Media Company Lays Firm Foundation for Business Growth

Customer Case Study

Aegis Media achieves worldwide data center transformation with FlexPod and optimizes application performance

EXECUTIVE SUMMARY

Customer Name: Aegis Media

Industry: Media

Location: United Kingdom

Number of Employees: 12,000

Challenge

- Support ambitious business growth
- Improve operational efficiency and IT governance and security

Solution

- Data center transformation, with FlexPod architecture based on Cisco Nexus switching, Cisco UCS servers, NetApp storage, and VMware virtualization

Results

- Application performance improved by 100 percent
- Tenfold increase in disaster recovery capability
- Savings of 20 percent on infrastructure, 30 percent on power, and 50 percent on space

Challenge

Headquartered in the United Kingdom and present in 130 countries across five continents, Aegis Media is the world's leading media and digital communications group. Moreover, the company is at the forefront of an industry that's handling big data issues and complex analytics as the worlds of business and consumer applications collide.

These trends are driving high-end computing and hybrid cloud capabilities. However, in 2011, Aegis was operating as a federated IT organization. Some global services were centralized, but 50 to 60 separate local IT departments had been added largely through company acquisitions. The hardware was aging and only offered a limited level of virtualization, which affected its efficiency and cost effectiveness. The equipment employed was also difficult to manage and make secure, meaning that it was hard to provide consistent service and support enterprise-class IT platforms across the business.

The need to move to a more modern platform was underscored at the start of 2012 when Aegis won a global media contract with a major client. With its sights set on doubling turnover every five years, the company needed a new infrastructure to support growth and scale quickly and flexibly. These goals were out of reach with the legacy IT platforms, not least because hundreds of physical servers would have been required.

Instead, the company's IT leadership embarked on a transformational project to move away from traditional rack-mounted servers and consolidate data centers worldwide. Improving efficiency was a critical requirement with Aegis aiming to push the level of server virtualization to above 80 percent. "We were looking for a platform that could enable better collaboration applications and improved security, while achieving cost benefits and putting proper IT governance in place," says Colin Towers, global chief technology officer.

"We have progressed to ultra-modern, well-governed capacity management. FlexPod is a strong foundation, the cornerstone we needed."

Colin Towers
Global Chief Technology Officer
Aegis Media

Solution

Aegis looked at a range of potential vendors, seeking a platform that would offer the greatest flexibility. Already familiar with Cisco® technologies, the company was interested in the advantages provided by the Cisco Unified Computing System™ (UCS®), such as blade server density and deployment flexibility. Another potential plus was the system's ability to work alongside VMware and NetApp technologies within a FlexPod architecture, which is a pre-designed and pre-validated base data center configuration.

Previously, Aegis had storage and servers at each of its 170 locations, but with help from Cisco, it consolidated these servers into just three main data centers and one disaster recovery site. Those centers are based in New York, the United States (for the whole of the Americas), Hong Kong (for Asia), and London (for Europe, Africa, and the Middle East), with the backup site just outside London. Within these centers, FlexPod units form a private cloud, which Aegis is intending to develop into a hybrid model as its requirements evolve. The company also has five server rooms that house FlexPods in Cape Town, Sao Paulo, Moscow, Shanghai, and Melbourne.

The FlexPod units are built on Cisco UCS 5108 chassis with a combination of UCS B230 M2 Series Blade Servers equipped with Virtual Interface Card (VIC) 1280 Modules and B200 M3 Series Blade Servers, each with a VIC 1240. The B230 M2 blades use Intel® Xeon® Processor E7-2850 chips, while the B200 M3 models have dual Intel Xeon Processor E5-2620 chips. The Intel chip sets give the blades exceptional levels of computing power. Morris says: "One of the most important things has been the number of guests we could get per blade. The memory density on the Cisco UCS blades is pretty unique in the market. Per rack, the density we're able to achieve within the limits of our power in the data center is very good indeed."

The data center servers are unified in a single fabric through UCS 6296UP 96-port Fabric Interconnects and UCS 2204XP Fabric Extenders. Data center switching is provided through a combination of Cisco Nexus® 7010 and 5596UP Series Switches and Cisco Catalyst® 2960-S and 3750-X Series Switches. Meanwhile two Nexus 2248TP-E Fabric Extenders provide unified, scalable access, and a single point of management across many devices. Completing the lineup of Cisco data center technologies is a couple of Cisco ASA 5585-X Series Adaptive Security Appliances.

Aegis is also using Cisco Overlay Transport Virtualization to extend Layer 3 connections between its two U.K. data centers, a move that has allowed the company to eliminate Spanning Tree Protocol and thus achieve added resilience.

A standard feature of FlexPod is that the Cisco components are combined with VMware virtualization software and NetApp unified storage systems. The Aegis NetApp systems offer replication between primary and secondary arrays, running Common Internet File System and block storage. "We are making full use of the features of NetApp," says Morris.

About 99 percent of Aegis applications now run on FlexPod. These applications include VMware vSphere, several Structured Query Language database clusters, a small SAP implementation, Microsoft Office, SharePoint 2013, and Exchange 2010 and 2012, among others. With implementation nearly complete, management of the data center infrastructure is being outsourced to Tata Consultancy Services.

"Previously, only about five percent of applications could be recovered within 24 hours. Now that level has risen to almost 50 percent."

James Morris
Lead Global Enterprise Architect
Aegis Media

Results

Aegis can now deploy new virtual servers in minutes, instead of the days or weeks previously required to provision physical servers. "The speed of provisioning has increased dramatically," says Towers. "Before, we were running out of capacity, and now we can flex compute and match it to fluctuating demand. This helps us be more responsive to business needs, like responding to client projects overnight at times." Application performance has also improved. He adds: "Previously the company was seeing performance issues in some places, and now we've doubled capacity, which has improved the stability of our systems and applications."

FlexPod has also had a positive effect on business continuity. The company has traditionally had a tiered approach to application recovery, with some critical systems needing to get back online in two or three minutes, some within four hours, and some within a day. "Previously, only about five percent of applications could be recovered within 24 hours. Now that level has risen to almost 50 percent," says Morris.

Meanwhile infrastructure costs have come down by an estimated 20 percent. Aegis is expecting to see a 30 percent cut in power consumption and a 50 percent reduction in space compared to that required for its previous equipment. The company used to have 30 racks in its data center devoted to U.K. operations alone. Now that same rack space accommodates the services for the whole of Europe, Middle East, and Africa for a fourfold or fivefold increase in density. A substantial drop in carbon emissions is anticipated.

Next Steps

With virtualization in the data center now at almost 90 percent, Aegis is completing the FlexPod deployment and ultimately hopes to combine it with other compute and storage resources within a hybrid cloud. This approach could support new services such as virtual desktop infrastructure and application virtualization.

In the meantime, though, the data center transformation is helping Aegis achieve its goal of aggressive growth in a market increasingly dominated by professional IT services and big data challenges. This goal has become even more important since Aegis was sold to the Tokyo-based agency group Dentsu in the largest-ever corporate transaction in the history of advertising.

"We have progressed from a bit of a mixed bag, where our IT infrastructure was creaking at the seams, to ultra-modern, well-governed capacity management," concludes Towers. "FlexPod is a strong foundation; the cornerstone we needed."

For More Information

To learn more about the Cisco architectures and solutions featured in this case study, please go to:

www.cisco.com/go/flexpod

Product List

FlexPod

- Cisco Unified Computing System (UCS)
  - Cisco UCS B230 M2 Series Blade Servers with Intel® Xeon® E7-2850 Processors
  - Cisco UCS B200 M3 Series Blade Servers with Intel® Xeon® E5-2620 Processors
- NetApp storage
- VMware vSphere Hypervisor

Fabric Interconnects

- Cisco UCS 6296UP Series Fabric Interconnects
- Cisco UCS 2204XP Series Fabric Extenders
- Cisco Nexus 2248TP-E Series Fabric Extenders
- Cisco Fabric Extender Technology

Routing and Switching

- Cisco Nexus 7000 Series Switches
- Cisco Nexus 5000 Series Switches
- Cisco Catalyst 3750 Series Switches
- Cisco Catalyst 2960 Series Switches

Security

- Cisco ASA 5585-X Series Adaptive Security Appliance

Applications

- Structured Query Language database
- SAP implementation
- Microsoft Office
- Microsoft SharePoint 2013
- Microsoft Exchange 2010 and 2012

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