

How Cisco IT Uses NetFlow to Improve Network Capacity Planning

Network management capacity planning saves money and improves performance across Cisco.

BUSINESS BENEFITS

- A structured network capacity planning process
- Improved deployment management
- Of the featured solution
- Increased employee satisfaction
- Better relationships with other internal organizations

“Essentially, we turned on NetFlow with no negative impact on the network. It didn’t create memory problems on routers, and it didn’t clog bandwidth circuits by behaving invasively. There were other positives, too.... We saved money, because we no longer had the operational overhead of probes, and we had highly accurate information.”

– Keith Brumbaugh, Cisco IT Global Network Engineer

Of all the issues faced by enterprise companies in managing their networks, capacity planning is one of the most important. More an art than a science until recently, network capacity planning is all about balancing user performance expectations against the realities of capital budgeting.

Starting in 2000, bandwidth requirements at Cisco Systems® began to double every 12 to 18 months, degrading performance on established circuits. Driving bandwidth consumption were voice over IP and video on demand, which share the network with more conventional business applications. Though IT knew that traffic was increasing exponentially and that actual usage was not in line with expectations, it did not have access to the level of detail necessary to understand the true nature of problem. This made it almost impossible to make informed decisions.

Cisco® developed a structured process for planning bandwidth requirements—categorizing network traffic as legitimate, inappropriate,

or unwise, and setting sizing and utilization thresholds. Network capacity planners then deployed Cisco IOS® NetFlow technology and selected third-party solutions to monitor, analyze, and report on traffic across the Cisco network infrastructure.

A clearly established, proactive planning process has allowed to Cisco to upgrade its network infrastructure based on solid performance information. Network upgrades have become business decisions rather than ad-hoc responses to employee dissatisfaction.

Cisco capacity planners can now prioritize and manage deployments better—delivering bandwidth before performance deteriorates. The planning process has also made it easier to understand the impact of application rollouts. The result has been a better relationship with the application team—both groups can better plan and budget activities that affect each other’s operations.

Case Study: http://www.cisco.com/en/US/about/ciscoitwork/case_studies.html

FOR MORE INFORMATION

To read the entire case study or for additional Cisco IT case studies on a variety of business solutions, visit Cisco on Cisco: Inside Cisco IT www.cisco.com/go/ciscoit

NOTE

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Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
168 Robinson Road
#28-01 Capital Tower
Singapore 068912
www.cisco.com
Tel: +65 6317 7777
Fax: +65 6317 7799

Europe Headquarters
Cisco Systems International BV
Haarlerbergpark
Haarlerbergweg 13-19
1101 CH Amsterdam
The Netherlands
www-europe.cisco.com
Tel: +31 0 800 020 0791
Fax: +31 0 20 357 1100

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