

## Cisco Wide Area Application Services Performance Optimization for SolidWorks

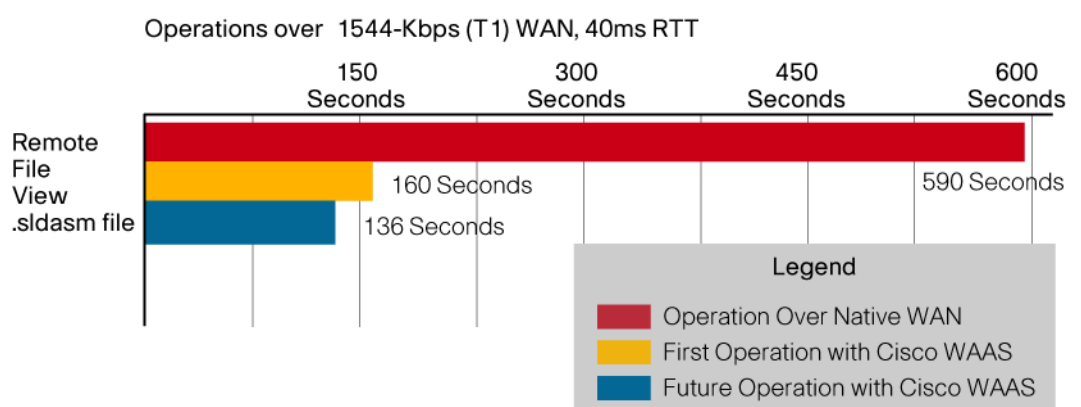
The SolidWorks family of 3D CAD applications, like many applications, is subject to degrading performance when used in Wide Area Network (WAN) environments. When deployed in Local Area Network (LAN) environments, SolidWorks performs exceptionally well. However, when used in a WAN environment, SolidWorks performance characteristics are dramatically worse. Cisco WAAS is able to significantly improve the performance of SolidWorks over the Wide Area Network (WAN) by removing the effect of latency, eliminating redundant data from the network, and compressing non-redundant traffic.

### How Cisco WAAS Optimizes SolidWorks

Cisco Wide Area Application Services (WAAS) provides powerful WAN optimization and application acceleration technologies that can improve the performance of almost any TCP-based application over the WAN, including SolidWorks. The Cisco WAAS solution provides LAN-like performance across the WAN through a combination of technologies, including:

- Application acceleration—Mitigate latency and bandwidth through advanced protocol optimizations, including read-ahead, message prediction, and caching.
- Throughput optimization—Improve behavior of transport protocols to make them more efficient in WAN environments.
- Bandwidth optimization—Minimize the transmission of redundant data patterns through data redundancy elimination (DRE) and compression.

**Figure 1.** SolidWorks image view over a WAN connection.



### Performance Results

As shown in Figure 1, Cisco WAAS significantly improves the time that it takes to open and view an image across a Wide Area Network (WAN). A 77% reduction in time to open an image resulted in significant improvement in end-user satisfaction and development productivity, while enabling centralization and consolidation of images.

## Summary

The SolidWorks family of 3D CAD applications allows product designers and manufacturers to get quality products to market faster at a lower cost. Cisco WAAS helps design engineering organizations consolidate these large images, improve throughput, and reduce WAN congestion as data is being transferred across geographically dispersed sites. With Cisco WAAS, access to centralized SolidWorks imagery and other systems is accelerated, thereby improving productivity and end-user satisfaction.



**Americas Headquarters**  
Cisco Systems, Inc.  
170 West Tauman Drive  
San Jose, CA 95134-1706  
USA  
www.cisco.com  
Tel: 408 526-4000  
800 653-1118 (toll-free)  
Fax: 408 527-0689

**Asia Pacific Headquarters**  
Cisco Systems, Inc.  
165 Robinson Road  
#28-01 Capital Tower  
Singapore 068912  
www.cisco.com  
Tel: +65 6317 7777  
Fax: +65 6317 7798

**Europe Headquarters**  
Cisco Systems International BV  
Hertofbergpark  
Hertofbergweg 13-19  
1101 CH Amsterdam  
The Netherlands  
www.europe.cisco.com  
Tel: +31 20 600 020 0/91  
Fax: +31 20 657 1100

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at [www.cisco.com/go/offices](http://www.cisco.com/go/offices).

©2007 Cisco Systems, Inc. All rights reserved. CDP, the Cisco logo, and the Cisco Square Bridge logo are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn is a service mark of Cisco Systems, Inc.; and Access Registrar, Aironet, EtherSwitch, Catalyst, CDA, CCIP, CCSE, CCSP, CDNA, CCNP, CCSP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Enterprise/Solver, EtherChannel, EtherFast, EtherSwitch, Fast Step, Follow Me Browsing, FormShare, GigaDrive, GigaStack, HomeLink, Internet Quotient, IQS, IPPhone, IP-TV, IQ Expertise, the IQ logo, IQ Net, Roadshow Sourcebook, iQuick Study, iStream, Linksys, Meeting Place, MGX, Networking Academy, Network Registrar, Packet, PIX, ProConnect, RaptorLX, ScriptShare, SlideCast, SMARTnet, StackWise, The Router, Way to Increase Your Internet Quotient, and Thousand are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (07012)