

SOLUTION BRIEF

NETWORK OBSERVABILITY BY BROADCOM

Making Every Network Work
for Retailers

KEY BENEFITS

Optimize Network Operations to Reduce Costs

Reduce network operations complexity with advanced data-driven insights. Correlate data from alarms, faults, performance, flows, configurations, and logs. Actively monitor network delivery experience over paths to the cloud. Gain the insights needed to reduce cost and improve mean time to repair (MTTR).

Accelerate Network Transformations to Fuel Revenue Growth

Gain the capabilities needed to deliver new services faster, resolve tickets at the first touch, and boost service availability. Validate your transformation across multi-vendor networks and software-defined environments. Prevent outages with dynamic configuration and change management.

Enhance Connected Experiences to Boost Customer Retention

Leverage active and continuous monitoring across the entire network delivery path to test every network hop and validate the user experience. Quickly identify and isolate the root cause of any issues, including those arising in third-party networks, in order to minimize the impact on the user experience and reduce MTTI.

Business Challenges

To compete, grow, and boost profits, retailers continue to pursue strategic digital transformation imperatives. Success hinges on the retailers' technology teams, and their ability to harness innovations, wring maximum value from data, and support omnichannel strategies, while constantly ensuring digital services perform reliably and optimally.

In today's digital world, customers demand both fast and seamless experiences, every time. For online retail, it's no exaggeration to say that functionality issues and even delays of seconds can cause an online shopper to abandon their transaction and go to another site. Similarly, a slow or glitchy in-store encounter—whether a customer is searching for inventory, seeking assistance, or using a kiosk-based digital checkout—results in costly friction and erodes the experience.

Delivering highly responsive connected experiences is a complex task in the modern digital landscape. Websites and mobile apps rely on an extensive ecosystem of apps, services, infrastructures, and networks. As workloads shift to the cloud, retail IT and network operations teams face additional challenges. Now, many critical components—such as ISP networks, CDNs, DNS providers, IaaS and SaaS environments, and cloud API gateways—lie beyond the direct control of these teams. However, these third-party environments can have a significant impact on the digital customer experience. Further, many retailers are now employing a range of SaaS solutions, including point of sale (PoS), e-commerce, and marketing offerings from such vendors as SAP, Oracle, and Microsoft. These SaaS offerings introduce additional visibility challenges.

The problem is that too many teams are relying on tools that aren't equipped for these networking realities. Historically, they've used tools that only monitor the health of the local area networks (LANs) and wide area networks (WANs) that they're managing internally. Consequently, they contend with monitoring gaps introduced by this reliance upon external, multi-vendor, multi-cloud, and multi-technology environments.

These teams lack the visibility and control they need to monitor the entire network delivery path. This leaves them increasingly exposed to issues that can have a negative impact on network performance and user experience. The end result is that customers can have poor experiences—and that network operations teams won't even notice.

The Requirements

To address these challenges, network operations teams at retailers need a solution that can provide full visibility into the health, performance, and availability of all network devices and services that customer transactions and internal operations are reliant upon. Today, that means gaining comprehensive coverage not only of internally owned networks, but delivery paths that span third-party, multi-cloud, and multi-vendor networks.

Further, these teams need application-level insights that reflect the network experience delivered to customers. By gaining the multi-vendor visibility required, teams can reduce mean time to innocence (MTTI)—and eliminate the unnecessary blame-game that can otherwise occur between technology teams, service providers, cloud providers, and other entities.

Solution Overview

Network Observability by Broadcom provides the unified, end-to-end network visibility that your teams need to ensure your networking services continuously deliver optimized availability and performance and high-quality user experiences. The solution extends your monitoring reach beyond the borders of your data centers and into user sites, edge services, multi-cloud environments, and ISP networks. With these capabilities, your teams can optimize network operations, accelerate network transformations, and enhance connected experiences. The solution provides the high scalability and resilience needed to support the network operations and transformation initiatives of the largest retailers.

KEY CAPABILITIES

Optimize Network Operations

- Centralize the management of data, including alarms, faults, performance metrics, flow intelligence, configurations, and logs
- Equip operations teams with user experience insights
- Use advanced analytics to reduce alarm noise and expedite triage
- Leverage actionable insights driven by intelligent data collection and analysis
- Ensure network scalability, availability, and performance, supporting business growth

Accelerate Network Transformation

- Simplify triage across multi-vendor, SD-WAN, and SASE networks
- Perform health diagnostics of both the overlay and underlay in SD-WAN environments
- Enforce device compliance with policy-driven configuration
- Establish an open architecture that enables seamless integration and automation

Enhance Connected Experiences

- Actively monitor network delivery experience over paths to the cloud
- Track SaaS and cloud application traffic on any network
- Isolate the root cause of performance issues across internal and third-party networks, including ISP and cloud environments, speeding MTTI
- Establish proactive issue detection and rapid remediation, so you can fix issues before customers are affected

With the solution, your teams can track every hop across the entire network delivery path and spot any degradation point—from the user endpoint to the cloud service. With advanced, patented analytics capabilities, Network Observability by Broadcom delivers actionable insights that fuel proactive network management. The solution enables your teams to more rapidly isolate issues and address emerging requirements for next-generation network technologies. With the solution, you can use a single console that provides end-to-end visibility across multiple domains, vendors, and technologies. As a result, the solution enables your teams to establish standardized, automated triage workflows, accelerate problem resolution, and tame the complexity of today's software-defined networks (SDN) and other modern technologies.

Multi-National Hospitality Firm Reduces Costs by Getting Full Network Visibility Across Thousands of Properties

A prominent multi-national organization in the hospitality industry grew to feature more than 30 esteemed brands and manage 8,000 properties worldwide. This company's expansive network provides individuals with a multitude of opportunities to forge connections, gain new experiences, and broaden their horizons.

The organization's network team was responsible for assessing the network performance delivered by their on-property guest registration system. Due to limited network visibility, they were unaware that regional latency was adversely affecting employee productivity and customer satisfaction. Low guest satisfaction can lead to negative reviews, revenue loss, and even potential removal of a property from the organization's promotional and brand channels.

By leveraging Network Observability by Broadcom, the network team achieved enhanced visibility across remote properties, AWS instances, and data center environments. By effectively isolating and resolving issues, they proactively ensured a positive customer experience that met SLAs. Additionally, the team migrated from an internally hosted application to distributed AWS availability zones, resulting in improved application performance, smoother operations, and savings of 16,000 employee-hours per month.

Related Products

DX NetOps by Broadcom. Gain unified and scalable network monitoring for traditional and modern software-defined infrastructures.

AppNeta by Broadcom. Monitor network performance from users' perspectives, no matter where they are, which network they are using, or which cloud-based apps they access.

For more information, please visit the following URL:
enterprise-software.broadcom.com/network-observability

About Us

Broadcom Inc. (NASDAQ: AVGO), a Delaware corporation headquartered in San Jose, CA, is a global technology leader that designs, develops and supplies a broad range of semiconductor and infrastructure software solutions. Broadcom's category-leading product portfolio serves critical markets including data center, networking, enterprise software, broadband, wireless, storage and industrial. Our solutions include data center networking and storage, enterprise, mainframe and cybersecurity software focused on automation, monitoring and security, smartphone components, telecoms and factory automation. For more information, go to www.broadcom.com.