Greater Virtualization with a Smaller Server Footprint

Private cloud helps Bosnian power utility streamline IT and cut costs

EXECUTIVE SUMMARY

Customer Name: Elektroprivreda

Industry: Energy

Location: Bosnia and Herzegovina

Number of Employees: 5000

Challenge
- Simplify diverse, sprawling IT infrastructure
- Reduce costs and improve efficiency of data center operations

Solution
- Private cloud solution based on Cisco Unified Computing System and Microsoft Hyper-V virtualization software on Windows Server 2012

Results
- Server consolidation, from 42 physical and 90 virtual servers to just 12
- Greater virtualization, from 75 to 98 percent
- Easier to integrate newly-acquired coal mines

Challenge

Power utility Elektroprivreda found itself with a complex mix of hardware and software for the running of its power generation and distribution operations. The state-controlled company was satisfied with its existing virtualization platform, which provided a virtualization ratio of about 75 percent.

However, the company was forced to purchase new server equipment almost every year, just to keep up with the growing demand for IT capacity. This approach led to the IT department having to manage various equipment from different hardware vendors.

"We had to have a lot of spare parts because of different vendors and different models," says Haris Brkanić, head of ICT management and maintenance. "Every new project brought new hardware."

Elektroprivreda was keen to simplify IT operations and, if possible, cut costs. Also the company, which already had coal-fired and hydroelectric power stations and electricity distribution networks, faced the challenge of integrating a recently-acquired coal mines business.

Solution

Elektroprivreda's decision to rebuild its headquarters offered a chance to set up a new data center. It planned on using this opportunity to introduce new technology, simplify its IT, and fix some of the problems that it had been experiencing.

The company went through a rigorous tender process, before selecting a private cloud solution based on Cisco® Unified Computing System™ (UCS®) and Microsoft Hyper-V virtualization software on Windows Server 2012.

The solution, comprising 12 Cisco UCS B200 M3 Series Blade Servers, has replaced 42 physical servers and 90 virtual servers on seven hosts; a big cost saving. The old servers have been rebuilt and reused in the utility's regional offices.

CISCO™

> "Definitely it is much easier. A lot of things are very easy to implement."

Haris Brkanić
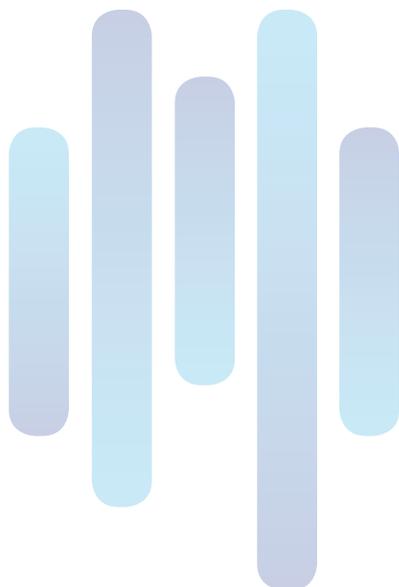Head of ICT Management and Maintenance
Elektroprivreda

Results

Elektroprivreda has greatly simplified IT operations both in terms of software and hardware, leading to easier management and lower costs. The new solution provides more extensive virtualization, integrates management deeply into the infrastructure, and will make it easier to merge newly-acquired coal mines into the company.

Server consolidation has eased maintenance and management significantly. "Definitely it is much easier," says Brkanić. "A lot of things are very easy to implement." However, quantifying the benefits of the project so soon after installation is difficult.

Virtualization is now at 98 percent, with the ability to configure things easily. The daily management of the Cisco servers, the Hyper-V virtualization hosts, and virtual machines from a single console is a simple task. "It's a huge benefit. From one screen you can see everything," says Brkanić.

The new system is also ready for the technically straightforward but time consuming integration of the company's new coal mines. "Everything is ready; all we need is a go-ahead and finalization of the pre-integration tasks by the IT departments of the coal mines," adds Brkanić. However, he stresses that it would not be fair to compare the new and the old systems because their differences are so great.

For More Information

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

Product List

Data Center Solutions

- Cisco Unified Computing System (UCS)
  - Cisco UCS B200 M3 Series Blade Servers

ıllıllı CISCO™