

## Cisco Wide Area Application Services Performance Optimization for SolidWorks

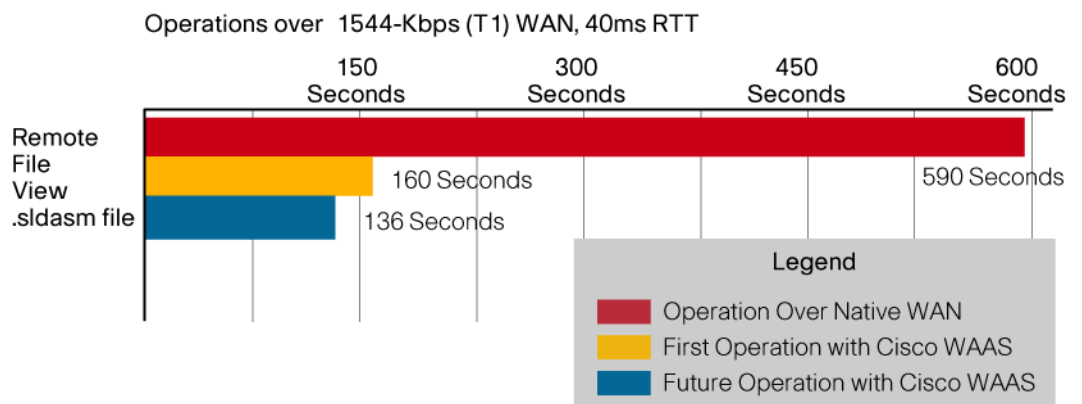
The SolidWorks family of 3D CAD applications, like many applications, is subject to degrading performance when used in Wide Area Network (WAN) environments. When deployed in Local Area Network (LAN) environments, SolidWorks performs exceptionally well. However, when used in a WAN environment, SolidWorks 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.

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## 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.

