WM-PP Interface for Pick Parts Material Staging

Installation of WM-PP Interface for pick parts material staging & the Relevant Transaction Flows

Link to Content's target Space:

TINY URL:  http://wiki.sdn.sap.com/wiki/x/UwOXB

Please add this page under category: Warehouse Management (LE-WM)

Applies to: SAP 4.7/ECC 6.0

Summary

The materials that are to be supplied to production site through warehouse are effectively managed using WM-PP interface. This document strives to cover the entire gamut of this most important interface. Document is structured in two parts. First part covers the basics on installation of WM-PP interface. Part-II covers the business transaction flows when production planning interacts with warehouse management module when using staging indicator '1' i.e. pick parts.

Author(s):

Prakash Aminchandra Pol

Company: Infosys Technologies Limited
Created on: 07-Feb-2010

Author(s) Bio

Prakash Pol, SAP Lead Consultant currently with Infosys Technologies Limited is MM and WM consultant.

Table of Contents

> Introduction
> Part-1 Installation of WMS interface with Production planning
> Part-2 Business transaction flow when production supply takes place through WM-PP interface for pick parts staging indicator
> Conclusion
> Related Content

Introduction

The crux of WM-PP interface is the concept called “material staging”. The material staging indicator in control cycles define the method of how materials can be supplied with the warehouse management system. Four material staging methods are possible in SAP. This document specifically stresses upon the staging indicator '1' i.e. Pick parts. * '1': Pick parts- The production order quantity required at the shop floor is picked up using this method. Picking can takes place through immediate creation of TR after staging or through creation of delivery if it is customized at IMG.

- '2': Crate or KANBAN parts: These materials are always removed from warehouse in full cases. Whenever a case of needed parts is emptied in production then these can be ordered.
- '3': Release order parts: Release order parts are scheduled individually and replenishment is carried out manually based on production orders.
- '4': Manual staging: Here the materials are staged manually i.e. movement of components to production storage is carried out using manual transfer orders. When you post the goods issue, posting are made to destination storage bins through control cycles.
- '0': Not relevant to WM-PP: These types of materials are not to be requested using WM system.

Part-1 Installation of WMS interface with Production planning
Customizing setting to be maintained at IMG node- SPROàLogistics ExecutionàWarehouse managementàInterfacesàDefine Production. This setting will ensure the tight integration of warehouse management with production planning module.

**STEPS:**

**First step** is to define the production supply area. The supply area is used for material replenishment purposes and is situated directly on the shop floor. The supply area is used in KANBAN production control and in WM. The supply area is assigned to following objects- Plant, Storage locations and person responsible. Several supply areas can be defined for one storage location, however one supply area can not be assigned to multiple storage location. The standard T-code used to maintain supply area is PK05.

**Second step** in maintaining the WM-PP interface is to assign replenishment movement types at production storage type levels. Standard SAP WM movement type is 319. Replenishment movement type is basically a WM movement type used to replenish warehouse stock internally for storage bin in the assigned production storage type. This movement type is triggered when the material staging is carried out for production supply and also when one has to replenish the fixed bins. You can also assign replenishment method in storage type by having methods like replenishment report or transfer order creation for fixed bin/random. LP21 is used if you have decided to go for replenishment planning report for fixed storage bins and LP22 for replenishment report based on outbound deliveries. In Part-2 of this document under step 5, when you create TR for material staging, it is actually a replenishment using LB13.

**Third step** in interface is to decide whether you need picking for a particular supply area and staging indicator. This picking would be carried out either through transfer requirement or through delivery. If you choose delivery creation, then one has to enter delivery type and the goods recipient. In standard SAP default WMPP delivery type is created for such purpose.

**Fourth step** is carrying out an activation of WM-PP interface. Under this step you instruct the system on whether material supply to production area through WM management is active or not. You could also set an indicator if you want to carry out complete material staging (i.e. for all items with full quantity) whenever the TR/TO is generated for replenishment. If you have fixed production storage bins then batches found in WM can be confirmed back to production orders by setting batch confirmation PP indicator.

**Fifth step** is to maintain control cycle using LPK1 transaction; here you define what is the destination storage type and bin for the particular material, plant and supply area. If supply area is a source from which materials are supplied to production site then the control cycle is the destination data which specifies on what is the exact location on shop floor where materials are to be supplied. In this step, the staging indicator is extremely important setting whereby you mention what is the type of staging you want to carry out. As explained in Introduction section of this document, staging indicator 1 stands for pick parts.

The next section on transaction flows will try to explain business scenario when staging is carried out through indicator 1.

### Part-2 Business transaction flow when production supply takes place through WM-PP interface for pick parts staging indicator

Following are the standard steps in carrying out various transactions in SAP for supplying the materials to production area when staging is carried out using ‘Pick List’ i.e. with indicator 1. * CO03 Display the reservation if any in the production order (WM pick-list)

- LP10 Conversion to WM units, rounded to full WM packaging units and conversion back to the base unit of measure
- LB02 change Storage location to 0001 for all postions
- LB13 Create transfer order from transfer requirement
- The transfer order confirmation is done to finally supply the components to production storage types

**TRANSACTION FLOW**

1. CO03 Display production order in SAP
2. Go to pick list to get the information of all the components that are to be picked up for supply to the production site.
3. To carry out material staging one can use LP10. You can also carry out conversion to WM units, rounded to full WM packaging units and conversion back to the base unit of measure to ensure the proper conversion between WM and base UoM.
   1. Skip from Base unit of measure to WM unit of measure
   2. Rounding to the upper WM unit
   3. Skip back to Base unit of measure
4. Then to perform staging Click on Material staging
5. Enter to confirm each warning message
6. Then SAVE. After you save, you will be taken to the initial screen of LP10 with message saying- WM staging of materials saved in database. This means a transfer requirement has been created in gSAP
4. Then using LB13, find the created TR number
5. Using LB13 only, create transfer order from transfer requirement
6. Converting this TR into TO, check all the quantities and batches in TO before posting. Carry out the same operation for each item
7. Then post the transfer order by saving the same.

### Conclusion

If you have properly installed the WM-PP interface the materials could be supplied to the production site/shop floor from the physical warehouse in an efficient manner. Warehouse personnel can then track this physical flow of material on system more effectively and with minimal effort.
Related Content