

# CA Unified Infrastructure Management for Cisco IP SLA



## At a Glance

CA Unified Infrastructure Management (CA UIM, formerly CA Nimsoft Monitor) for Cisco IP SLA monitors end-to-end availability, round trip response time, latency, jitter and dropped packets between any two IP SLA-enabled points across a network. This gives you the visibility you need to identify and address issues before your applications or users are impacted. In addition to monitoring, it provides a centralized interface to both review existing IP SLA tests and manage all IP SLA tasks, such as test activation/deactivation, task edits, new test creation and test deletion.

### Key Benefits/Results

**Unified visibility.** Improved network availability and performance through a single, unified platform that allows you to monitor and control your entire IT environment, both inside and outside the data center.

**Ease-of-use.** Our “plug and play” probe architecture allows for on-demand delivery of monitoring services.

**Speed time-to-value.** Customers can install CA UIM and deploy monitoring to more than 100 servers in less than three minutes.

**Reduce cost and complexity.** Eliminates the cost and complexity of maintaining multiple platforms.

### Key Features

**Highly scalable** – Can go from 100 to more than 100,000 devices that eliminates the worry of outgrowing your monitoring solution.

**Customizable Dashboards** – Configure service delivery information to measure delay, jitter, and packet loss on the network.

**Business metric monitoring** – Enables aggregation of monitoring data from disparate sources to provide current views of critical business services that impact customer experience.

**Unified trending and root-cause analysis** – Quickly identifies and corrects problems across your entire IT infrastructure before they become performance issues.

**Drag-and-drop configuration** of IP SLA on Cisco devices

## Business Challenges

To survive and thrive in an application economy, businesses need to develop and deploy software with precision and speed. When the business uses a converged voice, video and data network for its daily activities it is increasingly important to monitor performance to ensure quality of service (QoS) and service level agreements (SLA) compliance. These applications are more susceptible to even the slightest changes and transmission characteristics of the network. It is imperative to understand the traffic characteristics of the network before and after deployment of new applications to ensure successful implementations and maintain service level compliance.

## Solution Overview

The Cisco IP SLA Agent is embedded software within Cisco IOS devices that generates and monitors traffic to measure performance between any combination of network endpoints. Since the agents reside on Cisco devices, they have precise knowledge of the delays and can therefore provide very accurate performance measurements. Both enterprises and service providers routinely deploy IP SLA for network performance statistics within IP networks that utilize Quality of Service (QoS), Voice over IP, Security, Virtual Private Network (VPNs) and Multiprotocol Label Switching (MPLS).

Configuring IP SLA is a difficult and time consuming task forcing many businesses today - both small and large - to not utilize such a powerful monitoring feature. With CA UIM for Cisco IP SLA it has never been easier, with drag and drop configuration, data analyses and seamless use of the collected data in any CA UIM console, dashboard, QoS or SLA report.

CA UIM for Cisco IP SLA provides an easy to use, scalable and cost effective solution for configuring IP service level monitoring using your Cisco devices by utilizing the “probe” capabilities within Cisco IOS. IP SLA is supported on almost all Cisco IOS devices.

CA UIM provides a comprehensive solution to improving the end-user experience. From monitoring the application response time at the desktop through to monitoring the performance and availability of the entire IT infrastructure, including Cisco IOS devices, CA UIM can give you a complete, 360 degree view of business critical services. All CA UIM information is correlated to business service dashboards and measured against pre-defined SLAs to warn you against SLA-threatening conditions.

## Critical Differentiators

CA UIM uses a Message Bus Architecture as a core element that is streamlined, comprehensive and efficient. It enables all monitoring components to communicate with each other, without direct program-to-program connections and acts as an abstraction layer between the core system and the monitoring probes. This leads to significant improvements in reliability, scalability and development agility.

CA UIM is a rapidly deployed solution that requires minimal customization or administration and has the following key features:

**DHCP (Dynamic Host Configuration Protocol):** Measures the roundtrip time taken to discover a DHCP server and obtain a lease from it. The lease is then released after the operation.

**DNS (Domain Name System):** Measures the time required to send a DNS request and receive a reply. If a hostname is specified, the operation queries for an IP, and vice versa.

**Echo:** Measures the time taken to send an ICMP (Internet Control Message Protocol) message to a destination and receive a reply.

**FTP (File Transfer Protocol):** Measures the time required to transfer a file from a remote FTP server to the source.

**HTTP (HyperText Transfer Protocol):** Measures the round trip time taken to connect and access data from an HTTP server.

**Jitter:** Measures the delay, delay variance and packet loss in a network by generating synthetic UDP data. The operation sends a certain number of packets (specified by the "Packets" field), each of a certain size (specified by the "Packet size" field), a certain number of milliseconds apart. Requires a target which supports IP SLA agents.

**UDPEcho:** Measures the UDP (User Datagram Protocol) response time between the source and target. The target must be a device which supports UDP Echo Service (UDP port 7) or another IP SLA agent.

**TCPConnect:** Measures the time taken by the source to perform a TCP (Transmission Control Protocol) connect operation to the target device (which can be any IP device and does not necessarily need to support IP SLA). Specify the target port number to test a specific TCP protocol (i.e., 21 (ftp), 22 (ssh), 23 (telnet), 80 (http), etc.).

## Related Products/Solutions

In addition to CA UIM for Cisco IP SLA, modules exist for monitoring Windows, UNIX, Linux, AS400/iSeries and Novell Netware. These are complimented by database monitoring modules for all common databases, application modules for Exchange, IBM Notes and other widely deployed applications as well as full management of your network infrastructure, including routers, switches, firewalls, etc.

For more information, please visit [ca.com/uim](http://ca.com/uim)

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