Windows Server 2012

Private cloud helps Bosnian power utility to streamline IT and cut costs

> "[System Center's Virtual Machine Manager] is a huge benefit. From one screen you can see everything."
>
> Haris Brkanić, Head of ICT management and maintenance, Elektroprivreda

The plan to expand its headquarters gave the power utility company Elektroprivreda of Bosnia and Herzegovina the chance to simplify its sprawling and growing IT system and cut costs. By choosing Microsoft's Hyper-V virtualization software, Microsoft System Center management software and new Cisco servers, it removed much of the complexity and improved the operational efficiency of its data center operations, while simplifying its software licensing.

Customer: Elektroprivreda
Website: http://www.elektroprivreda.ba
Customer Size: 5000 employees
Country or Region: Bosnia and Herzegovina
Industry: Energy

Customer Profile

Elektroprivreda of Bosnia and Herzegovina runs power stations and coal mines and is 90% owned by the state. It transmits and distributes its electricity to more than 700,000 consumers.

Software and Services
- Windows Server 2012 Datacenter
- Microsoft Hyper-V Server 2012
- Microsoft System Center 2012
- Microsoft Premier Support

For more information about other Microsoft customer successes, please visit:
www.microsoft.com/casestudies

Business Needs

The power utility Elektroprivreda in Bosnia and Herzegovina found itself with a complex mix of hardware and software for the running of its power generation and distribution operations.

The state-controlled company, which is the major utility in the country, was satisfied with its use of its existing virtualization platform, built on VMware, which allowed for a virtualization ratio of about 75%. Haris Brkanić, head of ICT management and maintenance, had no complaints. "We didn't have any trouble with VMware," he says, for example. "VMware worked fine." However, the company was forced to purchase new server equipment almost every year, just to keep up with the growing demand for IT capacity, which had led to the IT department having to manage many different models of equipment from four or five hardware vendors. "We had to have a lot of spare parts because of different vendors and different models," says Brkanić. "Every new project brought new hardware." Elektroprivreda was keen to simplify its IT operations and, if possible, cut its costs.

Also, the company, which already had coal-fired and hydroelectric power stations and electricity distribution networks, faced the challenge of integrating a coal mines business that it had recently taken over. "It was really hard for them to manage their environment; having multiple software and hardware vendors," says Sead Borovina, a Microsoft technical account manager.

Elektroprivreda's decision to rebuild its headquarters offered it a chance to set up a new data center in the basement of the building. It planned on using this

Microsoft

opportunity to introduce new technology, simplify its IT and fix some of the problems that it had been having.

Solution

Most of Elektroprivreda's servers are Windows servers and standardizing on Microsoft software would aid simplification. This however, depended on whether it made sense financially, as well as operationally.

Elektroprivreda, which is 90%-owned by the government of Bosnia and Herzegovina, has to go through a rigorous process of inviting and evaluating tenders for contracts. Elektroprivreda was keen to learn more about potential new software.

The company had an Enterprise Agreement licensing deal with Microsoft, in place since 2008. As it rapidly expanded its IT operations it was clear that it required additional support, so it signed a Premier Support agreement. "We were very happy with that," says Brkanić.

The agreement let Elektroprivreda evaluate the suitability of Microsoft's Hyper-V virtualization software on Windows Server 2012 compared to the existing VMware infrastructure and compare, head to head, the technical capabilities and economic impacts of the two. The earlier installation of part of System Center, Microsoft's IT management software, had also provided most of the infrastructure needed for deploying and managing a private cloud architecture built on top of the Hyper-V. Elektroprivreda eventually chose Microsoft's private cloud after seeing the success of a cloud project in the government of Bosnia and Herzegovina. However, a wait for the completion of the new company headquarters allowed for a long evaluation. "For more than a year we tested the Hyper-V functionalities. We didn't have any problems during testing," says Brkanić.

For its new hardware, Elektroprivreda chose 12 UCS Blade servers from Cisco, which were suitable for Hyper-V.

The 12 servers replaced 42 physical servers and 90 virtual servers on seven hosts; a big

cost-saving. The old servers were rebuilt and reused in the utility's regional offices.

Benefits

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

• **Simplified IT**

The change from 42 physical and 90 virtual servers to just 12 has eased maintenance and management significantly. "Definitely it is much easier," says Brkanić.

The company can do much of the system management itself and can call in Microsoft for support if needed. "A lot of things are very easy to implement," he says. However, quantifying the benefits of the simplification project soon after the July to October 2013 installation is difficult, says Brkanić, especially before the completion of follow-up work including installing clusters of machines in subsidiaries.

• **Better virtualization**

Hyper-V gives Elektroprivreda an improved, 98% virtualization, 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 using System Center's Virtual Machine Manager. "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, he adds: "Everything is ready; all we need is a go-ahead signal from the upper management and finalization of the pre-integration tasks by

the information and communications departments of the coal mines." However, he stresses that it would not be fair to compare the new and the old systems because their differences are so great.

• **Licensing and support benefits**

Premier Support gives Elektroprivreda support for Hyper-V and other Microsoft products.

"The licensing is always an issue," says Brkanić. However, Microsoft allows simple changes, he says: "It's easier to add on licensing." Moreover it is clear to the Elektroprivreda management just what it is getting for its money, says Brkanić: "It's a big benefit".

Microsoft