

**PRODUCT BULLETIN NO. 2764** 

# **CISCO NETWORK ANALYSIS SOFTWARE 3.4**

Cisco Systems<sup>®</sup> is proud to announce Cisco<sup>®</sup> Network Analysis Module (NAM) Software 3.4 for both the Cisco Catalyst<sup>®</sup> 6500 and Cisco 7600 Series NAM and the Cisco Branch Routers Series NAM. Cisco NAM Software 3.4 offers new features that extend the capabilities of the NAM and its embedded Web-based Traffic Analyzer to simplify and automate the traffic management of complex networks.

The Cisco NAMs enable network managers to gain visibility into all layers of network traffic by providing application-level Remote Monitoring (RMON) based on RMON2 and other advanced MIBs. The Cisco NAMs analyze traffic flows for applications, hosts, conversations, and network-based services, such as quality of service (QoS) and voice over IP (VoIP), providing comprehensive traffic monitoring integrated within the network infrastructure. Cisco NAMs include an embedded, Web-based Traffic Analyzer, which provides full-scale remote monitoring and troubleshooting capabilities accessible through a Web browser (see Table 1).

NAM Feature	Description
Collects and Unifies Data from a Broad Range of Sources	<ul> <li>The NAM provides real-time and historical application-level monitoring based on RMON2 and other advanced MIBs.</li> <li>NetFlow analysis from both local and remote devices extends application-level visibility.</li> <li>Mini-RMON and MIB-II provides real-time and historical switch port and router interface utilization statistics.</li> </ul>
Integrated LAN and WAN Monitoring	<ul> <li>Unique data collection capabilities enable the NAM to collect both LAN and WAN traffic.</li> <li>The Cisco Catalyst 6500 and Cisco 7600 NAM collect LAN data from physical ports, VLANs, and Cisco EtherChannel<sup>®</sup> connections using the Switched Port Analyzer (SPAN) feature. VLAN access control list (VACL)-based captures and NetFlow Data Export (NDE) can be used to view WAN traffic.</li> <li>Support for a special packet-monitoring feature in Cisco IOS<sup>®</sup> Software enables the Cisco Branch Routers Series NAM to gain insight into traffic at the IP layer and above for both LAN and WAN traffic, including encrypted links.</li> </ul>
Easy and Cost-Effective to Deploy, Operate, and Maintain	<ul> <li>The NAM includes an embedded, Web-based Traffic Analyzer, which provides full-scale remote monitoring and troubleshooting accessible through a Web browser.</li> <li>Integrated traffic analysis enables detailed visibility and full packet capture and decode without having to send personnel to remote sites or to haul large amounts of data over WAN links to the central site.</li> <li>Integrated nature of the NAM reduces operational, maintenance, and technical support costs—the NAM Traffic Analyzer is embedded in the NAMs at no extra cost, and the maintenance for the Branch Routers Series NAM is included as part of the branch router's maintenance contract.</li> <li>CiscoWorks LAN Management Solution (LMS) and CiscoView Device Manager allow centralized and coordinated management of multiple NAMs along with other integrated service modules.</li> </ul>

#### Table 1. Features Table for the Cisco NAM

NAM Feature	Description
Advanced Monitoring Capabilities for Response Time and IP-Based Services	<ul> <li>The Application Response Time (ART) MIB tracks response time at different points in the network to pinpoint application performance problems related to the network or to the application server.</li> <li>VoIP traffic flows can be analyzed in real time to alert network managers to VoIP quality degradation.</li> <li>The Differentiated Services Monitoring (DSMON) MIB can verify QoS policies and identify violations.</li> </ul>
Secure Solution	• The NAM offers TACACS+, Secure Sockets Layer (SSL), and Secure Shell (SSH) Protocol-based security.
Supported in CiscoWorks Solutions	• Support in CiscoWorks simplifies multi-NAM configuration, NAM software image management, and initial NAM setup and launch of the Traffic Analyzer Web interface.

## **NEW FEATURES**

New features in Cisco NAM Software 3.4 include:

- Packet Capture and Decode Enhancements—Simultaneous captures, capture to disk, capture filters based on IP address, and decode filters based on multiple user-specified criteria are some of the new packet capture and decode features that increase the NAM's flexibility as a powerful troubleshooting solution.
- URL Monitoring—Network managers can now recognize and monitor URLs to gain essential visibility into Web traffic. Key statistics, such as identifying frequently visited Websites, as well as the hosts visiting them, provide more granular information on the use and activity of critical enterprise resources.
- Larger Capture Buffer Capacity on Cisco Catalyst 6500 Series and Cisco 7600 Series NAMs—Increased buffer size optimizes the NAM's packet capture capacity permitting robust data captures.
- **Protocol Grouping**—Protocols can be grouped together under a single aggregate identifier (for instance, "Web") to enable network managers to obtain immediate feedback on how a particular set of applications behaves. The NAM provides a default set of protocol groups and allows network managers to create custom groups to meet specific needs.
- Network-Based Application Recognition—Protocol Discovery (NBAR-PD) MIB Support for Cisco Branch Routers Series NAM—NBAR is a classification engine in Cisco IOS Software that can recognize a wide variety of applications, including Web-based applications and client/server applications that dynamically assign TCP or User Datagram Protocol (UDP) port numbers. The NAM can retrieve application protocol statistics calculated by the NBAR-PD MIB for presentation and display within its Traffic Analyzer Web interface. Data from the NBAR-PD MIB consists of application-layer statistics for each interface giving network managers a quick, high-level summary of the application protocols and their utilization. This data can be used as a starting point for in-depth traffic analysis by the NAM and, in addition, for applying QoS policies that can be monitored using the NAM's DSMON function. Monitoring application-layer protocols helps managers to optimize network traffic to ensure that network bandwidth is being best used to fulfill business objectives.
- Identification and Classification of Multiprotocol Label Switching (MPLS)-Tagged Network Traffic—MPLS-tagged traffic can be either monitored as a single application protocol or as IP-based application protocols encapsulated within MPLS providing network managers with the flexibility to collect MPLS traffic statistics at the level of granularity that best supports their management needs.
- Switch/Router Health Monitoring—Tight integration in the Cisco Catalyst 6500 Series and Cisco 7600 Series as well as in the Branch Router Series, permits the NAM to track and report the status of vital switch and router resources including CPU use, backplane bandwidth, memory use, temperature and fan status, sysUpTime, hardware revisions, and power supply status.
- NetFlow 9 Support—The NAMs now support the latest version of NetFlow—version 9.
- Support of the CiscoWorks Applications—The NAM is supported by CiscoWorks. The CiscoWorks Resource Manager Essentials (RME) application included in CiscoWorks LMS provides software image management and device configuration management. RME configuration templates simplify the configuration of multiple NAMs, and the software image manager eases the version management and deployment of NAM software updates using wizard-assisted planning, scheduling, downloading, and monitoring tools. In addition, the Cisco Catalyst 6500 Series NAM supports CiscoWorks CVDM. This application facilitates the discovery and initial configuration of the NAMs and launches the NAM Traffic Analyzer Web interface. Through this integration, network managers can manage their NAMs using the same tools that they use to manage their other Cisco Catalyst 6500 Series service modules.

# PLATFORM REQUIREMENTS

Cisco NAM Software 3.4 is supported on the Cisco Catalyst 6500 Series and Cisco 7600 Series NAM-1 and NAM-2, and on the Cisco Branch Routers Series NAM, NM-NAM. The Cisco Branch Routers Series NAM is supported on the Cisco 2600, 2800, 3660, 3700, and 3800 multiand integrated services routers.

Cisco NAM software 3.4 is not supported on the first generation of Cisco Catalyst 6500 Series NAM, WS-X6380-NAM. See the NAM Software 3.4 release notes for information regarding system hardware and software requirements.

### AVAILABILITY

Cisco NAM Software 3.4 will be available by April 30, 2005, as part of new Cisco Catalyst 6500 Series and Cisco 7600 Series NAMs (NAM-1 and NAM-2) and Cisco Branch Routers Series NAM (NM-NAM) hardware orders. Existing NAM-1, NAM-2, and NM-NAM customers may download the new release from the Cisco.com Software Center at no charge using their Cisco SMARTnet<sup>®</sup> contract access privileges.

#### **ORDERING INFORMATION**

Ordering information for Cisco NAM Software 3.4 is provided in Table 2.

Table 2.	Ordering	Information for	or Cisco	NAM	Software	3.4
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Customer	Access	Part Number	Description
Current Customers <ul> <li>WS-SVC-NAM-1</li> <li>WS-SVC-NAM-2</li> <li>NM-NAM</li> </ul>	Download	Download	NAM software image
New Customers • WS-SVC-NAM-1 • WS-SVC-NAM-2	Included in NAM	SC-SVC-NAM-3.4	Cisco Catalyst 6500 Series and Cisco 7600 Series Network Analysis Module Software 3.4
New Customers <ul> <li>NM-NAM</li> </ul>	Included in NAM	NM-NAM-SW-3.4	Cisco Branch Routers Series Network Analysis Module Software 3.4

#### FOR MORE INFORMATION

For more information about the Cisco NAMs, visit: <u>http://www.cisco.com/go/nam</u> or contact either your local sales representative or the CiscoWorks product marketing group at: <u>ciscoworks@cisco.com</u>.



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