



CASE STUDY

UnumProvident ::

Improved Visibility, Faster Troubleshooting with NetQoS®

Industry: Insurance

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Background:

UnumProvident

UnumProvident is the largest provider of group and individual income protection insurance in the United States and United Kingdom. Through its subsidiaries, UnumProvident insures more than 25 million people and provided \$6.0 billion in total benefits to customers in 2005. With primary offices in Chattanooga, Tenn., and Portland, Maine, the company employs approximately 11,300 people worldwide. For more information, visit www.unumprovident.com.

Challenge:

Why Is Network Traffic Increasing and What Impact Is It Having?

UnumProvident delivers applications globally over its wide area network (WAN) to employees located at three major campuses (with server farms in each), two large field offices and 36 smaller field offices. The company was experiencing a growth in network traffic, but did not have adequate network analysis tools to discover why this was happening or how application performance was being impacted. The network group used basic IP accounting, but could not gain much insight into what was consuming network resources.

In addition, UnumProvident needed a way to quickly isolate problems to the server, network or application. As Dan Collyer, UnumProvident's Manager of Network Services, said, “We spent way too much time determining the cause of problems. We needed a tool that would provide answers faster.”

Solution:

NetQoS® SuperAgent® and NetQoS ReporterAnalyzer™

To solve its network challenges, UnumProvident's network group deployed two products from NetQoS: SuperAgent® and ReporterAnalyzer™. SuperAgent and ReporterAnalyzer are the modules of the NetQoS Performance Center, a Web-based management portal that integrates data from NetQoS' products in customized views to help enterprises be more effective in capacity planning, troubleshooting, and service level management.

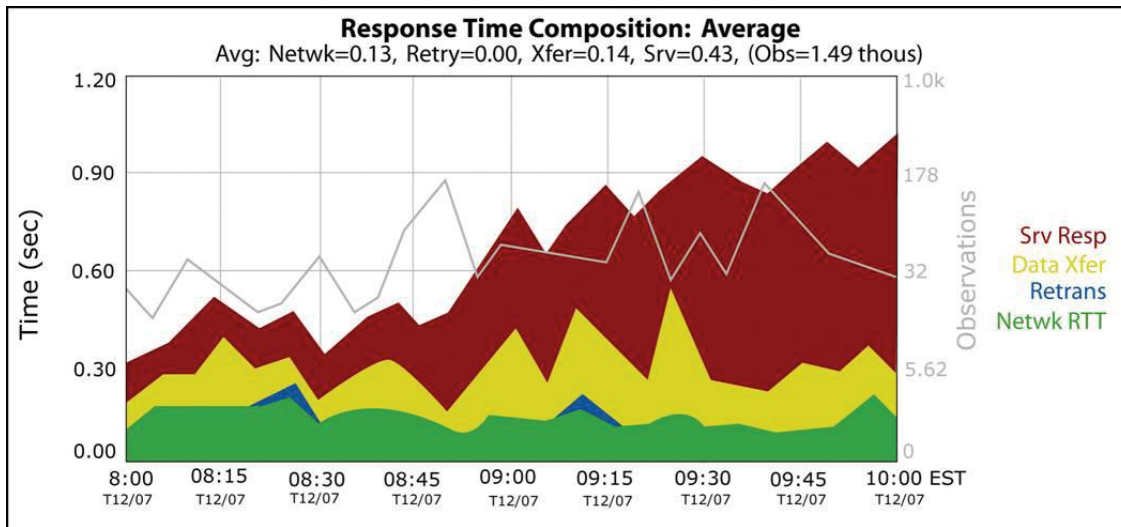
NetQoS SuperAgent®

UnumProvident chose NetQoS SuperAgent because of the product's ability to separate response time into network, server, and application delay components, enabling rapid troubleshooting of performance bottlenecks. Automated processes measure and analyze application response time for all user transactions, compare the response time against intelligent baselines, then investigate the cause of problems as they occur. SuperAgent automatically gives the UnumProvident's network, systems, and application groups the key diagnostics needed to quickly solve performance problems.

SuperAgent's passive monitoring approach was a key factor in UnumProvident's decision to implement the product. By working without desktop or server agents, SuperAgent helps customers avoid an ongoing management burden.

According to Collyer, "The NetQoS agentless approach was very important to us. Our desktops are already loaded up, so deploying agents would have been a major ordeal."

Instead, SuperAgent is connected to a mirrored switch port or network tap near the server farm and passively collects TCP packet header information from real application traffic. From this vantage point in the data center, SuperAgent measures and reports on the response time for all end users when accessing key enterprise applications. This passive monitoring approach adds no significant additional load to the network or application servers, preventing the waste of bandwidth or processing power when measuring application transactions. Collyer also cited SuperAgent's ease of deployment as another benefit: Within two hours, the network group was monitoring its first application.



Sample SuperAgent Graph Showing a Spike in Server Response Time

NetQoS ReporterAnalyzer™

UnumProvident chose NetQoS ReporterAnalyzer because of its scalability. The product monitors the entire wide area network while reporting on 100 percent of traffic flows and storing the data for long periods. ReporterAnalyzer works by capturing a rich set of traffic statistics exported by Cisco IOS® NetFlow-enabled routers and switches. ReporterAnalyzer is designed to handle the volume of NetFlow data typical in the world's largest networks, providing real-time visibility into enterprise-wide network traffic and access to more than one year's worth of detailed data.

Using ReporterAnalyzer, UnumProvident can see which applications and users consume bandwidth, with visibility into all IP traffic at 15-minute granularity and near real-time reports at one-minute granularity. UnumProvident also chose ReporterAnalyzer for its customizable reports, which can be made available to anyone in IT.



Sample ReporterAnalyzer Chart Showing Top Daily Applications

Results:

Network Knowledge Is Power

NetQoS ReporterAnalyzer and SuperAgent are providing UnumProvident with unprecedented visibility into the performance of its networked applications. Using SuperAgent to monitor about 22 applications, including parts of its Active Directory environment as well as several home-grown, proprietary applications, UnumProvident is now able to pinpoint the cause of problems in minutes rather than days. By quickly isolating problems to the network, server or application, SuperAgent is enabling the network, systems and application groups to objectively dissect and solve problems more easily. This minimizes the blame between groups when problems arise and lets the network group make more efficient use of its time.

Using the data from SuperAgent, UnumProvident's network group is able to deal quickly with issues as they arise. For instance, when users at one office began complaining about an application's performance, the network group was able to view the end-to-end performance of this application, determine how widespread the problem was and locate the problem source. They were able to provide immediate feedback to the end users with a status and estimated time to repair.

The network group also uses SuperAgent as an overall network health monitor. One key application used by approximately 3,000 UnumProvident employees is particularly sensitive to network conditions. If that application is performing well, said Collyer, they know the network as a whole is performing well.

UnumProvident is monitoring about 500 interfaces with ReporterAnalyzer to understand how application traffic is impacting network performance. Using ReporterAnalyzer's real-time and historical information, high level of data granularity and alerting features, the network group can now observe and investigate isolated events that cause a spike in network traffic, without having to wait for each event to occur again.

For instance, using ReporterAnalyzer, UnumProvident was able to see that several spikes in traffic were being caused by its legal department, which had been sending large volumes of information across the WAN to burn CDs. Before ReporterAnalyzer, the network group had no way to determine the cause of these network traffic surges. By knowing which applications are using bandwidth, who is using the bandwidth, and when, UnumProvident can make timely and cost-effective decisions to optimize its network and improve IT service delivery.

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About NetQoS® Performance Center

The NetQoS Performance Center unlocks the intelligence needed to quantify network and application performance across an entire organization with end-to-end application response time monitoring, network traffic analysis, device performance management, long-term packet capture and analysis, and VoIP performance monitoring. Via a single Web-based management console, the NetQoS Performance Center integrates the data in customized views to help organizations optimize application delivery, solve problems faster, mitigate the risks from change, and make the most efficient use of resources. With role-specific views for different groups in an IT organization, such as network engineering, operations, IT service managers, and IP telephony management, the NetQoS Performance Center enables staff at all levels to:

- Measure end-user application response times
- Provide consistent application service delivery
- Understand how infrastructure changes affect network and application performance
- Isolate performance problems to the application, server, or network
- Identify the applications and users consuming bandwidth, and when
- Avoid unnecessary WAN costs
- Correlate network performance to VoIP call quality of experience
- Manage the convergence of voice, video and data
- Identify virus or denial of service attacks and unauthorized application usage

About NetQoS SuperAgent®

NetQoS SuperAgent analyzes end-to-end application response time without endpoint agents, giving IT organizations visibility into how well the network infrastructure is delivering applications to end users across the enterprise. SuperAgent separates response time into network, server, and application delay components and launches automatic investigations into problems, enabling rapid troubleshooting of performance bottlenecks. SuperAgent also measures the impact of infrastructure changes and reports service level quality for internal users and external service providers.

About NetQoS ReporterAnalyzer™

NetQoS ReporterAnalyzer provides global visibility into wide area network traffic, enabling an understanding of how application traffic is impacting network performance. ReporterAnalyzer captures a rich set of traffic statistics from Cisco IOS® NetFlow or other IPFIX enabled routers and switches to identify which applications and users are using bandwidth, and when, allowing network managers and engineers to make informed decisions in troubleshooting and capacity planning. ReporterAnalyzer's product architecture scales to handle the number of interfaces and volume of flow data in the world's largest networks, providing real-time visibility into 100 percent of enterprise-wide network traffic and access to a full year's worth of detailed data.

About NetQoS® Inc.

NetQoS software and services help service providers, government agencies, and large enterprises – including half of the Fortune 100 – improve the delivery of applications over wide area networks by enabling them to monitor application service levels, troubleshoot problems quickly, and plan for change. Representative NetQoS customers include Chevron, Lockheed Martin, American Express, Hilton Hotels, Siemens, Boeing, Deutsche Telekom, NASA, and Barclays Global Investors. Headquartered in Austin, Texas, NetQoS has R&D centers in Austin and Raleigh, N.C., and regional sales offices in London and Singapore. For more information, visit www.netqos.com or call (877) 835-9575.

To learn more about NetQoS network performance management products, please visit www.netqos.com.

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