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Ten Questions to Ask When Evaluating Network Performance Management Solutions





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We understand the complexity of enterprise networks and the technology needed to manage and optimize them. A network management tool is essential to ensure smooth business procedures, including the internal and external communication between various company locations, as well as with clients and partners. Malfunctions and failures in operational processes easily result in loss of time, as well as financial loss.

This requires a new approach to network management, including selecting a network-management vendor that can meet modern IT business requirements and act as a single source of truth for insights into the network.

We created this list of essential questions you must ask before purchasing an NPM tool to be a guide to assist you when researching prospective vendors – and most importantly questions you must ask yourself.



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// QUESTION 1

Does the Solution Provide Comprehensive End-To-End Visibility?

Modern network management solutions are required to support a seamless, high-performance digital experience. These solutions need to gather network-performance metrics from infrastructure devices, including routers, firewalls, load balancers, switches, and application-performance enriched flow data to create a comprehensive application-impact analysis.

It should also support integrated application visualizations, including application-path analytics, by having the ability to alert on application-performance issues caused by network-device issues. When it comes to performance issues, streamlined analysis features can help accelerate the identification of root causes.

An effective modern NPM solution needs to collect and correlate performance data from the entire network, often from highly complex hybrid environments. This includes monitoring all types of network devices used, wireless components, SD-WAN, LAN, cloud environments, customer and enterprise applications, VoIP devices, and the datacenter.

// QUESTION 2

Does Your Solution Maximize the Benefits of SD-WAN?

As more organizations look to software-defined (SD-WAN) for improved network performance and reduced communication costs across their remote offices and distributed branches, IT professionals need advanced performance and analytics capabilities to gain insights into performance, QoS policies, path routing, and traffic management complexities to ensure this key initiative is a success.

SD-WAN automates wide area network environments and makes them more dynamic and secure. It can provide direct internet connection from a branch, enable teams to balance between multiple service provider and transport types more easily, and make intelligent adjustments to application paths for better performance.





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/ QUESTION 3

Is Cloud Monitoring Supported?

With the rise of cloud and hybrid IT, administrators have more options when it comes to finding the right network monitoring solution for their business. Your IT team can manage your solution on-premises or in the cloud, or a third-party can manage it at their site, either on-premises or in the cloud.

Accelerate your cloud migration with end-to-end visibility from on premises environments into the public cloud. Extensive cloud monitoring capabilities easily bridge visibility gaps through flow to packet conversion for true application performance visibility in the public cloud. Leverage a comprehensive network monitoring platform to plan, deploy, and optimize cloud migration projects.

QUESTION 4

Does the Solution Provide Comprehensive Application Monitoring and Optimization?

It is crucial for network teams to ensure that the network is optimized in order to support and optimize the performance of the applications that are traversing that network. Application performance is critical to your business success. All application transactions traverse the network, and network health and performance can influence application performance in multiple ways.

A network analytics solution must combine application context with network infrastructure metrics and traffic. Due to the growing complexity and demands of the network, organizations are already struggling to keep up. According to a recent Cisco report, around 73% of organizations are struggling to maintain the status quo rather than future-proofing their networks. Without a future-proof the network, organizations lean heavily on legacy tools that do not give clear visibility into the network, especially around application traffic.

For these IT teams to be successful, there are three basic functions that the solution should address:



**Application
Visibility**



**Network
Optimization**



**Application
Performance
Assessment**



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// QUESTION 5

Does the Solution Provide Insights into Voice and Video Applications?

Voice and video applications are especially sensitive to latency issues within the network. Organizations need to understand hop-by-hop, how applications are impacted by network infrastructure and routing. Furthermore, digital transformation drives increased machine-to-machine, or east-west, traffic within data centers, most of which stays invisible to IT teams. These blind spots are prevalent and can be costly.

With a comprehensive NPM tool, IT teams can now access the granular insights they need to quickly identify, troubleshoot, and resolve issues across the traditional network as well as application issues such as VoIP and video performance problems without the need for deep forensic analysis.

QUESTION 6

Does the NPM Support Machine-Learning, Advanced Anomaly Detection & Correlation?

Scale-related performance is critical, modern NPM solutions should incorporate machine-learning techniques to enable the platform to continuously learn and apply knowledge based on big-data trends. This includes the ability to create dynamic baselines and identify anomalous behavior from multiple sources of raw data. Machine-learning algorithms should support critical performance corrections, including determining which voice traffic to prioritize, when to throttle bandwidth, and whether a user's access should be blocked.

The solution needs to collect and analyze data not only for root-cause and performance analytics but also proactive health metrics. Key health analytics include top network users, availability, common traffic patterns that contribute to performance issues, application jitter, latency, and loss. Finally, NPM solutions should automatically create baseline and trending metrics to ensure that capacity issues do not contribute to downtime or performance issues.





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QUESTION 7

Is the Solution Utilizing Advanced Analytics and Reporting?

Network operations need to apply more sophisticated analytics to network data to derive meaningful insights into complex issues. The solution must provide an advanced analytics platform to provide reports and analysis on nearly every aspect of a network's performance. It should not only allow users to report on N dimensions (application, user, site, device, segment, etc) and easily pivot reports to focus on key network performance intelligence; but it should enable custom reporting for baselining and trend analysis.

Additionally, the correlation of data across multiple network domains such as WAN, LAN, Data Center, Cloud, etc., provide network management teams a cohesive big-picture view of performance metrics throughout their entire network. A modern NPM solution should use analytics to enhance network security monitoring, optimize networks, proactively predict network problems, and even optimize business processes.

Lastly, be aware that many traditional network monitoring tools excel at alerting network operators to potential problems, but not every alert represents a true problem. Intelligent alerting will benefit your IT teams greatly, giving back valuable time to busy IT professionals.

QUESTION 8

Does the Solution Assist with Capacity Planning?

Capacity planning is critical for optimal application performance. Under-provisioning of network resources leads to congestion—resulting in bad user experience, loss of productivity and a negative business impact. To avoid under-provisioning, most organizations resort to overprovisioning. However, overprovisioning of network resources results in excess capital spend and a negative impact to the bottom line. Whether you're ensuring that there is enough bandwidth through a service provider, or verifying the load on network devices, having full awareness in a single view is paramount.

Since performance problems are usually grounded in capacity, capacity planning and network performance management best practices have significant overlap. These features are critical for any NPM solution to have to support capacity planning;

- ✓ **Service Level Management**
- ✓ **Networks and Application Analysis**
- ✓ **Baselining and Trending**
- ✓ **Exception Management**
- ✓ **QoS Management**



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/ QUESTION 9

Does the Solution Incorporate AIOps?

By providing intelligent, actionable insights that drive a higher level of automation and collaboration, your ITOps team can continuously improve, saving your organization time and resources in the process. The overarching benefit of AIOps is that these teams are able to identify, address, and resolve slow-downs and outages faster than they can by sifting manually through alerts from multiple IT operations tools and with fewer errors. This results in many added benefits including reduced MTTR, modernizing of IT departments and teams, and being able to shift to predictive management as opposed to reactive.

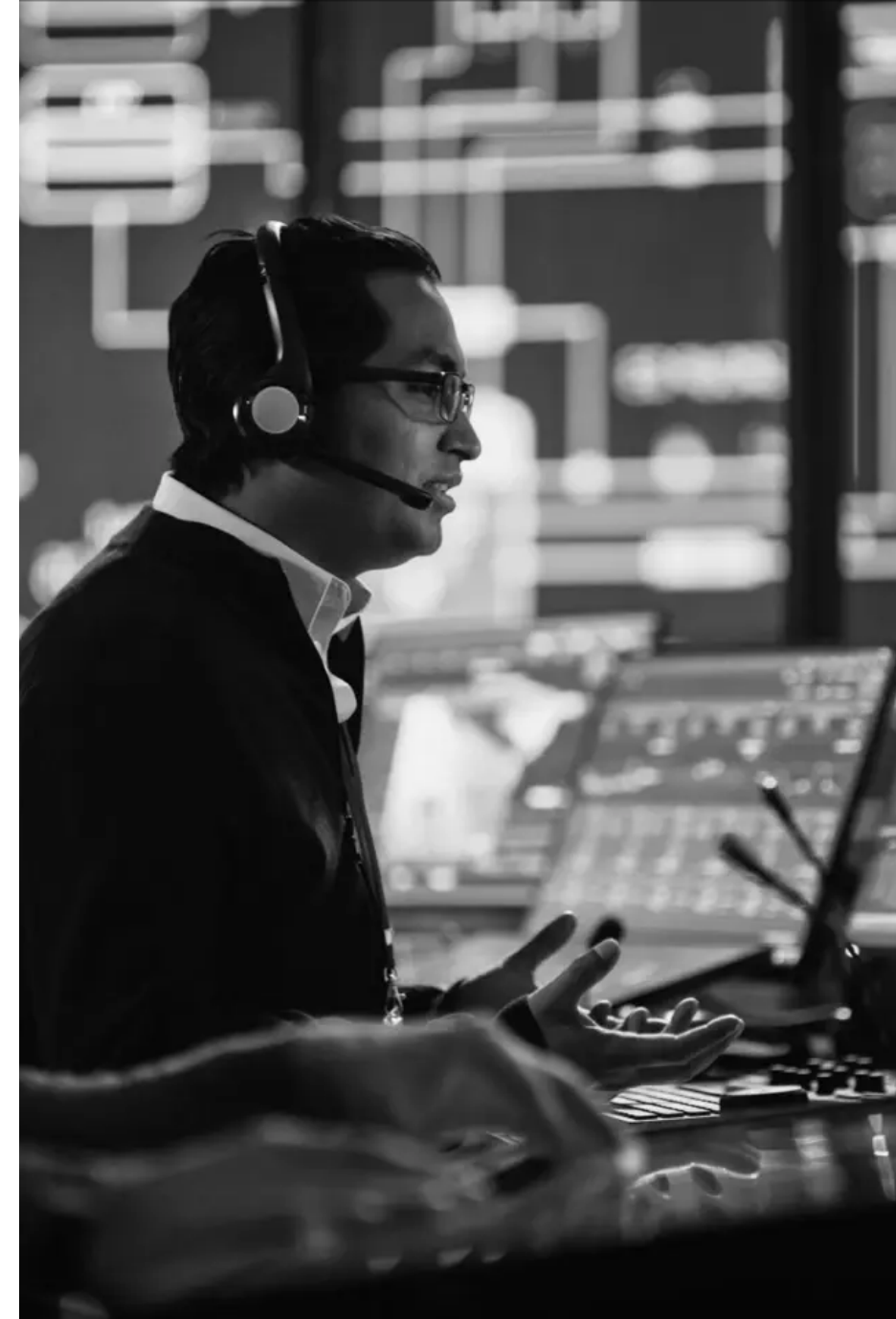
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QUESTION 10

Can the Solution Provide Scalable, Enterprise Support?

For large-scale enterprises, finding solutions that can support the vast number of devices in your network is important in determining suitable network monitoring tools. You shouldn't just consider the size of your current network, either; if your network is going to expand, you need to keep this in mind as you decide on a monitoring solution.

Modern NPM platforms need to analyze devices and environments at scale without latency and grow into monitoring new computing environments, including SD-WAN, multi-vendor WAN, and public and private cloud environments. NPM should also support capacity planning to avoid both over- and under-provisioning of resources and predict whether a network can support growing business-critical traffic.



Why LiveAction?

LiveAction gathers real-time data from multi-vendor network elements to monitor the digital experience, VoIP & video, SD-WAN, cloud and manage application and datacenter performance. With LiveAction's unified platform, enterprises are able to eliminate the cost and complexity of managing point solutions, reduce meantime to resolution, and save days documenting activity by leveraging automated reporting. LiveAction customers become more proactive by leveraging network analytic and AI/ML techniques to identify and fix issues before an application or network problem impacts the business.

Enterprises can proactively plan for change in the network, whether a new SD-WAN deployment, critical business application, or migration to the public cloud. Most importantly, LiveAction allows enterprises to reduce both internal and customer downtime making sure SLAs are met even as business requirements evolve. NetOps teams are now effectively equipped to address the modern challenges of the everchanging network and accurately prove and justify the positive impact their teams are making on the business.

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LiveAction provides end-to-end visibility for network security and performance. By relying on a single source of truth – the packets – LiveAction gives modern enterprises the confidence needed to ensure the network is securely meeting business objectives, providing full network visibility to better inform NetOps and SecOps, and reducing the overall cost of network and security operations. By unifying and simplifying the source of collection, inspection, presentation, and analysis of network traffic, LiveAction empowers network and security professionals to proactively and quickly identify, troubleshoot, and resolve issues across increasingly large and complex networks.

To learn more about LiveAction, visit www.liveaction.com