The Problem: Making Sense of a Massive Global Infrastructure

This premier technology company delivers software, services and hardware to more than 1 billion users worldwide. To effectively serve its customer-base and over 100,000 global employees, the company needs its network to function more like a utility than a standard enterprise infrastructure. Maintaining nonstop availability and performance, however, is a constant challenge.

To manage the massive environment—tens of thousands of network nodes, 1 million+ ports, more than 100,000 servers, both physical and virtual infrastructures—the IT operations team must make sense of vast amounts of information every hour of every day. “Alert storms” consisting of hundreds of thousands of alarms were common, making it extremely difficult to zero in on the most serious problems. The sheer scale of the infrastructure also made it difficult to gain the performance and trending insights needed to plan effectively for the future.

“We had a lot of data in disparate systems, but we weren’t able to do much with it as it stood,” says the company’s infrastructure manager. “It was difficult to plan for capacity, growth and utilization.”

The Solution: Automated Root Cause Analysis, Monitoring, and Reporting

The company uses VMware Smart Assurance to maintain control over its sprawling distributed infrastructure and deliver the nonstop availability and performance its users expect. It would be impossible for human beings to respond to raw streams of network alerts for an environment of this size. So the IT operations team relies on Smart Assurance to perform ongoing fault management, allowing them to take corrective action before problems impact users or services.

When issues arise, Smart Assurance automatically correlates symptoms to identify the root cause of the problem and delivers those details to the company’s primary IT operations console, Microsoft System Center. Team members can then quickly prioritize and respond to critical issues—instead of spending hours sifting through low-priority alerts.

About The Client

Industry: Software and Technology
Product: VMware Smart Assurance
Challenge: Maintain nonstop availability and performance for huge, complex global infrastructure.
Results:
Reduced “alarm storms” from hundreds of thousands of network alerts daily
Accelerated root cause analysis to quickly pinpoint problems
Increased visibility and insight to make smarter ongoing investments

95% fewer network alarms
“We have little to no tolerance for network problems because of the impact they can have on our company, both from a user experience and financial perspective,” says the infrastructure manager. “The huge volume of alert storms and alert streams, however, have always been challenging to manage because of the size and scope of our network. Because of their strength in root cause analysis and fault management, our team relies heavily on these tools to deliver a network our users can rely on.”

VMware Smart Assurance also maintains an always-accurate view of the company’s network topology. It tracks hundreds of thousands of physical and virtual network devices from multiple vendors and captures the relationship between all devices and services in the network.

**Deeper Insights to Make Smarter Decisions**

In addition to fault management, the company relies on Smart Assurance’s integrated analytics and reporting to capture in-depth, consolidated infrastructure performance and trend data. By harnessing historical data on performance and capacity trends, they can better predict future requirements and make more informed decisions for capital expenditures. The IT team can cross-reference network, compute, storage and application availability and performance data through a single interface. They can also generate integrated reports, instead of having to review multiple systems or create reports manually from those systems.

“With Smart Assurance, we can focus on visualization and exploiting the rich sources of data already at hand,” says the infrastructure manager.

This comprehensive visibility also helps the IT team to more effectively share information with constituent business units within the larger company. Keeping with the goal of delivering utility-like service, the team can offer a tenant view of the environment, helping other business units understand the performance of their IT services and better plan their own IT investments.

The company also uses Smart Assurance’s Network Configuration Manager capabilities to simplify ongoing network lifecycle planning. The company draws on a broad suite of integrated tools to automate design, change management, security, compliance and more. Together, these Smart Assurance capabilities allow the company to keep pace with current demands, better prepare for the future, and deliver superior performance and availability to hundreds of millions of users worldwide.

Hundred of personnel hours saved
by automatically prioritizing alarms based on impact

Smarter business decisions due to in-depth analytics on performance and utilization

Learn More

For additional information about VMware Smart Assurance:

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