MTT Reduces Costs on VMware Monitoring with Microsoft System Center Operations Manager

SUMMARY

Company
Mezhregionalniy Transit Telecom JSC

Challenge
Need to monitor VMware virtual infrastructure with Microsoft System Center Operations Manager

Solution
Veeam nworks Management Pack for VMware for Microsoft System Center Operations Manager

Results
- Centralized monitoring of physical and VMware virtual infrastructures
- Reduced costs of implementing VMware monitoring
- Ability to receive performance metrics specific to the VMware virtual infrastructure

"The nworks Management Pack (MP) is the best choice for a company with heterogeneous infrastructure that has invested in Microsoft System Center Operations Manager and is looking for a means to monitor vSphere. With the nworks MP, we can get an integrated view of our physical infrastructure and vSphere, quickly identify incidents, and react to them before they impact our customers, and therefore, increase the quality of services we provide."

— **Andrew Kochetov,**
Senior Engineer
Mezhregionalniy Transit Telecom JSC

The Client

Mezhregionalniy Transit Telecom JSC (MTT) is one of Russia's five leading telecommunication operators. Working with commercial and retail customers, MTT provides long distance and international communications, traffic transmission for cellular operators, and serves inbound international traffic.

MTT's offices and services are spread across the entire Russian Federation, with the company headquarters located in Moscow.

The Challenge

To ensure the company IT infrastructure is running smoothly, MTT uses Microsoft System Center Operations Manager integrated with an internally developed application for IT infrastructure monitoring. This application uses the Microsoft System Center Operations Manager API to retrieve monitoring data and display it on a single console, enabling the monitoring team to keep an eye on the health and performance of the entire operations environment. "With this combination, we can receive detailed information about core components of the IT infrastructure, detect bottlenecks, and instantly respond to any possible issues," says Andrew Kochetov, MTT senior engineer.

When deployment of the virtual infrastructure began in 2008, MTT faced a challenge to find a monitoring solution for the VMware virtual infrastructure that would integrate with the company's existing IT infrastructure. "Virtualized servers run service programs for billing transactions analysis, as well as applications specific to managing the cellular communication network," says Kochetov. "We required a tool that would provide centralized monitoring of both physical and virtual servers."

Most of the existing third-party products for virtual infrastructure monitoring present data on their own monitoring consoles or integrate with Microsoft System Center Operations Manager only at a superficial level. "Since in our case Microsoft System Center Operations Manager is an important component in the monitoring scheme, we sought a solution that fully integrates with Microsoft System Center Operations Manager and fits seamlessly into the enterprise monitoring platform. Otherwise, we would have to look

for supplementary integration utilities or suffer from 'console sprawl,' spending additional time to correlate fragmented monitoring data from different systems," Kochetov added.

The Solution

After investigating different products, in February 2009 MTT decided on the Veeam nworks Management Pack for VMware for Microsoft System Center Operations Manager. A key driver for choosing the nworks MP was its ability to fully integrate with Microsoft System Center Operations Manager, which allowed MTT to maintain a single point of focus for physical and virtual infrastructure monitoring.

In addition, the nworks MP allows consolidating VMware and System Center Operations Manager data to enable 'drill-down monitoring.' This is thanks to the unique integrated topology generated by the nworks MP – which creates connections between ESX Hosts, virtual machines, and the Ops Mgr agent that may be running inside the VM 'guest OS'. This helps create a comprehensive 'end-to-end' topology view of VMware vSphere, from the highest level — ESX cluster, down through ESX Host, to the VM, to the virtualized Windows OS, and the applications and services running in the virtual machine.

One of the primary benefits of the Veeam nworks MP is that the product does not require an agent running on the ESX servers or virtual machines. The nworks MP uses the VI API to provide more than 300 metrics, properties and events specific to the VMware virtual infrastructure, including CIM/SMASH metrics for monitoring ESX hardware: temperature, fan speed, power and so on. Due to its agentless architecture, the nworks MP can work with ESXi servers that lack the service console to deploy agents within, and offload the monitoring burden from standard ESX servers.

Core benefits that led MTT to choose the nworks MP included:

- Single monitoring console based on Microsoft System Center Operations Manager
- Simple integration with the existing monitoring platform
- Ability to get monitoring data specific to VMware virtual infrastructure (balloon memory, CPU wait time and so on)
- Agentless architecture
- A set of pre-configured monitors and alerts making the nworks MP an out-of-the-box solution ready to use immediately after installation
- Knowledge base providing a detailed description of underlying metrics, level of alarm severity and troubleshooting information

The Result

Having embedded the nworks MP into its monitoring platform, MTT was able to control availability, performance and the overall health of its VMware virtual infrastructure using Microsoft System Center Operations Manager. The virtual infrastructure has become an important part of the company's IT infrastructure, and requires monitoring along with the physical infrastructure. Now, the MTT monitoring team has a holistic view of all IT infrastructure levels.

"For operating an efficient IT infrastructure, time is crucial," explains Kochetov. "With the nworks MP we didn't spend a minute to additionally train the monitoring team – they keep on working with the same administration interface they already know. And thanks to the centralized monitoring, we can immediately identify potential problems, reduce system downtime and, therefore, increase the availability of the VMware virtual infrastructure."

ABOUT VEEAM

Veeam Software, a VMware Technology Alliance Premier partner, helps organizations safeguard their investment in virtual infrastructure by providing innovative systems management software designed to reduce costs, increase productivity and mitigate risk. Veeam is an international company with U.S. headquarters in Columbus, Ohio and European headquarters in London, UK.

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