

Assuring Omnichannel Services in Contact Centers for Retail Banking Organizations

Introduction

In most banking organizations, the contact center is an essential part of the business, often even the primary method of live interaction with the customer. As omnichannel strategies become more common, the contact center is becoming a central touch point for managing the customer experience, via voice, video, e-mail, online chat, or social media. Whether a customer is calling in to check their balance or discuss a fraud complaint, their satisfaction depends on clear communication. Any disruption could cause dissatisfaction or even account cancellation.

Although voice communications are essential to managing the customer experience, modern contact centers also depend on a variety of different applications to operate effectively including customer account management, different chat programs, payment processing applications, and on the back end database, middleware and critical service enablers, to name a few. This increasingly complex environment creates challenges for IT teams trying to assure service delivery.

The nGeniusONE® Service Assurance platform provides real-time visibility into the performance of contact center services for retail banking organizations by analyzing traffic data over the network and converting into “Smart” Data. Powered by Adaptive Service Intelligence® (ASI) technology, the highly scalable and patented deep packet inspection engine, the nGeniusONE platform enables IT teams to identify the root cause of performance issues impacting the prompt delivery of voice, video, and application services occurring in the contact center / service delivery environment. With an end-to-end view, IT teams can quickly triage performance issues even in complex multivendor retail banking networks, ultimately reducing Mean Time to Resolution (MTTR).

Contact Center Problems Solved by nGeniusONE Platform

The nGeniusONE platform delivers visibility into the performance of the contact center service environment including agent desktops/phones, UC Servers, load balancers, voice protocols (SIP/SCCP/H.323, RTP, RTCP), service enablers (e.g., DHCP, LDAP/

AD, and DNS), backend database servers, middleware, application and web tiers, the network, WAN, and the end users. As a result, integrated views are available that show the interrelationships between different elements used in service delivery. nGeniusONE enables IT teams in retail banking environments to understand the full context for voice and video service anomalies from an end-user perspective, as well as any issues related to performance degradations in other contact center applications or services.

By measuring performance from an end user perspective, retail banking IT teams can accurately diagnose if the root cause of an issue or of a quality problem is within the underlying infrastructure such as the network, routers, applications or UC servers, or if the issue is originating elsewhere, as in the SIP trunking service provider domain.

nGeniusONE provides additional views to expose advanced media analytics such as:

- Call quality details.
- Network-based views.
- Site specific metrics.
- Service desk search to query on call history with contextual drilldown capabilities to get more insights into media and signaling.

All of these advanced views aid IT teams in rapidly determining the scope of affected users and pinpointing the root cause of service degradations. These views provide critical insights into media quality, call signaling, whether it’s a single user or a whole office impacted, and much more.

The nGeniusONE platform supports UC&C technologies that use SIP/SCCP/H.323 and RTP protocols. The solution enables retail banking IT teams to efficiently identify, triage, and resolve many UC service delivery challenges such as:

- Delays in registering agent phones, call setup, and termination.
- Call signaling failures or taking too long to process signaling messages.
- Interoperability issues between SBC and SIP Trunking service provider.

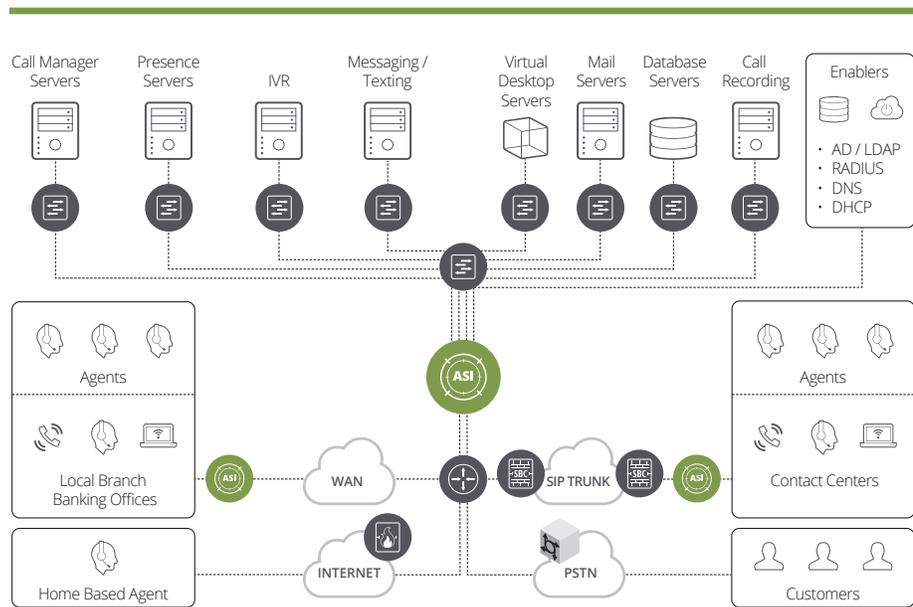


Figure 1: The nGeniusONE platform delivers high level visibility for managing voice, video, and application performance in complex, multivendor contact center environments in retail banking organizations.

- Load balancing issues across different UC servers and SBCs.
- LAN/WAN capacity or management issues causing excessive packet drops and transmission latencies.
- QoS mismatch problems between different network elements.

nGeniusONE Platform Offers Seamless Conceptual Workflows

In order to help retail banking IT teams address voice, video, application performance, call signaling, and media quality issues, the nGeniusONE platform relies on the power of ASI. The data is efficiently organized so that it can be viewed by a range of key metrics such as location (community of users), QoS level, codec, VLAN, servers, applications, etc. The nGeniusONE platform offers a workflow based-approach to problem identification, service triage, and resolution.

Through the use of intuitive workflows, retail banking IT teams can seamlessly transition across multiple layers of analysis. Service delivery teams can now efficiently hand-off incident response tasks across different internal IT groups as well as with external service providers that are involved in troubleshooting UC&C or application performance issues. As a result, service delivery teams supporting the network, UC&C, endpoint devices, and SIP trunking service providers can effectively collaborate to quickly triage and isolate call quality problems and other performance issues interfering with contact center operations.

The nGeniusONE platform streamlines service delivery by providing the following key analysis layers:

- **Service Dashboard** – The dashboard delivers real-time health status, metrics, alarms, and intelligent early warning of application performance problems. Retail banking IT teams can use the dashboard to quickly spot performance issues related to contact center services including network and server components, session border controllers, call managers, service enablers, backend databases, and load balancers in a single view.
- **Service Dependency Map** – The service dependency map provides visibility into all the dependencies among various multi-vendor service components. This enables IT teams to analyze the service delivery environment and discover the client-server relationships and messaging performance for all services, whether voice or application-related. As contact centers become more complex it's important to be able to graphically visualize the interrelationships between different service elements.
- **Service Monitors (Call Server Monitor, Media Monitor, DNS Monitor, and more)** – Service monitors enable retail banking IT teams to quickly triage, visualize and isolate the issues contributing to performance degradation across different tiers such as Call processing, UC servers, DNS servers, front-end and back-end servers, and load balancers. Using the analysis from these service monitors, IT teams get a consolidated view of application request workloads, traffic latencies, protocol signaling errors, and media quality providing end-to-end visibility into the performance of application, voice, and video service components across all tiers.
- **Session Analysis** – Session analysis helps retail banking IT teams analyze transaction latencies, and network-related information such as average response time and QoS tagging. Detailed session and flow information is provided to diagnose one-way traffic and QoS mismatches, etc.
- **Packet Analysis** – Packet analysis enables retail banking IT teams to perform deep-dive protocol level analysis and forensic evidence collection. Packet analysis provides UC&C and other application specific details and any proxy servers through which the voice, video, and application requests have passed including the load balancing server.

A majority of performance issues can be efficiently triaged by using the Dashboard and the Service Monitor screens alone. However, should deep dive troubleshooting be needed, IT teams can contextually drill down to the Session Analysis and the Packet Analysis layers.

nGeniusPULSE

nGenius®PULSE and nPoints provide valuable visibility from the contact center agent's perspective with contact center owners / operators to assure service availability and performance for your customers. nGeniusPULSE pro-active synthetic testing automatically sends consistent, configurable, scheduled tests from the user desktop, even when the users are not active. This provides early warning of emerging communications problems for that user, from wherever they are performing their jobs, with corporate or cloud-based contact center environments. This contributes to troubleshooting by discovering a problem early, to alert IT that a problem exists that can be quickly addressed to avoid broader impact to other agents and users.

Smart Edge Monitoring

When deployed as part of the NETSCOUT® Smart Edge Monitoring solution, nGeniusONE and nGeniusPULSE combine to extend IT's ability to truly visualize real-time, end-user experience for contact center agents in the client edge. Smart Edge Monitoring is an entirely new, patent-pending architecture that combines smart data analytics with synthetic transaction testing to deliver visibility and support for end-users experience whether working at home, business offices, or remote locations.

In leveraging the Cloud Adaptor in InfiniStreamNG® or vSTREAM® appliances, ASI technology now combines passive, packet-based monitoring data with nPoint synthetic test monitoring to quickly understand what the customer experience is and exactly why issues are occurring. As a result, this unique solution drives significant reductions in MTTR for any agent-impacting communication issue in contact centers.

Benefits of the nGeniusONE Solution for Contact Centers in Retail Banking Organizations

- **Quickly Troubleshoot Service Performance Issues in Contact Centers**
 - Reduce MTTR by enabling retail banking IT teams to view service performance end-to-end across multi-tier, multi-vendor, multi-location environments and maintain connectivity for contact center agents, whether on site or remotely located.
- **Improve Call Quality and Reliability**
 - nGeniusONE provides visibility into customer experience by measuring call quality performance and any impairments observed in network transmission, media traffic, and call signaling. This helps IT improve communication reliability between contact center agents and the customer.
- **Reduce Time to Diagnose Data, Voice And/Or Video Performance Issues Within a Single Solution** – Combined visibility of data, voice, and video helps retail banking organizations optimize the performance of voice and video over a converged IP network protecting their ability to reach customers and drive business.
- **Increase IT Team Collaboration**
 - Encourage or empower greater collaboration between network, application, and UC&C teams by providing a common ASI dataset and workflows across all tiers of the UC&C service. Improved communications reduces MTTR and increases uptime of critical retail banking contact center applications such as voice, video, CRM software, and others, better enabling agents to respond to customer requests.



Corporate Headquarters
NETSCOUT Systems, Inc.
Westford, MA 01886-4105
Phone: +1 978-614-4000
www.netscout.com

Sales Information
Toll Free US: 800-309-4804
(International numbers below)

Product Support
Toll Free US: 888-357-7667
(International numbers below)

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