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Oracle Warehouse Management Release 12

With Release 12 of the E-Business Suite, which became available in January, Oracle has added significant, new enhancements to its Warehouse Management System (WMS). Prior to the release, ARC was briefed on the functionality included in Release 12. This is Oracle's largest WMS release since November of 2004. It should be noted that because of the acquisition of the robust Transportation Management System (TMS) provider, G-Log, now rebranded "Oracle Transportation Management," the WMS and TMS solutions are not on the same release schedule, but an integration between the two has already been released.

The new solution has made several improvements that will make the manager of a Distribution Center happy. Oracle has improved their labor reporting, the ability to monitor labor productivity, and the ability to move labor to bottlenecked processes. There is new RFID functionality. There is support for planned cross docks (pegging inbound inventory as identified by an Advanced Ship Notice to an outbound shipment). And, there is increased ability to create configurable shipping documents.

However, the most significant news for WMS around this release is Oracle's new ability to support heavy process manufacturing verticals, like Chemicals and Metals. While the Food & Beverage and Pharmaceutical industries have traditionally bought WMS solutions from best of breed vendors, historically the only company with any real market share for the heavy process industries was SAP. SAP has some competition now.

In ERP style WMS, the inventory management model is located in the WMS. Previous to this release, the Oracle E-Business suite had two inventory modules, one that supported discrete industries, while the Oracle Process Manufacturing suite had its own inventory solution that serviced the process industries. Oracle Order Management, Procurement and Supply Chain Planning applications were integrated to one of these two inventory modules, depending upon the vertical. Each inventory application, in turn, supported manufacturing applications. The discrete industry solution, for example, supported standard costing and quality control while the process solution supported flavors of costing and quality control that fit the process industries.



In the new release there is only one inventory module that supports both process and discrete organizations. The manufacturing costing and quality applications are not converged in this release, so users must still pick the style of manufacturing that applies to their industry.

What does this change mean? It means that hybrid manufacturers can operate with just one item master and inventory system. For example, consider an aluminum manufacturer that needs process industry functionality to cast aluminum. However, once the aluminum is produced it becomes a discrete product. If that lot of aluminum is then machined into a variety of products, those products have discrete SKUs that need to be supported by an inventory model that supports discrete inventory attributes. Because discrete and process attributes are now contained in one item definition, and the inventory system now supports process requirements, on hand balances of inventory can now be managed and viewed centrally. To help support this, the new solution has features like dual units of measure, sub-lot control, hold, and netting logic. These changes make it easier for process manufacturers to engage in Available to Promise (ATP), which has been more difficult on the process side than the discrete. This is because of the need for many process manufacturers to have lots quality tested prior to release to downstream manufacturing or shipment. Inventory in this status is on reserve. The new solution provides for better status attributes surrounding holds, and it prohibits a warehouse location that has been discovered to have erroneous inventory balances (an incorrect net inventory calculation) from being included in the Supply Chain Planning application's available to promise calculations.

ERP style WMS solutions, unlike best of breed solutions, are frequently used to support the warehouse that feeds the factory floor. The latest upgrade will now allow users to use the WMS' inventory control, replenishment, and task dispatching user interfaces to better support process manufacturing operations.

The warehouse attached to a factory also needs to be able to support capital equipment maintenance and repair. The new solution offers better integration to Oracle's Enterprise Asset Management (EAM) application. At a high level, EAM workflows include work requests, material requests, and scheduling. The new release integrates the material request step that takes place in the EAM solution with the WMS' ability to pick the service parts and deliver them to the right location. The WMS control board can be used

to interleave spare parts picks with other warehouse activities, as well as monitor the progress of the pick delivery.

In comparing new releases of ERP WMS solutions to best of breed solutions, this analyst continues to be struck with the greater support for the warehouse attached to the factory, and the end to end lot traceability that the ERP style WMS solutions provide.