nGeniusONE Platform for Cisco Unified Communications and Collaboration

nGeniusONE Platform Provides Fast Triage for Cisco UC/Jabber

Cisco Unified Communications (UC) is the IP Telephony of choice in many enterprise environments and for collaboration services, Cisco Jabber® is often adopted. Users become dependent on Jabber for voice, video, presence, instant messaging, and contact availability and quickly become intolerant of any disruptions. To reduce time to resolve problems before, during and after Cisco Jabber rollouts and upgrades, UC&C and IT staff need a performance management solution that can quickly get to the source of the issue.

Implementing Cisco UC and Jabber deployments in complex UC&C environments is a challenge and is not met by simple point tools. nGeniusONE® Service Assurance platform is uniquely capable of relating CDR data from Cisco UC&C with real-time call quality performance monitoring at strategic locations in the network. This information

provides a comprehensive view and deeper insights into the root cause of service quality issues. Coupled with proactive application and network analysis, service quality alerts, and the state of the art continuous monitoring, IT and UC&C personnel can quickly resolve service quality issues before they become apparent to users.

nGeniusONE is powered by Adaptive Service Intelligence™ (ASI) technology, the patented Deep Packet Inspection engine which generates highly scalable metadata that enables a comprehensive view of UC&C service performance across complex multi-tier, multi-vendor, multi-location Jabber environments. Using the efficient data organization provided by ASI, performance metrics can be viewed by a range of keys such as location (community of users), servers, users, applications, etc. This enables nGeniusONE to offer an efficient top-down approach to problem identification, service triage, and resolution. Using contextual workflows, the precise location and the

source of service degradation can be easily identified with the help of system wide visibility not available with other tools. This ultimately reduces mean time to resolution (MTTR).

Cisco UC&C Environment Issues Solved by the nGeniusONE Platform

IT and UC&C organizations need granular data for assuring a consistent user experience. Since the Jabber clients send call quality reports at the end of every call, it can be difficult to isolate and detect patterns of intermittent problems as they occur. Operations teams need granular data to see the relationships and interrelated nature of the overall network infrastructure, application services, signaling and enabling protocols necessary to deliver real-time services like voice, video, persistent chat, WebEx, etc.
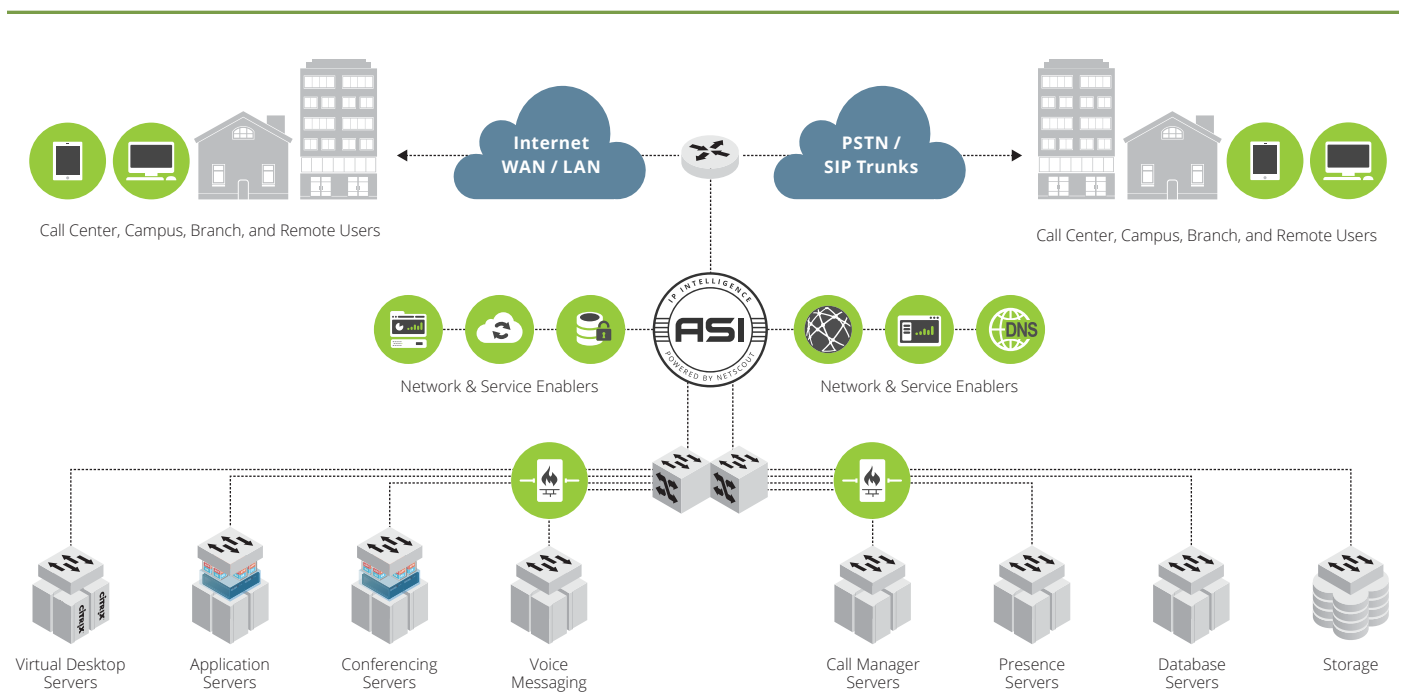

Figure 1: The nGeniusONE platform correlates Cisco CDR data with real-time granular per-user, per-session assessments from midpoint locations.

As organizations deploy Cisco UC&C in large campus environments, network managers generally have to deal with managing distributed, multi-vendor platforms operating across numerous locations spanning several geographical areas. In such environments, manually correlating data from disparate sources to find the root cause of problems becomes extremely difficult and may not provide the necessary visibility into the end-to-end behavior of both network and application on the delivered call quality.

Finally, Cisco UC&C services depend on other servers such as Cisco Unity®, Microsoft® Exchange, Active Directory®, DNS, DHCP, TFTP, etc., for delivering UC&C services. Consequently, IT organizations must gain unified visibility into how voice, video, and data applications impact each other to effectively manage UC&C service performance.

Not only does the nGeniusONE platform support common call signaling issues that may impact Cisco UC and Jabber services like registration, call setup, teardown latencies, response times, errors and failures, it also triages other network-related issues like load balancing and SIP trunk interoperability issues. By providing full visibility, the nGeniusONE platform enables IT teams to precisely locate the source of voice and video call quality issues. It provides visibility into some of the common media related issues including:

· QoS tags, VLAN, negotiated CODECs on a per segment basis

· Mean Opinion Score (MOS) values based on IP network impairments as well as based on conversational quality

· Precise location and the source of service degradation such as one-way audio, echo, noise level using advanced visualizations such as network-based views, bi-directional streams, community-based views, and listing of all conversations for a single user

nGeniusONE Platform

The nGeniusONE platform delivers granular UC&C application-specific metrics for voice and video session transmission, and the conversational quality to characterize voice and video service performance and the true user experience.

nGeniusONE uses NETSCOUT Intelligent Data Sources such as the InfiniStream appliance and nGenius Lync Data Collector to provide IT with end-to-end visibility into the behavior and the quality of voice/video services. These intelligent data sources dynamically measure in real-time and extract granular call and session quality as well as user experience metrics from active voice and video media streams. Deployed along the call path, at traffic aggregation points, and at points of demarcation that may include soft-client, hard phones, multiple vendor network devices and IP Telephony equipment, these highly efficient data sources provide critical information necessary to assure the service quality of voice and video services operating across complex, multiple vendor, multi-location environments.

Within the Cisco UC&C environment, nGeniusONE correlates midpoint measurements with the data collected from Call Data Records, VoIP call controllers, and Session Border Controllers (SBCs) to provide a unique view into the service behavior affecting users. nGeniusONE then presents the performance metrics in an easy-to-view network-oriented visualization displaying correlated metrics from along the service delivery chain. Using this unique data presentation model, all service teams supporting the network, voice and video applications, and the endpoint devices can effectively collaborate to quickly triage and isolate voice/video related problems, precisely locate the impairment anywhere in the network, and rapidly resolve problems before users are disrupted.

By leveraging the correlated metrics along the call path, the IT organization can move from a reactive to a more proactive service delivery management approach.

To address any specific customer complaints about call quality, the nGeniusONE platform helps the first-level support staff make an informed decision based on facts and quickly escalate the problem to the right team member for fast resolution.

Additionally, NETSCOUT Intelligent Data Sources extend the overall investment value of the nGeniusONE platform from NETSCOUT. The nGeniusONE platform provides a unified view of interdependency of Cisco Call Manager servers with data applications and brings the performance management of all network-based services such as voice, video, and data under a single point of visibility.

Benefits of the the nGeniusONE Platform for Cisco UC&C

· **Triage Issues Quickly** – Decreases MTTR for Cisco UC and Jabber services with real-time, end-to-end, and comprehensive service visualization that enables IT teams to quickly triage service issues by pinpointing the source of voice and video call quality problems

· **Increase Reliability** – Provides visibility into true user experience by measuring call quality performance due to impairments observed in the network transmission, media traffic and call signaling

· **Improve IT Team Collaboration** – Using a common ASI dataset, the platform improves time to knowledge by enabling collaboration between network, application, and UC&C teams for resolving Jabber service delivery problems

· **Single Solution Supports Entire UC&C Service** – Enables proactive management of Cisco Jabber service quality alongside other IP Telephony services

· **Investment Protection** – Leverages same nGeniusONE platform for simultaneous performance management of all Cisco infrastructure and applications, providing unmatched investment protection and shared data

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For more information, please visit www.netscout.com or contact NETSCOUT at 800-309-4804 or +1 978-614-4000