NETWORKING

2017 EMA INNOVATOR: CA TECHNOLOGIES

PARTNERING POWER

EMA™

An Enterprise Management Associates
Research Report

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Table of Contents

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EMA Innovator Awards: Networking, First Half 2017

The EMA Innovator Awards recognize products and services that demonstrate true innovation in the IT industry. On a rolling basis, EMA analysts present these awards to vendors that have advanced their respective industries and solved pressing problems for their customers.
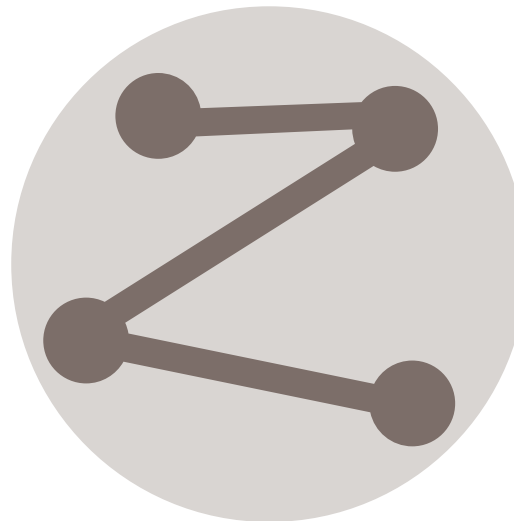
This report recognizes the award-winning integration of Network Operations and Analytics from CA Technologies and Netrounds' Active Testing solution. By integrating these two products, CA and Netrounds offer enhanced network management capabilities to their customers. The following pages explore how these award-winning products address the challenges that today's network managers struggle with.

Current Networking Trends Demand Innovation

Before we discuss the award, we want to take a moment to review some of the business and technical trends that are driving the need for increased innovation in the networking world.

These conditions place extreme pressure on under-resourced network teams. They need to build flexible and agile networks that can bring connectivity to new applications and new devices. And they need tools that can validate and secure that connectivity. As vendors deliver new and updated products and services to the market, EMA analysts will evaluate them from this perspective. The following EMA Innovator award winners are vendors helping network teams survive this disruption.

Managing in the Dark

The number one challenge to successful network operations is a "lack of end-to-end network visibility." Network managers lack the tools they need to fully understand network health and performance. By extension, they also lack visibility into how the network is supporting the business.

Trying to Do More With Less

Network teams are understaffed and underbudgeted. The number two challenge to successful network operations is a "lack of resources (people and budget)." Network managers lack the skilled personnel and the budget to adequately operate their networks.

Constant Firefighting

Network managers spend 71% of their typical workday troubleshooting problems. That troubleshooting is split almost evenly between reactive firefighting (36%) and proactive problem prevention (35%). This situation leaves little time for projects that deliver real value to a business.
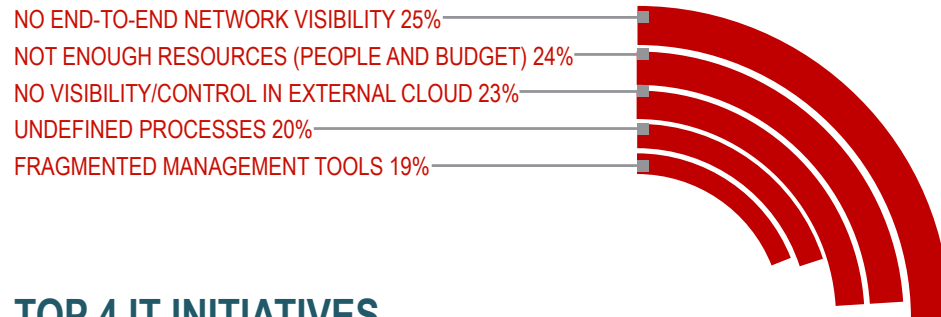
Transform the Business

Enterprises are not easing up on their demands of the network. A wide variety of transformational IT initiatives are directly impacting the network team's decision-making. Internal cloud transformation initiatives, the Internet of Things (IoT), and software-defined data center architectures are all top of mind for network teams today. In fact, 87% of network teams are already providing connectivity to IoT.

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TOP 5 CHALLENGES
TO SUCCESSFUL NETWORK OPERATIONS

NO END-TO-END NETWORK VISIBILITY 25%

NOT ENOUGH RESOURCES (PEOPLE AND BUDGET) 24%

NO VISIBILITY/CONTROL IN EXTERNAL CLOUD 23%

UNDEFINED PROCESSES 20%

FRAGMENTED MANAGEMENT TOOLS 19%

TOP 4 IT INITIATIVES
DRIVING NETWORK MANAGEMENT DECISION-MAKING

SOFTWARE-DEFINED DATA CENTER 49%

INTERNAL CLOUD TRANSFORMATION 37%

INTERNET OF THINGS 37%

SERVER VIRTUALIZATION 35%
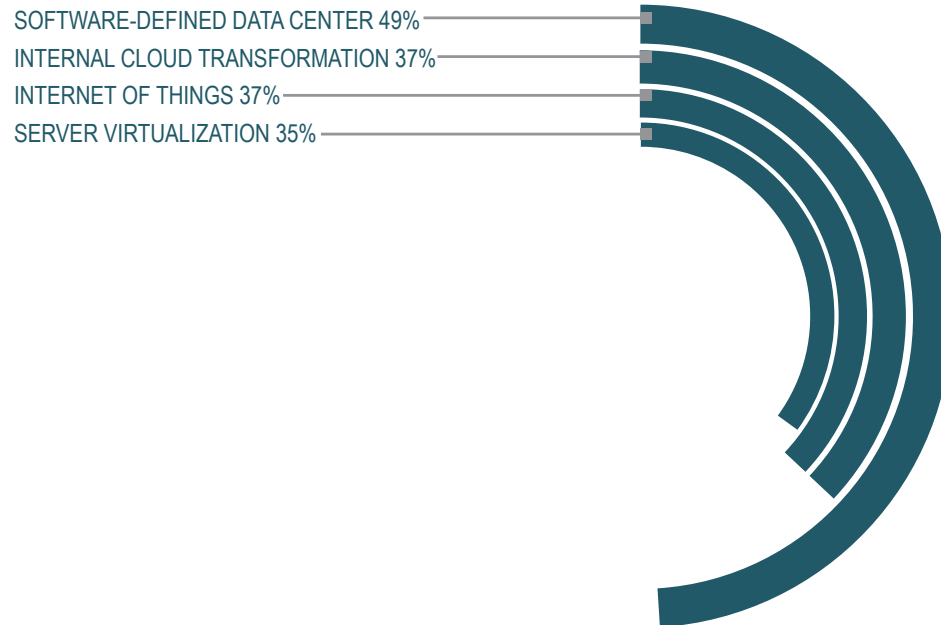
PERCENTAGE OF TOTAL WORK TIME
THE NETWORK TEAM SPENDS ON THE FOLLOWING ACTIVITIES EACH WEEK

ALL OTHER PROJECTS 29%

REACTIVE TROUBLESHOOTING 36%

PROACTIVE PROBLEM PREVENTION 35%

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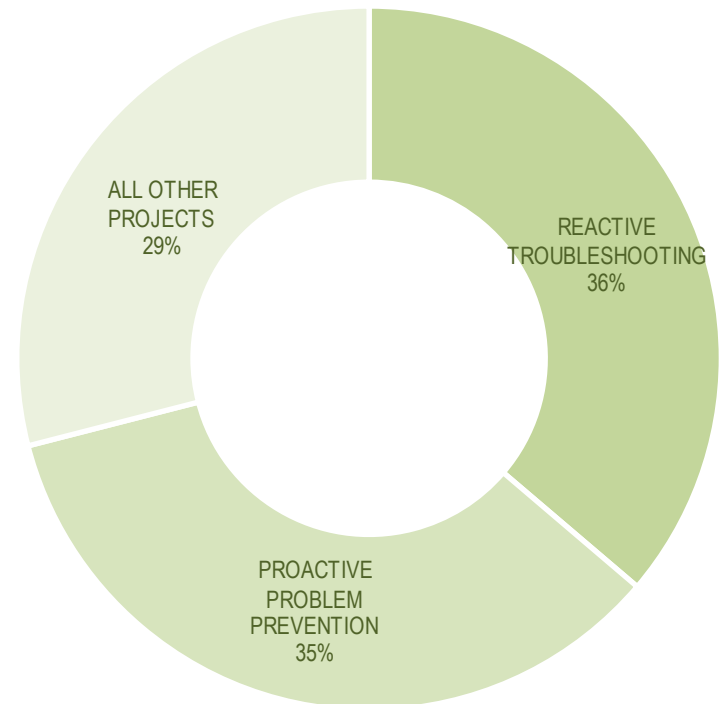
Network Operations and Analytics from CA and Netrounds Active Testing and Monitoring Integration

Product Category: Network Operations Software

CA Technologies announced that it integrated its Network Operations and Analytics platform with technology from new partner Netrounds, a provider of active test traffic monitoring solutions. This integration gives Network Operations and Analytics users the ability to predict and validate the performance of applications and services in environments where network managers often struggle to gain adequate visibility, such as the public cloud and software-defined WAN (SD-WAN).

Network Operations and Analytics from CA Technologies is an integrated platform of network management and monitoring solutions, including CA Performance Management, a network performance monitoring solution, and CA Spectrum, an event and fault management solution. At its core, this platform excels at collecting and analyzing health and performance metrics from network devices. CA offers additional integrated products that can provide visibility into production traffic via packet analysis and network flow analysis.

Netrounds Control Center and Active Test Agents deliver a distributed, real-time active test and monitoring solution that provides end-to-end visibility to determine network performance and end user Quality of Experience (QoE) in environments where traditional network monitoring tools lack visibility. IT operations can deploy the Netrounds Test Agent at strategic points within the network. These agents continuously monitor key performance indicators (KPIs) across the network and record the results. The Netrounds Control Center collects the data from the agents and provides users real-time, end-to-end insights into the health and performance of the network.

How the Integration Works

CA has integrated Netrounds into its network operations console so that users can correlate insights gained from the active testing and monitoring enabled by the Netrounds Control Center and Test Agents with the operational insights provided by the Network Operations and Analytics platform. CA says Netrounds' active test traffic analysis allows network operators to predict network performance in environments where traditional monitoring tools lack full visibility.

By analyzing the active traffic generated and sent end-to-end across the network by its test agents, Netrounds can determine how an application will perform. It can also validate behavior through network service chains, assuring that the right network and security services are applied to each flow as it passes through public cloud and hybrid environments.

When Netrounds detects a problem with a network flow, it will surface the alert in the Network Operations and Analytics user console. Network managers can then use the core capabilities of the CA platform to troubleshoot any problems detected by Netrounds.

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EMA Perspective

Active test and monitoring solutions have emerged as a critical tool for enterprise network engineering and operations. Test traffic is is the second most popular source of data for network capacity planning and engineering (37%). Only network flow records (NetFlow/sFlow/IPFIX) are more popular (41%) for this use case. Active test traffic is also the second most popular data source for network availability and performance monitoring (42%), second only to packet inspection (44%). Just a few years ago, synthetic traffic was one of the least valuable sources of data for network planning and operations.

MOST POPULAR DATA SOURCES FOR NETWORK CAPACITY PLANNING & ENGINEERING

Network flow records (NetFlow, sFlow/IPFIX) **41%**

Test traffic **37%**

MOST POPULAR DATA SOURCES FOR NETWORK AVAILABILITY AND PERFORMANCE MONITORING

Network packets **44%**

Test traffic **42%**

The popularity of active test traffic analysis is attributable to several enterprise trends. For instance, the use of external cloud services has created a network operations blind spot. Many network monitoring tools lack visibility into Infrastructure as a Service (IaaS) clouds and especially Software-as-a-Service (SaaS) environments. Reflective test traffic solutions like Netrounds can remove this blind spot by transmitting test traffic into the cloud and measuring the results.

Active testing and monitoring solutions can also predict end user experience across any network that is instrumented with test agents. EMA research has found that end user experience monitoring is the second most important feature (40% of network managers) in today's network performance monitoring solutions, second only to traffic volume analysis (41%).

The integration of Netrounds Active Testing with Network Operations and Analytics from CA Technologies addresses all of these trends and more. CA is delivering new and critical functionality to network managers through this partnership.

EMA Recommendations

- **Identify blind spots.** As you adopt new technology (external cloud services, software-defined WAN, private cloud), identify where your new network operations blind spots are.

- **Consider active testing and monitoring.** If you rely primarily on SNMP polling, flows, and/or packets to monitor your network, evaluate how test traffic analysis could enhance your network visibility. Netrounds and many other vendors offer different approaches to this technology.

- **Evaluate CA's Netrounds integration.** Network Operations and Analytics users should ask CA to demonstrate its Netrounds integration. Determine whether the integrated workflows offered by this partnership could improve network operations.

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About Enterprise Management Associates, Inc.

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 EMA's 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 or blogs.enterprisemanagement.com. You can also follow EMA on Twitter, Facebook, or LinkedIn.