Performance Summary

- Achieve up to 22 times improvement for Lotus Notes
- Reduce bandwidth utilization by 95 percent or more for Notes Applications
- Restore full collaboration using Notes in a WAN environment

Test Scenario

These tests were performed using a Windows XP client with Notes version 7 retrieving files from a Domino server hosted on Windows 2003 server. The tests were run on a simulated WAN of 256Kbps with 40ms latency.

- For the cold test, the starting condition is no traffic has passed through the Blue Coat yet.
- For the warm test, the starting condition is same or similar traffic has already passed through the Blue Coat once.

Blue Coat Accelerates and Optimizes Lotus Notes

Lotus Notes is mission critical enterprise application that provides email, messaging, web browsing, database, collaboration and file sharing in a distributed environment. However, using Lotus Notes over a WAN link with limited bandwidth and high latency destroys the rich collaborative environment, reducing user productivity. Blue Coat appliances accelerate Lotus Notes by reducing the effects of latency and eliminating repetitive data transferred over the WAN to enable greater productivity and network utilization.

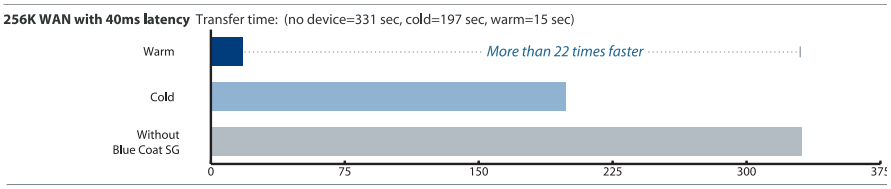
Lotus Notes over the WAN

Lotus Notes is a distributed client server application comprised of two major pieces, Notes and Domino. Notes is the client front end application for all users, while Domino is the back end server hosting applications and data. Domino server is a multi functional application platform that can operate as a web, email, database, file, or application server, and even map to other commercial databases. Lotus Notes typically connects to a Domino server on port 1352.

A strength of Notes and Domino is its replication capabilities and the ability for clients to continue to use and update data even when disconnected from their server. Clients and Servers can synchronize data as they become online, through either manual, automatic or scheduled replication. Replication of Notes data can be especially demanding over the WAN, but is frequently composed of similar and repetitive data.

Performance Results

To simulate the network impact of Notes, this test used Notes to open and retrieve a 10MB document.. ProxySG appliances reduced the transfer time by over 90%, and decreased bandwidth usage by up to 95% over a 256Kb WAN with 40 ms latency.



How Blue Coat Accelerates and Optimizes Lotus Notes

Blue Coat's MACH5 byte caching and compression technologies, in combination with TCP enhancements and bandwidth management, improve and accelerate Lotus Notes by eliminating redundant data over the WAN and round trip latencies. Notes applications, whether it is email, web, or database contain compressible and repetitive elements which respond extremely well to MACH5 byte caching and compression technologies. Additionally, the Blue Coat solution also provides the ability to employ bandwidth management/QoS for any class of traffic to be appropriately prioritized in alignment with the needs of the organization.

Blue Coat Benefits

Improve user productivity, reduce bandwidth usage

Byte caching, combined with TCP level optimizations, significantly improves user productivity with Notes while conserving bandwidth.

Improve Notes Replication

Deploy Blue Coat to efficiently replicate Notes data and databases between clients and servers, or server to server replication.

Remove unwanted traffic

Deploy Blue Coat to unclog your networks by removing business irrelevant and malicious web traffic.

Secure the WAN

Blue Coat provides granular and flexible policy to enforce your company's security requirements. Furthermore, Blue Coat provides the ability to secure and encrypt all data over the Application Delivery Network.

About Blue Coat MACH5 Acceleration Technology

Blue Coat MACH5 technology is a patent-pending combination of five separate application management and tuning technologies that provide unrivaled improvements in application performance and bandwidth utilization. Whether at the edge of your network, or right in the heart of it, MACH5 technology provides a powerful toolkit for meeting any application delivery challenge. These technologies include:

Bandwidth Management

Assign priority and network resources based not only on port or device, but on users, applications and content to more accurately reflect your corporate policies on the network. Works by itself, or integrates with your infrastructure QoS to provide application intelligence to the packet switching network.

Protocol Optimization

Improves the performance of protocols that are inefficient over the WAN through specific enhancements that make them more tolerant to the higher latencies typically found there. Blue Coat has been optimizing network protocols for over a decade, and offers multiple improvements for TCP, CIFS, HTTP, HTTPS, MAPI and most streaming video and IM protocols.

Byte Caching

Cache repetitive traffic found in the byte stream and serve it locally to reduce the amount of traffic that actually uses the WAN at all. Works like a customized compression algorithm for your network traffic, and leads to dramatic bandwidth savings.

Object Caching

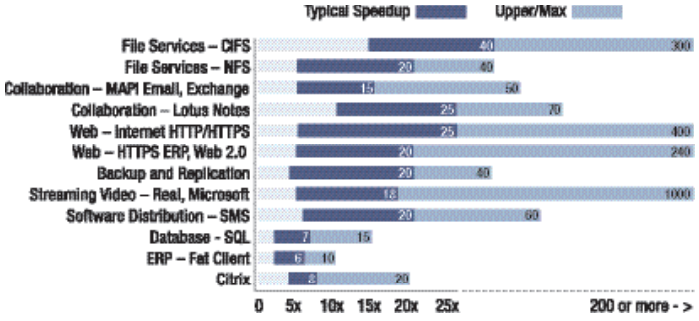
Store files, videos and web content locally, providing LAN-like performance for WAN users, without the overhead and risk of traditional wide area file services. For content delivery, no technology does more to reduce latency and bandwidth to improve the end user experience.

Compression

Inline compression can reduce predictable patterns even on the first pass, making it an ideal complement to byte caching technology.

About the Blue Coat ProxyClient

ProxyClient builds on Blue Coat's secure web gateway and acceleration technologies to extend application delivery to the desktop. Using MACH5 technology, including caching, compression and protocol optimization, ProxyClient accelerates web and office applications for roaming and small branch users. ProxyClient delivers LAN-like user experience and Blue Coat web filtering with a simple and easy footprint for installation, configuration, deployment and ongoing maintenance.



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