

### Performance Summary

- › Improve file retrieval by more than 100 times, in seconds instead of minutes
- › Reduce bandwidth utilization by 95% or more, depending on the operation (95% for modified content, 99% for static content)
- › Blue Coat MACH5 securely accelerates all Office SharePoint Server 2007 operations (including the retrieval of training videos and recorded announcements)
- › Blue Coat MACH5 can accelerate Office SharePoint Server 2007 operations, regardless of the protocol used – even when encrypted by HTTPS/SSL

### Test Scenario

These tests were performed with Office SharePoint Server 2007 installed on Windows 2003 Server, using a client with XP SP2. The tests were run on a simulated 1.544Mbps (T1) WAN link with 100ms latency.

- › Cold test, starting condition: no traffic has passed through Blue Coat appliances.
- › Warm test starting condition: the same or similar traffic has already passed through the Blue Coat appliances once.

## Blue Coat Accelerates and Optimizes Office SharePoint Server 2007

IT organizations need to ensure that global users in distributed enterprises effectively collaborate and remain productive, while also ensuring they are able to manage important documents and files from a central location. Integrating customer and partner information into the corporate workflow and process is an even more difficult task, requiring that users outside of the organization are granted access. Office SharePoint Server 2007 helps with these tasks, but slow WAN links and degraded performance detract users from adopting the software and processes. Blue Coat Systems provides an end-to-end solution based on MACH5 technology to regain performance, minimize bandwidth usage, and significantly reduce the time to complete all SharePoint Server 2007 operations, whether it is for information or content management, collaboration and workflow, or the integration of customer and partner information during the proposal process.

### Microsoft SharePoint Server over the WAN

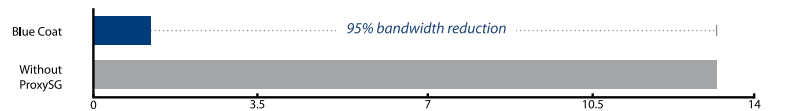
Microsoft Office SharePoint Server 2007, also called Office SharePoint Server 2007 and Team Server, provides a consistent interface that simplifies how users interact with content, processes, and business data. Everyday business activities, such as document review and approval, issue tracking, and signature collection, are tightly integrated with familiar client applications, e-mail, and Web browsers.

However, these same tasks for remote users over a WAN, with reduced bandwidth and high latency, causes performance to severely degrade, slowing the adoption of business processes. While there are many uses cases for Office SharePoint Server 2007, common user scenarios include posting documents for review, or posting a file for sharing. As an example, opening a 6MB file stored on a remote Office SharePoint Server 2007 can take minutes instead of seconds since the entire 6MB file needs to be downloaded. Modifying the file or adding comments to it will take the same amount of time to save - all 6MB still needs to be transferred - even though most of the file will not have changed.

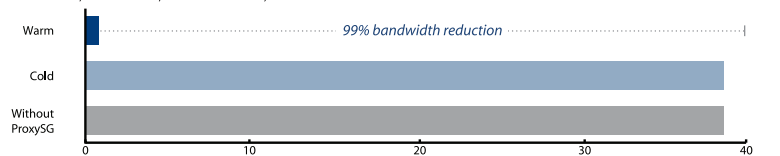
### Performance Results

In a test using Office SharePoint Server's "file edit" feature to open, edit and save a 6MB MS Word document, Blue Coat ProxySG appliances reduced the bandwidth utilization by 95%. In another test for retrieving a 39MB training video, Blue Coat ProxySG appliances reduced the file retrieval time by more than 100 times, and decreased bandwidth usage by over 99%.

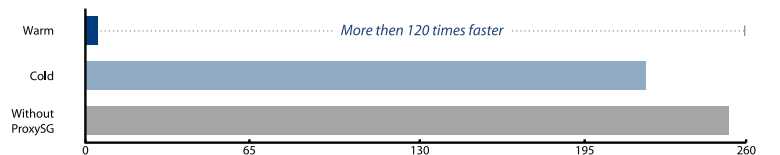
**"Edit and Save" of a 6MB MS Word file over a 1.544 Mbps (T1) WAN with 100ms latency:**  
Bandwidth Used: (without=13.3 MB, with=0.85MB, 95% reduction)



**39 MB training video download, 1.544 Mbps (T1) WAN with 100ms latency:**  
Bandwidth used: (without=39 MB, Cold=39 MB, Warm=0.072 MB)



**Time Taken: (without=251 secs, Cold=230 secs, Warm=2 sec)**



## How Blue Coat Accelerates and Optimizes Office SharePoint Server 2007

Blue Coat's MACH5 (Multiprotocol Accelerated Caching Hierarchy) Application Delivery Network improves and accelerates all Office SharePoint Server 2007 operations and tasks. Object caching, byte caching and compression technologies allows Sharepoint users to access content and



**Blue Coat Benefits**

**Improve User Productivity**

Protocol optimizations, object caching and byte caching significantly reduce the time required to complete all SharePoint operations.

**Reduce Bandwidth Usage**

Object caching, byte caching and compression significantly reduce the amount of traffic over the WAN.

**Reduce Server Utilization**

Object caching and protocol optimizations reduce the load on the server, allowing for greater scalability and ROI.

**Secure and Easy Deployment**

Integrate securely with your IT infrastructure, even offloading authentication features from the Office SharePoint Server.

**QoS and Bandwidth Management**

Deploy Blue Coat to intelligently prioritize and bandwidth-shape SharePoint Server traffic relative to other business-critical traffic.

complete tasks in seconds instead of minutes, and reduces bandwidth utilization by up to 99%. When combined with protocol optimizations, nothing does more to offload application servers and provide users with a LAN-like experience. Users can now complete all SharePoint tasks and operations over a WAN in seconds, for large file retrievals as well as file edits or modifications. Additionally, the Blue Coat solution also provides the ability to employ bandwidth management/ QoS (Quality of Service) for any class of traffic to be appropriately prioritized.

**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.

