SAP Solution Brief
SAP Supply Chain Management

SAP Extended Warehouse Management

ADVANCED WAREHOUSING WITH SAP® EWM

UNIFIED PLANNING AND EXECUTION IMPROVES WAREHOUSE CONTROL

Gain full control over your high-volume warehouse operations using the SAP® Extended Warehouse Management application. With this software, you can achieve higher process and stock visibility, enhance the effectiveness of warehouse planning, and enable more efficient distribution and storage processes.

Effectively managing the logistics environment is an increasingly complex challenge. In the face of market uncertainties, fluctuating fuel prices, and growing customer expectations, it becomes even more essential that operations managers run a lean, reliable logistics operation.

To profitably manage inventory movements and deliver on the promise of the perfect order, companies must integrate their end-to-end logistics and fulfillment operations. By enabling visibility across all nodes in the network, organizations can allow warehouse managers and logistics executives to anticipate supply chain disruptions and take proactive, timely, and profitable actions across the global logistics network.

To address these requirements, SAP offers integrated applications that orchestrate and manage all aspects of the logistics and fulfillment processes. With this integrated software, logistics executives can plan, source, procure, store, transport, and deliver products – all within a single, unified logistics platform. One of such applications is the SAP® Extended Warehouse Management (SAP EWM) application, which provides flexible, automated support for processing goods movements and managing stock in your distribution facilities. This application is designed for high-volume warehouses that require support for complex warehouse management functions and processes. By integrating your inventory management and delivery processes, the software brings planning and execution processes closer together.

As a result of the integration between SAP EWM and SAP Business Suite software, you can achieve higher process and stock visibility, more effective warehouse planning, and more efficient distribution and storage processes.

Increased Visibility and Control for High-Volume Warehouses

With SAP EWM, you can gain control over the full range of your warehouse processes. The software can help you manage the movement of items within the warehouse – from the point of goods receipt to goods issue. It also extends to the yard, letting you track the processing of goods from the time a trailer is checked in until products are checked out.

Optimize Inbound Processes

You can use the SAP software to help optimize the following inbound processes:

- Yard management – Manage trucks and trailers in your yard, map their movements based on warehouse tasks, and monitor the yard via a warehouse monitor.
- Put-away and stock removal – Maximize warehouse capacity and enhance the goods issue process using product master data parameters that automatically determine appropriate storage strategies. The software assigns appropriate bins for placement and picking of goods.
- Expected goods receipt – Streamline goods receipt and let related processes begin in the warehouse. By using the enterprise resource planning

(ERP) purchasing document as a planned goods receipt, the software helps you create and verify inbound deliveries based on the arrival of the truck.

- Cross-docking – Reduce warehouse costs by minimizing product handling. Cross-docking features help you transport products directly from goods receipt to goods issue, letting you increase goods processing efficiency while reducing processing and storage costs.
- Value-added services – Document value-added services (such as product assembly, labeling, packing, or kitting) in the warehouse using orders. The orders can specify worker activities, link the delivery item with packaging specifications and service details, and identify auxiliary products needed to complete the service.
- Quality management – Map inspection processes using a quality inspection engine. Check whether delivered products satisfy your quality criteria, and inspect goods upon receipt.

"The SAP Enterprise Warehouse Management (SAP EWM) solution was introduced to compete with best of breed solutions. Now on its fourth release, EWM is gaining traction in the market, offers the features and functions you would expect in a robust solution, and offers distinctive value propositions not offered by other leading suppliers."

SAP EWM: A Rival to Best of Breed Solutions? by Steve Banker, ARC Advisory Group, October 14, 2010

Streamline Outbound Processes

With SAP EWM, you can increase the efficiency of the following processes:

- Wave processing – Control warehouse processes such as picking activities or posting changes by grouping warehouse request items and processing them together. You can group items into waves based on activity area, route, or product.
- Replenishment processing – Help ensure that forward pick areas are stocked with appropriate goods quantities to support picking requirements. Manage replenishment using strategies based on minimum and maximum stock levels, demand-based stock requirements, and exception-based replenishment.
- Production supply – Efficiently deliver products or components from the warehouse to the production supply area for manufacturing. Stage pick parts or release order parts in the production supply area, or use kanban to handle crate parts.

Enhance Storage-Bin Management

The software can help you improve the following storage-bin management processes:

- Handling unit management – Define handling units, which include products and related packaging materials. Use handling units to provide flexibility of movement as well as visibility into the contents of a pallet or container.
- Slotting – Determine the best fit for a product within the warehouse. Optimize the storage of warehouse stocks so that each product is stored in the most optimum bin, according to size and frequency of access.

With SAP EWM, you can gain control over the full range of your warehouse processes. The software can help you manage the movement of items within the warehouse – from the point of goods receipt to goods issue.

- Physical inventory – Perform physical inventory at the warehouse level to help ensure you have the right amount of the right product in the right bin. Manage stock differences and then evaluate and post the differences back to the ERP system.

Support Distribution Center Processes

Use the SAP software to enhance the following processes:

- Planning and monitoring – Give warehouse personnel complete and up-to-date visibility into all warehouse activity using the central warehouse monitor in SAP EWM. The monitor displays information on picking, put-

away, physical inventory, resource management, and warehouse stocks.

- Radio frequency (RF) support – Use radio frequency technology to support faster, more-accurate data entry. The device-agnostic software provides tools to translate messages and information from the RF devices.
- Serial number support – Manage serial numbers at the document level or at the bin level.
- Resource management – Maximize the efficiency of warehouse processes by facilitating the management and distribution of work via queues. Produce warehouse orders that represent optimum work packages per warehouse employee.
- Labor management – Track employee performance against engineered labor standards or other performance metrics. Manage your workforce efficiently by using the software to help with planning, simulating, and measuring employee activities.
- Automation and support for material flow systems – Link to your external warehouse control systems. Linking and embedding processes let you integrate automated put-away and storage-retrieval systems, forklift control systems, and other automated equipment for all product movements.

Powerful Functionality in a Unified Logistics Solution

SAP EWM offers the sophisticated features of best-of-breed warehouse management software with the scalability that will support your long-term growth. A more cost-effective approach than buying and integrating discrete warehouse management solutions, this single software application helps you achieve full control over your warehouse processes. With SAP EWM you can realize the following benefits:

- Enhanced control – Optimize warehouse processes by managing movements in the warehouse (from point of goods receipt to goods issue) and in the yard (from the time a trailer checks in until product checkout).
- Improved efficiency – Increase warehouse efficiency with functionality that keeps your products stored in optimum locations, and use resource management features to manage warehouse personnel and measure their effectiveness and efficiency.
- Increased visibility – Extend real-time visibility and control of warehouse operations by transforming operations into an adaptive fulfillment supply chain in which customers, suppliers, and partners share knowledge and resources.
- Better business performance – Increase competitiveness and improve the bottom line with the ability to respond faster to changes in supply and demand.

Find Out More

SAP is uniquely qualified to help warehouse managers and logistics executives like you improve supply chain operations by increasing warehouse management efficiency. With a 20-year history of providing warehouse logistics software, SAP possesses unparalleled expertise in supply chain optimization. Warehouse management software from SAP is used by more than 6,000 customers worldwide. We recently introduced the best-in-class SAP EWM software, which is already helping hundreds of customers achieve enhanced process and stock visibility, better warehouse planning, and more-efficient distribution and storage processes.

To learn more about how you can use SAP Extended Warehouse Management to streamline warehouse operations at your company, please call your SAP representative today or visit us on the Web at www.sap.com/scm.

Visionary Enterprise Warehouse Management from SAP

Gartner Inc. named SAP as a "visionary" in its recent report on supply chain management and enterprise warehouse management. C. Dwight Klappich writes in "Magic Quadrant for Warehouse Management Systems" (July 2010): "Innovation remains a very important factor in the industry, even though core warehousing best practices have been well-established. Leading vendors continue to enhance core WMS with more investment in 'extended WMS,' where a greater emphasis is placed on improving warehouse performance through decision support, analytics, and optimization."[1]

1. The Magic Quadrant is copyrighted 2010 by Gartner, Inc. and is reused with permission. The Magic Quadrant is a graphical representation of a marketplace at and for a specific time period. It depicts Gartner's analysis of how certain vendors measure against criteria for that marketplace, as defined by Gartner. Gartner does not endorse any vendor, product or service depicted in the Magic Quadrant, and does not advise technology users to select only those vendors placed in the "Leaders" quadrant. The Magic Quadrant is intended solely as a research tool, and is not meant to be a specific guide to action. Gartner disclaims all warranties, express or implied, with respect to this research, including any warranties of merchantability or fitness for a particular purpose.

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Summary

The SAP® Extended Warehouse Management (SAP EWM) application is a state-of-the-art, best-in-class warehouse management application that enables high warehouse productivity and efficiency, high inventory accuracy, reduced labor cost, better customer service, enhanced stock and process transparency, and optimization in storage planning and process execution.

Business Challenges

- Keep supply chains running smoothly in the face of market uncertainties
- Profitably manage inventory movements
- Continuously optimize warehouse management and planning processes
- Enhance process and stock visibility
- Enable more efficient distribution and storage processes

Key Features

- **Inbound processes** – Establish support for yard management, put-away and stock removal strategies, expected goods receipt, cross-docking, value-added services, and quality management
- **Outbound processes** – Perform wave processing and replenishment processing
- **Storage-bin management** – Manage handling units, perform goods slotting, and process physical inventory
- **Distribution center processes** – Enable planning and monitoring, radio frequency support, serial number support, resource management, labor management, and support for material flow systems

Business Benefits

- **Enhance warehouse control** by managing movements in the warehouse (from point of goods receipt to goods issue) and in the yard (from the time a trailer is checked in until product checkout)
- **Improve warehouse efficiency** with functionality that keeps your products stored in optimum locations, and manage warehouse personnel effectiveness and efficiency
- **Increase real-time visibility** by transforming operations into an adaptive fulfillment supply chain in which customers, suppliers, and partners share knowledge and resources
- **Increase competitiveness and improve the bottom line** with the ability to respond faster to changes in supply and demand

For More Information

Call your SAP representative, or visit us online at www.sap.com/scm.

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