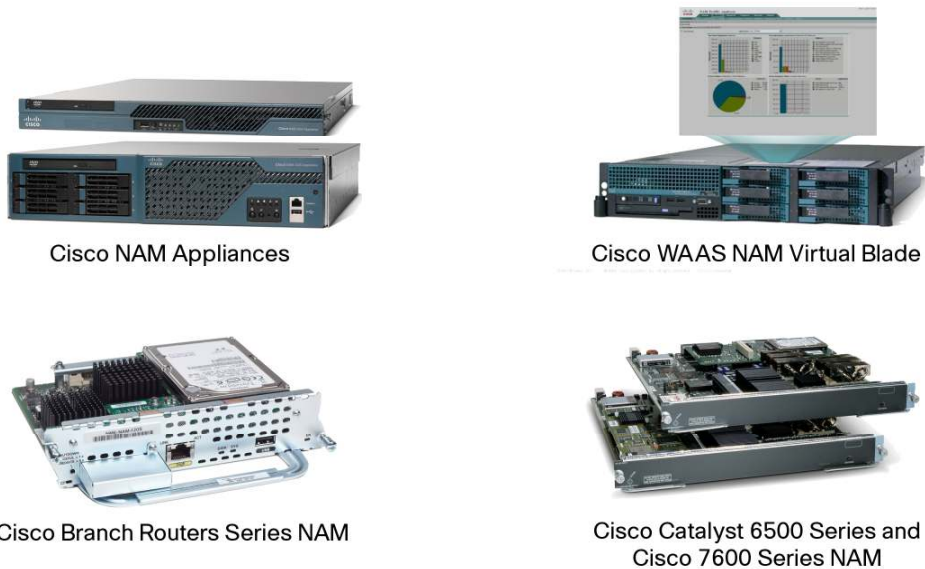


Cisco Network Analysis Module 4.1 Product Family

Businesses rely on enterprise applications to help ensure efficient operations and gain competitive advantage. At the same time, IT is challenged with managing application delivery in an environment that is dynamic and distributed. The number of business applications is growing, application architectures are increasingly complex, application traffic is proliferating, and traffic patterns are difficult to predict. This demands integrated application and network visibility to successfully deliver disparate applications in a complex IT environment.

The Cisco® Network Analysis Module (NAM) suite of products offers unparalleled visibility into application and network performance to help ensure consistent and efficient delivery of applications and services to end users. The Cisco NAM product family includes both integrated services modules and self-contained appliances to manage performance from the branch to the data center (Figure 1).

Figure 1. Cisco NAM Product Family



Product Family Overview

The NAM product family includes:

- **Cisco® Branch Routers Series NAM (NME-NAM):** This service module integrates with both Cisco Integrated Services Router (ISR) Generation 2 and first generation Cisco ISRs to provide multiservice performance visibility, traffic analysis, and troubleshooting in the empowered branch.
- **Cisco Catalyst® 6500 Series and Cisco 7600 Series NAM (NAM-1, NAM-2):** These service modules help improve operational manageability of network resources in the enterprise campus, data center, and WAN. In addition, deeper insight into network and applications performance helps simplify application delivery across the network.

- **Cisco® NAM Appliances (NAM2204, NAM2220):** An extension of the Cisco NAM blades, these appliances offer next-generation performance, superior scalability, and maximum deployment flexibility. The appliances complement Cisco NAM service modules, offering comprehensive performance instrumentation across your Cisco network.
- **Cisco® WAAS Network Analysis Module (NAM) Virtual Blade:** Leveraging the existing WAAS footprint, the NAM virtual blade offers an integrated application performance monitoring and reporting solution. The virtual blade is available for the WAAS 574 and 674 Appliances.

Benefits Summary

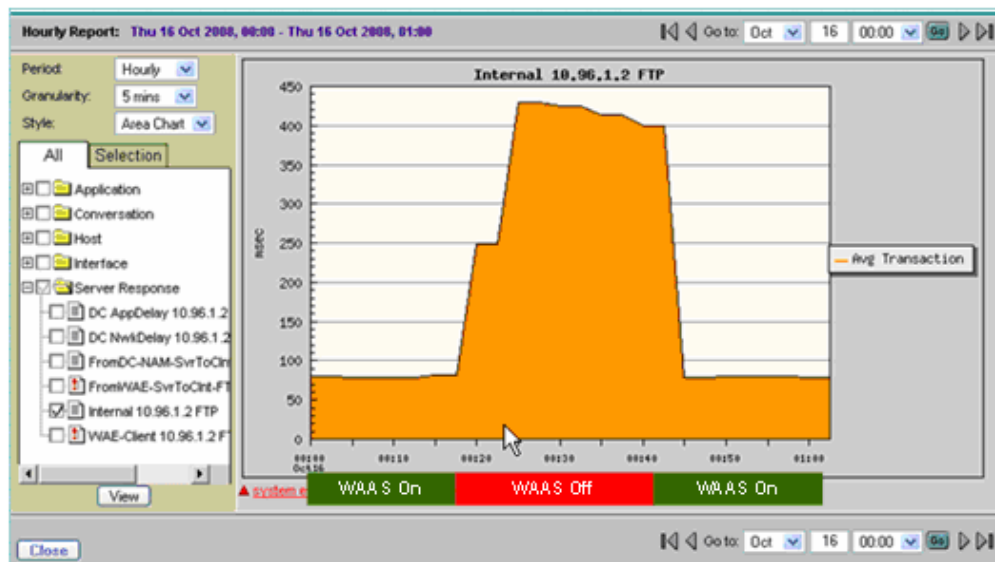
Simplify the delivery of applications and services

Managing application performance entails full visibility across all stages of application delivery, namely profiling, baselining, control, optimization, and troubleshooting. Cisco NAM implements Intelligent application performance analytics that can not only characterize the end-user experience but also provide end-to-end performance visibility across the entire application delivery cycle. It offers you a comprehensive set of transaction-based statistics such as response time, transaction time, data transfer time, and retransmission time. It allows you to monitor and analyze application performance trends for TCP-based business applications and preempt performance issues by enabling threshold-based proactive alerts. You can also utilize a breadth of troubleshooting capabilities to quickly isolate and resolve the issues minimizing any impact to the end users.

Gain the most from WAN optimization initiatives

Cisco NAM 4.1 offers end-to-end application performance visibility in the Cisco Wide Area Application Services (WAAS) environment. The visibility empowers you to effectively use Cisco WAAS to improve application performance. It measures and reports on application response time, transaction time, bandwidth usage for optimized and passthrough traffic, and LAN/WAN data throughput among other performance metrics across all WAAS segments. Cisco NAM can help identify the candidate sites and applications that would benefit the most with WAN optimization. Cisco NAM can quantify and validate the impact of WAAS on application performance. The real-time visibility can also be used for ongoing optimization improvements and troubleshooting performance degradation issues. Figure 2 illustrates the impact of Cisco WAAS.

Figure 2. Impact of Cisco WAAS on Application Performance



Improve voice service levels with superior voice quality analytics

Convergence of voice and data over shared network infrastructure offers a new set of challenges in managing voice quality. The new breed of enterprise applications are diverse in their traffic characteristics and pose different demands on network resources for end-to-end delivery. Voice is a real-time application and is highly sensitive to network parameters such as packet loss and jitter. Cisco NAM can analyze voice streams in real time to provide critical performance information, including Mean Opinion Score (MOS), to monitor voice quality. In addition, Cisco NAM offers visibility into quality of service (QoS)/Differentiated Services (DiffServ) reports to help validate QoS planning assumptions and quickly troubleshoot voice performance degradations possibly due to the impact of other non-business-critical applications.

Enhance operational efficiency with faster problem detection and resolution

Cisco NAM accelerates problem isolation and root-cause analysis reducing the time it takes to resolve a performance issue from weeks and days to hours and minutes. The embedded, web-based Traffic Analyzer GUI allows you to isolate application problems to the network, the application, or the server. The network problems can be further investigated using comprehensive traffic analysis views with detailed information on VLANs, DiffServ, hosts, conversation pairs, and application usage. In addition, Cisco NAM offers intelligent packet captures, decodes, and filters to quickly identify the cause and minimize the impact on end users.

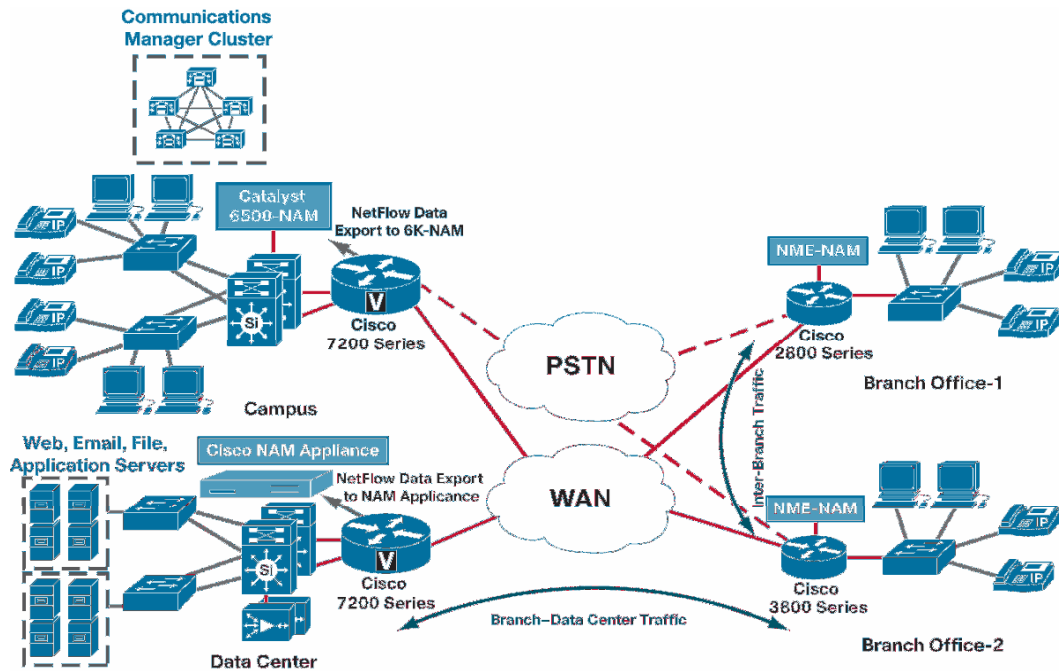
Reduce risk and management complexity with comprehensive network visibility

Cisco NAM helps you in mitigating risk by providing deeper insight into the network when undertaking IT initiatives such as new application rollouts, data center consolidation, and WAN optimization. It helps you to ensure consistent performance levels, optimal use of network resources, and a minimal impact on business during such undertakings. You can also anticipate any infrastructural changes by analyzing resource usage and traffic trends. As a result, Cisco NAM helps enhance IT agility to changing business needs.

Deployment Flexibility with Cisco NAM Product Family

The Cisco NAM product portfolio provides a choice of form factors, offering flexibility of deployment across the network to help enable the comprehensive visibility required to deliver consistent end-to-end application performance levels. In an example scenario illustrated in Figure 3, Cisco Catalyst 6500 Series NAM or Cisco NAM appliance can be deployed in the data center to monitor performance of TCP-based applications being delivered to remote sites.

Figure 3. Application Performance Monitoring with Cisco NAM Product Family



Cisco Branch Routers Series NAM can also be deployed in the empowered branch to get full visibility into the traffic entering or leaving the branch, hence offering comprehensive performance views for applications being delivered in the empowered branch.

The Cisco WAAS NAM Virtual Blade is targeted for WAAS predeployment scenarios to help understand the potential benefits of WAN Optimization by leveraging the zero hardware footprint of the virtual offering.

The products with the family may have some differences in terms of feature set. Please consult individual product data sheet for detailed feature list.

Ordering Information

The ordering information related to the Cisco NAM product family can be obtained from the [Cisco NAM 4.1 product bulletin](#). To place an order, visit the Cisco Ordering Homepage. To download software, visit the Cisco Software Center.

For More Information

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



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