

Last updated: April 2008

## Introduction

### What Is the Cisco WAN and Application Optimization Solution?

The Cisco® WAN and application optimization solution is a set of tools and techniques working together to improve the reliability, performance and delivery of applications securely across a corporate network.

### What Problems Does It Solve?

Businesses depend on application software to get the job done. Business suffers when application performance is diminished or when networks do not deliver optimal application performance. At the same time, the workforce is increasingly located outside headquarters. Server and application consolidation presents performance issues, and the volume of data is increasing. Information Technology (IT) organizations face new challenges to provide LAN-like response time over the corporate WAN.

The issue is significantly worse in these dynamically changing IT environments. New users and applications are constantly added, and the network infrastructure continually changes. Do you know what applications are running on your network? Do you have the right tools to discover changes and have end-to-end visibility to function in these dynamically changing environments? The Cisco WAN and application optimization solution is designed to improve application performance and delivery to meet changing and expanding business needs.

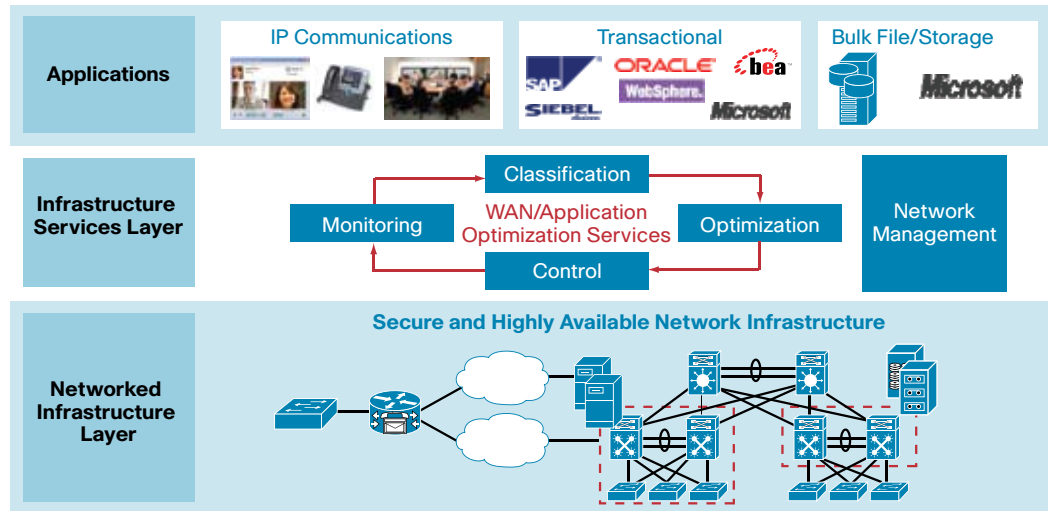
### The Cisco Vision

Cisco empowers network managers to deploy critical business applications on integrated networks to increase productivity and gain competitive advantages.

Cisco delivers advanced, integrated WAN and application optimization solutions to support a broad set of applications with different requirements, from IP communications to transaction-oriented applications. Cisco continues to add optimization techniques and delivers the "network as the platform" vision. This means that the network is becoming increasingly intrinsic to the performance of applications.

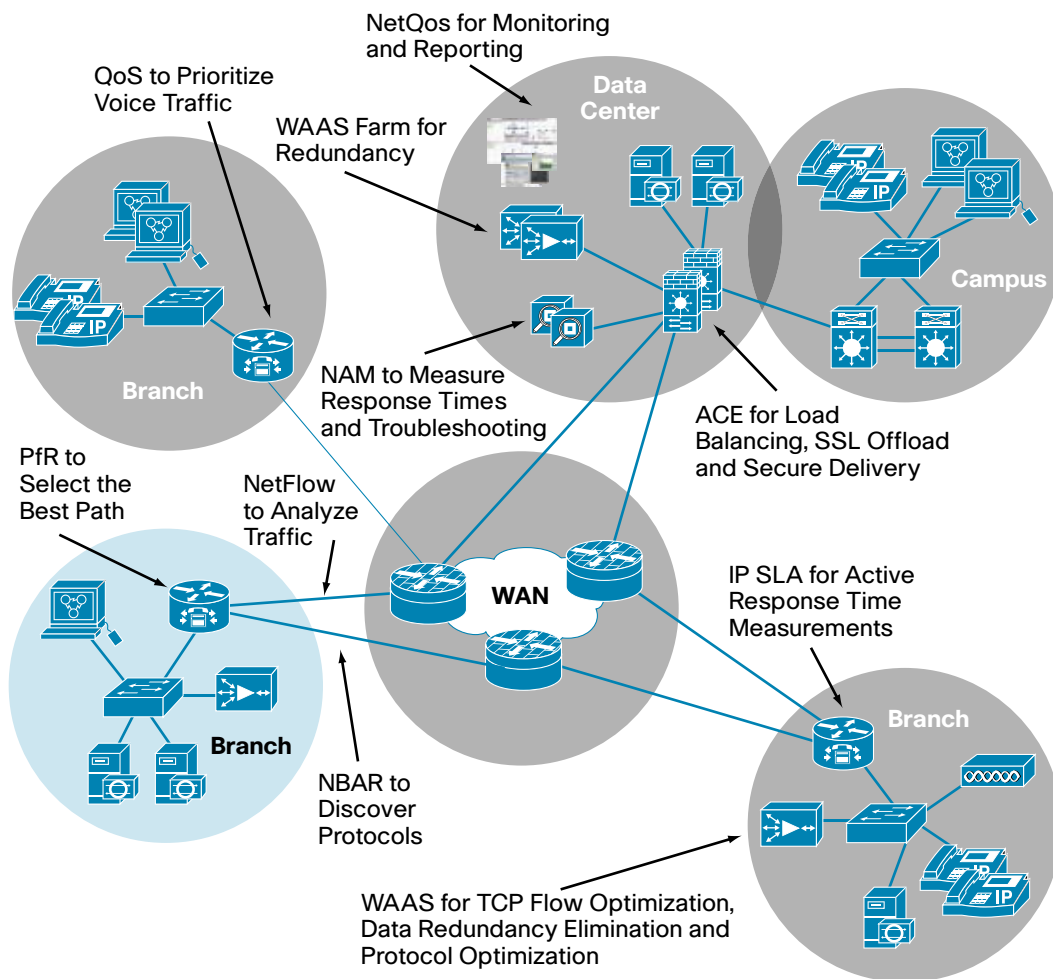
Security directly affects network and application performance. A complete, holistic solution delivers more than just comprehensive WAN and application optimization capabilities, and also involves cooperation with security components to protect your business against disruption. Cisco offers such a network-based systems approach.

Figure 1 WAN and Application Optimization Framework



Architectural Component	Component Properties	Customer Benefits
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>Successful application delivery requires IT organizations to continuously identify the applications running on the network and support business goals.</li> <li>IT organizations must help ensure acceptable performance of the applications that are relevant to the business while controlling irrelevant applications.</li> </ul>	<ul style="list-style-type: none"> <li>Deliver business continuity</li> <li>Meet expanding and changing business need.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>An intelligent network must be an active participant in application delivery. The network must be application aware to assess and control application performance and be able to automatically discover applications running on your network.</li> </ul>	<ul style="list-style-type: none"> <li>Obtain End-to-end visibility to function in these dynamically changing IT environments.</li> </ul>
<b>Optimization</b>	<ul style="list-style-type: none"> <li>A variety of techniques and tools are applied to network traffic to dramatically improve application performance and availability, decrease latency, improve bandwidth utilization, and provide security.</li> </ul>	<ul style="list-style-type: none"> <li>Obtain optimal application performance.</li> <li>Avoid or delay costly bandwidth upgrades.</li> <li>Maximize your return on network investment.</li> </ul>
<b>Control</b>	<ul style="list-style-type: none"> <li>Quality of Service and traffic management techniques help ensure that business-critical traffic is not negatively affected by less important traffic and apply controls to conform with established business policies and priorities.</li> </ul>	<ul style="list-style-type: none"> <li>Prioritize application traffic to meet and reflect the importance of the business objectives.</li> <li>Meet critical service level agreements.</li> </ul>
<b>Network Management</b>	<ul style="list-style-type: none"> <li>Management tools are used to gather application and network performance information from the network and generate comprehensive reports to provide visibility into applications and the network.</li> <li>Configuration management tools are also used to centrally define policies and perform system-based change and configuration management.</li> </ul>	<ul style="list-style-type: none"> <li>Assess the IT infrastructure, helping ensure optimal performance given the business needs.</li> <li>Obtain operational efficiency to support ongoing changing business needs.</li> <li>Ability to effectively troubleshoot problems.</li> </ul>

Figure 2 Places in the Network



## Summary

The data center and branch are the primary places in the network where WAN and application optimization solutions are deployed. As the Cisco WAN and application optimization solution evolves, it will touch more places in the network.

A “network as a platform” approach uses the network to identify applications on your network, gains end-to-end visibility, optimizes applications, and controls and protects business-critical traffic. The solution provides a design baseline and is tested and documented to support reliable predictable customer deployments. The systems approach provides an application delivery foundation with which you can easily add advanced optimization technologies and keep up with changing business objectives.

The “network as a platform” approach enables customers to continue using their Cisco IP network assets, resulting in substantial savings for customers. With a superior breadth and depth of offerings and expertise in data networking, Cisco offers a network-based, end-to-end systems approach.

## For More Information

For more information, visit <http://www.cisco.com/go/wanopt> or send e-mail to [info-wanopt@cisco.com](mailto:info-wanopt@cisco.com).