Cisco Network Analysis Module Software 4.0

PB500677

In today's business reality, distributed enterprises heavily rely on applications for communication, collaboration, and effective day-to-day operations. At the same time, IT is challenged with managing application delivery in an environment that is rapidly changing. The number of business applications is growing, application architectures are increasingly complex, application traffic is proliferating, and traffic patterns are difficult to predict. In addition, driven by security, regulatory, and economic considerations, enterprises are embracing data center consolidation, desktop virtualization, and network and application convergence to maximize the value of their IT investments. This demands comprehensive application and network visibility to successfully deliver disparate applications in a complex IT environment.

Cisco® Network Analysis Module (NAM) is a powerful network-aware performance assurance solution that delivers unparalleled visibility into application and network performance to help ensure the consistent and efficient delivery of applications and services to end users. It combines performance monitoring, traffic analysis, and advanced troubleshooting to provide a comprehensive solution that meets the performance management needs of today's dynamic, evolving enterprises. The visibility enables IT to effectively use control and optimization mechanisms such as quality of service (QoS), and Wide Area Application Services (WAAS) to improve application performance.

The unique design of Cisco NAM combines a rich set of embedded data collection capabilities and performance analytics with a remotely accessible, web-based management console, all of which reside on a single network module or new high-performance appliance. The network module can be installed into Cisco Catalyst® 6500 Series Switches, Cisco 7600 Series Routers, Cisco Integrated Services Routers (ISRs) Generation 2 (G2) or first-generation Cisco ISRs. The new NAM appliances extend the reach of the NAM in places in the network either not currently served by the blades or where higher performance monitoring is essential.

Cisco NAM includes a Traffic Analyzer GUI, which provides quick access to both configuration menus and real-time and historical performance reports.

Table 1 lists the key features of Cisco NAM.

Table 1.   Cisco NAM Features

Feature	Description
Application performance monitoring	Offers intelligent application performance monitoring and real-time visibility for voice, video, and data applications. Cisco NAM helps improve the operational efficiency of IT organizations by enabling them to proactively detect performance degradation, quickly identify its source, and troubleshoot the underlying issues.
Transaction-aware application response time monitoring	Analyzes TCP-based application packets as they travel from the client through the network to the data center and out again, providing insight into network round-trip time, server response time, data transfer time, transaction time, and so on to monitor application performance.
Voice-over-IP (VoIP) and video packet quality analysis	Analyzes voice and video packet streams and provides visibility into key network performance indicators to maximize the quality of the user experience.
Comprehensive flow-based monitoring	Automatically identifies hundreds of protocols and provides real-time and historical performance reports on hosts, conversations, and applications using critical network resources.
LAN and WAN monitoring in one solution	Provides visibility into traffic from local and remote switches and routers for comprehensive traffic monitoring.
Web-based captures for deep, insightful data analysis	Captures the packets to help resolve acute problems before they affect users. Captures can be performed using a web browser from any desktop, and the decodes can be viewed through the Traffic Analyzer GUI. Extensive capture features, including trigger-based captures, decodes, filters, and a capture analysis toolset, help to quickly pinpoint and resolve problem areas.

Anytime, anywhere access	Includes an embedded Traffic Analyzer web interface that can be accessed from any desktop, eliminating the need to send personnel to remote sites or haul large amounts of data over WAN links to the central site.
Pre- and postdeployment metrics to quantify business changes	Provides valuable "before and after" traffic analytics to help plan for and verify changes in network resources, such as new application roll-outs, WAN optimization, server consolidation, segmenting the network, and deploying VoIP and video.
Secure solution	Offers TACACS+, Secure Sockets Layer (SSL), and Secure Shell (SSH) Protocol–based security.
Deployment flexibility	Cisco NAM can be deployed in blade form factor in Cisco Catalyst 6500 Series Switches, Cisco 7600 Series Routers, and Cisco Integrated Services Routers, and as a multigigabit appliance. This complement of blades and appliances allows NAM instrumentation to be broadly deployed in the network for comprehensive performance monitoring.

Highlighted New Features in Cisco NAM 4.0

Cisco NAM 4.0 offers the features described in Table 2.

Table 2.   New Features in Cisco NAM 4.0

Feature	Benefit
New NAM 2200 Series Appliances	An extension of the NAM family of modules, the NAM 2200 Series Appliances offer high-performance monitoring, large onboard storage, and maximum deployment flexibility. They increase the reach of the NAM in places in the network either not currently served by the blades or where higher performance monitoring is essential.
Intelligent application 0erformance (IAP) analytics	Provides comprehensive application performance measurements to accurately characterize end-user experience, LAN/WAN latency and application delays. Intelligence derived from integrated application and network visibility helps assure the effective and reliable delivery of the applications that make up the business.
Superior voice quality monitoring	Provides standards-based voice quality in real time using Mean Opinion Score (MOS) and key performance indicators such as jitter and packet loss. Superior voice characterization combined with real-time troubleshooting helps improve the quality of voice services delivered to the end user.
Integration with Cisco Unified Communications Management Suite	Offers scalable and flexible deployment options complementing the Cisco Unified Communications Management Suite with networkwide visibility allowing active enforcement of enterprisewide service quality objectives.
Visibility into WAN-optimized networks (WAAS deployments)	Measures the impact of WAAS on application performance. Identifies the applications where WAN optimization and application acceleration services can be most beneficial in improving the performance. Provides end-to-end application performance visibility critical for ongoing optimization improvements and resolving problems related to application performance degradation.

Platform Requirements

For optimal performance Cisco NAM Software 4.0 is recommended for use on the NAM platforms listed below, although it is supported on all shipping NAM platforms as well as on NM-NAM.

- All NAM 2200 Series Appliances
- WS-SVC-NAM-1-250S
- WS-SVC-NAM-2-250S
- WS-SVC-NAM-1 with MEM-C6KNAM-2GB=
- WS-SVC-NAM-2 with MEM-C6KNAM-2GB=
- NME-NAM-120S

Information regarding system (switch or router) hardware and software requirements can be found in the Cisco NAM Software 4.0 Release Notes posted on Cisco.com.

Availability

Cisco NAM Software 4.0 became available in December 2008 as part of NAM blade orders. The new Cisco NAM Appliances became available in January 2009. Current Cisco NAM customers can download the new release from the Cisco.com Software Center at no charge using their Cisco SMARTnet® contract access privileges.

Ordering Information

Table 3 provides ordering information for Cisco NAM Software 4.0. Table 4 provides ordering information for the Cisco NAMs. To place an order, visit the Cisco Ordering Homepage. To download software, visit the Cisco Software Center.

Table 3.   Ordering Information for NAM Software 4.0

Customer	Access	Part Number	Description
Current NAM customers • WS-SVC-NAM-1-250S • WS-SVC-NAM-2-250S • WS-SVC-NAM-1 • WS-SVC-NAM-2 • NME-NAM-120S • NME-NAM-80S • NM-NAM	Download from Cisco Software Center	None	Cisco NAM for Cisco Catalyst 6500 and Cisco 7600 Series Cisco NAM for Branch Routers
New customers • NAM2204-RJ45 • NAM2204-SFP • NAM2220	Preloaded in the NAM hardware	NAM-APPL-SW-4.0	Cisco NAM Software 4.0 for Cisco NAM 2200 Series Appliances
New customers • WS-SVC-NAM-1-250S • WS-SVC-NAM-2-250S • WS-SVC-NAM-1 • WS-SVC-NAM-2	Preloaded in the NAM hardware	SC-SVC-NAM-4.0	Cisco NAM Software 4.0 for Catalyst 6500 and Cisco 7600 Series NAM
New customers • NME-NAM-120S • NME-NAM-80S	Preloaded in the NAM hardware	NME-NAM-SW-4.0	Cisco NAM Software 4.0 for Branch Routers NAM

Table 4.   Ordering Information for Cisco NAMs

Part Number	Cisco NAM 2200 Series Appliances
NAM2204-RJ45	Cisco NAM 2204 Appliance, 4x1GbE, RJ-45
NAM2204-SFP	Cisco NAM 2204 Appliance, 4x1GbE, SFP
GLC-T	1000BASE-T SFP
GLC-SX-MM	GE SFP, LC Connector SX Transceiver
GLC-LH-SM	GE SFP, LC Connector LX/LH Transceiver
NAM2220	Cisco NAM 2220 Appliance, 2x10GbE
NAM2220-AC-PS	AC Power Supply (Redundant)
XFP-10GBASE-SR	XFP, 10GE, Short Range
XFP-10GBASE-LR	XFP, 10GE, Long Range
NAM-APPL-SW-4.0	Cisco NAM Software 4.0
Part Number	**Cisco Catalyst 6500 and Cisco 7600 Series NAM Description**
WS-SVC-NAM-1-250S	Cisco Catalyst 6500 Series and Cisco 7600 Series Network Analysis Module-1
WS-SVC-NAM-2-250S	Cisco Catalyst 6500 Series and Cisco 7600 Series Network Analysis Module-2
MEM-C6KNAM-2GB=	Field-Installable Memory Upgrade Kit (2GB) for WS-SVC-NAM-1 and WS-SVC-NAM-2
SC-SVC-NAM-4.0	Cisco NAM Software 4.0

Part Number	Cisco Branch Router Series NAM Description
NME-NAM-120S	Cisco Branch Routers Series Network Analysis Module
SNAM-50VOICE	Voice Monitoring Software License for NME-NAM-120S, 50 RTP Streams
SNAM-100VOICE	Voice Monitoring Software License for NME-NAM-120S, 100 RTP Streams
NME-NAM-SW-4.0	Cisco NAM Software 4.0
SM-NM-ADPTR	NM Adapter Card for integration of NME-NAM into supported ISR G2 platforms

For More Information

For more information about Cisco NAM, visit http://www.cisco.com/go/nam, contact your local sales representative, or email the Cisco NAM product marketing group at nam-info@cisco.com.

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Amsterdam, The Netherlands

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