

As network infrastructures are being asked to cope with the modern strains of business operations, the associated challenges in how to effectively monitor, manage and troubleshoot their problems are getting ever more demanding.

Most monitoring solutions available on the market are themselves often seen as complex and expensive to deploy. However, cost-effective and fit-for-purpose alternatives are emerging, and offering businesses the opportunity to cut rather than incur costs when investing in network monitoring.

Supporting exponential traffic growth, diverse new services, mobile devices and 24/7 access for users, a typical enterprise IT network is a complex system with many moving parts, any of which can go wrong.

When they do, even short periods of network slowdown or outage can affect employee productivity, squander business opportunities and potentially have a detrimental effect on the company's reputation, each leading to potential dramatic costs for the enterprise.

To avoid these scenarios, network monitoring solutions are employed to watch a network from end to end, running continual tests on performance and alerting IT teams to any detected issues. This helps teams identify anomalies and potential problems before they cause any trouble, reducing downtime and the average time it takes to repair faults.

Furthermore, monitoring solutions can allow better decisions to be made about how to manage assets, thereby reducing costs and increasing revenue, because time and resources saved can then be reallocated to activities that deliver greater business value.

## Matching cost with functionality

When choosing a network monitoring solution, one of the most significant difficulties network teams face is cost. Wrestling tight or non-existent budgets, some are turning to the multitude of free or open source network monitoring options available. Commercial freeware can be attractive as it will often offer basic but essential features such as automatic network discovery, monitoring and alerting. But with no possibility to upgrade or extend, no support, and with questions surrounding reliability, scalability and stability, it is a risky option. Open source freeware, in contrast, can be developed according to a company's needs. Yet this option is labor intensive, representing an extensive time and resource drain that comes with no guarantee of ultimate success.

If free options do not fit requirements, at the other end of the scale there is a range of enterprise-level solutions that are often highly extensible, scalable and feature-rich. But these features more often than not come at a high price. On top of that, they can also be highly complex, require specialised services and training, and have a multitude of expensive features which overshoot company needs. As a result, many organisation's see a high total cost of ownership and poor ROI from their network monitoring solution. Despite this, a large proportion remain loyal to their network monitoring provider for fear of switching challenges and the associated costs with migrating to an alternative.

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## Fit for purpose solutions

Recently, purpose-built, value-driven products and tools have started to enter the market, offering an alternative to risky free/open source options and expensive enterprise-level solutions. Some of these new tools, such as the Allegro Network Multimeter, offer simple and rapid migration, comprehensive analysis and fast problem identification at a fraction of the cost of traditional enterprise solutions.

Helping IT teams tackle real-world network challenges, plug & play solutions like the Allegro Network Multimeter remove the need for time-consuming configuration and training frequently required by other solutions. Added to almost any point in the network they have the ability to perform network analysis and diagnose the cause of network problems with just a few clicks. Gaining this insight quickly then enables troubleshooting and testing to be carried out.

Often, the most effective way - in terms of both time and cost - to take the next step and identify a solution to the problem, is to combine network analysis tools with WAN network emulation. Network emulators like the Calnex SNE have reached a level of sophistication wherein they can perfectly mimic complex real-world networks and the various scenarios and conditions to which networks are exposed. Powerful and cost-effective, network emulators allow teams to rapidly and accurately simulate their networks. Within this simulated environment, they can safely trial, test and perfect bold and innovative solutions to their network issues without any risk to the real-world system.

State-of-the-art purpose-built technologies like the Allegro Network Multimeter and Calnex SNE demonstrate how investing in a network monitoring solution need not lead to buyer's remorse, and can instead bring cost savings, revenue generation and ultimately ROI.

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## **About Calnex**

Founded in 2006, Calnex is the world-leader in test and measurement solutions for synchronization and wide-area network emulation. Headquartered in Linlithgow, Scotland, with sites around the globe, Calnex was named the 2015 winner of the Queen's Award for Enterprise for International Trade, the UK's highest accolade for business success. Calnex's SNE Network Emulator is a multi-port, multi-user test solution. It emulates WAN links, and simulates complex data center and telecom infrastructure. The SNE provides comprehensive testing with higher ports counts to allow users to test with real-world network conditions in the lab, enabling issues to be found and resolved in existing networks, and potential issues in new networks to be fixed prior to the network, service or equipment going live.

