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How a Network Observability Platform can Prepare Your NetOps Team for the Future

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Prepared for Broadcom
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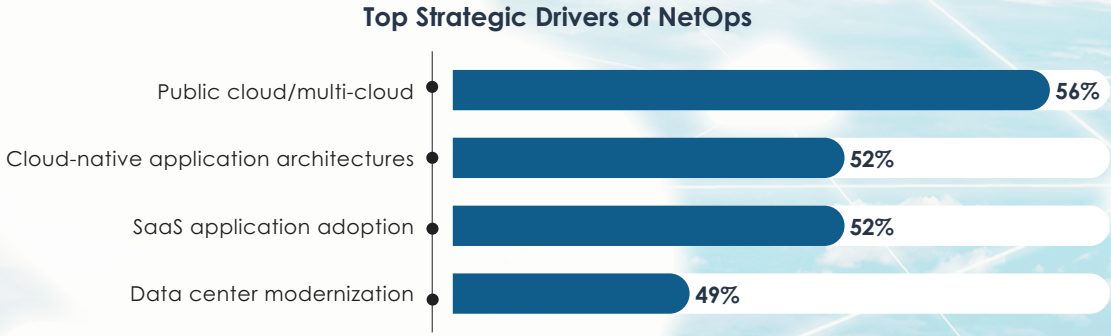
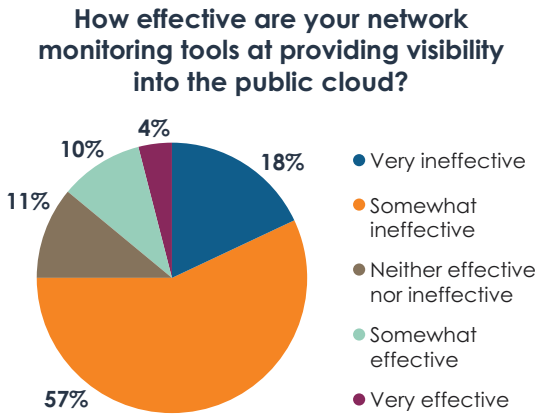
Network Observability Must Enable Hybrid, Multi-Cloud

Cloud Drives NetOps Strategies

Hybrid, multi-cloud architectures are shaping the future of enterprise network operations (NetOps) teams. EMA research found that the top four strategic drivers of NetOps teams are public cloud, cloud-native applications, SaaS applications, and data center modernization.[1]

Furthermore, 88% of NetOps teams expect to support a multi-cloud network by 2024. These new architectures will drive complexity and challenge NetOps visibility.





Legacy NetOps Tools are Failing

Today, the majority of NetOps teams try to monitor their cloud environments with their network monitoring toolsets, but only 18% of are fully satisfied with the quality of insights they get from the cloud.

Legacy network management toolsets are inadequate for hybrid, multi-cloud operations. Network teams must retool because the blame for digital disruption always falls on the network.

"People always blame the network. If the problem has something to do with the cloud application itself, we're not good at getting that data. Tools need better visibility into the cloud," a network engineer with a Fortune 100 consumer goods manufacturer recently told EMA.

[1] EMA, "Network Management Megatrends 2022: Navigating Multi-Cloud, IoT, and NetDevOps During a Labor Shortage," April 2022.

New Approach to Cloud-Enabled Network Observability

Network management tools must be modernized to provide cloud observability. EMA research found that NetOps teams with good visibility into the cloud do the following:

- Strategically focus on unified, multifunction NetOps platforms
- Collect cloud provider flow logs (e.g., AWS VPC flow logs) with their NetOps tools
- Use active, synthetic monitoring tools
- Require their NetOps vendors to offer AIOps insights for smart workflows and functionality, including anomaly detection, intelligent alerting and escalations, and automated root-cause analysis

Network Observability Must Manage Work-From-Anywhere User Experience

Today's IT organizations must support users who access applications and data from anywhere. Modern NetOps tools must adapt. This new normal is known as hybrid work.

NetOps is in Firefighting Mode

Today, end users detect and report 31% of all IT service problems before NetOps is aware of them. With more people working from home, the situation is bound to worsen.

While NetOps troubleshoots these reactive issues:

- Employee productivity is disrupted
- Business transactions and processes are interrupted
- Customer experience is degrading

Hybrid Work has Disrupted Operations

EMA research found that 85% of enterprises have experienced a permanent increase in the number of employees who work from home (WFH) at least part time. Before the pandemic, 19% of employees in the average enterprise's worked from home. Today, that figure exceeds 50%.

"After the pandemic, we expect about 70% of people to go into the office only two or three days a week. Another 15% will never go back ever, and they will just do their jobs at home," said a network engineer with a large insurance company.

Only 31% of NetOps teams are fully successful at supporting these remote workers.

"I've spent three or four hours on the phone with people trying to fix an issue at home. I talked to a person whose VDI session was restarting over and over again, filling up her ISP pipe. I couldn't fix it," a network engineer with a midsized healthcare enterprise told EMA.

Retooling for End-User Experience

EMA research found that 96% of NetOps teams have allocated budget for improving insight into hybrid work user experience. They have the following new requirements:

54%

need new dashboards and reports that focus on home office networks and remote worker experience

49%

need to upgrade tool scalability to address collecting and analyzing higher volumes of data for WFH insights

42%

need to collect new data and metrics to understand hybrid work user experience

WFH observability requirements led to a surge in using synthetic traffic monitoring tools that provide active insights into end-user experience from anywhere. EMA research found that 93% of NetOps teams use or plan to use active monitoring tools. Their top priorities for these tools are monitoring cloud infrastructure, SaaS application performance, user experience in corporate office, and WFH experience.

Modern Network Observability Solutions can Drive Operational Efficiency

Operational efficiency is essential for today's IT organizations because engineering talent comes at a premium. EMA research found that only 12.5% of IT organizations find it very easy to hire and retain people with networking expertise. NetOps teams that struggle the most with hiring are the least likely to be successful with operations.

NetOps teams must optimize how their technical personnel work. The typical networking professional spends only 25% of the workday on strategic projects.

What takes the rest of their time?

Sources of NetOps Inefficiencies

NetOps teams must improve efficiency, but their toolsets are a mess. The average NetOps pro believes that network problems could be reduced by 44% with better tools.

The typical IT organization uses four to 15 network management and monitoring tools. These fragmented toolsets lead to inefficient workflows, data silos and data conflicts, and visibility gaps.

Tool sprawl also leads to manual errors. In the average enterprise, 27% of all network problems are caused by manual administrative errors like bad config changes. This percentage increases with the number of tools used. NetOps teams that use one to three tools report that only 23% of problems are caused by manual errors, while teams that use 21 or more tools put that figure at 34%.

Finally, alert fatigue is killing productivity. Only 34% of alerts generated by NetOps tools are actionable. The other 66% are not indicative of a real problem. It takes too much time to sort through these alert storms.

Drive Improved Operational Efficiency with Network Observability

Network observability should start with tool consolidation. NetOps teams should reduce complexity by retiring niche tools and integrating strategic tools. When shopping for tools, successful NetOps teams tell EMA that they prefer fully integrated, multifunction platforms. Less successful NetOps teams procure best-of-breed tools from multiple vendors and do not bother to integrate them.

Maximize Tool Value

NetOps teams should strive to maximize the use of every tool they use. In other words, a network observability solution should address multiple use cases, which should reduce the likelihood of buying niche tools later. However, this approach requires discipline.

"Companies tend to buy a lot of tools and use them for only 10% of their functionality," said a network engineer with a Fortune 500 company. "It isn't that the new tools do something that the old tools can't do. It's just that the new tool was sold to somebody who wasn't technical enough to understand that we already had tools that could do the job just as well. The issue is that tools aren't fully onboarded, so you're not using them to their full capability."

Focus on Ease of Use

NetOps teams should close skills gaps by optimizing their tools. Tool managers should strive for simplicity and ease of use. Ease of use is the number-two platform requirement of network management tools, with 26% of NetOps teams making it their top priority. This allows low-skilled admins to contribute more to NetOps.

Mitigate Skills Gaps

EMA research found that NetOps teams seek the following tool capabilities when they are struggling with skills shortages and inefficient operations. First, they prioritize strong mapping and visualization of data. They also seek tools with application awareness and analytics features that can support proactive problem detection. Finally, they look for tools with strong workflows for escalations, problem isolation, and root-cause analysis.

Broadcom Network Observability

To learn more about how Broadcom's network observability solution can address the requirements discussed in this infobrief, download this **solution overview** from Broadcom.

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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**. You can also follow EMA on **Twitter** or **LinkedIn**.

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