Performance Summary

- Improve Microsoft App-V performance by 80% or more.
- Reduce bandwidth utilization by 98% or more, depending on the application size and network speed.
- Blue Coat makes App-V WAN deployments a reality.
- Blue Coat MACH5 can add security while accelerating RTSP or HTTP via SSL, encrypting the communication between ProxySGs on the WAN.

Test Scenario

These tests were performed between The App-V Server and the Desktop Clients. The tests were run on simulated T1 (1.544Mbps) ethernet links with 100ms latency.

- Cold (baseline) 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 Virtualized Applications for Remote Users

Microsoft Application Virtualization for desktops allows IT organizations to centrally manage their application portfolio. However these new technologies leave a heavy performance burden on expensive WAN network links and remote branch office users. Blue Coat provides the application delivery network that accelerates and optimizes the deployment of App-V virtualized applications, resulting in network cost savings and improved employee productivity for remote users. Together, Blue Coat ProxySG and Microsoft App-V reduce the cost and complexity of managing desktop applications by optimizing virtual application delivery over the WAN while avoiding costly bandwidth upgrades.

Microsoft App-V Overview

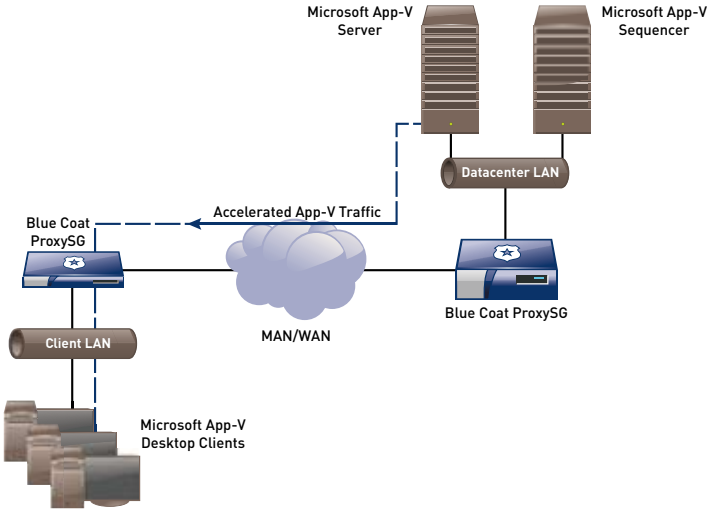
Microsoft Application Virtualization lets you deploy, update and support applications as services in real time, on an as-needed basis. When you use App-V, you transform individual applications from locally installed products into centrally managed services. Applications become available everywhere they need to be – no computer pre-configuration or changes to operating system settings are required. Microsoft App-V streams these applications over common HTTP & RTSP protocols.

Blue Coat Solution

IT organizations can combine the benefits of Blue Coat's application delivery network (ADN) solution and Microsoft App-V virtual applications to drastically reduce the time taken to stream applications from a central office App-V server to end users in remote branch offices or roaming road warriors.

Test results show that Blue Coat ProxySG products significantly accelerate the streaming of App-V applications for remote branch office users. Accessing applications was more than 30 times faster with ProxySG appliances and bandwidth utilization was reduced by over 99%.

Although App-V provides in-built caching for the application on the desktop, it is important to note that Blue Coat provides the second degree of caching benefits for a multi-user branch office, where the same user streaming a virtual application gets the benefit of a "warm" App-V cache hit, but the rest of the users in the branch office streaming the virtual application get the benefits of a "warm" Blue Coat cache hit.



The tested Blue Coat solution was deployed as shown in the above diagram

How Blue Coat Accelerates and Optimizes Microsoft App-V

Blue Coat's MACH5 (Multiprotocol Accelerated Caching Hierarchy) Application Delivery Network improves and accelerates Microsoft App-V. Byte caching and compression technologies reduce bandwidth utilization by up to 95% allowing data transfers to complete in minutes or seconds instead of hours. When combined with protocol optimizations to ensure full utilization of the link immediately regardless of the software's TCP behavior or packet loss on the WAN. The Blue Coat solution is also the only solution capable of integrating into your existing IT infrastructure, allowing for flexible authentication and deployment options.

Blue Coat Benefits

Reduce Bandwidth Usage

Byte caching and compression significantly reduce the time required to complete file and data retrieval.

Reduce Server Utilization

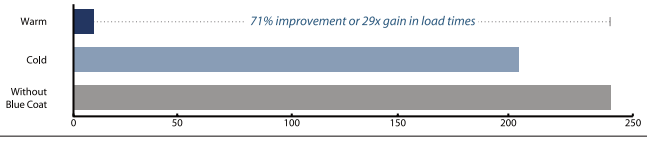
MACH5 Acceleration reduces load on the server, offloading transfer buffering from the server's to the ProxySG, allowing for greater scalability and ROI.

Secure and Easy Deployment

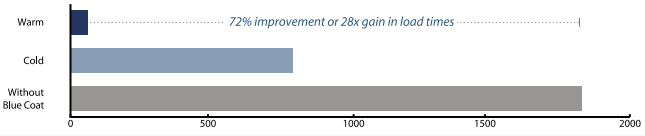
Integrate securely with your IT infrastructure.

Performance Results (Using HTTP and Simulated T1)

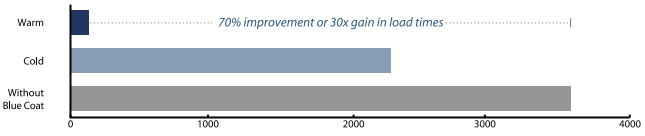
Word Viewer (39MB) Load Times - HTTP
Measurement = time in seconds: (without=242 secs , cold=202 secs, warm=8 secs)



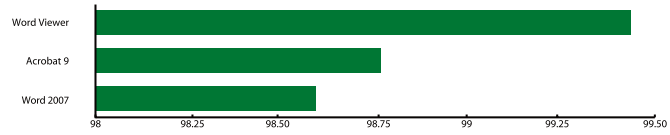
Acrobat 9 (324MB) Load Times - HTTP
Measurement = time in seconds: (without=1803 secs , cold=785 secs, warm=64 secs)



Word 2007 (654MB) - HTTP
Measurement = time in seconds: (without=3607 secs , cold=2244 secs, warm=120 secs)

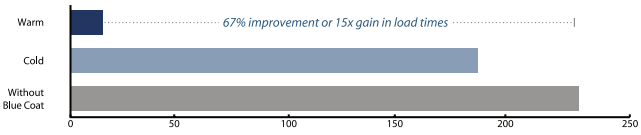


Network Bandwidth Savings - HTTP
Measurement = reduction

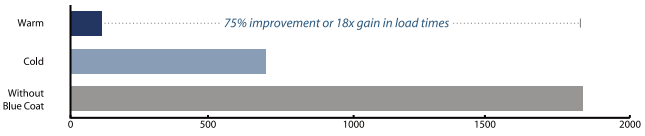


Performance Results (Using RTSP and Simulated T1)

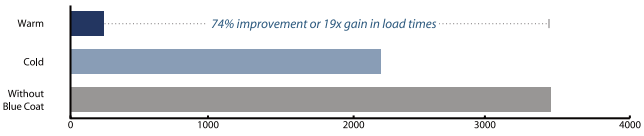
Word Viewer (39MB) Load Times - RTSP
Measurement = time in seconds: (without=227 secs , cold=190 secs, warm=15 secs)



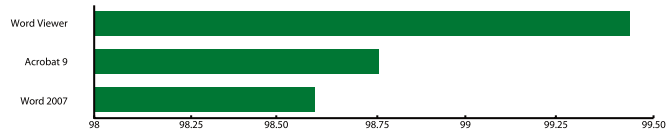
Acrobat 9 (324MB) Load Times - RTSP
Measurement = time in seconds: (without=1830 secs , cold=689 secs, warm=100 secs)



Word 2007 (654MB) - RTSP
Measurement = time in seconds: (without=3705 secs , cold=2202 secs, warm=191 secs)



Network Bandwidth Savings - RTSP
Measurement = reduction



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