

# Nimsoft for Cisco VoIP Monitoring

## Ensuring Optimized Network Performance and End User Services

### Key Features

- Proactive monitoring of VoIP platforms, network performance, call activity, and VoIP messaging
- Centralized, cohesive view of performance
- Instant alerts and real-time dashboards

### Benefits

- Improved performance and uptime
- Enhanced resource optimization
- SLA compliance

### Introduction

VoIP is increasingly relied upon to deliver vital communications services for organizations around the world. To ensure these services meet the reliability and quality demands of end users, organizations must be able to monitor and proactively manage every component within their VoIP infrastructure, including not only the underlying VoIP networks and components, but all the services that run on those networks.

### The Solution

Nimsoft Monitor offers organizations a centralized, cohesive way to manage all the VoIP systems and services that play a role in the quality of service end users ultimately experience. With Nimsoft Monitor, organizations can more effectively ensure continuous SLA compliance and end-user satisfaction. Nimsoft Monitor solutions enable organizations to monitor these vital systems within their VoIP infrastructure:

- VoIP networks. Nimsoft Monitor for Cisco IP SLA performs traffic simulations across Cisco devices to proactively detect and preempt excessive jitter, packet loss, and high latency.
- VoIP call activity. Nimsoft Monitor for Cisco Unified Communications Manager monitors all aspects of call activity in the Cisco VoIP environment, including Unified Communications Manager services, Cisco Unity Connection, Cisco Unified Presence, Cisco Contact Center Express, and other Cisco products supporting the AXL interface. Nimsoft Monitor can monitor any metric that the target Cisco device publishes via the Cisco AXL API.
- VoIP messaging. Nimsoft Monitor for Cisco Unity offers a comprehensive picture of the performance of both the Unity server operating system and all key messaging processes and services—including calls, log ins, greetings, playback, recording, and more—to ensure the end-user's messaging experience is efficient, reliable, and productive.

### Monitoring VoIP Networks

Monitoring VoIP networks is particularly vital—even the slightest changes in performance can have a dramatic impact on the quality of services end user

experience. Nimsoft Monitor for Cisco IP SLA provides an easy to use, scalable, and cost effective solution for configuring IP service level monitoring for Cisco devices. With Nimsoft Monitor, organizations can effectively understand the traffic characteristics of the network to ensure high quality service levels and SLA compliance. In addition, Nimsoft Monitor helps organizations manage the introduction of new applications, and effectively assess performance both before and after applications go online, to make sure any performance impact is immediately identified and addressed.

Cisco IP SLA Made Easy—Embedded within Cisco IOS devices, Cisco IP SLA is software that generates and monitors traffic to measure performance between any combinations of network endpoints. Since the agents reside on Cisco devices, they provide very accurate measurements of all performance characteristics that are vital in VoIP environments, including jitter performance, packet loss, round trip response time, CPU utilization, and more. IP SLA is supported on almost all Cisco IOS devices, but configuring Cisco IP SLA using native toolsets is an extremely difficult and time-consuming task, which has meant that many organizations have not been able to utilize these powerful monitoring capabilities.

## Monitoring VoIP Call Activity

To effectively monitor VoIP networks, organizations need to gain visibility into every facet of their VoIP infrastructure, and one of the most vital components in the infrastructure is Cisco Unified Communications Manager. To ensure this mission-critical component is functioning optimally, organizations need to monitor both server health and application health—both of which play

a role in the quality of services that are ultimately delivered.

Nimsoft Monitor for Cisco Unified communications Manager monitors and manages key performance metrics and services on Unified Communications Manager servers. Nimsoft Monitor for Cisco Unified Communications Manager contains an intuitive user interface that makes it easy for administrators to define hosts to be monitored, activate/deactivate checkpoints, and configure thresholds. Nimsoft Monitor probe's advanced monitoring capabilities can be achieved without installing any software on the Cisco Unified Communications Manager servers, and the probe can be extended to monitor all available Cisco performance objects. In addition, Nimsoft Monitor delivers vital performance data via alarms, operator consoles, business dashboards, long-term trend reports, and SLA compliance reports.

## Monitoring VoIP Messaging

Cisco Unity plays a vital role in all of an enterprise's employee communications, so consequently, its performance is vital, and visible. Nimsoft Monitor for Cisco Unity Probe offers a comprehensive picture of the performance of the complete Unity system, performing extensive collection and analysis of key messaging performance metrics. With Nimsoft Monitor probe, organizations can monitor:

- Cisco Unity Server operating systems. The underlying server operating system—including CPU utilization, memory, disk, and network—is monitored to expose problematic resource trends before it can impact messaging availability and performance.

- Cisco Unity Messaging Services. Focused monitoring is applied to key Cisco Unity messaging processes and services—including calls, log ins, greetings, playback, recording, and more— to ensure the end-user's messaging experience is efficient, reliable, and productive.

## Monitoring the Unity Ecosystem

Monitor the Entire Unity Ecosystem—With Nimsoft Monitor, organizations can monitor and manage, from a single console, the myriad interrelated systems that make up their infrastructure, including applications, servers, and networking components. This comprehensive visibility is particularly critical in a Unity environment, which is comprised not only of the Unity server, but the underlying IP network, and a range of servers and databases—all of which must be operating effectively to ensure effective end user services.

With Nimsoft Monitor, organizations can monitor:

- Email servers. In most cases, Microsoft Exchange is tightly integrated with Unity to house user in boxes. Nimsoft Monitor for Exchange Reporting solution offers an effective way to track and report on an organization's Exchange email system.
- Web servers. Microsoft IIS is typically used to host Unity Web interfaces and applications, and with Nimsoft Monitor for Microsoft IIS Monitoring Probe, organizations gain a powerful solution for efficiently monitoring all IIS server activity.



## Data Sheet

- **Databases.** In Unity environments, SQL Server typically is used to store and manage the associated .wav files of voicemails, fax files, and other data that Unity processes. The SQL Server Monitoring Probe can be used to constantly monitor the internal performance and space allocation in the SQL Server database.

### Critical Monitoring Data: When and How it's Needed

Nimsoft Monitor compiles, analyzes, and monitors performance data to provide real-time tracking and historical reporting of the entire VoIP infrastructure, including VoIP networks, call activity, and messaging.

Nimsoft Monitor delivers this vital information via alarms, operator consoles, business dashboards, long-term trend reports, and SLA compliance reports.

### About Nimsoft

Nimsoft is a global leader in IT Management-as-a-Service. The company's lightweight ITMaaS solutions make it easy for enterprises and service providers to implement comprehensive, adaptable monitoring and service desk capabilities essential for managing today's dynamic computing environments. Learn more at [www.nimsoft.com](http://www.nimsoft.com).

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