

# Bissell Selects Cisco WAN Optimization Solution to Centralize and Accelerate Product Life Cycle Management Application

Cisco WAAS saves floor care innovator over \$40,000 a year per remote site in WAN bandwidth costs and productivity.

EXECUTIVE SUMMARY
<p><b>BISSELL HOMECARE, INC.</b></p> <ul style="list-style-type: none"> <li>• Floor Care</li> <li>• Grand Rapids, MI</li> <li>• 1,200 employees worldwide</li> </ul> <p><b>BUSINESS CHALLENGE</b></p> <ul style="list-style-type: none"> <li>• High WAN latency between offices in United States and China</li> <li>• Slow Product Life Cycle Management application and data replication performance</li> <li>• WAN bandwidth expense control</li> </ul>
<p><b>NETWORK SOLUTION</b></p> <ul style="list-style-type: none"> <li>• Cisco WAE-512 Wide Area Application Appliance</li> <li>• Cisco Wide Area Application Services (WAAS) Software</li> </ul>
<p><b>BUSINESS RESULTS</b></p> <ul style="list-style-type: none"> <li>• Over US\$40,000 a year in savings in WAN bandwidth costs and productivity</li> <li>• Up to 60x faster application response time</li> <li>• Decommissioned 60 percent of WAN bandwidth</li> </ul>

## Business Challenge

BISSELL Homecare, Inc. was founded in 1876 by Anna and Melville Bissell, who constructed an ingenious carpet sweeper machine designed to remove sawdust and other stubborn particles that clung to rugs. The carpet sweeper was patented in 1876, and in 1883 the first BISSELL manufacturing plant was built in Grand Rapids, Michigan. Today, the Grand Rapids-based BISSELL is a floor care innovator and international manufacturer of home cleaning products, including sweepers, vacuums, deep cleaning machines, and cleaning formulas sold at retail locations nationwide. The company is in its fourth generation of family leadership and is the seventh oldest, privately held manufacturing company in the United States.

BISSELL has a worldwide network with facilities in China, Korea, and Hong Kong, as well as locations in Europe, Canada, and Mexico. The business critical application is a Web-based Product Life Cycle Management (PLM) solution used for all R&D and product manufacturing purposes. The PLM is hosted from the U.S.-based central database and Web server, and is replicated to servers in China for consistent version control.

According to Paul Babcock, Manager of Network and Computer Operations, and Chris Cullings, Network and Database Administrator for BISSELL, it used to take 16-24 hours to replicate data from the central site in the United States to the local site in China. “During our migration to the PLM product, we had to move 50 gigabytes of data across the ocean,” says Cullings. “Since it was a single TCP connection, we could not even fill up the 5 Mbps pipe that we were paying for. Clearly, our latency problem was also causing low IT asset utilization performance issues.”

In addition to the WAN bandwidth utilization issue, remote employees in China are losing significant productivity due to slow Web-browsing experience using the PLM application. “Here in the U.S., it takes end users 1 second to refresh a page while in China it took 60 seconds to refresh the same page – a sixty times difference”, explained Chris Cullings, “We have decided to proactively solve the issues around data replication, asset utilization and application performance issues.”

**“WAAS clearly met our needs and is the most cost-effective solution among all alternatives that we evaluated.”**

—Paul Babcock, Manager of Network and Computer Operations, BISSELL Homecare, Inc.

## Network Solution

Babcock and Cullings began exploring a variety of WAN acceleration solutions to solve the latency problem at the China site. Performance, cost, and global support were the key selection criteria that Babcock and his team focused on during vendor selection.

After evaluating two other vendors, the team decided on the Cisco Wide Area Appliance Services (WAAS) solution, which enables BISSELL to maintain centralized control of the PLM application while still offering a significantly improved experience to users in China.

According to Cullings, implementing Cisco WAAS required no changes to switches and routers in the China site. “The inline modules for the 512 appliances were a great selling point, as our offices in China have their own managed network,” says Cullings. “The inline modules allow remote technicians to drop in the WAE 512 appliance between the router and switch with no configuration changes, and optimization starts working in just 15 minutes. One of the nice things about Cisco is, quite frankly, you can put it in and forget about it; it just works.”

Babcock also cites the lower support cost of the Cisco WAN solution along with the global 24-hour support as key deciding factors.

## Business Results

“The Cisco WAE-512 has dramatically sped up traffic between China and the United States,” says Babcock. “It now takes roughly 20 to 30 minutes to replicate data changes across the WAN, compared to a 5-6 hours before. The performance increase will be even greater if changes are more substantial. Remote users now can download a PLM web page in just 1 second, instead of the 60 seconds before – a 60 times improvement. In our tests, we found the performance of the Cisco solution to be equal to or better than alternative solutions from other vendors.

“We are able to de-commission 60 percent of the WAN bandwidth, dropping it from 5 Mbps to 1.5 Mbps thanks to Cisco WAAS. Also, we estimate that productivity gain will give us significant savings per year. Adding bandwidth and productivity savings, we can save US\$40,000 a year from a single site in China,” says Babcock.

### PRODUCT LIST

#### Cisco Application Networking Services:

- Cisco Wide Area Application Engine (WAE) 512 Appliance
- Cisco Wide Area Application Services (WAAS) Software

## Next Steps

The next WAN optimization project for BISSELL is a second facility in China, followed by a third location in Hong Kong.

“We are focusing on improving communications to that area of the world, and believe Cisco products will

continue to be better and faster than other vendor offerings. In addition, we expect to continue rolling out WAN optimization solutions to our other sites,” says Cullings. “The Cisco product roadmap gives us the confidence that Cisco will invest a fair amount into research and development. Some of the things that we are looking into are not applicable to us today, but will definitely benefit us in the future when we need to cross that bridge.”

## For More Information

Find out more about Cisco WAE and Cisco WAAS solutions, please visit  
<http://www.cisco.com/go/waas>.



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