Energy Company Helps Ensure Regulatory Compliance

Cisco FabricPath enables ENEA Wytwarzanie to improve application performance and business continuity

EXECUTIVE SUMMARY

Customer Name: ENEA Wytwarzanie

Industry: Utilities

Location: Poland

Number of Employees: 2400

Challenge
· Increase application performance for optimal power monitoring while reducing potential for lost revenue
· Move to virtualized architecture to increase flexibility and achieve administrative efficiencies

Solution
· Cisco FabricPath transforms network infrastructure to support virtualized active-active data center performance, stretched clustering, and improved disaster recovery

Results
· Better placed to deliver continuous service and meet compliance requirements
· Higher availability and improved performance of applications
· Faster provisioning through simplified management

Challenge

One of Poland's largest utility companies, ENEA Wytwarzanie generates over 16 percent of the country's electricity. Its Kozienice power plant relies on mission-critical applications to monitor generator status on a 24-hour basis, helping staff adjust capacity to meet required electricity demand. Any disruption in data availability could potentially result in power loss and profit reduction.

ENEA Wytwarzanie decided to adopt a virtualized data center infrastructure to help ensure 24-hour application performance and reliability. It built a new secondary data center, which it federated with its primary data center, moving to an active-active topology.

As a critical element of this strategy, network infrastructure was carefully considered. Its legacy solutions were complex to manage, slow to converge, and did not fully support virtualization. Also, they did not offer the scalability needed, while limited redundancy compromised compliance requirements.

"We required a reliable and scalable information environment that could support critical state-of-the-art energy industry applications," says Piotr Siek, IT and telecom director at ENEA Wytwarzanie. "We also needed ways to support our stretched cluster active-active architecture," says Andrzej Płachta, ICT systems security administrator at ENEA Wytwarzanie.

Solution

As a longtime Cisco® customer, ENEA Wytwarzanie chose to move to a Cisco FabricPath-enabled Nexus® platform. This innovative technology uses innovative routing principles to allow Layer 2 scaling in a way that was not possible before. FabricPath supports data center transformation in several ways. It eliminates the scaling limitations of Spanning Tree Protocol. Also it allows any port in any VLAN on any switch to exist anywhere in the data center, thus increasing flexibility of deployment and, in turn, simplifying operations.

"Infrastructure management has been simplified, while reliability and performance have been significantly improved. This translates directly to the continuity of business processes."

Piotr Siek
IT and Telecom Director
ENEA Wytwarzanie

Working on the project with Cisco consultants and architects, ENEA Wytwarzanie quickly deployed Cisco FabricPath at the primary and secondary data centers.

The Cisco FabricPath solution chosen by ENEA Wytwarzanie uses four Cisco Nexus 7000 Series Switches and four Nexus 5000 Series Switches. To ensure tighter integration with VMware and virtual machines, the company also deployed Cisco Nexus 1000V Series Virtual Software Switches.

High availability is further boosted by the Cisco In-Service Software Upgrade feature, while Cisco virtual PortChannel simplifies management by allowing links physically connected to two different Cisco Nexus 5000 Series Switches to appear as a single device.

The solution also includes two Cisco Unified Computing System™ (UCS®) B200 Series Blade Server farms used to host VMware vSphere. Cisco Data Center Network Manager provides centralized, efficient management of the unified fabric environment. EMC VPLEX delivers stretched clustering by federating compute, storage, and memory resources in both ENEA Wytwarzanie data centers.

Results

Since deploying FabricPath, ENEA Wytwarzanie has increased the flexibility of its active-active environment through a simplified and consolidated network environment. The company also enjoys increased IT staff productivity and meets compliance requirements with disaster recovery processes ensuring five-nines systems availability.

ENEA Wytwarzanie has migrated many business applications to the virtualized Cisco platform, including Microsoft Exchange, SharePoint, SQL Server, and Lync, IBM Lotus Domino, EMC EPFM, along with its Siemens OSV telephony system. In addition to accelerating time-to-deployment, FabricPath is playing a key role in improving availability and performance of these core applications.

"Infrastructure management has been simplified, while reliability and performance have been significantly improved. This translates directly to continuity of business processes," says Siek. "Cisco FabricPath, together with Anycast Hot Standby Router Protocol, has proven to be a reliable and critical part of our move to a virtualized active-active environment," says Płachta.

For More Information

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

www.cisco.com/go/datacenter
www.cisco.com/go/fabricpath

Product List

Data Center
- Cisco Unified Computing System (UCS)
  - Cisco UCS B200 Series Blade Servers
- VMware vSphere Hypervisor
- EMC VPLEX storage

Routing and Switching
- Cisco Nexus 7000 and Nexus 5000 Series Switches enabled with FabricPath
- Cisco Nexus 1000V Series Switches

Applications
- Microsoft Exchange
- Microsoft SharePoint
- Microsoft SQL Server
- UC Siemens OSV v7

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