

## SAP Customer Success Story Defense and Security



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Paul Capelli, Director, Logistics Modernization Program, U.S. Army

### AT A GLANCE

#### Summary

To modernize the vast array of legacy systems used to manage its logistics, the U.S. Army Materiel Command's Logistics Modernization Program (LMP) pushes forward with Computer Sciences Corporation (CSC) and SAP to provide a single, integrated, commercial off-the-shelf (COTS) enterprise resource planning (ERP) solution.

#### Web Site

[www.amc.army.mil](http://www.amc.army.mil)

#### Key Challenges

- 25-year-old technology and 30-year-old processes
- 2,200 unique legacy applications
- Redundant and nonstandard data with paper printouts of critical reports
- Multiple logons

#### Project Objectives

- Common, accurate, real-time operating view
- Financial integrity
- Integrated planning and execution and precise forecasting
- Single version of the truth and rapid decision making
- Improved support for the “Warfighter”

#### Solutions and Services

- mySAP™ Business Suite solutions
- SAP® Active Global Support, including the SAP MaxAttention™ premium support offering

#### Why SAP Solutions and Services

- Willingness and ability to partner with the CSC team
- Technical expertise in areas such as data migration and security
- Capability of satisfying the functional areas to be modernized

- Lower total cost of ownership of COTS software from initial migration through upgrades and maintenance

#### Implementation Highlights

- Reengineering – redesign, development, and testing – of interface architecture
- First implementation for 4,300 users in 6 locations
- Ultimate system will serve 49,000 civilians and 1,500 military personnel in 149 fixed locations in 38 countries
- System will handle 6 million items and \$40 billion in goods and services annually

#### Key Benefits

- Dramatically improved financial reporting integrity and transaction traceability
- Positioned LMP for low-cost continuous improvement, adaptability, and scalability through standard upgrades to the innovative solution
- Enabled iterative forecasts and planning for over a million materiel needs in real time
- Provided single source of data for reliable materiel commitments

#### Implementation Partners

- SAP Active Global Support
- SAP Consulting
- CSC ([www.csc.com](http://www.csc.com))

#### Existing Environment

2,200 legacy systems

#### Database

Oracle

#### Hardware

UNIX-based hardware

#### Operating System

UNIX

## U.S. ARMY MATERIEL COMMAND

### Computer Sciences Corporation Delivers Mammoth COTS ERP Solution from SAP to Replace 30-Year-Old Legacy Systems

The challenge was simply enormous: to modernize a 30-year-old logistics management system that serves a million customers – spread across 149 fixed locations in 41 states and 38 countries – who need supply and support for 6 million items worth \$40 billion in goods and services. And not just any vast and far-flung system, but the one in use by the U.S. Army Materiel Command (AMC), which incorporates the added challenge of maintaining the customer – the “Warfighter” – in the highest state of combat readiness.

By 2000, this system was not in the best condition. Besides being 30 years old, it suffered from 25-year-old technology and the accretion of some 2,200 unique applications. It used batch processing, large mainframes, nonrelational data structures, and card images. Users were faced with obsolete screens; multiple logons; continuing challenges to obtaining information which, when it was forthcoming, was in anything but real time; data redundancy without standards; and voluminous paper printouts of critical reports. “There were a lot of functional stovepipe sets of applications that didn't really talk to each other very well,” says Paul Capelli, director of the U.S. Army's Logistics Modernization Program (LMP). “So in the legacy environment, it was virtually impossible to accurately plan and react to changes in requirements as they came.”



So the challenge was to migrate the relevant data from this kaleidoscopic system to a coherent, integrated, real-time, commercial off-the-shelf (COTS) enterprise resource planning (ERP) solution and then implement that solution across 149 fixed locations in 38 countries. As a result, AMC launched its LMP project. “The goals and objectives were to create a Single Army Logistics Enterprise [SALE] system, integrated essentially from factory to foxhole, for the first time ever,” says Capelli.

### **Aligned with Best Practices**

Computer Sciences Corporation (CSC) was selected to be the LMP prime contractor in December 1999. The program began officially on July 1, 2000, with CSC assuming responsibility for the systems LMP was to replace. CSC selected SAP to be the ERP solution provider for LMP.

Experts from CSC, SAP® Active Global Support, and SAP Consulting, along with external partners and subject matter experts from across the Army and AMC organizations, then applied themselves to the challenge. Adhering to design principles of cross-command commonality, the LMP team aligned AMC’s business processes with the SAP commercial and

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defense best practices to drive results in both the short and long term. Commitment to the standard SAP for Defense & Security solution portfolio allowed CSC to position LMP for low-cost, continuous improvement, adaptability, and scalability through standard upgrades to the innovative solution.

### **Extensive Redesign**

Mastery of the complexities of comprehensive supply chain planning and fulfillment modernization was a key component of the transformation of AMC’s supply chain through the Logistics Modernization Program. In unraveling over 2,200 unique legacy applications, the LMP team did exhaustive reengineering of the interface architecture.

The LMP solution followed best practices by not modifying SAP code but instead customizing and leveraging SAP-provided extensions. The standard mySAP™ Business Suite solutions enable LMP to keep pace with new commercial and defense capabilities via standard upgrades. “We’re using a majority of the available functionality that SAP brings in terms of its ERP solution,” says Capelli. “I think we’re using somewhere in the neighborhood of 20 modules. We’re also using advanced planning and optimization, the SAP data warehousing functionality, and supply chain management. So it’s a large suite of SAP products that we’re using.”

The modernization program required a speedy and successful go-live of the ERP applications, a stable production environment, and a tightly coordinated partnership between supplier, contractor, and AMC. To ensure these goals were met, AMC used the SAP MaxAttention™ premium support offering. SAP MaxAttention is a comprehensive support program that goes beyond basic operational concerns to drive ongoing solution enhancement, including increasing uptime and improving performance, data consistency, and maintainability. For example, SAP worked with AMC to define its solution scope and to manage risk. An SAP technical quality manager oversees on-site service delivery at AMC and provides a single point of access to SAP experts on solutions, technology, development, and support.

## Going Live

During the 2003 Independence Day holiday, the first deployment of AMC's logistics modernization went live and on July 2, 2003, LMP processed its first requisition for a radio shipped to a unit at Camp New Jersey, Kuwait. On July 7, LMP was made fully available to the community of 4,300 users across six locations.

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The initial release serves business functions at the Communications-Electronics Command, AMC headquarters, Tobyhanna Army Depot, the Army Security Assistance Command, AMC-related Defense Finance and Accounting Service, and the Communications Security Logistics Support Activity at Fort Huachuca, Ariz.

The new enterprise application integration interface infrastructure provides a single interface engine connecting all systems to the SAP hub, retaining more than 250 interfaces between LMP and external applications. It processes 60,000 MILSTRIP (military standard requisitioning and issue procedures) transactions daily. From go-live in July 2003 to February 2005, the system – which operates to fill orders, post receipts, and reconcile warehouse records – handled 40 million transactions.

## Orders Filled Instantly

An order manager and global available-to-promise (ATP) module fills orders instantaneously by applying a rules-based, worldwide search. Its database comprises 1.4 million materials with an inventory value of \$4 billion. Every day, it processes 500,000 updates against backorders. “As a user, I now understand, when a requirement comes in, what I need to do,” says Capelli. “I know where I'm going to go to satisfy that requirement and if that entails going to one of our maintenance depots to actually repair a piece of equipment, all of that is integrated together in the solution that we're using.”

The LMP instance maintains one set of financial information and provides real-time funds management and global inventory visibility. And – as of the first quarter in 2005 – it connects 4,600 pilot users at 1,200 storage sites and 500 mobile tactical sites. When fully implemented across all AMC Commands, more than 15,000 users will have access to the LMP solution and the system will process over 8 million requisition transactions annually.

## Integrity of Financial Reporting Dramatically Improved

Although their ERP solution is still in the process of being implemented throughout the organization, AMC has realized significant benefits from the solution. Integrating the SAP functionality with best business practices has dramatically improved transaction traceability and the integrity of financial reporting. Using the sophisticated SAP function that provides visibility into global inventory and available-to-promise data, planners now have a single source of data for making reliable materiel commitments. Using SAP solutions, LMP will be able to comply with the Federal Financial Management Improvement Act.

AMC has tightly integrated its financial budgeting and logistics operations to control expenditures with more efficiency and with greater visibility. A single database provides a consolidated, unambiguous view of Army assets to enable timely and decisive action. “We're doing all of the Army Working Capital Fund accounting inside of our solution,” Capelli notes. “So it reaches almost cradle to grave in terms of the life cycle of the weapons systems that we have to support, and it is a pretty broad spectrum of functionality that we're delivering.”

That asset visibility is comprehensive as well. It allows authorized users to view the movement and locations of all Army inventories, to monitor customer demand, and to consolidate and improve purchasing power. Supply distribution has been optimized vertically and laterally, resulting in significant savings.

### **Confidently Moving Towards Key Goals**

AMC credits SAP MaxAttention with being instrumental in creating a successful implementation of LMP's ERP software. The result has been a tight, trusted relationship among all parties. The program has ensured that the Army's mission-critical processes always work and that problem resolution is always quick and proactive.

All of this, of course, facilitates the Army's move to a SALE management system. The "wholesale" and "retail" distinctions of former times will be eliminated; there will just be the SALE system. By capitalizing on business processes and technological advances in the commercial world, AMC has been able to gather its logistics systems under one electronic roof. The result is sound and timely decision making and the ultimate realization of the Army's original vision: a quick, flexible response to the routine and emergency requirements of its soldiers stationed anywhere in the world.

"That's really what this is all about," says Capelli. "It's delivering those products and services to the troops on the ground. And we've seen the evidence that we've really shrunk those time frames to minutes when those transactions go through the SAP solutions as opposed to the way it would happen in the legacy environment. I can't describe a better benefit than that."