

**CASE STUDY**

# FIS Extends Visibility Beyond Network Edge, Speeds Triage by 95%

## FIS

### CLIENT PROFILE

Organization: FIS

Industry: FinTech

Employees: 55,000

### CHALLENGES

Ensuring optimized network service delivery, including when user traffic is reliant upon networks that reside outside the traditional borders of the enterprise.

### SOLUTION

Implemented DX NetOps and AppNeta to gain unified visibility of legacy networks, SD-WAN, and user experience.

### BENEFITS

- Reduced SLA breaches and penalties
- Accelerated triage by up to 95%
- Improved customer satisfaction

### Business

FIS is one of the leading companies in the financial technology (FinTech) market. Since 1968, they've been delivering solutions that lead the way in innovation, and they now offer more than 750 products.

Today, the company works with 95% of the world's leading banks. FIS has more than one million clients and serves customers across 120 countries. On an annual basis, the company's asset management technology processes \$40 trillion worth of transactions. Headquartered in Jacksonville, Florida, FIS employs more than 55,000 people.

### Challenges

For IT operations teams within FIS, meeting the key objectives below is critically important, and getting increasingly difficult.

#### Ensuring Network Performance and Availability

FIS' services and customers are highly reliant upon IT infrastructure and reliable network connectivity. To continuously deliver high value solutions and support customers' critical services, ensuring optimal network performance is an absolute imperative.

"Compared to an issue with an application or database, the impact radius can be much larger when a network device experiences an issue," said a senior systems engineer. "If a network device takes a hit, hundreds of apps, and all the users relying on those apps, can be affected."

#### Navigating Rapid Digital Transformation and Innovation

To continue to meet customers' rapidly evolving requirements and stay in the forefront of their dynamic industry, the team at FIS needs to speed its digital transformation and ability to innovate.

Given these demands, the IT operations organization continues to contend with increasing complexity, supporting more systems, more dynamic environments, and more disparate, yet interrelated technologies.

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## Adapting to Changing Networks

Both FIS and its customers have grown increasingly reliant on cloud services, which means they’re also increasingly reliant upon cloud providers’ networks. Plus, with rising support of work-from-anywhere approaches, users now count upon a diverse set of networks, including local Wi-Fi and third-party ISPs.

Fundamentally, users’ network paths are completely different than when teams were working at the office. The user experience is highly contingent upon networks that reside outside the traditional borders of the enterprise network. Traditionally, end users were able to work with stable, reliable corporate networks. Suddenly, those stable environments ceased to exist.

### The Requirement: Visibility Inside and Outside the Data Center

“In recent years, we’ve been contending with an ever-expanding spiderweb of networking,” the systems engineer explained. “Where communications used to be contained within a data center, the user experience continues to depend on networks and environments outside of the data center. To be able to continue to deliver 24/7 availability to clients, we have to be able to successfully monitor those domains as well.”

To ensure quality operations and high service levels, it is increasingly essential to establish end-to-end visibility. When issues arise, the team must be able to quickly pinpoint exactly where along the network path the issue is occurring, whether within the FIS network or those networks managed by ISPs, cloud providers, or other third parties.

## Solution

For several years, the team has been relying on Broadcom solutions to support and optimize its IT service management.

“We’ve had a long and successful relationship with Broadcom,” the systems engineer stated.

Over time, they’ve continued to expand their usage of DX NetOps by Broadcom. Today, they’re using the solution to monitor fault, performance, and flow of their traditional and software-defined networking (SDN) architectures. In addition, with the changing nature of their modern networks, they’ve had to transform the way they’ve done monitoring.

“We still have a lot of clients and networks on premises, but we’ve had to extend monitoring to cloud services, including public cloud environments and our own private cloud services,” the systems engineer revealed. “This has had a significant impact on our strategies and approaches for monitoring.”

The systems engineer continued, “DX NetOps by Broadcom has been a staple of monitoring, and the solution has been great for us. With the solution, we’ve been able to track on-premises network health and ensure the availability of our network devices.”

However, client services are increasingly reliant upon connectivity to environments outside of the data center, and it’s now just as important to monitor those domains as well as on premises equipment, and that’s going to continue going forward.

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“We’ve recently purchased AppNeta by Broadcom, which is an excellent complement to the other Broadcom solutions we have,” the systems engineer explained. “AppNeta enables us to look at the network path overall. When users encounter latency or connectivity issues, AppNeta enables us to quickly pinpoint which domain is responsible.”

Given their early success, the team continues to expand its usage of AppNeta.

#### **Use Cases**

AppNeta has become integral in enabling administrators to identify the location of an issue. Here are some recent examples that reveal how AppNeta is supporting their troubleshooting efforts.

##### **Network Device in Data Center**

Users of an application within their data center were experiencing time outs, latency, and connectivity issues. In response, staff from various groups set out to investigate.

“We had bridge calls, so called ‘war rooms,’ set up with various teams trying to diagnose the issue,” the systems engineer explained. “If you don’t have the right monitoring in place, these efforts can be chaotic, and MTTR (mean time to resolution) and MTTI (mean time to innocence) keep expanding. AppNeta enables us to quickly identify the location in which the issue is arising.”

Through AppNeta, the team was immediately able to pinpoint the cause of an issue, which would have otherwise been difficult to spot. The device wasn’t writing any errors to logs. This meant that even if an operator was accessing the device via command line execution, they may not have spotted the issue.

“It turns out a process was hanging,” said the systems engineer. “We were able to detect the cause of the issue, and point the vendor directly to what was happening. This substantially reduced resolution time for the vendor—and meant that the issue duration was kept to a minimum. We were able to pinpoint the issue and AppNeta helped tremendously.”

##### **Misconfigured Device in Customer Environment**

In another case, a client was encountering a number of latency and time-out issues for some time, and they were pointing at FIS as the cause.

“For us, it’s not about finger pointing,” the systems engineer explained. “We want to find the problem and get it remediated.”

With AppNeta, they were able to deploy a monitoring endpoint at the customer’s site, and this enabled them to gain end-to-end visibility of the user connectivity path.

“With this visibility, we were immediately able to see that the issue stemmed from a problematic, misconfigured load balancer on the client site,” the systems engineer recounted. “That was almost a year ago, and the customer hasn’t had any issues since. This is an example of FIS’ strong pursuit of excellence in customer service. We demonstrated that we really do care about the customer and their business. This is an executive-level mandate within FIS.”

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The systems engineer continued, “Broadcom is an invaluable partner as we continue to strive for customer excellence. Broadcom solutions are essential in our ability to continue to deliver high-quality services and support.”

## Results

By leveraging the advanced, extensive capabilities of their Broadcom solutions, the team at FIS has realized a number of important benefits.

### Faster MTTR and MTTI

With Broadcom solutions, teams are able to correlate individual device performance and end-to-end managed and unmanaged network path health. Now the team can pinpoint the root cause of any degradation that affects the user experience, whether it arises in managed or unmanaged networks. This enables network operations to identify and resolve any network issue much faster. In fact, with Broadcom solutions, the team was able to speed triage by up to 95%.

### Improved Customer Satisfaction

AppNeta’s active network testing of new service offerings enables FIS to validate every hop in the network path, from client to application, helping deliver optimized service levels. Improved triage and troubleshooting times helps ensure high availability of network services, which protects the company’s reputation and continues to build loyalty with their customer base.

“Along with the evolution of our networks, we’re transforming monitoring, and continuing to ensure our services are available for customers 24/7,” said the systems engineer.

### Enhanced SLA Compliance

In the past, teams were coming close and sometimes missing SLAs.

“With Broadcom solutions, our team is better equipped to meet or beat our SLAs,” the systems engineer explained. “This means we can avoid the financial penalties and poor customer experiences associated with SLA breaches.”

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Broadcom Inc. (NASDAQ: AVGO) 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, software, broadband, wireless, storage and industrial.

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