

# Oracle Warehouse Management

## Oracle Value Chain Execution Solution

### ORACLE<sup>®</sup> 12 E-BUSINESS SUITE

#### ORACLE WAREHOUSE MANAGEMENT

##### KEY BENEFITS

- Increase labor productivity
- Improve warehouse space utilization
- Increase on-time shipments
- Improve shipment accuracy
- Reduce fulfillment costs
- Improve inventory visibility
- Increase inventory accuracy

##### KEY FEATURES

#### Mobility

- Mobile RF-based execution
- Personalize mobile user experience
- Material Handling Equipment Integrations
- Directed voice picking
- RFID-enabled

#### Inbound Logistics

- Advanced Ship Notice generation
- Planned cross docking
- Opportunistic cross docking
- Standard and ASN-based receiving
- Returns processing
- Quality inspection
- Rules-based directed put away

#### Inventory Control

- Multi-level license plates
- Lot, Sub Lot, serial and revision control
- Dual unit of measure control

Oracle<sup>®</sup> Warehouse Management (WMS) enables companies to maximize their labor and space utilization and equipment investments by coordinating and optimizing resource usage and material flows. Specifically designed to support the needs of distribution, manufacturing, asset-intensive, and service businesses, Oracle Warehouse Management provides a single-platform across an entire global supply chain.



Figure 1: Benefits of Oracle Warehouse Management

### Best Business Practice Enablement

#### Integrated Fulfillment

Customers increasingly expect an integrated shopping and fulfillment experience. This is placing additional pressure for distribution and even manufacturing facilities to be able to both replenish stores and direct ship to consumers. The Omni Channel user experience has spread from the retail to the manufacturing and distribution industries. Increasingly fulfillment centers are not just optimizing the final goods handling at the end of the supply chain, but are a central and integral part of a blended fulfillment solution including manufacturing, order fulfillment, transportation management, and supply chain planning.

#### Modern Warehousing

The rapid change in recent years of new business models, oscillating fuel prices, and corporate mergers have all placed new demands on the warehouse. Providing a seamless customer experience across channels, optimizing across transportation and manufacturing, and supporting an ever broader array of companies and businesses within a single IT infrastructure are just a handful of the asks on today's warehouse management solutions. A modern, adaptable warehousing solution is the only way to keep up with the moving target of continued innovation in business models and warehousing technology.

- Material attribute tracking
- Material status & holds
- Lot and/or serial genealogy
- Consigned & Vendor managed inventory
- Cycle Counting
- Physical Inventory
- Multi-client inventory management
- Activity based billing

**Replenishment**

- Min-Max Replenishment
- Forward Pick Replenishment
- Pull Replenishment
- Push Replenishment
- Kanban Replenishment
- PAR Replenishment

**Task Management**

- Min-Max Replenishment
- Forward Pick Replenishment
- Pull Replenishment
- Push Replenishment
- Kanban Replenishment
- PAR Replenishment

**Outbound Logistics**

- Wave planning
- Multiple pick methods
- Rules-based directed picking
- Packing and containerization
- Consolidation, staging, and truck loading
- Advanced Ship Notice generation

**Value Added Services**

- Compliance Labeling
- Compliance with UCC, EAN and other GTIN product labeling standards
- Kitting/de-kitting
- Multi-level Bills of Material

**Warehouse Automation**

Oracle Warehouse Management has a built-in Warehouse Control System (WCS) module to integrate with voice and material handling equipment (MHE) solutions such as conveyors, carousels, pick-to-light, and automatic storage and retrieval systems (ASRS). Customers can deploy diverse equipment using an open API device integration to request tasks, and receive responses from diverse equipment types. Managerial workbenches enable real-time monitoring of the equipment and provide real-time visibility to the entire automation environment.

**Supply Chain Execution Convergence**

Most companies have made significant progress at optimizing within their functional silos of warehousing, transportation, and manufacturing. However, there is still significant potential to better orchestrate and align end-to-end processes across functional silos. For example, Oracle Warehouse Management can execute on an optimized transportation plan and release orders based on the dock appointments, with picked material staged to the correct dock door. Oracle WMS also uses the optimized transportation plan to recommend trailer loading in reverse stop sequence.

Oracle WMS can be leveraged in combination with Oracle Transportation Management and/or Oracle Global Trade Management as a stand-alone supply chain execution solution. The Distributed Warehouse Management (DWMS) feature is a deployment option which provides upgrade flexibility and allows you to run Oracle WMS against multiple ERP systems including legacy and non-Oracle systems. Oracle Warehouse Management also provides a comprehensive solution for the Third Party Logistics companies (3PL) and Logistics Service Providers (LSP) with the flexibility of hybrid warehousing (client and self-managed inventory) and a client-centric billing solution.

**“One” Warehousing**

With Oracle Warehouse Management customers require only a single, global warehouse management solution for all aspects of business including distribution, discrete & process manufacturing, maintenance, spare parts, and field service.

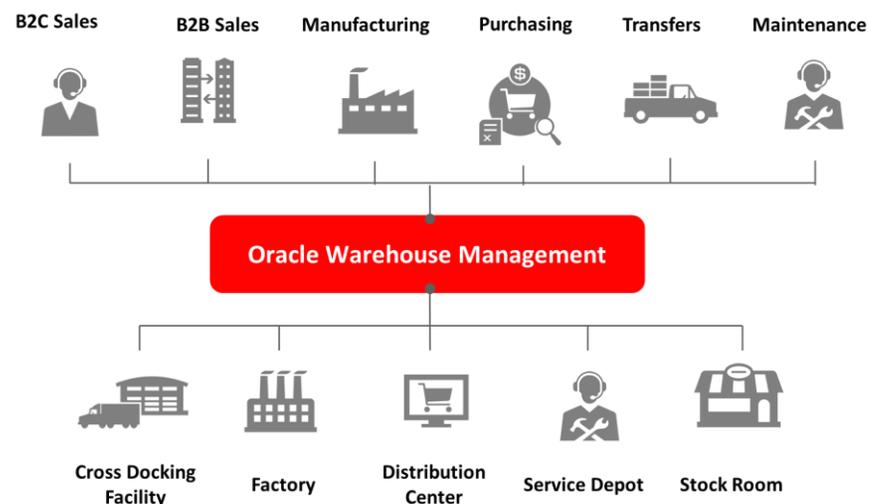


Figure 2: Any Flow, Any Facility, Any Type of Business

**ORACLE WAREHOUSE MANAGEMENT****RELATED PRODUCTS**

Oracle Warehouse Management expands the Oracle Value Chain Execution footprint and complements the following products:

- Oracle Inventory Management
- Oracle Mobile Supply Chain Applications
- Oracle Yard Management
- Oracle Order Management
- Oracle Transportation Management

**Any Type of Business**

Oracle Warehouse Management supports component picks for discrete jobs and schedules, ingredient picks for process manufacturing batches, part picks for maintenance work orders and repair orders required for asset management or depot repair. Upon completion, end items will be put away to the optimal storage location or intelligently cross-docked to an outbound staging lane.

**Any Size Facility**

Oracle Warehouse Management's architecture enables companies to start small and expand as necessary to support growth in users, transaction volume and business processes while maintaining high performance service levels. Oracle Mobile Supply Chain Applications (MSCA) provide a simple, mobile materials management solution for smaller facilities. Oracle MSCA shares the same product architecture as the more feature-rich Oracle Warehouse Management solution for larger & sophisticated facilities.

**Inbound and Outbound Flows**

Oracle Warehouse Management also offers the materials management feature set required in reverse logistics operations. Starting with return receipts, users can define the material flow required for product received on returns documents and guide subsequent inspection and rework processing. The product can then be routed to the repair depot for repair, refurbishment, teardown, and write off or return to vendor as required. This enables users to seamlessly manage reverse logistics operations in the same distribution centers that handle vendor receipts and customer order fulfillment.

**Cost Reduction Through Optimization****Resource Optimization**

Oracle Warehouse Management enables users to optimize resources such as storage space, labor and equipment. Directed Put Away Rules recommend storage locations based on configurable parameters such as velocity, volume and/or weight, and material classification to dynamically slot material. These rules can minimize storage fragmentation, enforce compliance with hazardous material, reduce obsolescence or implement other storage restrictions. Wave Planning allows customers to balance the number of orders to release with the amount of labor on-hand and then monitor the outbound progress. Task Management streamlines warehouse operator picking by optimizing the pick path and dispatching queued tasks only to qualified warehouse operators who have the required equipment to perform the task. Labor Management allows warehouse managers to define labor standards and then measure their workforce's productivity from an individual level to across the entire warehouse. Oracle Warehouse Management Extensions for Oracle Endeca delivers unprecedented visibility and control to warehouse managers and senior logistics professionals.

**Material Optimization**

Cross Docking minimizes material handling by eliminating unneeded put away. Cross dock opportunities may be planned in advance or executed on an opportunistic basis. In distribution operations, finished goods may be cross docked from inbound directly to outbound staging for customer sales orders. In manufacturing operations, opportunities may exist to cross dock raw materials from inbound directly to manufacturing and to cross dock finished product from manufacturing directly to outbound staging.

Forward Pick Replenishment optimizes the material picking of high volume distribution centers which fulfill a large number of smaller orders. Forward pick locations are dynamically replenished such that picking tasks are only dispatched after the replenishment has been completed. For items with uniform demand, Pull Replenishment automatically tops off a forward picking locator as soon as a shortfall is detected. For items with irregular demand, Push Replenishment fills forward pick locations with the quantity of that item in demand.

## Maximum Flexibility

### Configuration not Customization

Oracle Warehouse Management supports configuring both the user interface and the business rules driving warehouse transactions. Mobile User Interface Personalization allows users to tailor what they want to view; how they want to view it; and what information is required to complete a transaction. Oracle Warehouse Management has at its core a patented, flexible and powerful Rules Engine, which permits extensive tailoring of key warehousing processes without the need to customize. Areas which often require significant flexibility include directed putaway, directed picking, task prioritization and assignment, product allocation, and label compliance.

### Adaptability to demand

Oracle Warehouse Management's Rules Engine and Workflows can adapt to rapidly changing business requirements driven by customers, regulatory bodies, new product introductions, fluctuating demand and global outsourcing. Existing rules can be modified or new rules introduced.

Oracle® Warehouse Management (WMS) helps organizations succeed by enabling best business practices across any type of facility. It reduces costs by optimizing both resources and material. And it provides maximum flexibility to respond to dynamically changing business objectives.

#### CONTACT US

For more information about Oracle Warehouse Management, visit [oracle.com](http://oracle.com) or call +1.800.ORACLE1 to speak to an Oracle representative.

**ORACLE®**

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#### Hardware and Software, Engineered to Work Together

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