



Network Analysis Module

How Cisco IT Uses Analysis
Module to Gather Information on
Host, Network, and Application
Traffic



A Cisco on Cisco Case Study: Inside Cisco IT

Overview

- Challenge

 - Find a monitoring solution that will offer more than packet capture

- Solution

 - Development of NAM

- Results

 - NAM creates more visibility

- Next Steps

 - Continue to develop NAM for further adoption

Challenge: Find a monitoring solution that will offer more than packet capture

- Communication problems between two different hosts are hard to identify
 - Administrators must watch packet traffic as it moves across particular network segments
- Monitoring network segments while looking at traffic or application performance is difficult
 - Remote Monitoring based packet capture analysis software creates logistical problems
- Time, hardware, and other resource constraints make tradition monitoring methods difficult
- Integrating monitoring across LANs and WANs
 - To provide real-time and historical monitoring
 - To manage performance and troubleshooting

Solution: Development of NAM

- Cisco Network Analysis Module (NAM):

An integrated traffic monitoring service module that occupies only single slot in the Cisco Catalyst® 6500 Series Switch

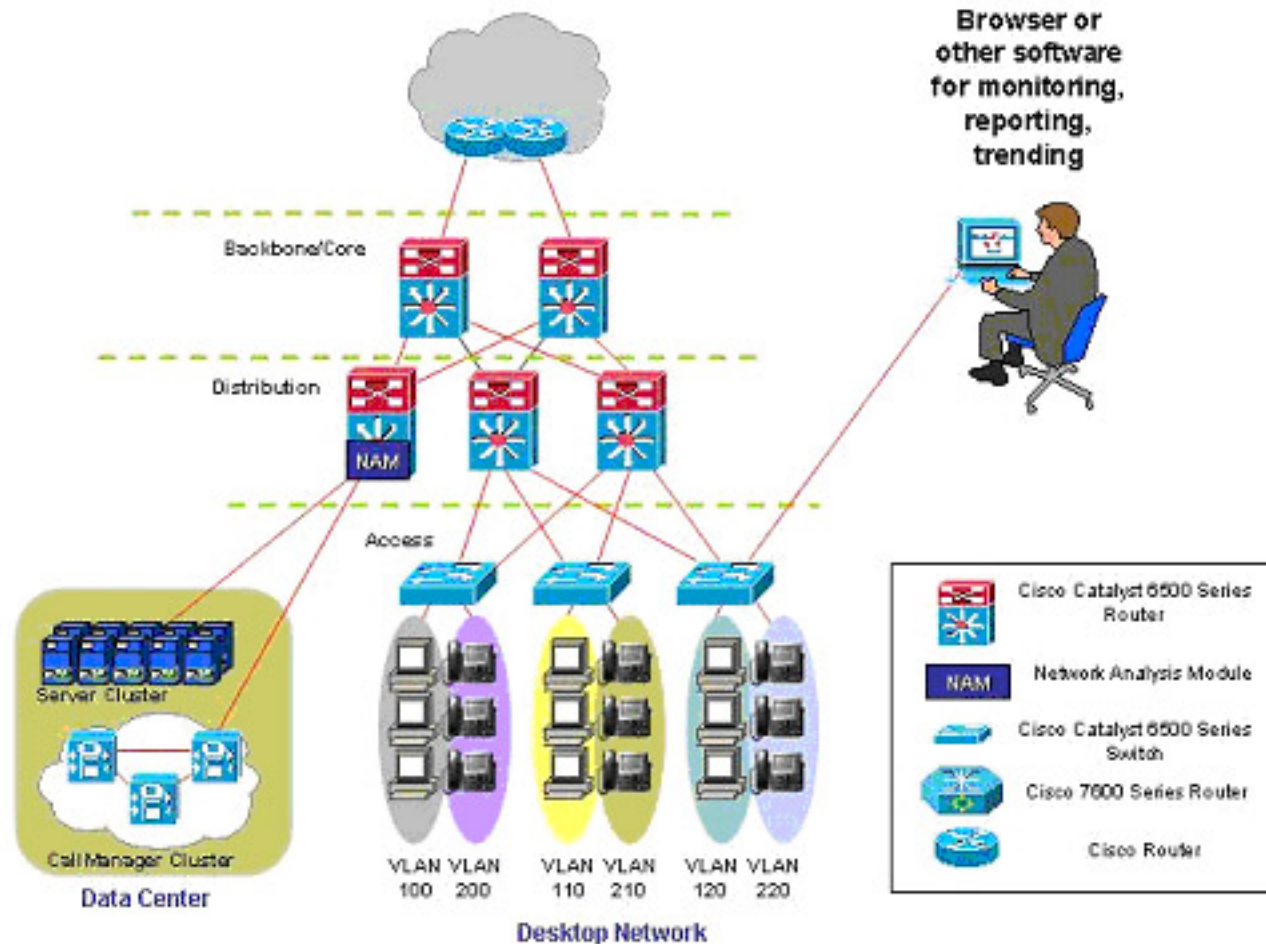
Gives full application layer visibility to network administrators, using a browser from any point on the network

Provides both real-time and historical monitoring, including data and voice

Can capture and decode packets, analyze trends, isolate network problems, and find application response delays with ease

Using new VoIP and QoS, administrators can analyze IP telephony sessions and validate QoS policies

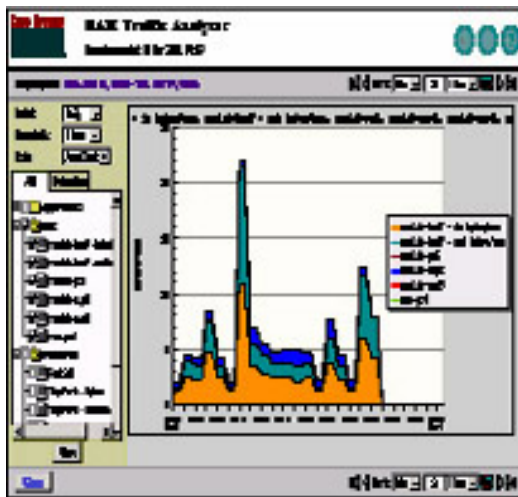
NAM in Cisco IT Currently Monitoring Data Center Networks



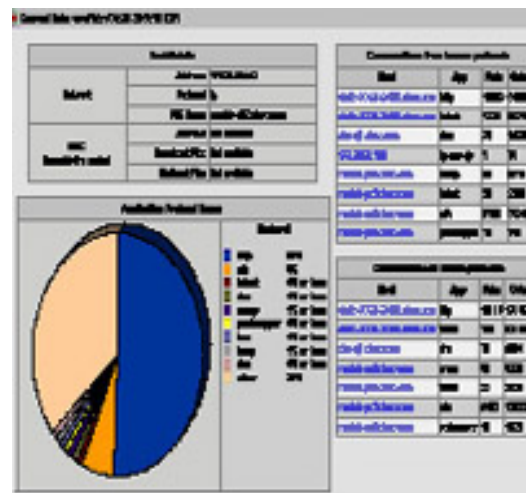
Results: NAM creates more visibility

- Administrators have far fewer problems in the request for packet captures

Examples of NAM Reports:



Historical Traffic Analysis



Application Monitoring By Host

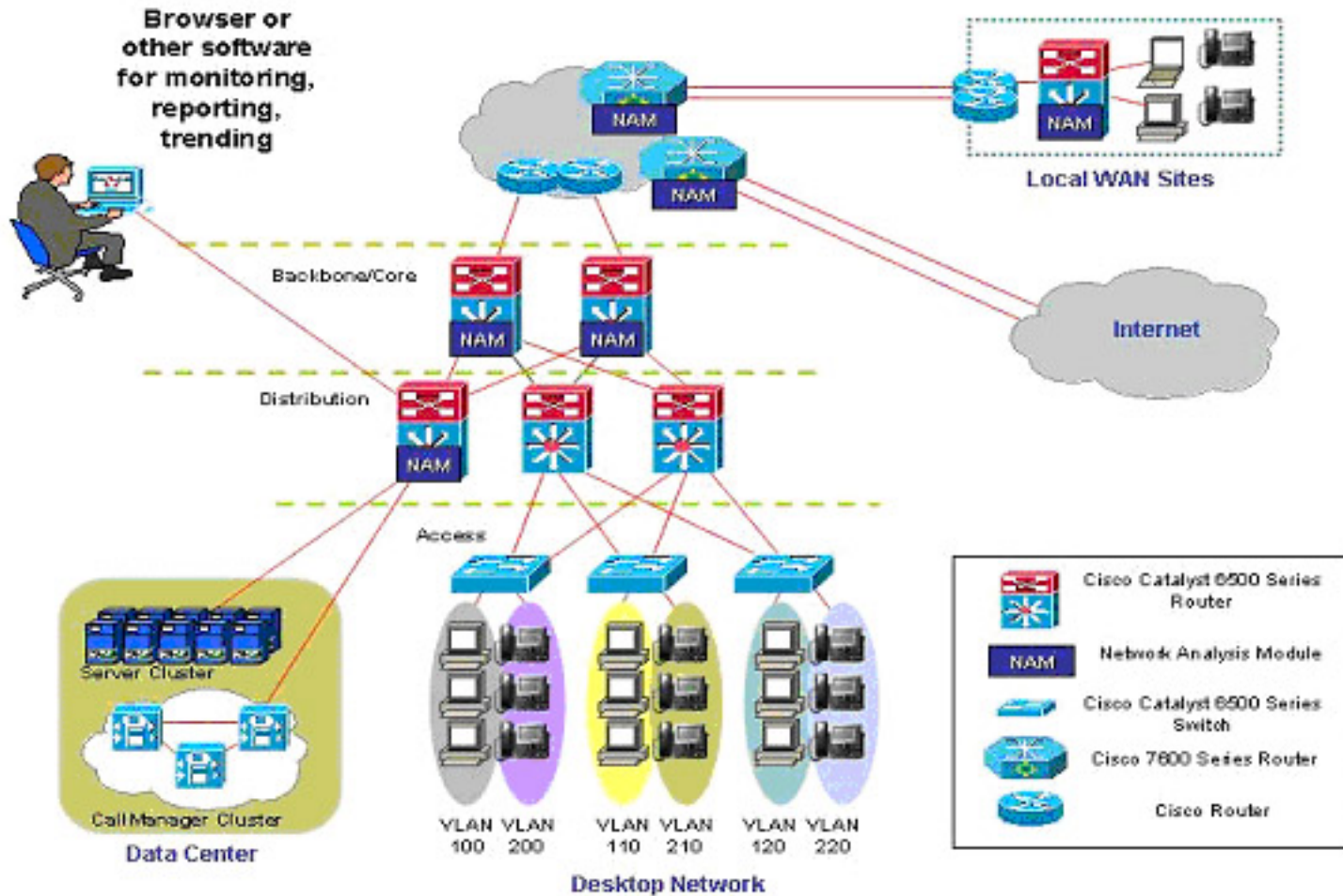
The screenshot shows the 'Voice Alarms' configuration window. It contains two sections for configuring alarms. The first section is for 'S00P' and the second for 'H.323'. Each section has checkboxes for 'Jitter Threshold (ms)' and 'Pkt Lost Threshold (%)' with corresponding input fields. The 'Apply' and 'Reset' buttons are at the bottom right.

Alarm Thresholds

Next Steps: Continue to develop NAM for further adoption

- Develop a comprehensive, next-generation picture of the network to anticipate what it will be doing, and how it will be managed
- Install NAM in both Internet environments, Cisco CCO and Cisco.com
- Plan for worldwide adoption, starting with the Asia-Pacific region and Europe
- Use NAM data to help troubleshoot VoIP traffic
- Find Network management software to analyze data from various sources to gain a complete view of traffic across the network

Proposed Future NAM Architecture: Monitoring Data Centers, Internet Access and selected WAN links



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