

# Research Summary: Network Management Megatrends 2012

*Prepared for Paessler AG*

## Network Management Megatrends

While many in IT might consider network management to be a mature and stable science, with little to improve or change, recent tectonic shifts in IT technologies and architectures, including cloud and server virtualization in particular, are combining to force a re-assessment of that position. In February 2012 ENTERPRISE MANAGEMENT ASSOCIATES® (EMA™) analysts published a landmark study of the drivers, issues, and priorities for network managers and network management tools, technologies, and practices, entitled [\*Network Management 2012: Megatrends in Technology, Organization, and Process\*](#). This EMA Research Brief recaps several of the major findings of the report and includes a related case study where network management tools deployed include PRTG Network Monitor offered by Paessler AG.

### *Study Context: Business, Organizational, and Technical Drivers*

The research started by assessing major “environmental” factors affecting priorities for monitoring and managing networks and networked application performance. In terms of overall business drivers, the steady focus, year upon year, has been on four key areas: operational cost containment, compliance, organizational consolidation/reductions, and global collaboration. Top networking initiative influencers were networking security, network performance optimization, and virtual network elements within virtual servers. Top broad IT initiative influencers were server virtualization, virtual/hosted desktop, and data center consolidation.

### *Megatrend: Increasing Use of Packet-Based Monitoring*

Packet-based monitoring and analysis was considered an essential aspect of network management by a majority of respondents, particularly among mid-large enterprises. The average number of deployed network and security products that are based on packet analysis is on the rise, with notable advances in compliance, data recording, and VoIP/UC analyzers.

### *Megatrend: Performance Diagnosis In Flux*

Performance diagnostics continue to be an important network management task, and an increasing number of pros are reaching beyond their third-party tools to collaboratively solve difficult issues due to rising complexity. Top data sources being used to diagnose performance problems included log files and other statistics such as SNMP (61%), network configuration information (52%), and traffic volumes/flow (49%).

### *Megatrend: Virtual Environment Support Still Evolving*

Virtual networking deployed as part of server virtualization continues to affect network managers. Only 62% of network engineers/operators report having access to virtual network elements within virtual server environments for monitoring/troubleshooting visibility, and only 58% have access for configuration and control. Consequently, 72% reported needing better visibility and 54% reported needed better control.

### *Megatrend: Cloud Have Real, Measurable Impacts*

External cloud services are having a direct impact on network management, according to nearly half of research participants. Within that group, 44% reported that when cloud issues arise, the network team gets called first, but 40% also indicated the network team is involved in cloud services design/deployment. Those embracing cloud are far more likely than peers to see influences of server virtualization, have networking teams leading cross-domain triage, and use outsourced services for network management needs.

## Resulting Requirements for Network Management

The changes coming from converging technologies, greater network criticality, and the shift towards cross-domain operations are resulting in new priorities for network management tools, technologies and practices. Key among these new requirements is the desire for fully or tightly integrated multi-function tools over loosely integrated or best-of-breed approaches. The top three business priorities for network management solutions were low cost of maintenance, low total cost of ownership, and flexible deployment options.

## Paessler Case Study: Global Equipment Manufacturer

The Global Datacenter Operations Manager at a multi-national construction equipment manufacturer is responsible for supporting a large organization with a very small group of professionals. The company's network and datacenter support a wide number of applications, with some of the most critical being external and business partner facing Web sites, internal employee information portals, quality and cost control applications, and most important of all, an Oracle-based parts database. The pure Cisco networking shop is also using VMware heavily for server virtualization.

This organization has recently undergone a strategic realignment, whereby the IT department was pulled out of the parent company and formed into a supporting organization responsible for all information and communications technology and services within North America. This IT team is essentially remaking itself into an internal cloud service provider.

The company is currently using Paessler's PRTG Network Monitor to monitor networks as well as systems and servers within the data center. PRTG is also being used to harvest NetFlow data in an integrated fashion. The Operations manager's IT group needed specific management tool capabilities for defining and tracking Service Level Agreements (SLAs) and providing the data required for usage-based chargeback. The PRTG platform has provided these capabilities, in combination with VMware vCenter Operations Manager.

Due to limited staff on hand, this manager has also been looking for tools that can be as proactive as possible. While there is more opportunity for improvement, the manager has been pleased with the fact that he often recognizes MPLS performance and availability issues with PRTG before their global telecoms carrier finds and notifies them.

This organization is also using the same infrastructure management suite to monitor errors coming from network-connected manufacturing equipment. Each North American site has been set up with direct access into the PRTG platform so that local operators can view networks, servers, printers and copiers, as well as errors and alerts from manufacturing equipment at that site in their own custom dashboard. This level of visibility is highly valuable as a "customer-facing" portal by which internal cloud customers can keep tabs on IT service quality as well as whatever else is of direct interest to them at their sites.

This case study illustrated a number of the key megatrends from EMA's research. The influence of server virtualization is clear for this IT team, as is the transition to cloud and the influence it has had on cross-domain visibility as well as proactive performance monitoring and diagnostics. Finally, the decision to use Paessler's PRTG as a single, consolidated platform for monitoring and collaboration across the full scope of operations reflects a growing preference for integrated network management approaches.

### About Paessler AG

Paessler AG leads the industry in providing the most powerful, affordable and easy-to-use network monitoring and testing solutions. The company's suite of just-right software products deliver peace of mind, confidence and convenience for businesses of all sizes – from Small Office/Home Office (SOHO) to large enterprises, including more than 70% of the Fortune 100 companies. Based in Nuremberg, Germany, Paessler's global reach includes more than 150,000 active installations of its products. Founded in 1997, Paessler AG remains a privately held company and is recognized as both a member of the Cisco Developer Network and a VMware Technology Alliance Partner. For more information, visit [www.paessler.com](http://www.paessler.com).

### About EMA

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that provides deep insight across the full spectrum of IT and data management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise line of business users, IT professionals and IT vendors at [www.enterprisemanagement.com](http://www.enterprisemanagement.com) or [blogs.enterprisemanagement.com](http://blogs.enterprisemanagement.com). You can also follow EMA on [Twitter](#) or [Facebook](#). 2446.030912