MEDIA SOLUTIONS GROUP
• Media and Entertainment
• San Francisco and San Jose, CA
• 65 Employees
CHALLENGE
• Cisco Eos helps media companies retain and add value to digital content by delivering new and engaging audience experiences
• Cisco Media Solutions Group needed a scalable, resilient, and efficient architecture to power the Cisco Eos social entertainment platform
SOLUTION
• Cisco Unified Computing System and Data Center 3.0 architecture
RESULTS
• 10x compute power
• 75 percent reduction in space
• 33 percent reduction in energy

Challenge

When R&B music artist Trey Songz premiered his latest music video in November 2009, he encouraged fans to share the video virally through Twitter and Facebook. They responded with great enthusiasm, and within a few hours, page views to his website had soared to ten times the daily average. For Warner Music Group's Atlantic Records label, this event generated the single largest hour of traffic for the year, across all artists and websites. Behind the scenes, the Cisco Eos® social entertainment software platform, developed by the Cisco Media Solutions Group (CMSG) and run on Cisco UCS servers, handled the traffic surge with ease.

Cisco Media Solutions Group (CMSG) was founded in 2006 to help media companies deliver new digital experiences such as fan communities and social entertainment. CMSG's Cisco Eos® social entertainment software gives media companies access to advanced technology while reducing the overall cost, complexity, and risk of building their own internal solutions. Built on a standards-based architecture, Eos functionality can be extended to other IP devices and services to follow the consumer to the device, location, and time of their choice.

By integrating social networking, content management and analytics capabilities into a single hosted application, CMSG helps media companies engage their target audiences and turn an elusive new medium into sustainable and profitable businesses.

One of the most important differentiators of the Eos platform is its ability to scale. To create engaging audience experiences, the application needs to deliver hundreds of websites to millions of audience members at any given time. Whether site visitors are downloading viral videos or watching the Olympics, the infrastructure must deliver every time.

Less than one year after launching with its first customers, CMSG converted Eos to the Cisco Unified Computing System™ (UCS) and Data Center 3.0 architecture for a more scalable, resilient, and efficient infrastructure.

Solution

In October 2009, Eos became the first hosted web application to go live on UCS. Cisco's Advanced Services (AS) team played a critical role in the architecture, design, and deployment. Working with the CMSG Operations team, the AS team was able to take product-based reference architectures, shape them into a design that would fit the needs of Eos, and build in the ability to scale the Eos platform easily as well as to take on new platforms with minimal effect to the underlying infrastructure.

"The first Eos data center took hundreds of hours to set up; with UCS, we finished in less than 80," says Craig Holland, senior manager of operations for CMSG. "And in the process, we gained ten times the compute power for half the space and one-third less energy."

UCS brings several benefits to the Eos platform: Its wire-once, connect-to-anything unified network approach is more flexible, less complex, and less costly than traditional models. UCS lowers capital expenditures by requiring fewer switches, cabling, and adapters. It also lowers operating expenditures by using less power, cooling, and space due to a reduction in the number of separate devices that are needed. Most importantly, UCS has proved that it can handle the inevitable spikes in consumer traffic that define a successful online marketing effort. Its ability to add cold capacity on demand makes it an excellent candidate for anyone who needs an elastic computing environment and has the desire to integrate with other cloud offerings based on UCS, virtualization, or other cloud platforms.

> "We eventually realized that we are dependent on technology, but we are not a technology company, so using a platform through a strategic partnership is a very desirable approach."
> — **Michael Nash, EVP, Digital Strategy and Business Development, Warner Music Group**

The Advanced Services team essentially built a Platform-as-a-Service (PaaS) offering, which is now available to other business units inside Cisco that need similar services and operational processes. The Eos experience has enabled the AS team to deploy these types of architectures with confidence, because they were able to vet the designs and learn the operational challenges that are inherent in such a complex offering.

Results

"Cisco Eos allows artists like Trey Songz to maintain direct relationships with their audiences," says Dan Scheinman, senior vice president and general manager, CMSG. "Thanks to Cisco Eos, powered by Cisco UCS, our customers no longer need to worry about the underlying infrastructure of the platform, and they don't have to operate data centers. They can return to the business of developing great content as media companies."

Since August 2009, media companies like Warner Music Group have deployed more than 40 Eos-powered websites generating approximately 2 million unique visitors per month and consuming several million minutes of media content. Cisco Eos has proved itself each time traffic reaches a new peak.

The rock band Paramore's (www.paramore.net) site is a good example of what Cisco Eos enables. Paramore was immediately able to establish a more direct relationship with its fans, obtaining more than 35,000 registered users within weeks of the site launch. Paramore has been able to turn that fan interest into economic opportunity and recently sold 4300 super premium content bundles in a week for $39.99 each.

According to Warner Music Group, its Eos-powered websites are 25 to 30 percent more engaging than other WMG sites. This means that, on average, visitors are spending more than eight minutes per visit, compared with about six minutes on non-Eos sites. CMSG customers also enjoy fast time to market for their sites, as shown by WMG's ability to develop and deploy interactive artist websites five times faster than it used to.

"We wouldn't be able to deliver the full promise of Cisco Eos without UCS," says Scheinman. "UCS gives us the capacity and confidence to realize the vision."

With Cisco UCS as its backbone, CMSG has been able to provide a robust platform for its media clients to increase user engagement with "social" content such as Twitter feeds, lower the cost for site development and management, and ultimately aggregate audience and user data across multiple branded sites. This combination enables media companies to better monetize their premium content through multiple revenue streams such as advertising, e-commerce and subscription-based services. CMSG's customer list has grown to include Warner Music Group and

The Travel Channel, as well as music services firms Tenth Street Entertainment and All Access Today. Cisco Eos also will also be used by the London Organising Committee of the Olympic and Paralympic Games (LOCOG) to deliver new audience experiences for the London 2012 Olympic and Paralympic Games. The companies and brands that depend on Eos have the infrastructure they need to add real-time content from wherever they are, which means the content on these sites is fresher than if it lived on traditional websites.

"We are dependent on technology, but we are not a technology company, so using a platform through a strategic partnership is a very desirable approach," says Michael Nash, EVP, Digital Strategy and Business Development, Warner Music Group.

By cutting costs and opening up new revenue opportunities, Cisco Eos helps media companies achieve a higher return on investment (ROI) and lower total cost of ownership (TCO) than the alternative in-house approach. In a recent study, IDC interviewed executives at leading media and entertainment companies and built a model to describe the relative ROI and TCO associated with Cisco Eos versus do-it-yourself (DIY) solutions. This model found that companies migrating to Eos from an existing DIY solution at a total investment of $121,000 realize average cost savings of $162,000 over three years per website and generate $306,000 in additional net revenue for total benefits of $468,000, yielding an ROI of 280 percent. These companies regain their initial investment and then beyond that, they reap an additional $1.80 in benefits for every dollar invested.

> "By utilizing UCS and Cisco Data Center 3.0 technologies, we have been able to drastically reduce the number of devices we need to manage while increasing efficiencies, ROI, agility and our ability to manage our environment in a much more elastic and cloud-like way."
> — Craig Holland, Sr. Manager, Operations, Cisco Media Solutions Group

Similarly, in a greenfield scenario with no preexisting installation, implementing Eos from scratch yielded an ROI that was higher by a factor of 8.2 compared with a DIY solution. The Eos case had a 197 percent ROI over three years compared with a 24 percent ROI for the DIY case.

Next Steps

Less than one year since the deployment of UCS, Cisco Eos is well on its way toward becoming the web platform "of record" for media and entertainment companies. Warner Music Group continues to launch a new artist approximately every week, and several new customers are in the pipeline.

To accommodate this rapid growth, CMSG and the UCS team are building out a second data center on the East Coast of the United States by the second half of 2010.

The Eos operations roadmap includes such features as:

- Utilizing VMware to enable integration with third- party cloud compute offerings
- Taking advantage of the powerful CPU and large memory footprints of UCS to more than double a single server's ability to perform in any layer of the application stack
- Further leveraging UCS's ability to control blades to quickly provision and destroy compute resources automatically based on load and projections
- Leverage technologies found in the Cisco Nexus® 7K switch, such as 802.1ae, to securely tie together multiple data centers to allow for active/active use of multi-DC resources
- Implementing the Cisco Content Delivery System (CDS) to accelerate webpage delivery both from the data center and through the Internet

For More Information

To find out more about Cisco UCS, go to: http://www.cisco.com/go/ucs. For more on Cisco Eos, go to: http://www.cisco.com/go/media

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