


















## Cisco Wide Area Application Services Customer Benefits and ROI Examples





(Approved by Customers for Public Use)




Customer Name	Challenges	Solutions	Results
<b>Media/Telecom/Technology</b>			
	<ul style="list-style-type: none"> <li>Need a high-performance WAN between Beijing and NBC studios in New York and Los Angeles to carry video, voice and data</li> <li>Need to avoid employee and equipment transportation costs</li> </ul>	<ul style="list-style-type: none"> <li>12004/4 router creating a 450Mbps virtual pipe with QoS dedicating 400 Mbps to video, 20 Mbps to voice and 30 to data</li> <li>WAAS for accelerating centralized mission critical applications</li> </ul>	<p>“With WAAS, our film-editing software has 140 Mbps throughput compared to 35Mbps without WAAS. That makes it feasible for our editing people to work in multiple locations.”</p> <p>—<b>Harry Ryan, Network Architect, NBC Olympics</b> Click <a href="#">here</a> for detailed case study</p>
	<ul style="list-style-type: none"> <li>Server and storage sprawl across 100 branch offices</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for enabling server consolidation and maintaining LAN-like application performance</li> </ul>	<p><b>100 sites optimized:</b></p> <ul style="list-style-type: none"> <li>Consolidated branch servers from 100 sites</li> <li>Reduced 3.2 Terabytes data across the WAN between two main sites in one month</li> <li>Maintained LAN-like application performance</li> </ul>
	<ul style="list-style-type: none"> <li>Poor application performance across the WAN for accessing centralized data centers</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized mission critical applications</li> <li>Embedded WAN optimization with Integrated Services Router (ISR)</li> </ul>	<p>“With Cisco WAE in the ISR we now have WAN performance levels equal to the LAN at construction sites and distribution centers.”</p> <p>—<b>Georg Pessler, Delivery Portfolio Manager, Siemens</b> Click <a href="#">here</a> for case study</p>
<b>Manufacturing</b>			
 <p>Monsanto Company is a leading global provider of technology-based solutions and agricultural products that improve farm productivity and food quality</p>	<ul style="list-style-type: none"> <li>Poor Microsoft Sharepoint performance across the WAN impacts global R&amp;D collaboration and time to market</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized Microsoft Office Sharepoint Server 2007</li> </ul>	<p>Average Sharepoint response time:</p> <ul style="list-style-type: none"> <li>From 270 to 8 seconds</li> </ul> <p>Average bandwidth consumption:</p> <ul style="list-style-type: none"> <li>From 90% to 50%</li> </ul> <p>Click <a href="#">here</a> for video case study</p>
 <p>Yokogawa is a world leader in industrial automation and control, test and measurement, information systems, and industry support.</p>	<ul style="list-style-type: none"> <li>Global R&amp;D sharing 100MB files across the WAN</li> <li>Constant and expensive bandwidth upgrade didn't help</li> <li>Version control nightmare because of multiple local file copies</li> </ul>	<ul style="list-style-type: none"> <li>WAAS enabled centralized file sharing</li> <li>LAN-like performance everywhere</li> </ul>	<ul style="list-style-type: none"> <li>“Less than one year ROI on WAAS</li> <li>Over € 100,000 savings annually</li> <li>€1000s and time saved by reducing employee travel</li> <li>Reduced data duplication by 40%</li> <li>IT resources from 34 branches to 5 data centers”</li> </ul> <p>- <b>Rob Tammeling, ICT Manager, Yokogawa Europe B.V</b> Click <a href="#">here</a> for case study</p>





Manufacturing (Continued)			
 <p>ADC Telecom is a leading communications equipment manufacturer with \$1.3 billion revenue in 2007</p>	<ul style="list-style-type: none"> <li>Poor Solidworks CAD performance across the WAN impacts global R&amp;D collaboration and time to market</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized Solidworks CAD application</li> </ul>	<p>"We achieved three-month ROI for WAAS and our worldwide engineering staff is so excited with the 5X faster SolidWorks."</p> <p>—<b>Dave Brady, VP of IT, ADC</b> Click <a href="#">here</a> for detailed case study</p>
 <p>REHAU is the premium worldwide brand for polymer-based innovations and systems in construction, automotive and industry with more than 15,000 employees around the globe</p>	<ul style="list-style-type: none"> <li>Poor performance accessing centralized IBM Lotus Notes and Microsoft SharePoint across the WAN</li> <li>High costs to maintain legacy file servers and storage across 170 sites</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating IBM Lotus Notes and Microsoft Sharepoint</li> <li>WAAS for enabling servers and storage consolidation into the data center in Nürnberg Germany and across Europe</li> <li>Expected savings of €15,000/site over three years by reducing its server footprint by half</li> </ul>	<p>"Before using Cisco WAAS downloading a file from our Lotus Notes and Sharepoint portal was taking around 60 seconds and now it takes just two to three seconds."</p> <p>- <b>Stefan Kristen, Senior Systems Administrator, REHAU</b> Click <a href="#">here</a> for detailed case study</p>
 <p>Michigan-based 132-year-old company is an international marketer of home cleaning products</p>	<ul style="list-style-type: none"> <li>1,200 employees, 20+ branches</li> <li>Slow centralized Microsoft Dynamics CRM</li> <li>6-7 hours/day remote data backup</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating Microsoft Dynamics CRM application</li> <li>WAAS for accelerating Microsoft System Center Data Protection Manager</li> </ul>	<ul style="list-style-type: none"> <li>90% faster Microsoft Dynamics</li> <li>90% faster data backup</li> </ul> <p>"WAAS clearly met our needs and is the most cost-effective solution among all alternatives that we evaluated."</p> <p>—<b>Paul Babcock, Manager of IT Operations, BISSELL</b> Click <a href="#">here</a> for detailed case study</p>
 <p>Nanometrics (NASDAQ: NANO) is a leader in the design, manufacture and marketing of high-performance process control metrology systems used in semiconductor manufacturing</p>	<ul style="list-style-type: none"> <li>Branch server and storage sprawl</li> <li>Branch IT consolidation prevented by poor Microsoft Dynamics CRM application across the WAN</li> <li>Expensive telephone bills across 25 global sites</li> </ul>	<ul style="list-style-type: none"> <li>Reduced \$260K branch IT OpEx 1st year by centralizing server, storage and applications</li> <li>Reduced \$500K phone bills 1st year by using WAAS to make rooms for company-wide VoIP</li> <li>LAN-like data applications everywhere</li> </ul>	<p>"We replaced Riverbed with Cisco WAAS for 3 reasons: Preserving and optimizing our VoIP quality Better application performance Lower TCO through router integration"</p> <p>— <b>Dave Kizer, CIO, Nanometrics</b></p> <p>Click <a href="#">here</a> for Networkworld article Click <a href="#">here</a> for detailed case study. Click <a href="#">here</a> for video testimonial</p>
 <p>Quest Diagnostics is the leading provider of diagnostic testing, information and services</p>	<ul style="list-style-type: none"> <li>Branch server and storage sprawl to provide local file and print services across 100 sites</li> </ul>	<ul style="list-style-type: none"> <li>WAAS integrated into the ISR for accelerating centralized applications</li> <li>WAAS enabling servers and storage consolidation into the data center</li> </ul>	<p><b>100 sites optimized:</b></p> <ul style="list-style-type: none"> <li>Consolidated branch servers from 100 sites</li> <li>Maintained LAN-like application performance</li> </ul>

Manufacturing (Continued)			
 <p>Colacem SpA, part of the Financo Group, is one of Italy's top three cement materials manufacturers producing common (gray) cement, white cement, masonry cement and hydrated lime.</p>	<ul style="list-style-type: none"> <li>• Had two IT departments supporting two business units</li> <li>• Wanted to consolidate disparate IT into a single, centralized IT infrastructure</li> <li>• SAP rollout to global users</li> </ul>	<ul style="list-style-type: none"> <li>• WAAS enabling servers, storage and data backup into the data center</li> <li>• WAAS for maintaining LAN-like application performance for global users</li> <li>• WAAS for making room for VoIP rollout</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced branch servers from 80 to 50 during phase 1, expecting 100% elimination of branch servers eventually</li> <li>• Eliminated WAN bandwidth upgrades</li> <li>• "WAAS was essential to us developing and deploying our new SAP system because our teams of experts around the world could access and share files and information on the project much faster than before, making the whole SAP implementation quick and efficient."</li> </ul> <p><b>- Andrea Coccia, chief information officer at Colacem</b> Click <a href="#">here</a> for detailed case study.</p>
 <p>Norcraft Companies is a recognized leader in the kitchen and bath industry, representing a comprehensive portfolio of the highest quality cabinetry lines.</p>	<ul style="list-style-type: none"> <li>• High capital expenses to refresh branch office servers</li> <li>• High operating expenses to manage branch office servers</li> <li>• WAN bandwidth limitations prevented server centralization</li> </ul>	<ul style="list-style-type: none"> <li>• WAAS integrated into the ISR for accelerating centralized applications</li> <li>• WAAS enabling servers and storage consolidation into the data center</li> </ul>	<ul style="list-style-type: none"> <li>• Avoided US\$75,000 capital expense of 12 new servers and ongoing server patch management</li> <li>• Maintained LAN-like application performance at remote locations</li> <li>• 84% less WAN consumption for Microsoft SQL</li> <li>• 68% less WAN consumption for print</li> </ul> <p>"Our deployment confirmed that Cisco WAAS is the most integrated and easiest-to-deploy solution."</p> <p><b>—Darin Wipf, Network Manager, Norcraft Companies</b> Click <a href="#">here</a> for detailed case study.</p>
Retail/Financial Services			
	<ul style="list-style-type: none"> <li>• Branch server and storage sprawl</li> <li>• Branch IT consolidation prevented by poor application performance across the WAN</li> </ul>	<ul style="list-style-type: none"> <li>• WAAS integrated into the ISR for accelerating centralized applications</li> <li>• WAAS enabling servers and storage consolidation into the data center</li> </ul>	<p><b>170 sites optimized:</b></p> <ul style="list-style-type: none"> <li>• 4-5X faster LAN-like Fair Issac, IBM FileNet and PeopleSoft</li> <li>• LAN-like application performance</li> <li>• Highly centralized branch IT</li> </ul> <p>"We have been adding WAAS to six to seven sites per week without production outage."</p> <p><b>— Brent Stahlheber, CIO</b></p>

Retail/Financial Services (Continued)			
 <p>Scotts Miracle-Gro is dedicated to a beautiful world with industry-leading lawn, garden and outdoor living products and services.</p>	<ul style="list-style-type: none"> <li>Poor file, print, data backup and replication across the WAN prevented IT centralization</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized file, print, and EMC SRDF</li> <li>WAAS enabling servers and storage consolidation into the data center</li> </ul>	<p>“The Cisco WAAS has proven to be an essential component for the success of our centralization and compliance initiative. Our operating expenses, data replication, and integrity have significantly improved.”</p> <p>—<b>Bill Waszak, CIO, The Scotts Miracle-Gro Company.</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>
 <p>Fulton Financial is a \$15.9 billion financial company headquartered in Pennsylvania</p>	<ul style="list-style-type: none"> <li>Poor Citrix print performance across the WAN</li> <li>Impacting loan and mortgage documents printing at remote offices</li> <li>Adding expensive WAN bandwidth didn't help</li> </ul>	<ul style="list-style-type: none"> <li>Reduced Citrix remote print services response time by 80%</li> <li>Accelerated loan and mortgage applications</li> <li>Dropped WAN bandwidth usage from 90% to 40%</li> </ul>	<p>“I am always skeptical of new IT products. Cisco WAAS, however, was a pleasant surprise for me. I didn't expect it to work so well and so easily.”</p> <p>—<b>Barth Bailey, VP of Network Infrastructure and Security</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>
Energy			
 <p>Panhandle Energy is part of Southern Union Company and engaged in the transportation, storage and distribution of natural gas</p>	<ul style="list-style-type: none"> <li>Branch server and storage sprawl to provide local file and print services across 100 sites</li> </ul>	<ul style="list-style-type: none"> <li>WAAS integrated into the ISR for accelerating centralized applications</li> <li>WAAS enabling servers and storage consolidation into the data center</li> </ul>	<p><b>100 sites optimized:</b></p> <ul style="list-style-type: none"> <li>Consolidated branch servers from 100 sites</li> <li>Maintained LAN-like application performance</li> </ul>
Transportation			
 <p>Sabre Holdings offers Travelocity, Sabre Travel Network and Sabre Airline Solutions and has 9,000 employees in 45 countries with \$2.8 billion revenue in 2006</p>	<ul style="list-style-type: none"> <li>Poor file sharing and Microsoft Outlook performance across the WAN for server-less branches</li> <li>High costs for branch office with servers and storage</li> </ul>	<ul style="list-style-type: none"> <li>10X faster file access</li> <li>Remote and acquisition office IT cost avoidance</li> <li>Increased company-wide homogenous server environment</li> </ul>	<p>“Cisco WAAS has played a critical role in our server and storage centralization, delivering increased data integrity, steady employee productivity, and reduced remote office costs, while helping avoid costly WAN upgrades.”</p> <p>—<b>David Smith, VP of Corporate Systems, Sabre Holdings.</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>

Transportation (Continued)			
 <p><b>PACER INTERNATIONAL, INC.</b>  <small>Freight Solutions for the 21st Century</small></p> <p>Pacer International (NASDAQ:PACR) is a U.S. based holding company with operations in non-asset based third-party logistics and intermodal freight transportation services.</p>	<ul style="list-style-type: none"> <li>• Most employees work from 62 global sites to serve customers and partners</li> <li>• WAN limitations prevent successful roll out of SAP and Microsoft Exchange centrally</li> </ul>	<ul style="list-style-type: none"> <li>• WAAS integrated with ISR for accelerating SAP and Microsoft Exchange</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced SAP response time by 50%</li> <li>• Reduced WAN bandwidth usage by 75%</li> </ul> <p>Click <a href="#">here</a> for video case study.</p>
 <p><b>DFDS SEAWAYS</b>  <small>JUST SAIL AWAY</small></p> <p>DFDS (Det Forenede Dampskibs- Selskab – The United Steamship Company) is the oldest and large shipping company in Denmark</p>	<ul style="list-style-type: none"> <li>• High costs of using satellite links</li> <li>• Satellite latency impacted business passenger and freight vessel customer satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>• WAAS for accelerating applications over satellite links</li> <li>• 4Mbps throughput on a 1Mbit satellite link</li> <li>• More and faster applications can now be delivered to ship.</li> </ul>	<p>“Ship-to-shore connections were too slow and it is much more cost effective to implement Cisco WAAS to improve communication speeds, than to increase satellite bandwidth.”</p> <p><b>- Poul Daugaard, Head of the Cisco WAAS project, DFDS</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>
 <p><b>Inchcape</b>  <small>Shipping Services</small></p> <p>Inchcape Shipping Services is the world's leading marine services provider with over 200 offices worldwide, delivering locally and individually tailored world-class services to each customer's needs.</p>	<ul style="list-style-type: none"> <li>• Double business size and revenue within five years</li> <li>• Many of the 200 worldwide branch offices faced with poor telecommunications infrastructure quality</li> <li>• High costs of operating at least 2 branch servers per location</li> </ul>	<ul style="list-style-type: none"> <li>• WAAS for accelerating centralized applications</li> <li>• WAAS enabling servers and storage consolidation into the data center</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced worldwide IT hardware footprint by 85%</li> <li>• Reduced bandwidth usage by 50%</li> <li>• LAN-like performance to users worldwide accessing UK-hosted applications</li> </ul> <p>“The application and the data may be hosted in the UK, but for the agent it performs as if it was on their laptop. This is what Cisco WAAS means to our business.”</p> <p><b>- Bryan Phillips, Group Information Director, Inchcape Shipping Services</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>
 <p><b>PANALPINA</b>  <small>on 5 continents</small></p> <p>Panalpina is one of the world's leading providers of forwarding and logistics services with 500 branches in 90 countries</p>	<ul style="list-style-type: none"> <li>• Shift IT spending from systems maintenance to delivery of innovation</li> <li>• Avoid US\$500,000 in capital cost for Toronto data center upgrade</li> <li>• Help ensure high employee productivity through excellent application performance</li> </ul>	<ul style="list-style-type: none"> <li>• Cisco WAAS for WAN optimization</li> <li>• Cisco MDS 9500 Series Multilayer Directors for storage networking</li> <li>• Cisco Catalyst 6500 Series Switches for data center networking</li> </ul>	<ul style="list-style-type: none"> <li>• US\$1 million of cost savings from data center centralization</li> <li>• Increased employee productivity and data integrity</li> <li>• Reduced operating costs</li> </ul> <p>• Click <a href="#">here</a> for detailed case study.</p>

Healthcare			
 <p><b>Banner Health</b></p> <p>Banner Health is one of the largest nonprofit hospital systems with 22 hospitals and \$3.1 billion revenue in 2006</p>	<ul style="list-style-type: none"> <li>Poor application performance for McKesson HBO, Fuji PACS and Cerner across the WAN prevented the centralization of Electronics Medical Records</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized applications</li> <li>WAAS enabling servers and storage consolidation into the data center</li> </ul>	<ul style="list-style-type: none"> <li>Reduced physician downtime by 67% through 3X faster hospital applications: Fuji PACS, McKesson HBO, and Cerner</li> <li>60% less WAN bandwidth usage</li> <li>Avoided WAN bandwidth upgrade of \$8,000/month</li> <li>100% ROI within 1.3 months</li> </ul> <p>“Once the Cisco appliances were configured easily, we didn’t have to watch or ‘baby-sit’ the system.”</p> <p>—<b>Steve Rains, IT Director, Banner Health</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>
 <p><b>Health Management Associates</b> is a premier operator of acute care hospitals with \$4.4 billion revenue in 2007</p>	<ul style="list-style-type: none"> <li>Comply with HIPAA by rolling out Sovera® application for Health Information Management</li> <li>Centralize Electronic Medical Records for ease of data protection and compliance</li> <li>Help ensure physician productivity by enabling access to centralized Sovera application across the WAN</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized applications</li> <li>WAAS enabling servers and storage consolidation into the data center</li> </ul>	<ul style="list-style-type: none"> <li>Saved \$1.5 million in annual WAN bandwidth expenses</li> </ul> <p>“Cisco WAAS is the most transparent and easiest solution to implement and integrate as it does not require us to overhaul our security infrastructure.”</p> <p>—<b>Mark Drake, Network Engineer, Health Management Associates</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>
Architecture/Construction/Engineering/Professional Services			
 <p>Enbridge operates the world’s longest crude oil and liquids pipeline system and has \$11 billion revenue in 2007</p>	<ul style="list-style-type: none"> <li>Poor user experience with Oracle, Lotus and Web-based applications over the WAN</li> <li>Limited bandwidth for remote offices</li> <li>Slow data backup over the WAN</li> </ul>	<p>Upgrade network and optimize WAN to accelerate application delivery while reducing annual costs.</p>	<p><b>70 sites optimized by Cisco ISR and WAAS:</b></p> <ul style="list-style-type: none"> <li>3X faster web-based Oracle 10g financial applications and IBM Lotus Notes</li> <li>5X faster data replication over the WAN</li> <li>Saves \$100,000 per year in Citrix user licensing fees</li> </ul>

Architecture/Construction/Engineering/Professional Services (Continue)			
 <p>Michael Baker Corporation, with 50 offices and \$651 million revenue in 2006, provides engineering and operations and maintenance services worldwide client</p>	<ul style="list-style-type: none"> <li>Limited bandwidth at local offices</li> <li>Needed fast performance for Bentley ProjectWise Content Management System over WAN</li> <li>High cost of operating servers in several remote offices to enable LAN performance</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized Bentley ProjectWise application</li> <li>WAAS enabling servers and storage consolidation into the data center</li> </ul>	<p><b>50 sites optimized by Cisco WAAS:</b></p> <ul style="list-style-type: none"> <li>\$4,200 to \$7,300 bandwidth expense savings per month across 50 offices</li> <li>\$1.18M net benefits over 18 months through more billable hour and less downtime</li> <li>269% ROI in 12 months</li> </ul> <p>Click <a href="#">here</a> for detailed case study.</p>
 <p>ENGlobal is a leading energy engineering and design firm with 2007 revenue of \$363 million</p>	<ul style="list-style-type: none"> <li>Improve business continuity through application and data center centralization</li> <li>Maintain employee productivity and LAN-like application performance</li> <li>Lower CapEx and OpEx of applications, bandwidth, and servers</li> </ul>	<ul style="list-style-type: none"> <li>Reduced disaster risk with uninterrupted employee productivity and enhanced server backup and maintenance</li> <li>50% less WAN bandwidth consumption</li> <li>100% ROI in 12 months and improved network services</li> </ul>	<p>“The tunnel-less Cisco WAAS design makes it very easy for me to manage VPNs and other network-based services so I can remain focused on projects that contribute to the company's success.”</p> <p>—<b>Abraham Madha, CIO, ENGlobal Corporation.</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>
Government			
 <p>City of Fort Wayne, Indiana</p>	<ul style="list-style-type: none"> <li>Enable centralization of remote application, file, and print servers</li> <li>Avoid the cost of purchasing additional bandwidth and achieve LAN-like user experiences for media-rich applications</li> <li>Enable the use of video conferencing, video on demand to reduce travel costs</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized applications</li> <li>WAAS enabling servers and storage consolidation into the data center</li> </ul>	<ul style="list-style-type: none"> <li>50% less WAN bandwidth usage</li> <li>100% ROI in 12 months</li> <li>Introduced additional bandwidth-intensive voice and video applications without additional cost</li> </ul> <p>—<b>Clifford Clarke, CIO, City of Fort Wayne, Indiana.</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>
 <p>Australia Government Department of Education</p>	<ul style="list-style-type: none"> <li>830 schools across Australia</li> <li>Oracle Learning 360 application rollout to all schools</li> <li>WAN limitations impact student learning experience</li> </ul>	<ul style="list-style-type: none"> <li>WAAS for accelerating centralized applications</li> <li>WAAS for making room for other bandwidth hungry applications</li> </ul>	<p>“We’re seeing a nine-fold improvement in the delivery of certain Oracle traffic by using the WAAS boxes.”</p> <p>- <b>Glenn Veen, Infrastructure and Telecommunications Manager</b></p> <p>Click <a href="#">here</a> for detailed case study.</p>