T-SYSTEMS

EMC optimizes reliability of T-Systems IP and MPLS network infrastructure for increased availability, performance, and reliability

OVERVIEW

T-Systems, the corporate customer unit of Deutsche Telekom, is one of the largest managed IT service providers in Germany. With more than 47,500 employees combining IT, telecommunications, and business applications expertise and innovation, the company is a leader in converged ICT (Information and Communications Technologies) solutions. T-Systems’ Real ICT solutions blend state-of-the-art technologies with industry-specific expertise to meet customers’ ever-changing information and telecommunications requirements. Integrated solutions, such as T-Systems’ Dynamic Services, offer on-demand ICT capabilities that enable customers to access a variety of operating and back-office applications including SAP, archiving, Microsoft Exchange, Lotus, and additional solutions. These “always-on-tap” services enable customers to quickly meet fluctuating requirements.

To meet customer needs, T-Systems has developed a full ICT portfolio, but also blends IT and communications technologies from third-parties to create additional solutions. The company develops and operates high-performance Internet Protocol (IP) networks for its customers; offers infrastructure and industry-specific solutions; provides international outsourcing; and handles complete business processes (Business Process Outsourcing) such as payroll.

BUSINESS CHALLENGE

Today’s businesses rely on IT infrastructure that comprises countless components, including storage systems, switches, routers, hosts, applications, and servers. Daily routines in data centers require configuration changes that can result in additions to, or replacement of, hardware and software components. The consequence is that IT environments are getting ever more complex and difficult to manage.

SOLUTION

T-Systems relies on EMC® Smarts™ software solutions to monitor and optimize the performance and availability of its customer networks, as well as part of its own IT network. Smarts analyzes the relationships among network devices, and, through automated root-cause analysis, builds a complete picture of the effect of any fault anywhere on the network. The result is dramatically increased uptime—pinpointing any problem across the data center and solving challenges in real time.

The company uses various Smarts modules to automate major network management and monitoring tasks. These technologies enable T-Systems to ensure smooth operations by allowing administrators to quickly remediate network availability problems. This increases the efficiency and performance of the network, ensuring that T-Systems’ customers can access their services around the clock.
With Smarts IP Availability Manager, T-Systems improves the availability of the network by automating the fault and root-cause analysis across all network levels. The software automatically diagnoses the cause of a network problem from hundreds or even thousands of alarms. This ensures fast mean-time-to-repair and subsequent elimination of the problem. Smarts IP Performance Manager monitors the performance of all network components. As soon as any deviations from normal values are detected, the solution will automatically alert the network administrator. T-Systems also uses Smarts MPLS Manager for automated fault management of MPLS (Multiprotocol Label Switching) networks. The software automatically recognizes logical and physical objects as well as the connected domains.

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Matthias Widmann
Systems Engineer, T-Systems

Smarts Service Assurance Manager enables T-Systems to create a complete view of the IT environment in real time, and also shows how network problems impact business processes. The solution integrates analyses from multiple sources and dynamically correlates information about the relationships, behavior, and characteristics of IT components. Smarts Network Protocol Manager determines the root cause of problems at the routing protocol level and displays them graphically.

“Our customer satisfaction depends on a powerful network infrastructure that is always available,” explains Matthias Widmann, systems engineer at T-Systems. “Network issues must never result in the loss of services. Smarts software helps us to efficiently monitor our networks, to quickly eliminate any faults, and enables us to offer our customers attractive services that are available around the clock.”

**LONG-STANDING PARTNERSHIP**

EMC and T-Systems have maintained a partnership for several years. “EMC is a long-standing partner,” says Widmann. “We are working together on technologies and solutions that enable our customers to optimize their IT environments and to always maximize the value of their key asset—information.”

For example, T-Systems launched a pilot project, “Automated Storage Management,” with EMC as its technology partner. The result of this cooperation is a pilot application for process automation that achieved cost savings and efficiency improvements through optimized SRM processes and automatic storage assignment.