

Performance Management Insights

Saving Millions With NetScout's Approach To Service Performance

Solution Overview

Value Proposition

Adaptive Service Intelligence (ASI) technology empowers enterprises to achieve operational efficiencies and save millions of dollars by:

- Enhancing service performance and protecting IT from service outages
- Allowing faster "time-to-successful" deployment
- Providing service visibility with no impact on user experience
- Improving Cybersecurity breach detection and mitigation

Core Functionality

The ASI and the nGeniusONE platform deliver real-time, actionable operational intelligence capabilities including:

- Holistic end-to-end visibility into service delivery infrastructure
- Proactive service triage which helps resolve problems in real time and assure positive customer/user experience
- Comprehensive service performance management platform across voice, data, and video services from a single pane of glass
- Ultra-high scalability, which assures service delivery across any size of service provider and enterprise infrastructure

Problem Overview

While the strategic importance of delivering IP-based services is constantly increasing, enterprises are being pressured to find ways to deliver these services faster, with higher quality and more cost effectively. To achieve these objectives, enterprises need a comprehensive service delivery monitoring tool which offers end-to-end visibility across service delivery environments. To be truly beneficial, the tool needs to offer proactive service triage capabilities to reduce the mean-time-to-resolution, by identifying the root cause of service degradations and outages in real time.

Unfortunately, the traditional bottom-up triage methodology based on multi-vendor silo-specific Network Performance Management (NPM), Application Performance Management (APM), and log data analytics tools is ineffective and does not offer service-level triage capabilities to IT organizations.

Since the bottom-up triage methodology relies on data, which is spread across multiple, disparate tools, it conceals the holistic real-time end-to-end view of the multi-tier service delivery infrastructure and the interrelationships and dependencies across its components. This compartmentalized Model of Service delivery monitoring inhibits the IT ability to triage service degradations effectively, significantly increases the mean time to resolution (MTTR), and extends the time spent in the war room. The overall result of relying on the bottom-up triage methodology is drastically increased service unavailability, reduced quality of end-user experience and loss in worker productivity.

And indeed, in a recent survey of senior IT decision makers, Forrester Consulting¹ discovered that 50 percent of respondents stand to lose nearly \$11 million per year by relying on bottom-up performance management and multiple silo-specific tools.

Solution Overview

NetScout offers a proactive service triage based on one cohesive, consistent set of metadata for enterprise-wide services, which offers end-to-end visibility across service delivery environments. This metadata is generated by the patented Adaptive Service Intelligence™ (ASI) technology running in the NetScout Intelligent Data Sources and offers meaningful and contextual view of all interrelationships and dependencies across all service delivery components. It allows the detection of service degradations in real time and before a large number of users is impacted.

NetScout's pervasive and scalable data collection is established by instrumenting strategic access points across the service delivery infrastructure. The packet flow data collection and aggregation is passive and non-intrusive and can scale to collect any required volume of data across service delivery environments.

The nGeniusONE™ Service Assurance platform aggregates, correlates and contextually analyzes the metadata stored on the NetScout Intelligent Data Sources in order to create real-time holistic views of service performance, establish performance baselines and facilitate service-oriented troubleshooting workflows.

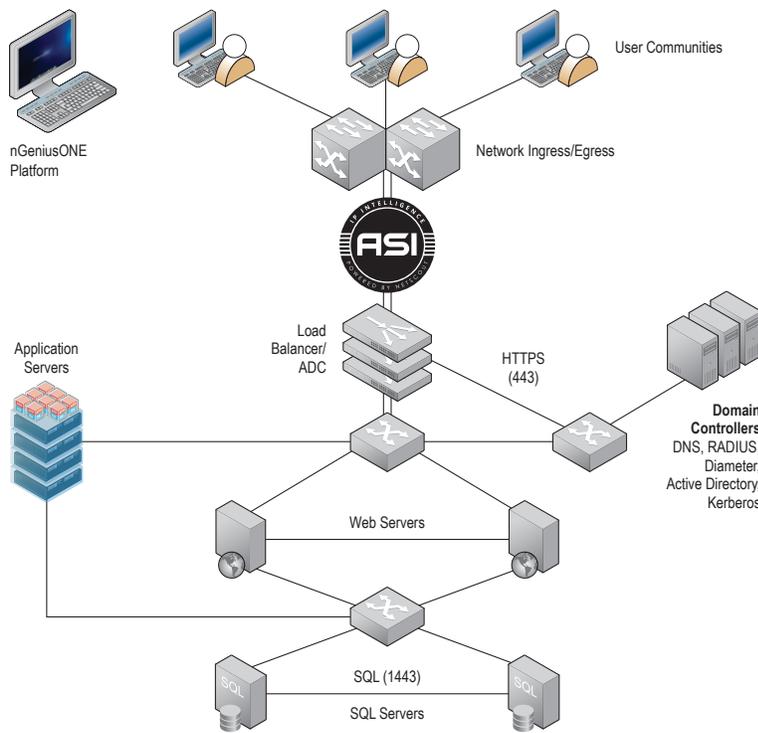


Figure 1: Service Instrumentation in Enterprise Infrastructure.

Core Technologies

NetScout’s unique ability to gain a pervasive end-to-end visibility into the service delivery environment and offer proactive service triage is attributed to the following architectural principles and technologies:

- Utilize Packet Flow Data
- Provide Scalable Packet Flow Access
- Use Adaptive Service Intelligence (ASI) technology

Utilize Packet Flow Data

NetScout uses packet flow data as the foundation for generating highly scalable metadata that enables a comprehensive real-time and historic view of all service components including physical and virtual networks, n-tier applications, workloads, protocols, servers, databases, users and devices.

Provide Scalable Packet Flow Access

NetScout physical and virtual TAP network monitoring devices provide comprehensive and reliable access to packet flow data and establish strategic service visibility points across the entire service delivery

infrastructure. The nGenius® Packet Flow Switches (PFS) filter, aggregate and distribute the targeted data to the NetScout Intelligent Data Sources in a transparent, selective and efficient manner.

Adaptive Service Intelligence (ASI) Technology

Adaptive Service Intelligence (ASI) is patented technology, which uses a rich packet-flow data Deep Packet Inspection (DPI) engine to generate highly scalable metadata that enables a comprehensive real-time and historic view of service, network, application and server performance. This powerful deep packet inspection and data mining engine runs on NetScout Intelligent Data Sources, generating metadata based upon actual session traffic in real time as the packets cross physical or virtual links. The generated metadata provides important metrics such as application traffic volumes, application server response times, server throughputs, aggregate error counts, error codes specific to application servers and domain, as well as other data related to network and application performance. The ASI technology is the foundation of a highly scalable service delivery monitoring architecture which seamlessly collects, normalizes, correlates and contextually analyzes data for all business services.

Solution Benefits

NetScout’s ability to provide end-to-end visibility into multi-tier service delivery environments combined with proactive service triage, helps address the key problems associated with silo-specific, component-based, bottom-up performance management approaches.

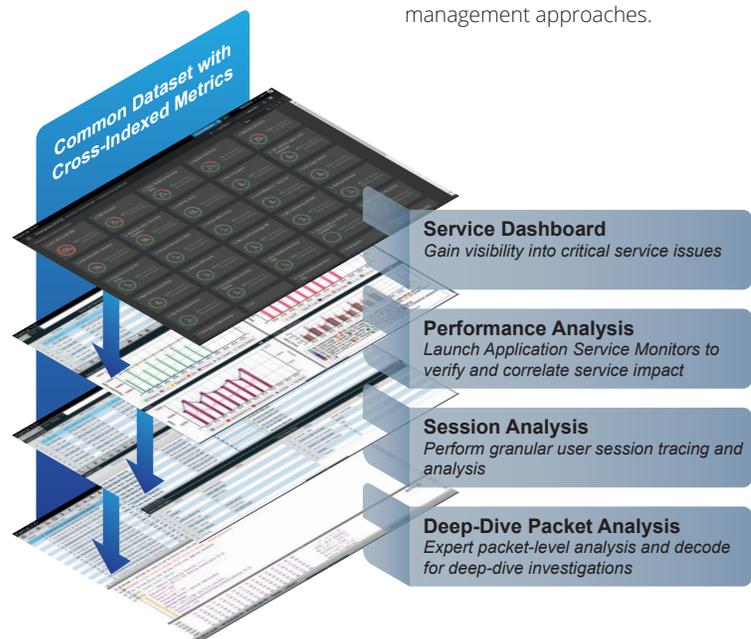


Figure 2: nGeniusONE Top-Down Service-Oriented Workflows

Attribute	Bottom-Up Triage Problems	NetScout's Solution	IT Benefits
End-to-End Visibility	Point visibility into individual service delivery components from a variety of multi-vendor silo-specific tools lacks the necessary insight into interrelationships and dependencies of service delivery components.	Offers holistic end-to-end visibility into service delivery infrastructure using one cohesive, consistent set of data, for enterprise-wide services delivered in physical and virtual environments.	<ul style="list-style-type: none"> Optimizes end-user experience. Comprehensive solution from a single vendor. Full visibility into services running in complex multi-tier service delivery environments.
Effective Service Triage	Reactive and time-consuming triage results in poor user experience and extended service downtime impacting multiple users and wasting millions of dollars.	Proactive service triage helps improve operational efficiencies by resolving service degradation in real time, before large numbers of users are impacted.	<ul style="list-style-type: none"> Increases service uptime and end-user productivity. Improves operational efficiencies and saves millions of dollars. Allows focus on innovative IT initiatives instead of wasting time in war rooms.
Scalability	Lacks scalability to assure delivery of modern enterprise-class business services.	Scales to assure service delivery across any size of enterprise infrastructure.	<ul style="list-style-type: none"> Optimizes return on investment in performance management by gradually expanding the solution over time.

About NetScout Systems, Inc.

NetScout Systems, Inc. (NASDAQ:NTCT) is a market leader in application and network performance management solutions that enable enterprise and service provider organizations to assure the quality of the user experience for business and mobile services. NetScout's technology helps these organizations manage service delivery and identify emerging performance problems, helping to quickly resolve issues that cause business disruptions or negatively impact users of information technology.

Footnote: 1. Forrester Consulting, Performance Management Insights: Saving Millions With A New Approach To Service Performance, March 2015.



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