

Leading Global Law Firm Assures Access to Information and Clients with nGenius Service Assurance Solution

End-to-end visibility assures business service continuity and optimal user experience across two data centers and 23 offices

Overview

Customer

A leading global law firm

Region

Global, HQ in Americas

Business Challenge

- Ensure fast, reliable access to information and clients on a 24/7 worldwide basis
- Maintain application and business service visibility across a geographically-dispersed network with two data centers, 23 remote offices and over 3,000 corporate users
- Deploy a single, unified service management solution that captures, stores, retrieves, and analyzes network, application and service delivery data

NetScout Solution

- Validate, manage, and assure performance and availability of key business applications such as VoIP, video conferencing, document management, collaboration, and email
- Quickly solve problems by pinpointing exact cause and location of a business service issue
- Optimize service delivery environment through trending and usage analysis to tune capacity

Business Value

- Assure business service continuity and optimal user experience
- Protect service delivery by rapidly identifying performance issues and maintaining service levels and up time
- Minimize service disruptions by being more proactive
- Simplify operational consistency and optimize IT staff productivity
- Lower total cost of ownership for monitoring branch office performance



Customer Profile

The firm provides comprehensive transactional, litigation, labor and employment, regulatory, and intellectual property legal services to clients across all major industries. The firm has over 3,000 legal professionals on staff, comprised of nearly 1,300 lawyers, and other legal specialists including patent agents, employee benefits advisors, regulatory scientists, and other specialists. These 3,000 professionals serve clients from 23 offices across the globe.

The success of the firm is based on its ability to help clients consistently meet their legal and business objectives on a timely and cost-effective basis. Recognized as providing exceptional client service, the firm has earned the trust, confidence, and respect of some of the largest corporations in the world, including more than half of the Fortune 100 companies. The company not only retains its customers – more than 2,000 clients have been with the firm for over five years – it also attracts approximately 2,000 new clients and 20,000 new projects each year.

In addition, the firm spends more than 90,000 hours on pro bono representations, at a value of tens of millions of dollars.

Significant Investment in Technology

Fast, reliable access to information and clients drives the firm's significant investment in technology that makes integrated legal services available on a 24/7 worldwide basis. Speed and uptime are critical to keeping clients happy and the staff fully productive.

Two geographically dispersed data centers serve 23 remote offices. All applications reside in the data centers and the remote offices connect into the closest data center for content and applications. The data centers are connected via two high-speed, redundant links. The network management team also employs high-end switches, routers, firewalls, load balancers, WAN accelerators and caching appliances to assure constant availability.

“When I heard about the nGenius Integrated Agent for Cisco ISR, and being a long-time Cisco customer with ISRs deployed in all my remote offices, I knew that this was a cost-effective and easy way for us to bring visibility to our remote offices without additional staffing resources.”

Manager of Networking/Technical Support

Each office has its own network with a Cisco® Integrated Services Router (ISR), firewall, WAN accelerator, an Internet connection and two redundant WAN links. They also use VPN, SSL VPN, and Citrix for secure remote access to information.

In addition to robust international voice and computer networks, the lawyers make extensive use of video conferencing, electronic fax delivery, internal conference bridges, and web-based workrooms to facilitate communications with clients and between staff. A highly connected organization, the firm also uses unified communications technologies to allow its attorneys to access all of their written, electronic, and voice communications from any voice or data portal anywhere in the world.

Business Challenge

Knowledge management is at the heart of the firm's current technology and business initiatives. The firm provides legal teams with the tools required to locate the precise agreements, pleadings, and other documents necessary for their work. Information must be readily available across the firm through the Internet, the corporate intranet, a networked litigation support system, and computerized

databases of firm documents, library resources, and business intelligence systems.

The firm also utilizes several applications that assist in the storage, retrieval, and management of litigation materials. Efficiencies realized from automating a case range from reducing photocopy costs to creating electronic witness and issue binders and increasing the portability of large volumes of documents. Software provides real-time capture of transcripts during depositions and during trial. Real-time communication between lawyers or with clients is essential to the smooth operation of the practice.

According to the manager of Networking/ Technical Support, “Performance is extremely important. Non-business use of the network during peak business hours, can sometimes affect the performance of critical applications. The nGenius Solution tells us what's going on in the network. Once we determine excessive Internet misuse, we contact the local administrator who asks those employees to modify disruptive behavior.”

NetScout Solution

The firm first purchased the nGenius® Service Assurance Solution in 2006. As soon as the network manager learned about the solution, he understood how it would revolutionize his team's ability to monitor, identify, and troubleshoot network and application performance issues.

The firm started with only nGenius Performance Manager and two nGenius Fast Ethernet Probes to monitor the two data centers. They quickly expanded coverage to several of the larger offices. Recently, they add the nGenius Integrated Agent for Cisco ISR software at the remaining smaller remote offices to provide end-to-end visibility of the global network, which assures business service continuity and optimal user experience across the entire firm.

The current solution consists of:

- nGenius Performance Manager
- Genius InfiniStream® appliances
- nGenius Probes
- nGenius Integrated Agents deployed in Cisco ISRs

“Our mean time for problem resolution has gone from hours to minutes as a result of the nGenius solution.”

Manager of Networking/Technical Support

The nGenius Integrated Agent software is installed on Cisco ISR using Application eXtension Platform (AXP) infrastructure on NME service modules. The nGenius Integrated Agent transforms a Cisco ISR into fully integrated Intelligent Data Sources that enables real-time deep packet analysis capabilities for the nGenius Service Assurance Solution. Because the a Cisco ISR service module provides the necessary infrastructure to securely install, run, and manage the nGenius Integrated Agent software, it does not require additional rack space, power or cabling.

“When I heard about the nGenius Integrated Agent for Cisco ISR, and being a long-time Cisco customer with ISRs deployed in all my remote offices, I knew that this was a cost-effective and easy way for us to bring visibility to our remote offices without additional staffing resources!” claimed the network manager. “Previously it was challenging to get hardware-based probes installed. The nGenius Integrated Agent makes installation easy. I took a small photo of the Cisco router and highlighted the two screws the office administrator needed to remove to plug in the NME service module. It’s a simple process that immediately brings positive results,” he concluded. Leveraging this combined NetScout® and Cisco solution enables the firm to receive more value from their

existing technology investments, to deliver better business value and enhance the user experience while simplifying the management of IP service delivery.

The nGenius Integrated Agent seamlessly integrates with the nGenius Performance Manager and requires a minimal learning curve for operators. After installing the nGenius Integrated Agents, the network manager informed the backup team, responsible for the monitoring of back-up traffic from the remote offices, that the nGenius Integrated Agent was functionally equivalent to an nGenius Probe. That was all the they needed to know to incorporate the new information into their reports.

The network team uses the nGenius Service Assurance Solution for a wide variety of management tasks, including:

- Effectively assuring the end-to-end performance of applications and services
- Accelerating problem diagnosis and troubleshooting
- Proactively monitoring service delivery instead of reacting to issues
- Trending and planning for changes in capacity and usage

As issues are typically reported after the fact, the network manager values the ability to store packet-level information to disk for back-in-time analysis. This ability provides the IT staff with the following analytic capabilities:

- Identifying problems that are not easily reproducible - the network management team uses filters to automatically trigger a file capture when a specific action happens to capture the anomaly. This data is used for offline analysis and diagnosis. Instead of trying to recreate or wait for the anomaly to reoccur, the IT team prevents problems before they affect users.
- Advanced application troubleshooting - positioning monitoring devices in the data centers and in all their remote offices means any packet must go through two devices. This two-probe monitoring approach allows them to take packet captures on both ends of the transaction to determine if a problem is cause by packet loss, misrouting, etc. and simplifies the process of diagnosing where the issue occurred.
- VoIP call records and quality of service monitoring – IT analyzes response and flight times to identify where delay is occurring – whether it’s in the local LAN, the WAN, on the client or in servers in the data center.

Table 1: Solution Highlights

Attributes	Benefits
Proven	Selected because of proven abilities and performance in highly complex networking and application environments.
Scalability	Delivers a unified platform that provides end-to-end visibility and can be readily expanded over time as the needs of the firm evolve.
High Availability	7x24x365 performance monitoring enables fast, reliable access to information and clients on a worldwide basis.
Service Consistency	Monitors critical knowledge management and information retrieval applications and enables IT staff to ensure reliable communications between lawyers, staff and clients.
Operational Efficiency	Significantly reduces the time required to detect, identify, and resolve service delivery issues and enhances IT productivity.
Low Total Cost of Ownership	The nGenius Integrated Agent running on the Cisco AXP reduces capital and operational costs of monitoring the branch office by lowering power, cooling, cabling and space costs and minimizing field deployment costs.

Table 2: Network Snapshot

Attributes	Benefits
NetScout Equipment Deployed	nGenius Service Assurance Solution: nGenius Performance Manager, nGenius InfiniStream 2900 appliances, nGenius Fast Ethernet Probes, and nGenius Integrated Agent software.
Cisco Equipment Deployed	Cisco routers for routing and switching; Cisco Application eXtension Platform; NME service modules.
Network Scope	nGenius InfiniStream appliances are deployed in the data centers, while nGenius Probes and nGenius Integrated Agents are deployed in the 23 remote offices. Each office has its own network hub with a Cisco switch, a firewall, an Internet connection and two redundant WAN links.
Users	The network is used by approximately 3,000 employees.

Business Value

Prior to the introduction of the nGenius Integrated Agent, the firm did not instrument the smaller offices citing cost effectiveness. Now, the firm has complete end-to-end visibility into the entire global network, from the data centers to every single remote office. This end-to-end visibility enables the network management team to:

- Optimize services delivery, applications, and network capabilities through better, more reliable network performance
- Reduce downtime by accelerating problem resolution through efficient troubleshooting and proactive monitoring
- Better leverage existing infrastructure investments

- Increase operational efficiency by providing workflow consistency and tool consolidation
- Protect revenue by maximizing network up time and maintaining employee productivity

“Our mean time for problem resolution has gone from hours to minutes as a result of the nGenius solution,” stated the network manager. “Prior to purchasing the nGenius Solution four years ago, we only had the ability to see high bandwidth. Our troubleshooting process was very manual. If there was a spike, we didn’t know if it was a virus, an FTP file, or non-business usage of the Internet. We would manually correlate packet captures, which was very time consuming. Today, we have all of the necessary information at our fingertips.”

He concluded, “I can’t say enough about this product. I know we’re only using about 15%-20% of the capabilities. VoIP and video are really important to the firm so I plan to explore those capabilities more, but my next step is to transition to the new flexible reporting recently introduced. This will enable us to expand capacity planning and trending activities.”



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NetScout offers sales, support, and services in over 32 countries.

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