

WHITE PAPER

ACTIVE & PASSIVE NETWORK MONITORING

Why enterprises need both



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TABLE OF CONTENTS

[Introduction](#)

[Passive Monitoring](#)

[Active Monitoring](#)

With enterprise networks transforming to support a growing web of apps, users, devices, and locations, there isn't just one way to measure network performance.

After all, different kinds of apps speak different programming languages and protocols, while requiring variable shares of network capacity — and that's just the beginning. Even the way networks are architected today requires, in many cases, a diverse array of infrastructure strategies and technologies that not every monitoring solution is equipped to test.

As a result, enterprise IT teams are often left juggling either a mess of monitoring tools that cover different visibility needs, or worse, a single solution that fails to cover any of them completely.

Network monitoring techniques generally fall into two overarching buckets: Passive monitoring via traffic analysis and device data collection or active monitoring via network testing and web synthetics.

PASSIVE MONITORING

Passive monitoring involves collecting network device data, typically via SNMP, and user traffic, historically through something like NetFlow. By analyzing this data over a period of time, the results give enterprise IT teams an idea of the “state of the network” at a given point and how users had been impacted by conditions during that sample. A drawback with traffic analysis is that it requires users to be impacted before IT can identify performance issues. Additionally, device data can only be collected from owned devices leaving gaps in network visibility for WAN connections to 3rd party SaaS apps.

ACTIVE MONITORING

Active monitoring, on the other hand, can allow IT to proactively test network connections and emulate user behavior — rather than just look at past activity — at set intervals. IT teams can also target apps outside of their private networks providing coverage for every business-critical

ACTIVE MONITORING (CONTINUED)

app on-premise and in the cloud. This gives teams a posture to address potential performance hiccups before they impact end users.

The trouble with this historically passive view of network monitoring strategies is that for a complete, comprehensive view of modern network and app performance, IT teams can't choose one or the other. They REALLY need both.

AppNeta by Broadcom Software takes a 4-Dimensional approach to network performance monitoring that combines the main pillars of active and passive techniques to deliver a comprehensive, complete picture of the network at any given time. By combining path, packet web and flow data, IT teams can glean complete user-experience visibility from a single monitoring point.

The result? Teams can enjoy active, continuous end-to-end measurement of network health, performance and availability, while having complete access to raw packet data from remote locations when and where IT needs it to get to the bottom of performance issues.

What does all of this mean for customers?

When teams have a complete view of the network that can get their knowledge workers back to work quickly, everyone wins: Business can continue to flourish uninterrupted while IT can focus on larger initiatives rather than wasting time fighting fires.

AppNeta's 4-D approach enables enterprise it to:

- Streamline the number of solutions they need to gain full visibility from as many as four or five down to one, resulting in lower licensing and ownership costs.
- Increase efficiency with a single streamlined solutions with API integration options for correlation of data to other business metrics. Automate diagnostics, reducing the amount of time IT spends resolving issues thanks to end-to-end visibility.
- Validate and enforce third-party vendor SLAs to limit overspending on connectivity and collecting data that can be used for financial recuperation.



To learn more about how AppNeta combines active and passive network monitoring, schedule a demo with our team to see our platform in action.



About Us

Broadcom Software is one of the world's leading enterprise software companies, modernizing, optimizing, and protecting the world's most complex hybrid environments. With its engineering-centered culture, Broadcom Software is building a comprehensive portfolio of industry-leading infrastructure and security software, including AIOps, Cybersecurity, Value Stream Management, DevOps, Mainframe, and Payment Security. Our software portfolio enables innovation, agility, and security for the largest global companies in the world.

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