



Customer Case Study

Healthcare Manufacturer Gains 4X Improvement for SAP Deployment

Cisco for Applications/SAP solutions give LAN-like performance to mission-critical Web-based enterprise applications.

EXECUTIVE SUMMARY	
INDUSTRY	<ul style="list-style-type: none"> Manufacturing, Biotech
BUSINESS CHALLENGE	<ul style="list-style-type: none"> Scaling enterprise applications to keep pace with growing base of employees Protecting significant investments in SAP applications Encouraging acceptance of Web-based business solutions (overcoming user objections)
NETWORK SOLUTION	<p>Cisco for Applications/SAP platform including:</p> <ul style="list-style-type: none"> Cisco Application Velocity System (AVS) appliances, deployed in redundant pairs in both the development and production environments Integration with existing Cisco 6500 Switches and Cisco Content Services Switch (CSS)
BUSINESS RESULTS	<ul style="list-style-type: none"> 4X improvement in SAP performance over the Web greatly improved employee productivity and the perceived value of the SAP solutions 2X improvement in the company's employee Web portal resulted in expanded use of the Web portal for company communications Potential was proved for future deployment of outward-facing access to SAP (partners and customers)

BUSINESS CHALLENGE

A Fortune 16 manufacturing company with annual revenues in excess of \$75 billion (2005) employs more than 55,000 people to produce healthcare innovations and solutions for its global customer base. The company's products and services affect patient health throughout a chain of care that includes pharmaceutical manufacturers, biotech firms, retail and mail-order pharmacies, hospitals, clinics, surgery centers, and physician offices.

To support its mission-critical business operations, the company has invested heavily in SAP enterprise applications, which include platforms for customer relationship management (CRM), enterprise resource planning, supply chain management, and literally all other business processes. As the manufacturing company has grown and its SAP applications have gone through updates and evolutions, the employees who rely on the applications had become very dissatisfied with the performance. The Web-based business solutions required downloading large amounts of data, and user productivity was greatly affected by the slowed Web transactions.

The most recent SAP deployment resulted in an unacceptable number of user complaints, with IT and the SAP team spending too much time fielding calls from unhappy employees. The entire SAP deployment was being given poor marks by management because of the performance issues. The team set out to evaluate alternatives for accelerating SAP performance, and eliminate the response problems that were frustrating users and management.

CISCO FOR APPLICATION SOLUTION

After an evaluation of Cisco for Applications/SAP and an alternative application acceleration solution from another vendor, the healthcare product manufacturer chose the Cisco solution. Cisco Application Velocity System (AVS) devices were deployed in pairs, for helping ensure availability and for efficient scaling of the applications. Both the staging and production environments were equipped with the AVS appliances. The new Cisco AVS solutions complemented the already-in-place Cisco 6500 Switches and Cisco Content Services Switches (CSSs) deployed for application delivery. The combination of the application delivery and acceleration solutions gave the employees the performance benefits for their SAP Web applications.

The Cisco AVS appliances accelerate the Java scripts used with the SAP applications, perform Webpage caching to speed downloads, and also compress page contents so that pages take less time to load. The accelerations are made possible by the Cisco AVS features for:

- Network latency mitigation:** Patented techniques such as FlashForward and Smart Redirect allow user requests to be performed at high LAN speeds instead of high-latency WAN rates.

- **Bandwidth reduction:** The Cisco AVS 3110 enables a 70 to 90 percent reduction in bandwidth usage using compression, allowing reductions in bandwidth costs, a delay or elimination of network upgrade expenses, and an overall improved end-user experience.
- **Server off-load:** SSL and Compression services are off-loaded from the server, reducing overhead by typically 80 percent to effectively regain data center capacity, and delaying the need to add servers to accommodate users and applications.

The combination of these features provided immediate performance improvements. For further performance gains, a Cisco systems engineer adjusted the configuration of the Cisco AVS, tuning it to the particular requirements of the customer's SAP environment. The tuning process optimized the SAP performance and also showed the customer how the Cisco AVS could be adjusted to meet any future requirements as the overall enterprise application environment changed.

“The return on investment for large enterprise applications is highly dependent on user satisfaction levels. If productivity drops due to frustration with performance, the perceived value of the overall business solution drops dramatically. Cisco for Application solutions provide immediate benefits for today’s complex applications and environments.”

— Jay Mellman, Director of Application Networking Services, Cisco Systems

BUSINESS RESULTS

The overall performance gains—a 4X improvement for SAP applications—exceeded the expectations of the customer. A side benefit was also gained. Cisco for Applications/SAP accelerated performance for the employee Web portal. In the past, the portal was rarely used. The accelerated portal is now used by more employees, and the company plans to expand the communications that can take advantage of the portal, lowering corporate costs for companywide distribution of information.

Increased server efficiencies will also save costs. By improving performance without increasing the number of servers required for the SAP applications, capital expense budgets can be kept under control. In fact, the current number of servers supports more employees, without any new servers in the data center. The number of servers for the Web portal has actually been reduced with the Cisco AVS in place. Users get information faster, and servers can support more employees—benefits that improve employee satisfaction and lower costs simultaneously.

PRODUCT LIST

Cisco for Applications/SAP:

High Availability, Scalability, Acceleration, SSL Offloading, and Compression

- Cisco AVS 3100 Series
- Cisco 11500 Series Content Services Switch
- Cisco Catalyst 6500 Series Switches

“The return on investment for large enterprise applications is highly dependent on user satisfaction levels,” says Jay Mellman, director of Application Networking Services at Cisco Systems. “If productivity drops due to frustration with performance, the perceived value of the overall business solution drops dramatically. Cisco for Application solutions provide immediate benefits for today’s complex applications and environments.”

With the resolution of the SAP performance problems, the manufacturing company can move forward with plans to extend access to partners and customers. Today’s collaborative workflows will be greatly enhanced as teams can be defined to include outside contributors. By overcoming the in-house performance objections and increasing the number of users who can access the SAP applications over the Web, Cisco for Applications/SAP provides an important foundation for future business processes.

FOR MORE INFORMATION

To find out more about the Cisco Data Center Solutions, including the Cisco for Applications solutions, go to:

<http://www.cisco.com/go/applicationservices>.



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