CHAPTER 1

Business Overview

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Introduction

Enterprise networks are carrying a growing volume of both business and recreational web traffic. Often business applications, including cloud applications such as Cisco WebEx, use the same HTTP and HTTPS protocols used by recreational web traffic. This complicates the task of optimizing network performance.

To optimize network performance and define policy for each of the applications utilizing the network, administrators need detailed visibility into the different types of applications running on the network.

The Cisco Application Visibility and Control (AVC) solution offers truly innovative and powerful capabilities of application awareness in enterprise networks. AVC incorporates into the routing devices application recognition and performance monitoring capabilities traditionally available as dedicated appliances. This integrated approach simplifies network operations, maximizes the return on network investments, and reduces the total cost of ownership.

With application awareness built into the network infrastructure, plus visibility into the performance of applications running on the network, AVC enables per-application policy for granular control of application bandwidth use, resulting in a better end user experience.

Business Use Case

The following use case illustrates how Cisco AVC can improve the user experience.

A user asks: "Why is Exchange running so slowly?"

IT engineers need answers to questions such as:

- Is Exchange actually running slowly? What are the users seeing?
- Where is the delay: branch LAN, WAN, data center LAN, or server?
- If the delay is in the network, why?
  - Is there a problem with network quality?

    or
  - Are less critical types of traffic, such as device software upgrades or even streaming sporting events, crowding out the important business traffic?

To solve the problem, IT engineers need to determine the best option. Cisco AVC offers tools to help find the best option.

- De-prioritize or block competing non-critical traffic.

  Cisco QoS tools can help.
- Send different applications over different routes.

  Cisco Performance Routing (PfR) can help.
- Squeeze more traffic over the same WAN links.

  Cisco Wide Area Application Services (WAAS) WAN optimization can help.
- Reduce apparent application latency over the WAN.

  Cisco Wide Area Application Services (WAAS) application acceleration can help.

  Or...
- Need to add more capacity?

  Cisco AVC integration with management and reporting tools, such as Cisco Prime Infrastructure, can help provide the data needed for planning new capacity.