Health Insurance Company Improves Service and Cuts Cost

Customer Case Study

Groupe Mutuel transforms data center application availability and performance while saving on power, space, and management

EXECUTIVE SUMMARY

Customer Name: Groupe Mutuel

Industry: Healthcare insurance

Location: Switzerland

Number of Employees: 1900

Challenge

- Improve operational resilience
- Enhance service capability, while lowering costs

Solution

- FlexPod architecture based on Cisco Nexus switching, Cisco UCS servers, NetApp storage, and VMware virtualization
- Cisco Services for solution design, validation, and deployment

Results

- Application speed doubled and provisioning times reduced from days to hours
- Four to twelve-fold reduction in restoration time
- Zero downtime across more than 500 servers for three years

Challenge

As a leading Swiss healthcare insurance provider, Groupe Mutuel Association d'Assureurs has 1.4 million clients and is ranked second in its market. It is also active in life insurance and occupational pension schemes, and provides a full range of personal insurance products.

Continuous data center operations are needed to provide essential services such as claims processing and billing. "We operate around the clock so can't afford systems failures," says Pascal Sarech, infrastructure manager at Groupe Mutuel Association d'Assureurs. "We must have high availability, disaster recovery capabilities, and a flexible architecture."

However, until recently the Groupe Mutuel data center architecture was not flexible at all. Based on Reduced Instruction Set Computer (RISC) servers with multiple storage arrays, the infrastructure was expensive to run and occupied an increasing amount of valuable office space. Furthermore it was aging, increasing the risk of equipment failure.

Solution

Groupe Mutuel has two main data centers, in Martigny, in the Swiss canton of Valais. The company had deployed a range of Cisco® technologies in these facilities over the years, for example Cisco MDS 9509 and 9148 Series Multilayer Switches followed by Cisco Nexus® 5000 Series Switches.

Therefore, when it came to server technologies Groupe Mutuel was interested in the Cisco Unified Computing System™ (UCS®), in particular because of its ability to work cohesively with VMware and NetApp technologies in a FlexPod architecture. A pre-designed and pre-validated base data center configuration, FlexPod helps simplify technology design, deployment, and servicing.

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Pascal Sarech
Infrastructure Manager
Groupe Mutuel

"We work with Cisco for the rest of our network and are moving to Nexus technology, which is very flexible and very reliable," says Sarech. "We compared different solutions and decided the best approach was FlexPod. It's easier to configure and gives you flexible functionality to move services from one unit of hardware to another without interruption. Cabling is also simplified."

Cisco arranged for a UCS proof of concept with Groupe Mutuel, after which the health insurer began installing the technology. It chose high-performance Cisco UCS B440 M2 Series Blade Servers for its main production environment, which is configured as a unified fabric using Cisco UCS 6100 Series Fabric Interconnects. Elsewhere, Groupe Mutuel also deployed UCS B200 M2 Series Blade Servers for a separate Cisco Unified Communications Manager upgrade project.

For implementation, Groupe Mutuel engaged Cisco Services to work alongside its partner Dimension Data to design and install the UCS architecture. "Cisco Services provided the assurance that we would get it right first time," Sarech says. "It's always better to have Cisco Services involved in validating the designs because it has plenty of experience and is in direct touch with experts who provide guidance on best practices."

This team lowered Groupe Mutuel's overall risk in transforming its data center infrastructure, as well as enabling a threefold reduction in the time to deployment.

Meanwhile, the company continued to build out its Cisco data center switching fabric, cutting costs by implementing Fibre Channel over Ethernet (FCoE) on the Nexus 5000 Series Switches. It also deployed Nexus 1000V Virtual Switching on many VMware ESX hypervisors, and introduced the larger Nexus 7000 Series Switches to extend FCoE into the network core.

In terms of storage, Groupe Mutuel decided to move to NetApp because it was simpler to manage. It uses two NetApp FAS6240 arrays per data center. MetroCluster software provides continuous availability and transparent recovery from failures, with no data loss. Smaller NetApp clusters have been installed at each of the company's five main regional bases. NetApp SnapMirror software replicates data on servers located at the main primary site to the regional bases.

The company has also activated Network File System capabilities on its VMware platform, which means it can manage storage by volume instead of on a disk-by-disk basis. In its VMware implementation, Groupe Mutuel leverages storage functionality that NetApp provides through integration with VMware, including NetApp SnapMirror cloning and Snapshot.

The FlexPod platform supports a wide range of applications running on VMware ESXi including Citrix XenApp, VMware Server, Microsoft SQL Server, Oracle PeopleSoft, Microsoft Office Suite, and IBM Lotus Domino. "It's been very easy to migrate applications to UCS and VMware," Sarech says.

Results

The Groupe Mutuel FlexPod deployment currently covers several hundred virtual machines, which is more than 85 percent of the server estate. Service levels have improved substantially. "We now have very, very few outages," Sarech says. "In fact, last year we had no interruptions whatsoever to the applications running on virtual servers on our FlexPod array."

On average, applications now run twice as fast. Furthermore, the health insurer now has templates for different types of servers, so it can provision a virtual machine with the necessary operating system in approximately only 15 minutes. Adding various applications can take up to half a day, but that's still significantly less than the three to five days required previously. After testing Red Hat on UCS, Sarech says, "We can compare efficiency, and we can say our infrastructure is twice as efficient at a tenth of the cost."

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Groupe Mutuel now has the ability to add new storage or servers to its data center infrastructure very quickly. The company's disaster recovery capabilities, by server, have improved, too: "In case of a problem, we can go back to normal, on a server, in a couple of minutes using a Snapshot," Sarech says.

The exact time to recovery depends on the volume of storage that needs to be reinstated, but can be as little as 15 minutes for a server with up to 50 GB, or around eight to nine hours for one with more than 4 TB. To put this into perspective, previously it would have taken around two to three hours to reinstate a small server and up to 24 hours to bring back one with several terabytes of data.

Other FlexPod-enabled benefits accrue from lower power consumption, which is approximately only a tenth of what it was previously, and reduced space requirements. The company now only needs half a rack where previously it had needed six or more. Cabling requirements have also dropped tenfold. Groupe Mutuel has to deal with fewer data center vendors, which saves time and money. "We have a financial benefit, no doubt about it," says Sarech.

Finally, licensing costs are expected to drop by about 75 to 80 percent when the company completes its migration from RISC-based servers to ones using Red Hat and Linux operating systems. "For the business, the main benefit is in having greater IT stability, reliability, performance, and agility" Sarech says. "For the IT department, it's about maintenance, which is two or three times easier than before. For customers, it means a better service."

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
www.cisco.com/go/services
www.cisco.com/go/colloboration

Product List

FlexPod

- Cisco Unified Computing System (UCS)
  - Cisco UCS B440 M2 Series Blade Servers
  - Cisco UCS B200 M2 Series Blade Servers
- NetApp FAS6240 Full Bundle Software
- VMware Hypervisor

Routing and Switching

- Cisco Nexus 7000 Series Switches
- Cisco Nexus 2000 Series Fabric Extenders
- Cisco Nexus 5000 Series Switches
- Cisco Nexus 1000V Series Virtual Switches
- Cisco MDS 9000 Series Multilayer Switches

Fabric Interconnects

- Cisco UCS 6100 Series Fabric Interconnects

Collaboration

- Cisco Unified Communications Manager

Applications

- Citrix XenApp
- Oracle PeopleSoft
- Microsoft SQL Server
- Microsoft Office Suite
- IBM Lotus Domino
- Linux
- Red Hat

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