Infor LN User Guide for Project Pegging

Important Notices

Trademark Acknowledgements

Publication Information

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About this document

Objective

The objective of this guide is to describe project pegging in LN.

Intended audience

This document is intended for persons in charge of project pegging. The intended audience can include key users, implementation consultants, product architects, support specialists, and so on.

Document summary

Chapter number	Content
Chapter 1	Project pegging
Chapter 2	Project pegging in Planning
Chapter 3	Project pegging in Manufacturing
Chapter 4	Project pegging in Sales and Procurement
Chapter 5	Project pegging in Warehousing
Chapter 6	Project pegging in Service
Chapter 7	Project pegging in People

How to read this document

This document was assembled from online Help topics. As a result, references to other sections in the manual are presented as shown in the following example:

For details, refer to *Introduction*. To locate the referred section, please refer to the Table of Contents or use the Index at the end of the document.

At the end of this document, a glossary is included. Terms explained in the glossary are presented as shown in the following example:

In Common, you can link addresses to business partners.

If you view this document online, you can click these terms to go to the term's definition in the glossary.

Comments?

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Chapter 1
Project pegging

1

Project pegging overview

A production order can be used to meet multiple demands from multiple projects and hence requires pegging distribution at the order level and at order line levels (such as estimated materials, production planning). This process is called (cost) pegging and the attributes are called pegs. If an item is project pegged, you can track the costs at the project, activity, and element level through the complete product life-cycle.

To perform proper (cost) allocation, tracking and tracing, inventory registration, and supply, pegging information must be added to items, inventory, and transactions throughout the entire goods flow, from ordering/receiving to issue/consumption. Because item lines can be split into multiple cost pegs, a peg distribution level is required below the item line. The main purpose of these cost pegs is cost distribution and not the physical movement of items.

Project pegging setup

To implement the project pegging functionality and to view peg (distribution) data, specify these parameters:

Step 1: Implemented Software Components (tccom0100s000)

Select the **Project Pegging** check box in the Implemented Software Components (tccom0100s000) session.

Step 2: Project Pegging Parameters (tcpeg0100m000)

Specify the project pegging parameters in the Project Pegging Parameters (tcpeg0100m000) session.

Step 3: Items - General (tcibd0501m000)

Specify the peg parameters by item in the Item - General (tcibd0101s000) session. Select the **Inherit Project Peg** and/or **Mandatory Project Peg** check boxes.

Cost peg distributions

Cost peg distributions are used in these LN packages:

- **Manufacturing**
  For more information, refer to *Pegging in Manufacturing - Overview (p. 13)*
- **Procurement**
  For more information, refer to *Project pegging in Procurement (p. 15)* .
- **Warehousing**
  For more information, refer to *Cost peg transfers - overview (p. 21)* and *Peg distribution for cycle counting and adjustment orders (p. 64)* .
- **Service**
  For more information, refer to *Project pegging in depot repair (p. 71)* .
- **People**
  For more information, refer to *Costs distribution of production order hours – examples (p. 75)* .

Chapter 2
Project pegging in Planning

2

Cost Peg Transfers in Enterprise Planning

Enterprise Planning has two types of cost peg transfers:

- Manual cost peg transfer

  Orders for this type of transfer are retrieved from Warehousing and are considered firm planned demand. These orders cannot be created, updated, or deleted in order planning.

  Displayed in the Item Order Plan (cprrp0520m000) session.

- Planned cost peg transfer

  Orders created based on the available excess on hand and excess on order.

  Displayed in the Item Order Plan (cprrp0520m000) session. The transfer out of a project peg is shown as a demand transaction and the transfer into a project peg is shown as a supply transaction.

  Planned cost peg transfers can also be viewed in the Planned Cost Peg Transfers (cprrp0130m000) session, which shows detailed information about the transfer.

Cost peg transfers in order planning

Order planning takes both manual cost peg transfers and planning cost peg transfers into account. The manual cost peg transfers are treated as demand orders and the excess on hand and excess on order are used to supply these transfers. In case of lack of excess on hand or on order, a cancel exception message is logged.

Planned cost peg transfers are created, updated, or deleted during the demand/supply matching of the order planning run. The planned cost peg transfers are maintained by the order planning process and cannot be manually changed.

Creating planned cost peg transfers

When excess on hand or excess on order is available that can be assigned to another cost peg, a planned cost peg transfer is created to show the transfer of the cost peg. Transfer rules that apply to the excess are checked in the Cost Peg Transfer Rules (tcpeg1100m000) session.

Updating and deleting planned cost peg transfers

Planned cost peg transfers with the status **Planned** cannot be changed. Before the planning of a plan item starts, all planned cost peg transfers with the status **Planned** are deleted.

Planned cost peg transfers with the statuses **Firm Planned** and **Confirmed** cannot be changed by order planning. They follow the same procedure as manual cost peg transfers.

The default status of a cost peg transfer is **Planned**. The statuses **Firm Planned** and **Confirmed** are maintained by the user.

Cost peg transfer exception messages

Cancellation exception messages are logged for cost peg transfers. These exception messages can be automatically processed in the Update Exception Messages (cprao1210m000) session.

Temporary cost peg transfers

Inventory can physically be transferred between two projects. If the **Borrow/Loan and Payback** check box is selected in the Project Pegging Parameters (tcpeg0100m000) session, there is no cost or billing impact.

The borrow/loan functionality allows the physical transfer of materials between projects for a limited amount of time. The borrowing projects remain responsible for any additional costs incurred during the time the loan is active.

Selecting the **Aging** check box allows you to set specific time limits for the return of the borrowed inventory. If the loaned inventory cannot be replenished on time by the borrowing project, the loan is converted into a permanent transfer.

Chapter 3
Project pegging in Manufacturing

3

Pegging in Manufacturing - Overview

Production Orders

Production orders are created:

- **Via transfer from Enterprise Planning**
  Peg information from planning is transferred during creation.
- **Manually**
  Peg information is defined manually by the operator based on the item settings such as inherit peg and peg mandatory. The peg distributions entered must be checked against commingle rules to verify that manually entered pegs are allowed to be on the same production order.

  It is possible to add a peg on a production order for an anonymous end item.

Peg information is included in Print Production Order Documents (tisfc0408m000).

Bill of Material

The **Inherit Project Peg** can always be modified for an item. The modification can cause inconsistences in the BOM. To prevent this a multilevel bill of material setup must be validated in regard to setting of the item.

Estimated Materials

Estimated materials can be updated with peg information from a production order. Each material line needs its own peg distribution that is sent to planned inventory transactions. The peg distribution for each estimated material line does not allow changing any of the peg information. The quantity of each line will prorate to the pegs based on planned quantity needed per peg.

Material Issue

The issuing of project pegged parts to production orders updates the costs of the production orders, project costs are not updated because the material costs already exist there.

If there is a shortage of pegged inventory on a peg while an excess from another peg exists it can be used if commingling is allowed by the peg parameters. In this case the cost is updated in project per the peg distribution.

- The issuing of anonymous items to a pegged production order causes costs to be updated in the project ledger as well as in the production order.
- The issuing of a customer furnished item to a production order does not get updated in the project ledger or the production order.

Safety Stock Calculation

It is possible for non-mandatory project pegged items to receive orders for an inventory item to fulfill project pegged demand, and at the same time adjust the safety stock. The supply order in such case is a combined distribution of a project pegged demand and a safety stock demand (no project peg).

Note

If the supply for a specific project cost account is excluded from commingling it can not be combined with supply for safety stock.

Project Cost Account

A project has two main structures:

- **Element**
- **Activity**

Users must define a structure of elements to model a work break down, model a structure of activities or a combination of both. Within project pegging, demand -, and supply orders for project pegged items refer to a project cost account.

A project cost account can be composed out of the cost peg attributes:

- project+ **Element**
- project+ **Activity**
- project+ **Element**+ **Activity**

Note

The Project Parameters have a new company parameter to indicate which combination of attributes is used to show the cost peg.

Chapter 4
Project pegging in Sales and Procurement

4

Project pegging in Procurement

To identify costs, demand, and supply for a project, you can implement project pegging and specify the items for which project pegging is required. For more information, refer to *Project pegging overview (p. 9)* .

Note

If you want to use project pegging in combination with costing breaks, also select the **Costing Breaks** check box in the Implemented Software Components (tccom0100s000) session. For more information, refer to Costing Breaks.

Project pegging in Procurement includes the pegging of project costs for purchase business objects, such as requisitions, requests for quotation, purchase orders, and purchase (push) schedules. If the item on the business object requires a peg, a peg distribution must be linked to these objects. In a peg distribution, the required quantity of the parent business object is distributed across distribution lines for combinations of project/budget, project element and/or project activity. For example, if a distribution is used to peg the ordered quantity on a purchase order line, the goods are purchased for and the costs are booked to these projects, elements, and activities.

A peg distribution cannot be created if the following are applicable for the parent object line:

- The warehouse is a **Project** warehouse
- The project is a PCS project
- The item is a **List** item of the type kit, or an **Equipment** item
- The warehouse is blank and the item type is **Purchased**, **Manufactured**, or **List**
- The **Default Supply Source** is **Assembly** in the Items - General (tcibd0501m000) session
- The **Configurable** check box is selected in the Items - General (tcibd0501m000) session
- The **Schedule Type** is **Pull Schedule** in the Items - General (tcibd0501m000) session
- The **Order Policy** is not **Anonymous** in the Items - Ordering (tcibd2500m000) session
- The **Order System** is not **Planned** in the Items - Ordering (tcibd2500m000) session
- Inventory handling is **By Component** for the purchase order line
- Payment is **Pay on Use** for the purchase order line

- The purchase order line is a VMI direct delivery line

Generating a peg distribution

When a purchase business object line is saved, a peg distribution can be generated only if project pegging is implemented. In the Purchase Peg Distribution (tdpur5100m000) session, a peg distribution can be manually specified or automatically defaulted from other objects. The business object is stored on the distribution line and includes these fields:

Business Object Type for Peg Distribution	Business Object	Business Object Reference
RFQ Line	RFQ number	position/alternative
RFQ Response	RFQ number	position/alternative/bidder
Requisition Line	requisition number	position
Purchase Order Line	order number	position/sequence
Purchase Order Receipt	order number	position/sequence/receipt sequence
Stage Payment Line	order number	position/stage payment line
Purchase Schedule Line	schedule number	position
Purchase Schedule Receipt	schedule number	position/receipt sequence

Commingling pegs

If purchase order/schedule lines are project pegged, commingling of pegs is subject to project combination checks. Commingling rules regarding project pegging, which you can specify in **Project Pegging** under Common, determine if lines with different pegs can be commingled into one purchase order line or purchase schedule. In general, commingling is carried out by planning group, which includes the commingling rules for the linked projects. However, commingling for export license required items is restricted by project. This means that if projects are different, separate purchase order lines or purchase schedules are created. To further restrict commingling, you can specify commingling exceptions, which are the pegs that must be excluded from commingling.

Example

Project 1 with activity 10 and project 1 with activity 20, both have a requirement for an export licensed item.

- Without an exception, 1 purchase order line with 2 distribution lines are created.
- With an exception for one or both of the activities, which means one purchase order line per project peg, 1 purchase order with 2 purchase order lines are created.

Note

If commingling of pegs is not allowed, a new purchase schedule header must be created when generating schedule lines from Enterprise Planning. Therefore, multiple active schedules with the same item, buy-from business partner, ship-from business partner, purchase office, and warehouse can be available.

Handling peg data

If the goods are purchased for and the costs are booked to only one project, the peg is visible directly on the purchase object line. When the line is saved, LN automatically writes one distribution line to the peg distribution. Peg fields, quantities, or the ordered amount can be updated on both the parent object line and the distribution line, after which they are synchronized both ways. If more pegs (distribution lines) are specified in the peg distribution, the peg fields are emptied on the parent object line and the quantities or ordered amount are unavailable. The sum of the quantities or ordered amounts on the peg distribution can be updated to the quantities or ordered amount on the parent object line. If the peg distribution's total quantity differs from the quantity on the parent object line, the following question about updating the parent object line is asked: **Peg distribution quantity does not match line total. Click OK to update 'Total'**.

Warehouse receipts

For partial warehouse receipts, pegs with the highest priority obtain quantities first. The priority of the peg is based on the required date and required quantity from Enterprise Planning for the purchase line that must be received. The peg with the earliest required date has the highest priority.

If no required date and required quantity can be retrieved from Enterprise Planning, this fallback mechanism is applicable:

- **Purchase order lines**
  The priority is based on the dates from the inbound order line peg distribution.
- **Purchase schedule lines**
  The priority is based on the dates from the purchase schedule line peg distribution. Schedule lines are not linked to individual inbound order lines because, for push schedules, goods are received against a blanket warehouse order, which is linked to the schedule header. During the receipt process for a certain quantity, the pegs that match the total quantity to be received for the schedule lines are communicated to Warehousing for use in the receipt process. These schedule lines are communicated by line position and (oldest) planned receipt date. The

generated warehouse receipt line peg distribution always is a subset of the (aggregated) peg distribution of the schedule lines.

When a receipt is confirmed, the peg distribution (order line), or peg distribution data (schedule line) is copied from the warehouse receipt line to the purchase order/schedule receipt. You cannot update the peg distribution for the purchase order/schedule receipt.

If a receipt correction or an inspection is performed for a receipt line in Warehousing, based on the priority in the peg distribution, the peg distribution lines are also updated with the quantity changes. By means of the **Warehouse Receipt Distribution Line** field, which is communicated by Warehousing, the related distribution lines are updated in the Purchase Peg Distribution (tdpur5100m000) session.

Purchase receipts

For partial purchase receipts and invoice handling, no priority rules are used. Partial purchase receipts are proportionally distributed to the peg distribution lines. You cannot update pegging information on the purchase receipt. However, if a parent object line and linked distribution line(s) include an ordered amount and no ordered quantity, you can change the ordered amount after receipt in the Change Price and Discounts after Receipt (tdpur4122m000) session. When the received amount is changed for the order line, the amount change is proportionally distributed to the peg distribution lines.

Note

Planned inventory transactions, material transactions, and (financial) integration transactions are not logged on parent object line level, but on peg distribution level. Therefore, transactions are booked by peg.

If project pegging is implemented but a project peg is not mandatory for an item, you can optionally specify a peg (distribution).

If a purchase requisition line is generated from a catalog and the selected item requires a mandatory peg, the requisition line can be inserted without peg distribution linked. LN checks if a purchase distribution is available only when the requisition is submitted for approval.

When a bidder is linked to an RFQ, a record is inserted in the RFQ Responses (tdpur1506m000) session, but no peg distribution is linked yet. The RFQ line's peg distribution is copied to the response line when its status becomes **Accepted**. A peg distribution that is linked to a response line with the **Accepted** status, cannot be updated.

If landed costs are linked to an order/schedule line with a peg distribution, the landed costs are proportionally calculated by peg and written to the Integration Transactions (tfgld4582m000) session, based on the peg distribution that is linked to the order/schedule line.

If an item that requires a peg must be invoiced by supplier stage payments, a peg distribution is linked to a **Stage Payment Line**. For a combination of purchase order line/stage payment line, the **Amount** of the stage payment line is distributed across the distribution lines. The peg distribution is created when the stage payment line is approved and is deleted when the stage payment line is unapproved. For more information, refer to Supplier stage payments.

Backorder lines are handled as independent order lines. You can change, add, and delete peg distribution lines for a backorder line. The backorder line pegs need not be equal to the parent object line pegs.

When returning pegged goods, specific conditions are applicable. For more information, refer to Purchase return orders.

Chapter 5
Project pegging in Warehousing

5

Cost peg transfers - overview

Cost peg transfer functionality enables the transfer of cost between two different pegs (pegged to unpegged and vice versa). The cost peg transfers do not physically move the inventory but only transfer the cost of the inventory. Cost peg transfers are performed within the same warehouse. It is not possible to transfer the goods across warehouses.

When the cost peg transfer is processed, the changes are permanent (when excess inventory is moved). However, the inventory can be transferred back..

The source peg and the target peg can be either an unpegged inventory (no project, element and activity filled) or a pegged inventory (belonging to a project, element and/ or activity). For a cost peg transfer line, either the source peg or the target peg must be specified. The cost peg transfer also changes the allocations within the inventory - Transfer Allocated (from peg) and Transfer on Order (to peg).

Cost peg transfers can be generated from different sources within LN.

These are the possible origins for the cost peg transfers:

- **Enterprise Planning**
- **Outbound Advice**
- **Manual**
- **Mass Cost Peg Transfer**

Enterprise Planning

The cost peg transfers are created in Enterprise Planning during the planning runs and can be transferred to Warehousing by the user or by LN. The cost peg transfers are generated to handle shortage, using the Project Pegged Inventory (whwmd2560m000) session, identified during the planning run. When you process the cost peg transfer the cost is transferred from the source peg to the target peg. Financial transactions are created during the processing of the cost peg transfer.

Outbound Advice

Cost peg transfers can be created to handle shortages during the generate outbound advice process. When shortages occur, LN first searches for the open cost peg transfer and links it to the outbound advice.

During the Generate Outbound Advice process, there can be shortages in project pegged inventory. When shortages occur, LN searches for a cost peg transfer, and links it to the outbound advice. The Cost Peg Transfer is processed when the outbound advice is picked or can be processed manually.

In case the shortage is not met, a cost peg transfer is created if Available Excess or Available to Transfer (ATT) inventory is present for a different peg. The Available Excess and Available to Transfer (ATT) inventory is transferred to the pegs with shortage of inventory.

Manual

LN allows you to manually create cost peg transfers. These are not created by specific process. The user can determine which pegged inventory must be transferred.

Mass Cost Peg Transfers

Mass cost peg transfers are created by executing a separate process that allows the user to execute a cost peg transfer from a source peg to a target peg.

Processing Cost Peg Transfer

While processing the cost peg transfer, LN:

1. Checks the inventory level of the source peg. In case of insufficient inventory, the cost peg transfer is not processed.
2. Moves the quantity of the cost peg transfer from the source peg to the target peg.
3. Creates financial transactions for the cost peg transfer.

The cost peg transfer can be processed manually or automatically during the picking process. Manual processing can be performed using an option or by a batch session available across all the cost peg transfer sessions.

Changes on the cost peg transfer

LN allows you to modify the cost peg transfer of all origins. In case of insufficient inventory, the cost peg transfers are not processed. The cost peg transfer that is linked to an outbound advice cannot be modified.

In case the cost peg transfer quantity increases, while the cost peg transfer is modified, the Available Excess and the Available to Transfer of the source peg no longer meets the requirement, LN checks for the inventory available on the source peg. If inventory is available, LN displays a warning message that the transfer includes the goods that are not moved from Available Excess and the Available to Transfer inventory. In case the inventory is not sufficient, LN displays an error message.

Changes on the outbound advice

In case the advised quantity is increased on the outbound advice, the increased quantity must also be advised and the cost peg transfers linked to the outbound advice are also updated (if there is enough inventory) or a new cost peg transfer is created to match the advised quantity.

Example

Increase the advised quantity:

When you change the advised quantity on the outbound advice from 20 to 25:

Cost Peg Transfer Lines (whinh145)

Cost Peg Transfer	From Peg	To Peg	Quantity	Required Date	Processed
TRF000001	AAA-01	BBB-02	8 (5+3)	31/11/2011	No

The project pegged inventory:

Project Pegged Inventory (whwmd260)

Peg	on order	on Hand	Allocated	Location Allocated	Available Excess	Available to Trans-fer	Transfer Allocated	Transfer on order
AAA-01	0	20	10	12 (10+2)	2 (5-3)	0	8 (5+3)	0
BBB-02	0	5	10	13 (10+3)	0	0	0	8 (5+3)

Outbound Advice is updated:

Outbound Advice (whinh225)

Outbound Advice	Advised Quantity
1	25 (20+5)

The Outbound Order Line Cost Peg Distribution:

Outbound Order Line Cost Peg Distribution (whinh290)				
Peg	Ordered Quantity	Required Quantity	Need Date	Advised Quantity
BBB-02	10	10	31/11/2011	13 (10+3)
AAA-01	10	10	01/12/2011	12 (10+2)

Decrease the Advised Quantity

When you change the advised quantity from 20 to 14:

The cost peg transfer:

Cost Peg Transfer Lines (whinh145)

Cost Peg Transfer	From Peg	To Peg	Quantity	Required Date	Processed
TRF000001	AAA-01	BBB-02	5	31/11/2011	No

The cost peg transfer remains unchanged, because the decrease in advised quantity is removed from the location allocation based on the latest required date.

The project pegged inventory:

Project Pegged Inventory (whwmd260)

Peg	on order	on Hand	Allocated	Location Allocated	Available Excess	Available to Trans-fer	Transfer Allocated	Transfer on order
AAA-01	0	20	10	4	5	0	5	0
BBB-02	0	5	10	10	0	0	0	5

Outbound advice is updated:

Outbound Advice (whinh225)

Outbound Advice	Advised Quantity

1	14 (20-6)

The Outbound Order Line Cost Peg Distribution:

Outbound Order Line Cost Peg Distribution (whinh290)

Peg	Ordered Quantity	Required Quantity	Need Date	Advised Quantity
BBB-02	10	10	31/11/2011	10
AAA-01	10	10	01/12/2011	4 (10-6)

Splitting the cost peg transfer

During the Generate Outbound Advice run, shortages if identified, are met using the existing cost peg transfers. The two scenarios are:

- Quantity on the cost peg transfer is more than the shortage quantity
- Quantity on the cost peg transfer is less than the shortage quantity

When the cost peg transfer quantity is more than the shortage quantity, the total cost peg transfer quantity is not utilized. A new cost peg transfer is created (with the same origin) with quantity equal to the shortage quantity. Consequently, the quantity of the original cost peg transfer is reduced.

When the cost peg transfer quantity is less than the shortage quantity, the cost peg transfer must be updated with the outbound advice. LN checks for other cost peg transfers that can be used to handle the shortage.

Example

Starting Point

Project Pegged Inventory (whwmd260)

Peg	on order	on Hand	Allocated	Location Allocated	Available Excess	Available to Trans-fer	Transfer Allocated	Transfer on order
AAA-01	0	20	10	0	0	0	10	0
BBB-02	0	5	10	0	0	0	0	10

An order is created with this outbound order line cost peg distribution data:

Outbound Order Line Cost Peg Distribution (whinh290)

Peg	Ordered Quantity	Required Quantity	Need Date	Advised Quantity
AAA-01	10	10	31/11/2011	0
BBB-02	10	10	01/12/2011	4 (10-6)

This Cost Peg Transfer is present, origin can be (Enterprise Planning, Manually, Mass Cost Peg Transfer):

Cost Peg Transfer Lines (whinh145)

Cost Peg Transfer	Order Line	From Peg	To Peg	Quantity	Required Date	Processed
TRF00001	10	AAA-01	BBB-02	10	10/12/2011	No

As per the data, there is a shortage of five pieces for the Peg BBB-02 which can be handled with the Cost Peg Transfer TRF000001.

The outbound advice is created with this data:

Cost Peg Transfer Lines (whinh145)

Cost Peg Transfer	Order Line	From Peg	To Peg	Quantity	Required Date	Processed
TRF00001	10	AAA-01	BBB-02	5 (10-5)	10/12/2011	No
TRF00001	20	AAA-01	BBB-02	5	01/12/2011	No

For Cost Peg Transfer Line 20 the Required Date has been changed to match the Outbound Order Line Cost Peg Distribution record.

For the Cost Peg Transfer TRF000001 line 20 of the Outbound Advice is also populated.

Within the inventory table, this data is updated:

Project Pegged Inventory (whwmd260)

Peg	on order	on Hand	Allocated	Location Allocated	Available Excess	Available to Trans-fer	Transfer Allocated	Transfer on order
AAA-01	0	20	10	10	0	0	10	0
BBB-02	0	5	10	10	0	0	0	10

Only the location allocated is changed, because the cost peg transfer is already present before the outbound advice has been created. Splitting Cost Peg Transfer does not influence the Transfer Allocated and the Transfer on Order. Project Pegged Inventory (whwmd2560m000) session.

Peg distribution in the inbound and inspection processes

Receiving project pegged goods into a warehouse results in inventory transactions that are based on the underlying peg distribution of the related receipt line.

Inbound and Pegging

This results in an update of the pegged inventory levels in the Project Pegged Inventory (whwmd2560m000) session. The planned quantity of the inbound order line is updated in the Planned Inventory Transactions (whinp1500m000) session, which also includes the peg data. Planned inventory transactions are also generated for each peg.

If the receipt line is marked for inspection, the received quantity is blocked. Depending on the parameter settings, the quantity can also be blocked for usage by Enterprise Planning. Any quantity, rejected (or destroyed) during receipt inspection are assigned to the pegs having the latest required date to make sure that the approved items are assigned as much as possible to the pegs with the earliest required date in order to meet the demand in time.

Project Warehouses

For a ship-from or ship-to warehouse that is a Project or a Project-WIP warehouse; no inbound/ outbound order line peg distribution is created. In that case, the project fields on the inbound/ outbound order lines are used. When however, an inbound/ outbound order line is created for a 'Project Pegged' item related to a Normal warehouse, a peg distribution is applicable and the project fields on the inbound/ outbound order lines are disabled.

Inbound Order Line Peg Distribution

For an inbound order line, the peg distribution data can only be viewed and not maintained. In case of manual transfer orders, the peg distribution can only be maintained (manually) on the outbound order line. When an outbound transfer line is saved after the peg distribution is modified, the inbound transfer order line peg distribution changes accordingly.

Cost and Service Items

For order lines with a cost or service item, also a peg distribution can exist, but assigning the received quantities of these item types to the peg lines is always performed pro-rata. This peg distribution data is only essential for proper cost allocation to projects/ pegs and has no logistic purpose as these items are non-physical entities. When ordering zero pieces of a certain cost/ service item, also a peg distribution data can be created, consisting of only one peg line.

Warehouse Receipts

- **Receipt Line Peg Distribution**
  When confirming a receipt line, LN creates peg distribution under the receipt line. The sequence of assigning received items to pegs is based on the earliest required dates and required quantities retrieved from Enterprise Planning (EP).

  In case an inbound line contains multiple pegs and the received quantity deviates from the ordered quantity, the received quantity must be apportioned to the peg distribution lines according to the priority determined by the 'Earliest Required Date' that is defined in Enterprise Planning (EP). The peg distribution lines are generated when the receipt is confirmed.

  Sometimes, the order quantity of the order exceeds the total required quantity of the item, resulting in an excess quantity. The excess is determined in Enterprise Planning (EP), in which case the distribution lines have no demand order reference and an empty required date. Any excess on top of the required quantity (not exceeding the ordered quantity) is assigned to the pegs in peg line sequence. Any excess that is received on top of the ordered quantity is distributed to the peg lines proportionally based on the ratio of ordered quantities.

- **Update Planned Inventory Transactions / Inventory Levels**
  When confirming a receipt line, the Planned Inventory Transactions are updated, based on the received quantities of the corresponding receipt line peg distribution. So, the planned inventory transactions are recorded on project peg level.

  When confirming a receipt line, the Inventory on Hand is increased in the Warehouse - Item Inventory (whwmd2515m000) session. Similarly, the Inventory on Hand must be increased in the Project Pegged Inventory (whwmd2560m000) session, based on the received quantities of the corresponding receipt line peg distribution.

- **Assigning Received Quantities to Project Pegs**
  In case of a full, partial or over receipt on an expected inbound order line containing multiple peg lines, LN decides the pegs to which the received quantity is assigned, based on the following sequence:

a. The pegs having the earliest required date are received first, until all required quantities are fulfilled.

b. The pegs having unfulfilled ordered quantities (and no required quantities anymore) are received in sequence of peg line.

c. Any excess on top of the ordered quantity is assigned to the pegs proportionally.

When the full order line quantity is received on the linked receipt line, for each order line peg a receipt line is created and the total of the received quantities per peg line is equal to the ordered quantity.

- **Back Orders**
  For a confirmed receipt line, if the received quantity is less than the expected quantity, the difference must be resolved in Purchase Control by processing the created back order (if allowed). This back order is received on another inbound line with a peg line distribution for the pegs that are not fully received.

  When the back order line is received and confirmed, a receipt line peg distribution is created for the remaining pegs received.

- **Receipt Corrections**
  You can use the Receipt Correction (whinh3121s000) session, to change the confirmed received quantity. Increasing the already received quantity leads to positive receipt correction. The additional received quantity is assigned to the pegs in the same way as the initial receipt.

  a. The pegs having the earliest required date are received first.

  b. The pegs having unfulfilled ordered quantities are received in sequence of peg line.

  c. Any excess on top of the ordered quantity is assigned to the pegs proportionally.
  Decreasing the already received quantity leads to negative receipt correction.

  When the received quantity is decreased, the change in received quantity is distributed across the received pegs in the following way:

  a. Any excess on top of the ordered quantity is decreased proportionally.

  b. The received excess on top of the required quantity, but less than the ordered quantity is decreased in sequence of the peg line.

  c. Any remaining received quantity is decreased in the sequence of the latest required date.

Inbound Procedure - Inspection

The Warehouse Inspections (whinh3122m000) session does not have an own line peg distribution. Registration of inspected/ rejected quantities takes place in the peg distribution available under the receipt lines which roll up into the inbound order line peg distribution.

Generally, inventory subject to warehouse inspections remains blocked. Similarly, the Project Pegged Inventory (whwmd2560m000) to be inspected remains blocked. After processing the inspection, the planned inventory transactions and the inventory levels are updated accordingly, by peg level.

Approved quantities are assigned first to peg lines having the earliest required date. Rejected/destroyed quantities are assigned first to the peg lines having the latest required dates. In case of excess quantities,

the excess must be utilized first. The rejected/ destroyed quantities are distributed based on the actual received quantities of the receipt line (not on the total values of the related inbound order line). The updated receipt line peg information is rolled up to the level of the inbound line distribution.

- **No Handling of Rejected Goods**
  If the **Handle Rejected Goods** check box is not selected in the Warehouses (whwmd2500m000) session, rejected goods become supplier owned and are not added to the inventory, which means the costs must be removed from the project pegs.

- **Handling Rejected Goods (Inventory Disposition = No)**
  In this scenario, the warehouse parameter **Handle Rejected Goods** is selected and **Inventory Disposition** check box is not selected in the Inventory Handling Parameters (whinh0100m000) session.. Rejected goods become supplier owned, which means the costs must be removed from the project pegs. Rejected Inventory (whwmd2570m000) records are created for rejected quantities on a purchase order (or purchase schedule). The Receipt Line Peg Distribution (whinh3528m000) session can be started from the Rejected Inventory (whwmd2570m000) but the field **In Rejected Inventory** in the Receipt Line Peg Distribution (whinh3528m000) session is no longer visible because the peg details of the rejected inventory no longer exist, so that the rejected items become anonymous (unpegged) inventory. The rejected inventory can be accepted, destroyed or returned from the Rejected Inventory (whwmd2570m000) session.

- **Handling Rejected Goods (Inventory Disposition = Yes)**
  In this scenario, the warehouse parameter **Handle Rejected Goods** check box and the **Inventory Disposition** check box in the Inventory Handling Parameters (whinh0100m000) session are selected. The field **In Rejected Inventory** in the Receipt Line Peg Distribution (whinh3528m000) session is populated in the pegs, because the peg details still exist for the rejected items and the items do not become anonymous (unpegged) inventory. The pegs are updated while handling the rejected inventory. The quantity **In Rejected Inventory** must be decreased for each accepted, destroyed (scrapped) or returned inventory.

Outbound Procedure - Inspections

The Warehouse Inspections (whinh3122m000) session does not have own line peg distribution. There is also no specific peg distribution related to the outbound advice. Inspected/ rejected quantities are registered in the Outbound Order Line Peg Distribution (whinh2190m000) session.

Generally, inventory scheduled for outbound inspections remains blocked. Similarly, the Project Pegged Inventory (whwmd2560m000) to be inspected remains blocked. After processing the inspection, the planned inventory transactions and the inventory levels are updated accordingly, by peg level.

Update Outbound Order Line Pegs

The **To be Inspected Quantity** on the Outbound Order Line Peg Distribution (whinh2190m000) session, reflects the advised peg quantity that is already released and is subject to inspection.

The following conditions are applicable to handle the outbound order line pegs during warehouse inspections:

- For each released outbound advice, an inspection line is created. At this point, the **To be Inspected Quantity** is defined and apportioned to the pegs in sequence of earliest required date.
- When the advised quantity of the earliest peg is fully assigned as **To be Inspected Quantity**, the remainder of the released quantity is assigned to the **To be Inspected Quantity** of the next peg with the earliest required date and so on.
- Any approved quantities are assigned to the pegs in sequence of the earliest required date.
- Any rejected quantities are assigned to the pegs in sequence of latest required date. But in case of over delivery (Advised quantity > Ordered Quantity), the excess must be consumed first in sequence of earliest required date.
- The **To be Inspected Quantity** of the pegs is blocked for inspection.
- While processing an inspection record, any approved or rejected quantity is apportioned only to those pegs that have a **To be Inspected Quantity**. This **To be Inspected Quantity** is consumed by the approved and rejected quantities assigned to the peg. Effectively, the blocked quantity is decreased for the quantity processed.

Outbound process

Peg distribution in the outbound process

During the outbound process, issuing project pegged goods from a warehouse result in inventory transactions that are based on the peg distribution.

During the outbound advice and during inspections, the outbound order line cost peg distribution is updated with the advised quantities, approved quantities and the rejected quantities. When the goods arrive at the staging location and are shipped, the actual pegs are created. During the confirmation process, the shipment line peg distribution is created.

Generate outbound advice

While generating outbound advice for a pegged outbound order line, additional inventory checks are performed to determine the pegged inventory that must be advised. LN first searches for the available stock points. If the stock point is identified, the outbound order line cost peg distribution is advised based on the available quantity at the stock point and the available quantity in the project pegged inventory. The peg distribution is based on the earliest required date.

When determining the quantity that must be advised for each separate peg line, this calculation is performed before searching for the project pegged inventory:

```
Quantity to be advised = Required Quantity - Advised Quantity - Rejected
Quantity
 - Shipped Quantity - Not Shipped Quantity - Expected Not Shipped Quantity

Quantity to be advised = Minimum (To be distributed (Stock point Quantity),
 To be Advised )
```

This table clears the quantity that must be advised:

Required Quantity	Advised Quantity	Shipped Quantity	Not Shipped Quantity	To be Advised Quantity
10	10	10	0	0 (10 – (10 – 0))
20	10	10	0	10 (20 – (10 – 0))
20	20	10	10	10 (20 – (20 – 10))
20	20	10	0	0 (20 – (20 – 0))
20	20	15	5	5 (20 – (20 – 5))
20	20	0	20	20 (20 – (20 – 20))

With the retrieved To be Advised Quantity, the project pegged inventory search engine is activated. The possible scenarios are:

- No shortages, full advise
- Shortage on project pegged inventory
- Shortage on stock point inventory
  - Part that can be advised has no shortage in project pegged inventory
  - Part that can be advised has a shortage in project pegged inventory

No shortages, full advise

Initial position of the inventory:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	100	0	100

Project Pegged Inventory (whwmd260)

Warehouse	Item	Project	Element	Activity	Extension	Cost Component	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			40	0	40
WH01	item001	proj2	elem2	acti2			40	0	40
WH01	item001	proj2	elem3	acti2			20	0	20

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	40	Open

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Sequence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Required Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	10	0	10/30/2011

Sales	SLS000001	10	1	20	proj2	elem2	acti2	20	0	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	10	0	10/29/2011

In the example, you can see that outbound order line can be advised as the inventory levels are sufficient. This example displays results after an outbound advice is created:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	100	40	60

Project Pegged Inventory (whwmd260)

Ware-house	Item	Project	Element	Activity	Exten-sion	Cost Compo-nent	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			40	10	30
WH01	item001	proj2	elem2	acti2			40	20	20
WH01	item001	proj2	elem3	acti2			20	10	10

Outbound Order Line (whinh220)

Order Ori-gin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	40	Advised

Outbound Advice (whinh225)

Order Origin	Order	Line	Sequence	Item	Warehouse	Advised Quantity
Sales	SLS000001	10	1	item001	WH01	40

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Se-quence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Re-quired Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	10	10	10/30/2011
Sales	SLS000001	10	1	20	proj2	elem2	acti2	20	20	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	10	10	10/29/2011

Note

Only one outbound advice is created. The outbound order line cost peg distribution is updated with the advised quantity for each peg.

Shortage on project pegged inventory

The cost peg transfer functionality enables you to track the shortages in project pegged inventory. For more information, refer to *Cost peg transfers - overview (p. 21)* .

Initial position of the inventory:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	100	60	40

Project Pegged Inventory (whwmd260)

Ware-house	Item	Project	Element	Activity	Exten-sion	Cost Compo-nent	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			20	0	20
WH01	item001	proj2	elem2	acti2			10	0	10
WH01	item001	proj2	elem3	acti2			70	60	10

Outbound Order Line (whinh220)

Order Ori-gin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	40	Open

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Se-quence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Re-quired Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	10	0	10/30/ 2011

Sales	SLS000001	10	1	20	proj2	elem2	acti2	20	0	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	10	0	10/29/2011

In the example, based on Required Date the peg line 20 has a higher priority, because the Required Date is earlier.

The resulting inventory after the outbound advice is created (without the use of transfer logic) is listed in these tables:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	100	90	10

Project Pegged Inventory (whwmd260)

Warehouse	Item	Project	Element	Activity	Extension	Cost Component	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			20	10	10
WH01	item001	proj2	elem2	acti2			10	10	0
WH01	item001	proj2	elem3	acti2			70	70	0

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	40	Partially Advised

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Sequence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Required Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	10	10	10/30/2011

Sales	SLS000001	10	1	20	proj2	elem2	acti2	20	10	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	10	10	10/29/2011

Outbound Advice (whinh225)

Order Origin	Order	Line	Sequence	Item	Warehouse	Advised Quantity
Sales	SLS000001	10	1	item001	WH01	30

Shortage on stock point inventory

The possible scenarios for stock point inventory shortage:

The part that can be advised has no shortage in the project pegged inventory

In this example, there is not enough inventory available. However, the part of the inventory that can be advised must also be handled.

Initial position of the inventory:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	50	20	30

Project Pegged Inventory (whwmd260)

Ware-house	Item	Project	Element	Activity	Exten-sion	Cost Compo-nent	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			10	0	10
WH01	item001	proj2	elem2	acti2			30	20	10
WH01	item001	proj2	elem3	acti2			10	0	10

Outbound Order Line (whinh220)

Order Ori-gin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	40	Open

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Se-quence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Re-quired Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	10	0	10/30/ 2011

Sales	SLS000001	10	1	20	proj2	elem2	acti2	20	0	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	10	0	10/29/2011

A shortage of 10 pieces is present on the inventory level. The advice can be created only for the available pegged inventory. LN generates a message for shortage and an outbound advice of the available inventory is created. Following is the resulting inventory after the outbound advice is generated:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	50	50	0

Project Pegged Inventory (whwmd260)

Warehouse	Item	Project	Element	Activity	Extension	Cost Component	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			10	10	0
WH01	item001	proj2	elem2	acti2			30	30	0
WH01	item001	proj2	elem3	acti2			10	10	0

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	40	Partially Advised

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Sequence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Required Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	10	10	10/30/2011

Sales	SLS000001	10	1	20	proj2	elem2	acti2	20	10	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	10	10	10/29/2011

Outbound Advice (whinh225)

Order Origin	Order	Line	Sequence	Item	Warehouse	Advised Quantity
Sales	SLS000001	10	1	item001	WH01	30

The part that can be advised has a shortage in the project pegged inventory

There is a shortage in the project pegged inventory.

Initial position of the inventory:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	50	20	30

Project Pegged Inventory (whwmd260)

Warehouse	Item	Project	Element	Activity	Extension	Cost Component	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			10	0	10
WH01	item001	proj2	elem2	acti2			5	0	0
WH01	item001	proj2	elem3	acti2			35	20	15

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	40	Open

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Sequence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Required Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	10	0	10/30/2011

Sales	SLS000001	10	1	20	proj2	elem2	acti2	20	0	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	10	0	10/29/2011

There is a shortage of 10 pieces on the inventory level. In the part that can be advised, a shortage of 5 pieces is also identified on the project pegged inventory. In this situation, LN determines that 30 pieces can be advised. However, an additional shortage of 5 pieces is identified. Hence, only 25 pieces are available to be advised. The resulting inventory is explained in these examples:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	50	45	5

Project Pegged Inventory (whwmd260)

Warehouse	Item	Project	Element	Activity	Extension	Cost Component	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			10	10	0
WH01	item001	proj2	elem2	acti2			5	5	0
WH01	item001	proj2	elem3	acti2			35	30	5

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	40	Partially Advised

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Sequence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Required Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	10	10	10/30/2011

Sales	SLS000001	10	1	20	proj2	elem2	acti2	20	5	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	10	10	10/29/2011

Outbound Advice (whinh225)

Order Origin	Order	Line	Sequence	Item	Warehouse	Advised Quantity
Sales	SLS000001	10	1	item001	WH01	25

Create outbound advice despite inventory shortage

LN does not allow you to generate an outbound advice with an advised quantity higher than the total advised quantities of the related outbound order line cost peg distribution.

Outbound advice ownership

LN automatically generates the outbound advice ownership when the outbound advice is created if the outbound line is project pegged. LN does not allow you to change the ownership distribution for the project pegged order lines. The ownership distribution is based on the issue ownership set on the outbound order line.

LN does not allow you to generate ownership distribution or insert, modify, delete records for pegged outbound order lines in the Outbound Advice Ownership (whinh4128m000) session.

Inventory search engine

Inventory selection during the process of generating an outbound advice must be changed to support the project pegged inventory. When demand for a pegged item is advised, the process takes care of these peg distribution lines. So, the inventory search engine logic is extended to support the project pegged inventory.

The initial point of these steps is that the inventory on item warehouse level is found. The search sequence for inventory:

- Search for available inventory with the required peg.
- Search for available cost peg transfer orders (cost peg transfer orders created by Enterprise Planning or manually entered).
- Search for available excess.
- Search for available to transfer (non-excess inventory).
- Unpegged inventory.

- Alternative Items.

Manual outbound advice

For a manually created outbound advice, when there is insufficient inventory to allocate for the manually entered advised quantity, LN displays an error message. The cost peg transfer logic is also executed.

Manual changes on outbound advice

When you modify the outbound advice quantity, LN updates the advised quantity on the underlying peg distribution.

In case of a decrease in the quantity, a peg redistribution is initiated. The decrease in advised quantity must be based on the latest Required Date. For example:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	50	50	0

Project Pegged Inventory (whwmd260)

Warehouse	Item	Project	Element	Activity	Extension	Cost Component	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1	100	100	20	20	0
WH01	item001	proj2	elem2	acti2	100	100	30	30	0

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	50	Advised

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Sequence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Required Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	20	20	10/30/2011
Sales	SLS000001	10	1	20	proj2	elem2	acti2	30	30	11/1/2011

Outbound Advice (whinh225)

Order Origin	Order	Line	Sequence	Item	Warehouse	Advised Quantity
Sales	SLS000001	10	1	item001	WH01	50

When you change the advised quantity to 45, the following is the result:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	50	45	5

Outbound Advice (whinh225)

Order Origin	Order	Line	Sequence	Item	Warehouse	Advised Quantity
Sales	SLS000001	10	1	item001	WH01	60

Undo outbound advice

When an advice is removed, the advised quantity on the deleted outbound advice line must be removed from the outbound order line cost peg distribution.

Process pick

When the user processes the picking list, LN also processes the pending cost peg transfers for the outbound advice that is picked.

Outbound advice for returns

Advising is done based on the latest required date; the pegs with the latest required date are advised first.

Creation of shipment line cost peg distribution

When the shipment lines are confirmed, the shipment line cost peg distribution is created for shipment lines related to an outbound order line that is pegged. The shipped quantities are distributed over the pegs for the shipment lines. The distribution is explained in these examples:

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on hand	Location Allocated Quantity	Available quantity
WH01	item001	50	50	0

Project Pegged Inventory (whwmd260)

Warehouse	Item	Project	Element	Activity	Extension	Cost Component	Inventory on Hand	Location Allocated Quantity	Available quantity
WH01	item001	proj1	elem1	acti1			20	20	0
WH01	item001	proj2	elem2	acti2			10	10	0
WH01	item001	proj2	elem3	acti2			20	20	0

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	WH01	50	Open

Outbound Advice (whinh225)

Order Origin	Order	Line	Sequence	Item	Warehouse	Advised Quantity
Sales	SLS000001	10	1	item001	WH01	50

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Se-quence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Re-quired Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	20	20	10/30/2011
Sales	SLS000001	10	1	20	proj2	elem2	acti2	10	10	11/1/2011
Sales	SLS000001	10	1	30	proj2	elem3	acti2	20	20	10/29/2011

For this situation the following shipment lines are created:

Shipment Lines (whinh431)

Shipment	Shipment Line	Order Ori-gin	Order	Line	Sequence	Item	Shipped Quantity
SHIP00001	10	Sales	SLS000001	10	1	item001	30
SHIP00002	10	Sales	SLS000001	10	1	item001	20

Shipment Lines (whinh428)

Shipment	Shipment Line	Peg Line	Project	Element	Activity	Required Date	Shipped Quantity
SHIP00001	10	10	proj1	elem1	acti1	10/30/2011	10
SHIP00001	10	30	proj2	elem2	acti1	10/29/2011	20

When the shipment is confirmed, the shipped quantity is updated on the outbound order line cost peg distribution

Outbound Order Line cost peg Distribution (whinh290)

Order Origin	Order	Line	Sequence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Required Date	Shipped Quantity
Sales	SLS000001	10	1	10	proj1	elem1	acti1	20	20	10/30/2011	10
Sales	SLS000001	10	1	20	proj2	elem2	acti2	10	10	11/1/2011	0
Sales	SLS000001	10	1	30	proj2	elem3	acti2	20	20	10/29/2011	20

Under and over deliveries

For under deliveries, the quantity not delivered must be distributed on the peg distribution, beginning with the peg line with the latest Required Date. For over deliveries, the quantity over delivery must be distributed evenly over the available peg lines for the outbound order line

Not shipped quantities

The peg line distribution data is transferred to the transfer order / adjustment order only if a not-shipped quantity exists on peg distribution. During the confirmation process the not-shipped quantity is updated on the outbound order line cost peg distribution and the shipment line cost peg distribution.

Shipments for returns

When the items are not shipped to the destination, but are shipped back to the origin (for example, buy-from business partner); a reverse Required Date priority is applied when generating the shipment line cost peg distribution during the confirmation of the return shipment line. As item inventory is decreased, LN changes the pegged inventory with the latest Required Dates.

Cost peg transfers

The cost peg transfers functionality is introduced that enables transfer of cost between two different pegs (pegged to unpegged and vice versa). The cost peg transfers do not physically move the inventory but only transfer the cost of the inventory. Cost peg transfers are performed within the same warehouse. It is not possible to transfer the goods across warehouses. For more information, refer to *Cost peg transfers - overview (p. 21)*

Transfer (manual) orders/ Transfer orders

LN allows you to use inbound and outbound cost peg distribution to enter transfer manual orders to transfer actual goods between warehouses. LN generates the outbound order line cost peg distribution

based on the project pegged inventory. The cost peg distribution can also be created manually and transferred to the inbound line cost peg distribution.

Change warehouse order at a later stage

LN allows you to modify the outbound warehousing order data related to sales order/ sales schedule. The data can be modified for warehousing orders of all origins. You can also define up to which outbound procedure step, the data can be modified. For more information, refer to To modify the outbound warehousing order data.

Additional costs on shipment header/ line

When the cost item that is mandatory pegged is added as additional cost to the shipment, the cost item is not displayed because LN cannot decipher which pegs must be added to the additional cost line.

When the cost item that is mandatory pegged is added as additional costs on the shipment line or when the parent shipment line has a peg distribution, LN copies the peg distribution data to the additional cost line. The cost peg distribution of this additional cost line is transferred to the Sales Cost Order. For more information, refer to Additional costs - shipment based

Interchangeable effectivity units for outbound process

The effectivity units can be interchanged when there is no inventory available for the ordered effectivity unit.

For project pegged outbound order lines, when there is no inventory available for the ordered effectivity unit, LN allows you to interchange effectivity units.

Example

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on Hand	Location Allocated Quantity	Available Quantity
WH01	item001	50	0	50

Warehouse - Item - Effectivity Unit Inventory (whwmd216)

Warehouse	Item	Effectivity Unit	Inventory on Hand	Location Allocated Quantity	Available Quantity
WH01	item001	1	50	0	50

Project Pegged Inventory (whwmd260)

Warehouse	Item	Effectivity Unit	Project	Element	Activity	Inventory on Hand	Location Allocated Quantity	Available Quantity
WH01	item001	1	proj1	elem1	acti1	30	0	30
WH01	item001	1	proj2	elem2	acti2	20	0	20

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Effectivity Unit	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	3	WH01	40	Open

Outbound Order Line Peg Distribution (whinh290)

Order Origin	Order	Line	Se-quence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Need Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	30	0	10/30/2011
Sales	SLS000001	10	1	20	proj2	elem2	acti2	10	0	11/1/2011

Planned Inventory Transactions (whinp100)

Order Origin	Order	Line	Sequence	Peg Line	Effectivity Unit	Ordered Quantity
Sales	SLS000001	10	1	10	3	30
Sales	SLS000001	10	1	20	3	10

Generate Outbound Advice

The ordered effectivity unit (3) is not in the inventory, so another effectivity unit is advised and the Planned Inventory Transaction (PIT) is updated. The result of generate outbound advice:

Example

Outbound Advice (whinh225)

Order Origin	Order	Line	Sequence	Item	Effectivity Unit	Warehouse	Advised Quantity
Sales	SLS000001	10	1	item001	1	WH01	40

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on Hand	Location Allocated Quantity	Available Quantity
WH01	item001	50	40	10

Warehouse - Item - Effectivity Unit Inventory (whwmd216)

Warehouse	Item	Effectivity Unit	Inventory on Hand	Location Allocated Quantity	Available Quantity
WH01	item001	1	50	40	10

Project Pegged Inventory (whwmd260)

Warehouse	Item	Effectivity Unit	Project	Element	Activity	Inventory on Hand	Location Allocated Quantity	Available Quantity
WH01	item001	1	proj1	elem1	acti1	30	30	0
WH01	item001	1	proj2	elem2	acti2	20	10	10

Outbound Order Line (whinh220)

Order Ori-	Order	Line	Sequence	Item	Effectivity	Ware-	Ordered	Status

gin					Unit	house	Quantity	
Sales	SLS000001	10	1	item001	3	WH01	40	Advised

Outbound Order Line Peg Distribution (whinh290)

Order Origin	Order	Line	Se-quence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Need Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	30	30	10/30/2011
Sales	SLS000001	10	1	20	proj2	elem2	acti2	10	10	11/1/2011

Outbound Order Line Peg Distribution - Advised Effectivity Units (whinh291)

Order Origin	Order	Line	Se-quence	Peg Line	Effectiv-ity Unit	Project	Ele-ment	Activity	Or-dered Quanti-ty	Ad-vised Quanti-ty	Need Date
Sales	SLS000001	10	1	10	1	proj1	elem1	acti1	30	30	10/30/2011
Sales	SLS000001	10	1	20	1	proj2	elem2	acti2	10	10	11/1/2011

Planned Inventory Transactions (whinp100)

Order Origin	Order	Line	Sequence	Peg Line	Effectivity Unit	Ordered Quantity
Sales	SLS000001	10	1	10	1	30
Sales	SLS000001	10	1	20	1	10

When the outbound advice is released, a shipment is created:

Shipment Lines (whinh431)

Shipment	Line	Item	Effectivity Unit	Shipped Quantity	Status
SHP000001	10	item001	1	40	Open

Confirm Shipment

When the shipment is confirmed:

Example

Shipment Lines (whinh431)

Shipment	Line	Item	Effectivity Unit	Shipped Quantity	Status
SHP000001	10	item001	1	40	Confirmed

Shipment Line Peg Distribution (whinh428)

Shipment	Line	Peg Line	Project	Element	Activity	Staged Quantity	Shipped Quantity	Need Date
SHP000001	10	10	proj1	elem1	acti1	30	30	10/30/2011
SHP000001	10	20	proj2	elem2	acti2	10	10	11/1/2011

Warehouse - Item Inventory (whwmd215)

Warehouse	Item	Inventory on Hand	Location Allocated Quantity	Available Quantity
WH01	item001	10	0	10

Warehouse - Item - Effectivity Unit Inventory (whwmd216)

Warehouse	Item	Effectivity Unit	Inventory on Hand	Location Allocated Quantity	Available Quantity
WH01	item001	1	10	0	10

Project Pegged Inventory (whwmd260)

Ware-	Item	Effectivity	Project	Element	Activity	Inventory	Location	Available

house		Unit				on Hand	Allocated Quantity	Quantity
WH01	item001	1	proj1	elem1	acti1	0	0	0
WH01	item001	1	proj2	elem2	acti2	10	0	10

Outbound Order Line (whinh220)

Order Origin	Order	Line	Sequence	Item	Effectivity Unit	Warehouse	Ordered Quantity	Status
Sales	SLS000001	10	1	item001	3	WH01	40	Shipped

Outbound Order Line Peg Distribution (whinh290)

Order Origin	Order	Line	Sequence	Peg Line	Project	Element	Activity	Ordered Quantity	Advised Quantity	Need Date
Sales	SLS000001	10	1	10	proj1	elem1	acti1	30	30	10/30/2011
Sales	SLS000001	10	1	20	proj2	elem2	acti2	10	10	11/1/2011

Planned Inventory Transactions (whinp100)

Order Origin	Order	Line	Sequence	Peg Line	Effectivity Unit	Ordered Quantity

The planned inventory transaction (PIT) is removed because the line is shipped.

Peg distribution for cycle counting and adjustment orders

The implementation of the project pegging functionality impacts the cycle counting and adjustment orders process due to inventory variances.

Cycle Counting Orders

When the project pegging functionality is implemented, LN creates a peg distribution line before the cycle counting order is processed. The peg distribution line can also be a blank peg. The remaining quantity or the total quantity is processed as unpegged.

Note

Blank pegs are not allowed if the **Mandatory Project Peg** check box in the Items - General (tcibd0501m000) session is selected.

After the cycle counting orders are generated, the proposed peg distribution can be generated only if the warehouse is not a project warehouse and the project pegging functionality is implemented. Use the Cycle Counting Order Line Peg Distribution (whinh5107m000) session to generate peg distribution. If the proposed peg distribution is not correct, the processing of the cycle counting order is discontinued. LN displays a message for the same. In case the proposed peg distribution is incomplete, LN creates the proposed peg distribution with the remaining data and is saved in the Cycle Counting Order Line Peg Distribution (whinh5107m000) session.

During the processing of cycle counting orders, the proposed peg distribution is verified. LN creates the proposed peg distribution, if it is not created completely. The data can be viewed in the Cycle Counting Order Line Peg Distribution (whinh5107m000) session.

Adjustment Orders

When the project pegging functionality is implemented, LN creates a peg distribution line before the adjustment order is processed. The peg distribution line can also be a blank peg. The remaining quantity or the total quantity is processed as unpegged.

Note

Blank pegs are not allowed if the **Mandatory Project Peg** check box in the Items - General (tcibd0501m000) session is selected.

After the adjustment orders are generated, the proposed peg distribution can be generated only if the warehouse is not a project warehouse and project pegging functionality is implemented. Use the Adjustment Order Line Peg Distribution (whinh5127m000) session to generate peg distribution. If the proposed peg distribution is not correct, the processing of the adjustment order is discontinued. LN displays a message for the same. In case the proposed peg distribution is incomplete, LN creates the

proposed peg distribution with the remaining data and is saved in the Adjustment Order Line Peg Distribution (whinh5127m000) session.

During the processing of an adjustment order, the proposed peg distribution is verified. LN creates the proposed peg distribution, if it is not yet created completely. The data can be viewed in the Adjustment Order Line Peg Distribution (whinh5127m000) session.

Automatically generated adjustment orders

When adjustment orders are generated as part of another process in LN, for example, rejection of goods during inspection, the peg distribution is created by the other process and is processed by LN.

Gains and Losses

When a pegged balance is impacted as a result of cycle counting or an inventory adjustment, the inventory at the peg level must also be adjusted. Increase in inventory quantity at a peg level is referred to as a Gain and a decrease in the inventory quantity is referred to as a Loss. The Gain and Loss balances can be viewed in the Project Pegged Inventory (whwmd2560m000) session. The pegged inventory that is affected by the gain or loss in the inventory is also recorded. LN applies a priority sequence when assigning gains and losses to the project cost pegs.

Priority sequence for Gains

1. For pegs that have been previously subjected to a loss:
    a. Pegs without excess and without Available to Transfer (ATT) and with an economic shortage and in sequence of earliest requirement date. LN considers economic shortage quantity.
    b. Pegs without excess and without Available to Transfer (ATT) and without an economic shortage (in alphabetical order). LN considers full quantity for the peg.
    c. Pegs without excess and with Available to Transfer (ATT) (in alphabetical order). LN considers full quantity for the Peg.
    d. Pegs with excess (in alphabetical order). LN considers full quantity for the Peg.
2. For pegs that have not been previously subjected to a loss:
    a. Pegs without excess and without Available to Transfer (ATT) and with an economic shortage and in sequence of earliest requirement date. LN considers economic shortage quantity.
    b. Pegs without excess and without Available to Transfer (ATT) and without an economic shortage (in alphabetical order). LN considers full quantity for the peg.
    c. Pegs without excess and with Available to Transfer (ATT) (in alphabetical order). LN considers full quantity for the Peg.
    d. Pegs with excess (in alphabetical order). LN considers full quantity for the Peg.
3. Inventory associated with a 'Blank peg'.

Priority sequence for Losses

1. For pegs that have previously been subject to a gain. In case of multiple Pegs, the pegs are selected in alphabetical order.
    a. LN checks for the pegs with excess (in alphabetical order) and considers the excess quantity.
    b. LN checks for the pegs with Available to Transfer (ATT) (in alphabetical order) and considers the Available to Transfer (ATT) quantity.
    c. LN checks for the pegs without Excess and without Available to Transfer (ATT) in sequence of earliest requirement date and considers full quantity for the Peg.
2. Inventory associated with a Blank peg.
3. Pegs that have not previously been subject to a gain:
    a. LN checks for the pegs that have an excess inventory balance greater than zero (in alphabetical order) and considers the excess quantity.
    b. LN checks for the pegs that have an Available to Transfer (ATT) balance (in alphabetical order) and considers the Available to Transfer (ATT) quantity.
    c. LN checks for the pegs without Excess and Available to Transfer (ATT) in sequence of earliest requirement date and considers full quantity for the Peg.

Example

Assumptions:

- Pegs are in the same warehouse
- Pegs are for the same item
- Peg is a combination of Project, Element and Activity
- The Project pegged inventory table is up to date. If not, an update is executed with a loss of one for every step.

Starting Point

Project Pegged Inventory (whwmd260)								
Peg Line	Project	Element	Activity	On Hand	Inventory Gains	Inventory Losses	Excess	ATT
1	PRO1	ELO1	ACT01	1	1	0	0	0
2				1	0	0	0	0
3	PRO2	ELO2	ACT02	1	0	0	1	0
4	PRO3	ELO3	ACT03	1	0	0	0	1
5	PRO4	ELO4	ACT04	1	0	0	0	1
6	PRO5	ELO5	ACT05	1	0	0	0	0

A loss of one results in the removal of Peg Line 1 as the first gains are decreased.

Project Pegged Inventory (whwmd260)								
Peg Line	Project	Element	Activity	On Hand	Inventory Gains	Inventory Losses	Excess	ATT
2				1	0	0	0	0
3	PRO2	ELO2	ACT02	1	0	0	1	0
4	PRO3	ELO3	ACT03	1	0	0	0	1
5	PRO4	ELO4	ACT04	1	0	0	0	1
6	PRO5	ELO5	ACT05	1	0	0	0	0

A loss of one results in the removal of Peg Line 2 as the blank peg is removed.

Project Pegged Inventory (whwmd260)								
Peg Line	Project	Element	Activity	On Hand	Inventory Gains	Inventory Losses	Excess	ATT
3	PRO2	ELO2	ACT02	1	0	0	1	0
4	PRO3	ELO3	ACT03	1	0	0	0	1
5	PRO4	ELO4	ACT04	1	0	0	0	1
6	PRO5	ELO5	ACT05	1	0	0	0	0

Then a loss of one removes the Peg Line 3 as an excess quantity exists.

Project Pegged Inventory (whwmd260)								
Peg Line	Project	Element	Activity	On Hand	Inventory Gains	Inventory Losses	Excess	ATT
4	PRO3	ELO3	ACT03	1	0	0	0	1
5	PRO4	ELO4	ACT04	1	0	0	0	1
6	PRO5	ELO5	ACT05	1	0	0	0	0

Then a loss of one removes the Peg Line 4 as it has ATT and it is alphabetically before line 5.

Project Pegged Inventory (whwmd260)								
Peg Line	Project	Element	Activity	On Hand	Inventory Gains	Inventory Losses	Excess	ATT
5	PRO4	ELO4	ACT04	1	0	0	0	1
6	PRO5	ELO5	ACT05	1	0	0	0	0

The next loss removes Peg Line 5 as it has ATT.

Project Pegged Inventory (whwmd260)								
Peg Line	Project	Element	Activity	On Hand	Inventory Gains	Inventory Losses	Excess	ATT
6	PRO5	ELO5	ACT05	1	0	0	0	0

The last loss removes Peg Line 6 which is the last scenario of a decreasing peg inventory.

Chapter 6
Project pegging in Service

6

Project pegging in depot repair

Overview

In Service, you can implement project pegging in the Depot Repair module. You can peg the service cost to a project, element, and/or an activity.

To peg a project, specify the project, element, and/or activity information for the call, the contract, the maintenance sales quotation, maintenance sales orders or work orders. You must select the **Mandatory Project Peg** check box in the Item - General (tcibd0101s000) session if defining the PCA ID is mandatory to peg the cost of the item to the project.

Initiation of the pegged transaction

The peg is initiated only when a business process is started for transactions that register actual costs. For Example Calls and Maintenance Sales orders.

Project Cost Account is an account where the cost is pegged. Costs are pegged through Project Cost Account ID. You can populate the PCA ID:

- By entering the PCA ID when you create a new call, contract, maintenance sales quotation, maintenance sales order, or an external work order.
- By specifying the PCA ID on the service contract. You can also enter the PCA ID manually.

Propagation of the peg in the depot repair process

The PCA ID is propagated to the resulting transaction (Example, from call to MSO to Work order). You can change the PCA ID until the status of the call / contract / maintenance sales quotation / maintenance sales order / work order changes.

Propagation of the peg to service contract and configuration lines

In Service, the service contract can determine whether the call / contract / maintenance sales quotation / maintenance sales order / work order, linked to the service contract, retrieves the PCA ID from the contract. By default, the configuration lines retrieve the PCA ID from the service contract header. These PCA IDs on the configuration line are propagated to the maintenance sales quotation lines, maintenance sales order part lines, and work orders.

Note

You can define the PCA ID for service contracts that have the status 'Free' or 'Active'.

Propagation of the peg to a call

The PCA ID of the call is retrieved from the service contract header by default, if the call is related to a service contract. You can specify or modify the PCA ID if the call status is ‘Free’. You must specify the reason for the modification.

If the call is solved without being transferred (Example to a maintenance sales order or service order), the call can be invoiced. The costs are booked to the corresponding PCAs. The cost component is used to identify the appropriate project cost type using cost mapping in the Cost Mappings (tcmcs0149m000) session.

Propagation of the peg to the maintenance sales quotations

LN defaults the PCA ID of the quotation header line either from a service call, or a maintenance sales order part line, or a work order. If the PCA ID is not defaulted from these origins, LN defaults the ID from the service contract configuration line if the serialized item is linked to a service contract. You can specify or change the PCA ID, if the maintenance sales quotation status is ‘Free’.

Propagation of the peg to the maintenance sales order

LN defaults the PCA ID of the maintenance sales order from the originating call or maintenance sales quotation. The PCA ID of the order part line is defaulted from a service call or maintenance sales order part line. If the PCA ID is not defaulted from these origins, LN defaults the ID from the service contract configuration line in case the serialized item is linked to a service contract. You can enter or change the PCA ID, if the maintenance sales quotation status is ‘Free’.

Propagation of the peg to the work order for MSO part line

By default, the PCA ID is retrieved from the maintenance sales order. If the installation group or the item is linked to a service contract, the PCA ID is retrieved from the service contract configuration line. If the PCA ID is not defaulted from these origins, LN defaults the ID from the service contract configuration line in case the serialized item is linked to a service contract. You can specify or change the PCA ID, if the maintenance sales quotation status is ‘Free’.

Propagation of the peg to the work order linked /originating from a maintenance sales order

LN defaults the PCA ID of the work order (linked/originating from maintenance sales order) from the service contract configuration line, if the serialized item is linked to a service contract. If the PCA ID is not defaulted from these origins, LN defaults the ID from the service contract configuration line in case the serialized item is linked to a service contracts. You can specify or change the PCA ID, if the maintenance sales quotation status is ‘Free’.

Propagation of the peg to the follow-up work order

By default, the PCA ID is retrieved from the initiating work order. If the installation group or the item is linked to a service contract the PCA ID is retrieved from the service contract configuration line. If the PCA ID is not defaulted from these origins, LN defaults the ID from the service contract configuration line in case the serialized item is linked to a service contract. The user can specify or change the PCA ID, if the work order status is ‘Free’.

Propagation of a material request to LN Warehousing from depot repair

When warehouse orders are generated from Service, in order to request material from a warehouse, the PCA ID is propagated to Warehousing only if the **Inherit Project Peg** check box in the Item - General (tcibd0101s000) session is selected. Warehousing uses the PCA ID for financial bookings to LN Project. Warehousing handles the potential peg transfers:

Example

Service needs materials B and material C to be used in the repair of item A. For item B, LN Service requests inventory with a peg. For item C, Service requests material with a peg, because the cost for B and C have to be reported to the project.

Warehousing checks if there is inventory of item B with the corresponding PCA. In the case of an inventory shortage, Warehousing checks whether transfer rules apply to meet the LN Service request. Warehousing handles the potential peg transfers in the background.

For item C, the process is the same. Service requests the material with a PCA, though there is inventory for item C without a peg.

For Example, a demand transaction for item A has a peg123 that requires material B and C. When the **Inherit Project Peg** check box in the Item - General (tcibd0101s000) session for Material B is set to Yes and for Material C is set to No:

	Inherit Peg	Cost Pegged To	Request to Warehouse
Material B	Yes	P1E10A10	Financially peg costs to: P1E10A10 Inventory from: P1E10A10
Material C	No	P1E10A10	Financially peg costs to: P1E10A10 Inventory from: <empty peg >

Since material C is without a peg in inventory, the costs are not yet pegged to the project. However, since material B is already cost pegged to the project, the cost do not have to be booked again to the project when the actual outbound process is executed.

Propagation of the Peg to generate purchase order

For project pegged items when purchase orders are generated, the PCA ID from Service (Example Subcontracting), is propagated to LN Order Management to generate the purchase order with the corresponding peg. For material request of type Via Purchase, the PCA ID is propagated only if the **Inherit Project Peg** check box in the Item - General (tcibd0101s000) session is selected.

Propagation of the peg to book hours

When hours are booked in Service, the PCA is processed to LN People to book hours on the work order.

Book other costs or bench stock material costs

When actual other costs or Bench stock material costs are defined in Service, the costs are logged in the PCL. If the item is defined for the maintenance sales coverage line, the item is used to identify the appropriate project cost type. In case the item is not defined, the cost component is used to identify the appropriate project cost type using cost mapping in the Cost Mappings (tcmcs0149m000) session.

Propagation of the peg to a maintenance sales order coverage line

When the maintenance sales order coverage lines are costed, the invoice is created in LN Invoicing. The revenues and costs are booked to the corresponding PCAs. If the item is defined for the maintenance sales coverage line, the item is used to identify the appropriate project cost type. In case the item is not defined, the cost component is used to identify the appropriate project cost type using cost mapping in the Cost Mappings (tcmcs0149m000) session. LN Invoicing receives the related PCA IDs for the actual costs.

Chapter 7
Project pegging in People

7

Costs distribution of production order hours – examples

Example 1

Peg distribution on the production order:

Peg	Quantity
A	2
B	3
C	5

Operation rates:

Type of Operation	Cost Rate ($)	Cost Component
Labor	40	LB1
Overhead on Labor	4	LB2
Machine	50	MC1
Overhead on Machine	10	MC2

If, for this production order, 20 man hours and 10 machine hours are entered when these hours are processed, costs and hours are retrieved per peg and cost component:

Cost Component	LB1	LB2	MC1	MC2
Peg				
A	$160 (4h)	$16 (4h)	$100 (2h)	$20 (2h)
B	$240 (6h)	$24 (6h)	$150 (3h)	$30 (3h)
C	$400 (10h)	$40 (10h)	$250 (5h)	$50 (5h)

Example 2

If different types of operation have the same cost component, costs and hours are aggregated.

Operation rates:

Type of Operation	Cost Rate ($)	Cost Component
Labor	40	LAB
Overhead on Labor	4	OVH
Machine	50	MACH
Overhead on Machine	10	OVH

If, for this production order, 20 man hours and 10 machine hours are entered when these hours are processed, costs and hours are retrieved per peg and cost component:

Cost Component	LAB	MACH	OVH
Peg			
A	$160 (4h)	$100 (2h)	$36 (4+2=6h)
B	$240 (6h)	$150 (3h)	$54 (6+3=9h)
C	$400 (10h)	$250 (5h)	$90 (10+5=15h)

Appendix A
Glossary

A

address

A full set of addressing details, which include the postal address, access numbers for telephone, fax, and telex, e-mail and Internet address, identification for taxation purposes, and routing information.

blanket warehousing order

A warehousing order that is generated during the creation of a push schedule and that contains:

- A position number and sequence number of zero.
- An item as defined on the purchase schedule.
- An order quantity equal to the quantity as defined on the purchase contract line.
- An empty planned delivery date and planned receipt date, but a contract date similar to the purchase contract date.
- A lot selection defined as Any.

business partner

A party with whom you carry out business transactions, for example, a customer or a supplier. You can also define departments within your organization that act as customers or suppliers to your own department as business partners.

The business partner definition includes:

- The organization's name and main address.
- The language and currency used.
- Taxation and legal identification data.

You address the business partner in the person of the business partner's contact. The business-partner status determines if you can carry out transactions. The transactions type (sales orders, invoices, payments, shipments) is defined by the business partner's role.

effectivity unit

A reference number, for example a sales order line or a project deliverable line, that is used to model deviations for a unit effective item.

export license

A license required by the authorities before selling and/or shipping of items (high-tech, classified or potentially dangerous) which are regulated by law. Items requiring this license have restrictions applied to them in Enterprise Planning. Supply for export license required items or items containing an export licensed item can only be commingled with supply for the same project. Similar restrictions exist for cost transfer rules.

inventory handling

The way in which the inventory is handled, both physically and in LN, if BOM items or list items are received or issued.

The inventory can be handled:

- By main item.
- By component.

kit

A predefined list of items to be delivered together when ordered by the customer.

You can define kits to facilitate order entry. A kit is ordered and priced as a single item. For internal order entry and warehousing purposes, the kit item is a list of components. On the sales order line, the components are linked. The cost price of the kit is the sum of the components' cost prices.

The components of a kit can be of the following types:

- Purchased items
- Manufactured items

Example: The components of a PC kit usually consist of the main cabinet, a monitor, a keyboard, and a mouse. In the Do-It-Yourself market, a toolshed kit can contain the parts for the walls and the roof, a door with hinges, a door handle, and a lock.

multilevel bill of material

A BOM that lists the subcomponents of the components, and any eventual subcomponents.

In the multilevel BOM, the final product is at level zero.

peg

A combination of project/budget, element and/or activity, which is used to identify costs, demand, and supply for a project.

project

A collection of manufacturing and purchasing actions that are performed especially for a particular customer order. A project is initiated by a customer order for items having a **To Order** order policy. The purpose of a project is to plan and coordinate the production of these items.

For a standard-to-order production, the project is only used to link the item with the customer order. Otherwise, a project can include:

- Customized item data (BOMs and routings)
- Project planning (activity planning)

A budget is a special type of project. A budget is used to plan and estimate, not to carry out production.

response line

A response to a request for quotation line, which includes a bidder's bid for the RFQ line. A bid offers goods or services for a certain price and terms of sale and can be considered as an offer to sell.

safety stock

The buffer inventory necessary to meet fluctuations in demand and delivery lead time. In general, safety stock is a quantity of inventory planned to be in inventory to protect against fluctuations in demand or supply. In the context of master production scheduling, safety stock is the additional inventory and capacity planned as protection against forecast errors and short-term changes in the backlog.

SSP

See: *supplier stage payments (p. 81)*

supplementary unit

An extra unit in which the quantity of goods must be reported for the EU Intrastat declaration. The main reporting unit is kilogram in all cases. For some goods, a reporting unit must be used such as pairs (of shoes and so on), liters, head or pieces (for cattle), or square meters. Quantities of goods to which kilograms do not apply are only reported in the supplementary unit.

supplier stage payments

Spread payments that are made by customers to suppliers over a period of time. With stage payments, customers can make payments for an item before or after the item is actually received. An item's invoice flow is separated from its goods flow.

Abbreviation: SSP

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