Q&A

Cisco Prime Network Analysis Module Software 6.0

General Overview

Q. What are the key features and benefits of Cisco Prime™ Network Analysis Module (NAM)?

A. Cisco Prime NAM Software offers deeper visibility into applications and the network to expedite problem resolution and optimization decisions. It provides an intuitive web-based graphical user interface (GUI) and an embedded performance database and rich data collection, all integrated in one solution. The prepackaged reports and workflows allow you to view network performance in real time and to understand what happened in the past when an event that affected network performance occurred. You can analyze the data, trends, and patterns not only to fix the performance issue but also to prevent reoccurrence. The visibility also allows you to assure that the network is optimally used and that business-critical applications get adequate resources to be able to deliver the committed service levels.

The commonly used features and benefits of Cisco Prime NAM are provided in Table 1. The features introduced with software release 6.0 are described later in this document. Note that software feature parity is maintained across the various form factors within the NAM portfolio, except for differences primarily due to hardware. For any differences in feature implementation, please refer to the individual data sheets for specific details.

Table 1. Key Features and Benefits of Cisco Prime NAM Software

Feature	Benefit
Application performance intelligence	Transaction-aware analytics help characterize the end-user experience and isolate application response time problems to the network, server, or the application itself.
Comprehensive voice quality monitoring and real-time troubleshooting	Gather real-time reports on Mean Opinion Score (MOS) and other key performance indicators (KPIs) such as jitter and packet loss to understand and improve how the end user experiences the delivery of voice services. MOS is computed based on ITU-T Recommendations G.107 offering accurate characterization of voice quality. Combine monitoring with real-time troubleshooting using prepackaged dashboards to improve the end-user service levels.
Site-based monitoring	Track network and application performance by logical endpoint groups or sites that you can create to mirror your network topology. For example, you can create sites by geographic locations, departments, or even managed customer networks and view performance data on a per site basis making it easier to obtain both a global and local view of how your applications are performing.
Analysis workflows	Streamline and accelerate problem resolution. Not only do these workflows improve the operational efficiency and user productivity, they also help validate and improve optimization decisions.
Historical reports	Go back into the past using Cisco Prime NAM's embedded Performance Database to understand what happened when an event that affected network performance occurred. It supports historical data analysis to accelerate problem resolution and advance optimization decisions.
Visibility into WAN-optimized networks	Obtain end-to-end proof points demonstrating how Cisco® Wide Area Application Services (WAAS) has improved application delivery. NAM reports on application response time, WAN bandwidth usage, LAN/WAN data throughput, and many other metrics to help ensure effective use of Cisco WAAS.
Monitoring virtual machine (VM) network traffic	Extend operational visibility to the virtual switching layer with Cisco Nexus® 1000V switch deployments. Offers insight into VM-to-VM interactions, virtual network traffic behavior, and virtual interface statistics. Monitors the VMs uninterrupted by VM migration.
Detailed flow- and packet-based traffic analytics	NetFlow and packet data complement each other to provide a powerful monitoring solution, all in one box. With extended NetFlow reporting capabilities, obtain an extensive view of the traffic to see who is using your network, what applications they're using, and how much bandwidth is being consumed. Pinpointing traffic of interest, you can use packet-based data to perform a "deeper dive" to quickly spot and address issues that affect performance.
LAN and WAN monitoring in one solution	Gain visibility into traffic from local and remote switches and routers for comprehensive traffic monitoring.

Feature	Benefit
Web-based captures for deep, insightful data analysis	Capture the packets to help resolve acute problems before they affect users. Perform captures using a web browser from any desktop, and view packet capture decodes through the GUI while the data is still being captured. Quickly pinpoint and resolve problem areas using trigger-based captures, decodes, filters, and packet capture error scan.
Visibility into Virtual Switch System (VSS) deployments	Monitor both virtual switches in VSS environments, reducing management overhead while improving operational efficiency.
Pre- and postdeployment metrics	Glean valuable before and after traffic analytics to help plan for and verify changes in network resources, such as introducing new applications, establishing quality of service (QoS) policies, consolidating servers, and deploying voice over IP (VoIP).
Secure solution	Use TACACS+, Secure Sockets Layer (SSL), and Secure Shell (SSH) Protocol-based security.
Standards-based northbound interface	Ease NAM configuration and export of computed NAM data using standards-based APIs (REST/XML). Facilitates integration with customer in-house managed applications or third-party reporting application of choice.
Anytime, anywhere access	Access the embedded web-based graphical interface 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.
Deployment flexibility	Cisco Prime NAM can be deployed as blade form factors in Cisco Catalyst® 6500 Series Switches, Cisco Nexus 7000 Switches, and Cisco Integrated Services Routers, as multigigabit appliances, as virtual service blades residing directly on the Cisco Nexus 1010/1110 Virtual Service Appliance, and as a virtual appliance that can be deployed on any x86 platform. The complement of physical and virtual blades and of appliances allows NAM analytics to be broadly deployed in the network for comprehensive performance monitoring.

Q. What are the business benefits of deploying Cisco Prime NAM?

A. Table 2 provides an overview of the business benefits that Cisco Prime NAM offers.

Table 2. Business Benefits of Deploying Cisco Prime NAM

Benefit	Description
Deliver consistent and resilient services	• Consistent application recognition and performance visibility across the network • Accurate characterization of performance for voice, video, and TCP applications • Deeper network visibility for effective use of control and optimization techniques such as QoS and Cisco WAAS • Preemption of performance issues with threshold-based proactive alerts
Ensure smooth network operations	• Prepackaged reports, visual correlation, and contextual navigation improves IT productivity • Rapid problem isolation and troubleshooting with combined packet and flow analytics, on-demand and triggered packet captures, and purpose-designed workflows • Remote management eliminates the need to travel to remote sites
Reduce total cost of ownership	• Integrated with Cisco platforms, Cisco NAM service modules and virtual service blades deliver reduced network footprint, lower operational cost, and simplified manageability • Choice of form factors offers deployment flexibility to address visibility and monitoring needs specific to a place in the network • Open standards-based API (REST/XML) preserves investment in existing management assets

Software 6.0 Introduction

Q. What are the new features that Cisco Prime NAM Software 6.0 offers?

A. The key Cisco Prime NAM Software 6.0 innovations are described in Table 3.

Table 3. New Capabilities in Cisco Prime NAM Software 6.0

Feature	Benefit
Deployment versatility	Extend application visibility into the virtual compute environment maintaining consistency across the physical and virtual infrastructure. The release introduces a fully featured software version of NAM that can be deployed on any x86 platform with KVM or ESXi environments. It can be deployed in the tenant network containers, remote sites, or almost any place in the network to eliminate blind spots and improve operational agility.
Custom application definition	Create custom applications based on a specific IP address (server) in addition to the port and port range.
Insight into overlay technologies, such as OTV,	Maintain visibility as you deploy cloud infrastructure. Overlay networks help in effective delivery of distributed applications; however, they demand deeper visibility to ensure optimal use of network resources and rapid

Feature	Benefit
LISP, VXLAN	troubleshooting.
Cisco TrustSec® policy validation	Validate the Cisco TrustSec policy by evaluating the endpoints or hosts, applications, and conversations participating in one or more security groups identified by a security group tag (SGT).
Wireless access visibility	Analyze packets within a CAPWAP tunnel to unveil a wealth of information that helps to improve service delivery over wireless access networks. Reports on performance and usage statistics on a per access point or a per endpoint basis help to quickly identify network bottlenecks and application performance issues.
Application response time distribution	Dive deeper to the transaction level to analyze the application response time distribution and uncover transactions that could be affecting the end-user experience.
Site-to-site traffic analysis	Profile application traffic across sites. For example, analyze traffic throughput across application tiers in a multitier deployment, where each tier could be designated as a "logical" site.
Scheduled capture	Capture the traffic even when the network isn't being watched. Packet captures can be scheduled at a specific time for a designated duration. For example, packet capture can be scheduled at 11 p.m. for 6 hours (subject to storage availability).
Rolling capture buffer	Capture the packets continuously in a rolling buffer and instantly save the capture triggered by a condition associated with the application or network performance. This new mode augments the existing mode of starting and stopping the captures based on condition-based triggers.
Enhanced packet capture analysis	Accelerate root-cause analysis with enhanced packet analysis capabilities. Take advantage of new dissectors and capture and display filters, along with interactive analysis interface. Eliminate the need to transfer packets to a centralized location; analysis can be performance in real time as the problem is being detected.
IPv6 support	Monitor IPv6 traffic. Facilitate the transition to IPv6 networks, taking full advantage of all NAM analytics and deeper visibility into applications and network. This release delivers USGv6 certification for all NAM form factors.
Scheduled reports	Promote cross-team communications and collaboration with the new scheduled report feature. Reports can be created directly to reflect the interactive console views customized for the purpose of troubleshooting, optimization, analysis, or management reporting.

Q. When is Cisco Prime NAM Software 6.0 available?

A. Starting January 2014, current Cisco NAM customers can download Cisco Prime NAM Software 6.0 from the Cisco.com Software Center at no charge using their Cisco SMARTnet® contract access privileges. Cisco Prime NAM 6.0 will be available in January/February 2014 as part of new NAM hardware orders.

Q. Will I be able to perform a software upgrade from NAM 5.x to NAM 6.0 or do I need to freshly install Cisco Prime NAM Software 6.0?

A. Yes, you will be able to perform a software upgrade from NAM 5.x to NAM 6.0. Please refer to Upgrading Prime NAM Software to 6.0(2) at http://www.cisco.com/en/US/products/sw/cscowork/ps5401/prod_installation_guides_list.html for detailed instructions on how to upgrade to the software version 6.0. If you are running NAM version 5.0, it is recommended that you upgrade to version 5.1.x first, and then upgrade to version 6.0.

Q. Will I lose any data when I migrate from NAM 5.x to Cisco Prime NAM Software 6.0?

A. You have the option to retain the data and configuration files while upgrading to software 6.0. Please refer to Upgrading Prime NAM Software to 6.0(2) at http://www.cisco.com/en/US/products/sw/cscowork/ps5401/prod_installation_guides_list.html to assess the right upgrade option for you.

Q. Will I be able to perform a software upgrade from NAM 4.x or prior versions to NAM 6.0?

A. You can upgrade from NAM 4.x or prior versions to 6.0; however, you need to choose the "reformat" mode, in which case you will lose the data and configuration files.

Supported Platforms

Q. Which NAM form factors support Cisco Prime NAM Software 6.0?

A. Cisco Prime NAM Software 6.0 is supported with the following form factors:

- Cisco Nexus 7000 NAM (NAM-NX1)
- Cisco Prime Virtual NAM (vNAM)
- Cisco Catalyst 6500 Series NAM (NAM-3)
- Cisco Catalyst 6500 Series and Cisco 7600 Series NAM (NAM-2) (Part number: WS-SVC-NAM-2-250S only)
- Cisco Catalyst 6500 Series and Cisco 7600 Series NAM (NAM-1) (Part number: WS-SVC-NAM-1-250S only)
- Cisco NAM 2300 Series appliances
- Cisco NAM 2200 Series appliances
- Cisco Prime NAM for ISR G2 SRE
- Cisco Prime NAM for Cisco Nexus 1100 Series

Q. If the NAM platform that I have is not supported, what options exist to allow me to use NAM 6.0 Software?

A. If you have the NAM hardware platforms indicated below, Cisco recommends the following:

- For WS-SVC-NAM-1 (Cisco Catalyst 6500 Series NAM-1) or WS-SVC-NAM-2 (Cisco Catalyst 6500 Series NAM-2): Consider taking advantage of the Cisco Technical Migration Program to upgrade to NAM-3 (WS-SVC-NAM3-6G-K9).
- For NME-NAM-80S or NME-NAM-120S (Cisco Branch Routers Series NAM): Consider taking advantage of the Cisco Technical Migration Program to trade in your NME-NAM-80S or NME-NAM-120S NAM for the SRE hardware platform and install Cisco Prime NAM Software 6.0.

For further questions related to upgrade, please contact either your local account representative or the NAM product marketing group at nam-info@cisco.com.

Technical Deep Dive

Q. How does Cisco NAM with software version 6.0 work?

A. Cisco NAM provides deeper visibility into the network and the applications traversing the networks. It takes advantage of the rich embedded instrumentation with the switch, router, WAAS, and other network devices to collect data and transform into meaningful, actionable analytics. The NAM processes the packets, flow information, and interface details of the devices, computes various performance and usage metrics, and stores processed information in the embedded Performance Database. This database provides actionable details on voice, video, and data traffic, VLANs, Differentiated Services (DiffServ) configurations, overlay networks such as OTV, LISP, and VXLAN, and Cisco TrustSec. The detailed information includes application response times, MOS values, top talkers, conversation pairs, application usage, and more. This information is presented in the Cisco Prime NAM's GUI in easy-to-read interactive reports with workflows to accelerate operational decisions.

The information that Cisco NAM collects is defined by the user's selecting one or more data sources. Data sources, which are features of the switch, router, or WAAS device, are described in Table 4.

Table 4. Cisco NAM Traffic Sources

Traffic Source	Description
SPAN, Remote SPAN (RSPAN), and Encapsulated RSPAN (ERSPAN)	Using the SPAN, RSPAN, and ERSPAN capabilities, traffic from ports, VLANs, and EtherChannel links can be mirrored to the NAM. The NAM collects statistics on all layers of network traffic spanned to it. RSPAN allows traffic to be collected from other RSPAN-enabled devices in the same VLAN Trunk Protocol (VTP) domain. ERSPAN allows traffic to be sent to the NAM using generic routing encapsulation (GRE) tunnels from a Layer 3 network.
VACLs	The NAM uses VACLs to capture or "filter" selected VLANs and WAN traffic (on Cisco IOS devices only) to the NAM ports. Additional filtering rules can also be applied to target specific data flows. The NAM must be specified as the capture destination for VACL entries when configuring the local supervisor.
NDE	NetFlow Data Export (NDE) records offer an aggregate view of the network traffic. When enabled on the switch, the NetFlow data source becomes available on Cisco NAM without the need to create any SPAN sessions. In addition, the NAM can receive NDE from remote devices for analysis.
WAAS	The NAM uses the built-in instrumentation on WAAS to gather information about the optimized and pass-through traffic to provide end-to-end application performance visibility in a Cisco WAAS environment. The information allows NAM to measure application response time, transaction time, bandwidth usage, and LAN/WAN data throughput to accurately quantify the impact of Cisco WAAS optimizations.
Cisco Performance Agent (PA)	Cisco PA is a licensed software feature introduced with Cisco IOS Software Release 15.1(4)M. It is supported on Cisco 880, 890, and ISR G2 platforms. The NAM utilizes PA to gain visibility into application response time and traffic statistics at remote branches. Deployed with WAAS Express, this feature enables NAM to deliver a comprehensive end-to-end view into the WAN-optimized network.
Promiscuous mode (with vSwitch and vNAM)	Using the promiscuous mode configured at the virtual switch or port group level in vSphere ESXi, the traffic traversing the virtual switch as per the defined VLAN policy can be monitored with Cisco Prime virtual NAM hosted on ESXi.

Q. How does Cisco Prime NAM Software 6.0 use NetFlow?

A. Cisco Prime NAM supports monitoring of both packet- and NetFlow-based traffic sources. These two data sources complement each other to provide a powerful and comprehensive monitoring solution. NetFlow can be used to gain an extensive view of the traffic to analyze who is using your network, what applications they're using, and how much bandwidth is being consumed. For deeper analysis, it can be combined with packet data using traffic sources such as SPAN, VACL, ERSPAN, or RSPAN. Also, NetFlow can be used to obtain visibility into traffic where SPAN is not available (for example, WAN interfaces, remote router interfaces, and so on).

NetFlow can be enabled on interfaces of local or remote devices and sent to the NAM for analysis. As a consumer, the NAM can receive NetFlow packets on its management port from devices such as Cisco routers and switches. Those records are stored in its performance database as if that traffic had appeared on one of the NAM data ports. The NAM understands NetFlow versions 5 and 9. Incoming NetFlow data is parsed by the NAM, stored in its internal database, and presented in the GUI in the same way as traffic from other data sources.

Some network devices have more than one "engine" that is capable of independently exporting NetFlow. Depending upon features of the device, flows can be exported from multiple flow caches in the hardware and/or software. For example, supervisor and line cards may be able to export flows independently from their local caches. By default, NAM 5 will automatically create independent data sources for each engine exporting NetFlow records to NAM.

Q. What versions of NetFlow does Cisco Prime NAM Software support?

A. The NAM supports versions 5 and 9.

Q. How is Cisco Prime NAM Software secured?

A. Cisco Prime NAM can be secured with up to 256-bit encryption. The NAM also supports role-based user authorization and authentication locally or using TACACS+.

Q. What protocols does Cisco Prime NAM monitor?

A. Cisco Prime NAM monitors several hundred unique protocols, including those defined in RFC 2896, and several Cisco proprietary protocols. NAM can automatically detect unknown protocols and offers users the flexibility to customize the protocol directory to meet their specific requirements. A custom application can be defined with an IP address in addition to the port and port range. It also supports URL-based application definition.

Examples of protocols supported by Cisco Prime NAM for monitoring are as follows:

- TCP and User Datagram Protocol (UDP) over IP including IPv6
- HTTP and HTTPS
- VoIP including Skinny Client Control Protocol (SCCP), RTP/Real-Time Control Protocol (RTCP), Media Gateway Control Protocol (MGCP), and Session Initiation Protocol (SIP)
- SigTran and Mobile IP protocols including General Packet Radio Service (GPRS) Tunneling Protocol
- Storage area network (SAN) protocols including Fibre Channel over TCP/IP
- Database protocols, including Oracle and Sybase
- Peer-to-peer protocols such as Gnutella, Fasttrack, and winmix
- Bridge and router protocols
- Unknown protocols by TCP/UDP ports, Remote Procedure Call (RPC) program numbers, and so on

Q. What is the REST/XML API and how does it help me?

A. The NAM API provides a mechanism for provisioning and retrieving data from the NAM servers using an XML interface. The API utilizes Representational State Transfer (REST) methodology to execute requests (web services) over HTTP or HTTPS by sending the XML data to the API server. The REST XML interface is capable of configuring a subset of the software features through create, read, update, and delete operations mapped to a particular HTTP or HTTPS method. APIs are provided for sites, data sources, application, application groups, action, threshold, packet capture, WAAS-monitored server, system info, and NetFlow Data Export. The interface also allows you to create an outgoing stream of exported performance data from NAM.

Q. Is Simple Network Management Protocol Version 3 (SNMPv3) supported in Cisco Prime NAM Software 6.0?

A. With Cisco Prime NAM Software 6.0, you have the ability to manage devices with SNMPv3. Note that for the WS-SVC-NAM-1, WS-SVC-NAM-2, and WS-SVC-NAM-3 platforms, SNMPv3 is not required. SNMP requests and responses are communicated over an internal interface within the chassis, and SNMPv3 is not used.

Q. How can I recognize and configure applications reported as unknown by Cisco Prime NAM Software 6.0?

A. Cisco Prime NAM Software 6.0 recognizes applications on the basis of port number, port number range, or standardized application identifiers exported by Cisco platforms through NDE. If the NAM is not able to recognize an application using any of these mechanisms, the application type of the traffic is reported as unknown. You can configure the application reported as unknown using the application configuration table on the Traffic Analysis dashboard (**Analyze > Traffic-Application**). When selecting an “unknown” application, the table will list all protocol/port combinations that were not recognized by NAM and allow you to configure them as custom applications.

Q. Can I define my own applications or application groups?

A. Cisco Prime NAM Software 6.0 identifies applications/protocols based on the TCP/UDP port number; thus if there are any applications using custom ports, the NAM can be configured to identify those applications by name instead of by port number. Custom applications can be defined combining a select protocol with port or port-range definitions, or an IP address (server) with protocol and port or port-range definitions. Custom application groups can be defined as a set of existing applications that can be monitored together. Please refer to the Cisco Prime NAM Software 6.0 User Guide for instructions on how to create a custom application or application group.

Q. How can I understand various response time metrics, and how do they help me in troubleshooting application performance issues?

A. Please refer to the Cisco Prime NAM Software 6.0 User Guide.

Q. Why do I need custom filters for the interactive reports?

A. Interactive reports use advanced filters to allow you to focus on information of interest and create a context for further analysis. For example, when analyzing application performance, you can create a filter to focus on a select site, application, encapsulation, time range, client, server, or a combination of the foregoing, offering a powerful mechanism to isolate performance issues. For example, the filter allows you to analyze the traffic within a specific CAPWAP tunnel. It unveils a wealth of information that helps to improve service delivery over a wireless access network. Reports on performance and usage statistics on a per access point or a per endpoint basis help to quickly identify network bottlenecks and application performance issues. Similarly, analyzing the traffic over the DCI (OTV) helps to ensure that the link is optimally utilized.

In addition, the custom filters can be saved to analyze specific contexts on an ongoing basis. Typically, this is valuable when watching a recurring performance issue. In such cases, you would save a custom filter having the appropriate filter attributes. When you select the custom filter, the interactive report will load the data as per the context defined in the custom filter.

Q. Can more than one user concurrently use Cisco NAM?

A. Cisco Prime NAM allows up to 10 users to access NAM concurrently. However, depending on what information the users are accessing, an increase in the number of concurrent users can result in a suboptimal user experience in terms of response times.

Q. When would I define a site using data sources or VLANs?

A. Cisco Prime NAM Software 5.0 introduced the concept of logical sites as collections of network endpoints. A site can be defined as a set of subnets specified by an address prefix and mask. In addition, sites can be defined using a remote device data source (such as a remote WAAS device, NDE from a remote network device). As examples, a site can be defined as a remote WAAS device representing the collection of endpoints for which an application is being optimized. A combination of these mechanisms offers a granular way to define a site.

Q. Can I trigger packet capture when the threshold is violated?

A. Yes, Cisco Prime NAM Software allows you to define “Trigger Capture” as one of the alarm actions to start or stop a predefined capture session. As a new feature in NAM Software 6.0, the packet captures in the rolling capture buffer can be instantly saved to a file, triggered by a violation of an application or network performance threshold.

Q. How can I replicate my site definitions and application definitions across all my NAMs?

A. The REST/XML API introduced with Cisco Prime NAM Software 5 allows you to create, update, and delete site definitions. It also allows you to retrieve all site definitions from a given NAM. The functions allow you to replicate the site definitions programmatically across all the NAMs deployed in the network. A similar API exists for the definitions or applications and application groups.

Q. Does Cisco Prime NAM Software perform historical traffic analysis?

A. Yes, Cisco Prime NAM takes you back to the past to understand what happened when an event affecting network performance occurred. It supports historical data analysis to accelerate problem resolution and to advance optimization and capacity planning decisions. Cisco Prime NAM Software Release 5.0 introduced embedded performance database that stores computed historical data for many weeks depending upon the monitored traffic throughout, number of hosts, and other network characteristics.

Q. Does Cisco Prime NAM Software support voice monitoring for Cisco VoIP deployments only?

A. No. Cisco Prime NAM Software monitors Real-Time Monitoring Protocol and thus, by extension, can provide reporting on any VoIP protocol that runs on top of RTP, a Layer 4 protocol.

Q. Which VoIP signaling protocols does Cisco Prime NAM Software support?

A. Cisco Prime NAM Software supports a breadth of standards-based VoIP signaling protocols, namely, SCCP, SIP, MGCP, and H.323.

Q. What are the key performance indicators for monitoring voice?

A. Cisco Prime NAM Software offers real-time voice quality monitoring using standards-based MOS and key performance indicators such as jitter and packet loss. It calculates MOS based on ITU-T G.107 recommendations.

Q. Can I identify the phones affected by voice quality degradation?

A. Yes. Cisco Prime NAM Software allows the administrator to pinpoint the individual RTP stream experiencing voice quality degradation. By correlating the RTP and signaling streams, Cisco Prime NAM Software can report the phone numbers and alias for each endpoint.

Q. What Cisco Unified Communications Management Solutions support Cisco NAM?

A. The solutions are Cisco Unified Service Monitor and Cisco Unified Operations Manager, a component of the Cisco Prime Collaboration Suite.

Q. How do Cisco Unified Service Monitor and Cisco Unified Operations Manager support Cisco NAM?

A. Cisco Unified Service Monitor collects voice metrics from multiple NAMs to provide enterprisewide visibility into voice quality. Cisco Unified Service Monitor generates alerts on the voice quality degradation that is reported by Cisco Unified Operations Manager. Based on these alerts, Cisco Unified Operations Manager allows the user to navigate into NAM to glean near real-time views of both voice and network performance to perform rapid troubleshooting.

Q. How does Cisco Prime NAM Software support Cisco Wide Area Application Services?

A. Cisco Prime NAM Software uses the built-in instrumentation of Cisco Wide Area Application Engine devices as a data source to gather information on the optimized traffic to provide end-to-end application performance visibility in a Cisco WAAS environment. It measures application response time, transaction time, bandwidth usage, LAN/WAN data, and so on to provide end-to-end application performance metrics, accurately quantifying the impact of WAAS optimization and helping to validate ongoing optimization improvements. NAM is also able to identify the applications that would benefit the most from deploying Cisco WAAS. Analyzing response time data over a period of time, the administrator can identify the applications where optimization can result in a material increase in available bandwidth.

Third-Party Reporting

Q. Does Cisco Prime NAM Software include an API to allow third-party reporting applications to use NAM as a source of data?

A. Yes, Cisco Prime NAM Software includes multiple mechanisms, such as REST/XML, SNMP, and comma-separated value (CSV)/HTTP to enable third-party reporting applications to collect data for networkwide reporting, trending, baselining, and capacity planning. The API allows you to use computed NAM data to feed in-house or third-party reporting applications that you already own, building up additional value and building out existing investments. For API details, please contact the NAM product marketing group at nam-info@cisco.com.

Ordering

Q. How can Cisco Prime NAM be ordered?

A. The ordering information related to Cisco Prime NAM products can be obtained from the corresponding data sheets:

- Cisco Nexus 7000 Network Analysis Module (NAM-NX1)
- Cisco Prime Virtual Network Analysis Module (vNAM)
- Cisco Prime Network Analysis Module for ISR G2 SRE
- Cisco Catalyst 6500 Series Network Analysis Module (NAM-3)
- Cisco Prime Network Analysis Module 2300 Series Appliances
- Cisco Prime Network Analysis Module for Cisco Nexus 1100 Series

To place an order, visit the Cisco Ordering Homepage. To download software, visit the Cisco Software Center.

Additional Information

Q. Where is additional information about Cisco Prime NAM found?

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

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