Cisco NAM Provides Visibility into Traffic and Performance at CiscoLive Barcelona 2010

Cisco Network Analysis Module (NAM) improves operational efficiency at the CiscoLive event by providing in-depth analysis of traffic statistics, application performance, and voice quality.

| EXECUTIVE SUMMARY |
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| **Customer Name: CiscoLive Barcelona 2010**
• Industry: Educational Events
• Location: Barcelona
• Network Size: 119 routers, 2 core switches
• Network Users: 3000+ |

Business Challenge

Unlike traditional corporate networks, the CiscoLive network is built up and fully operational in a matter of days. The CiscoLive network offers many advanced services including Cisco TelePresence™, video surveillance, IPv6, and voice over IP. The network provides connectivity for the various Cisco and partner technology demonstrations, labs, streaming video of the technical sessions, and wireless access for all the attendees. With so many activities dependent on the network, the availability, reliability, and performance of the network are crucial to the success of the event. Hence, from a network operations perspective, visibility into network usage and performance is critical.

Solution and Results

The Cisco NAM SVC-NAM-2 service module running NAM 4.1 software was installed in the core Catalyst® 6500 Switch to deliver granular traffic analysis, rich application performance measurements, comprehensive voice quality monitoring, and deep insightful packet captures to help monitor and troubleshoot network performance. See Figure 1.

Figure 1.   The Top Applications by Byte Count at CiscoLive
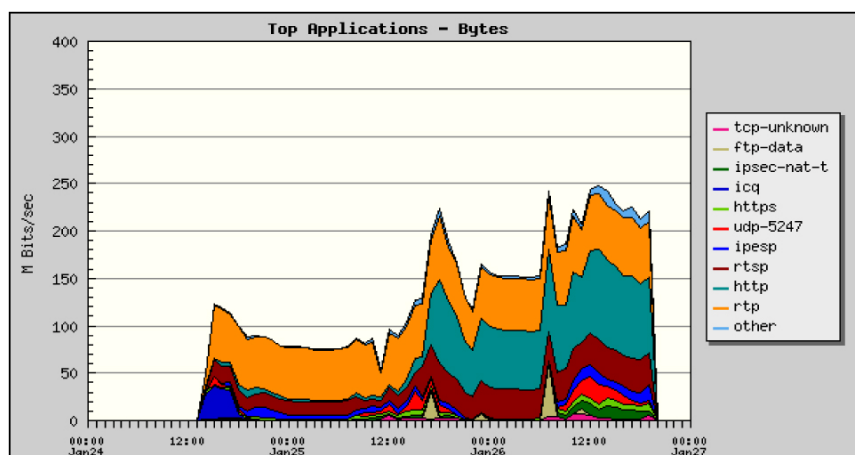
The CiscoLive network had 42 VLANs configured. There were different VLANs for users, partners, demos, labs, voice, wireless, management, and so on. Traffic from all 42 VLANs, with a total of about 300 Mbps, was set up to be sent through the Switched Port Analyzer (SPAN) to the NAM for analysis using the integrated data source configuration menu available in the NAM web-based GUI. Various monitoring capabilities, such as core monitoring, voice and RTP steam monitoring, response time monitoring, Differentiated Services (DiffServ) monitoring, URL monitoring, and chassis parameter (switch health and port stats) monitoring was enabled on the NAM. The NAM

configuration GUI makes it very easy to set up VLAN SPAN sessions and enable monitoring of traffic, so in less than 10 minutes the NAM is ready to begin analyzing the network.

- NAM provided continuous real-time monitoring of all the traffic flowing through the network core.
- URL monitoring provided hit rates for the servers hosting CiscoLive content as well as other most accessed sites on the Internet, such as Facebook.
- VLAN monitoring provided insights into individual VLANs as well as traffic volume per VLAN. This was helpful in containing bandwidth-intensive product demonstrations.
- NetFlow monitoring provided visibility into parts of the network running IPv6 traffic.
- Application performance monitoring for critical web servers helped pinpoint network latency issues.
- Voice quality monitoring provided visibility into quality of voice calls and RTP streams.

Cisco NAM provided real-time monitoring for the network at CiscoLive Barcelona 2010. NAM helped ensure exceptional network performance by providing visibility into all data, voice, and video traffic, as well as into key performance indicators. NAM's easy-to-use troubleshooting capabilities provided the necessary tools to improve Mean Time to Repair (MTTR) for any network issues. Cisco NAM was integrated with Cisco Unified Service Monitor (CUSM) and CiscoWorks LAN Management Solution (LMS) for end-to-end manageability of the entire network.

Business Benefits Achieved

- Single-point visibility into all 42 VLANs and all 300 Mbps of data flowing through the network core
- Detailed monitoring of critical web server performance, as well as quality of voice calls
- Integrated solution along with CiscoWorks LMS and Cisco Unified Communications Management Suite

Call to Action

Visit http://www.cisco.com/go/nam to learn about the Cisco NAM solutions and how Cisco NAM can benefit your customers in solving their operational issues arising from lack of traffic visibility.

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