



Infor LN User Guide for Demand Pegging

Copyright © 2024 Infor

Important Notices

The material contained in this publication (including any supplementary information) constitutes and contains confidential and proprietary information of Infor.

By gaining access to the attached, you acknowledge and agree that the material (including any modification, translation or adaptation of the material) and all copyright, trade secrets and all other right, title and interest therein, are the sole property of Infor and that you shall not gain right, title or interest in the material (including any modification, translation or adaptation of the material) by virtue of your review thereof other than the non-exclusive right to use the material solely in connection with and the furtherance of your license and use of software made available to your company from Infor pursuant to a separate agreement, the terms of which separate agreement shall govern your use of this material and all supplemental related materials ("Purpose").

In addition, by accessing the enclosed material, you acknowledge and agree that you are required to maintain such material in strict confidence and that your use of such material is limited to the Purpose described above. Although Infor has taken due care to ensure that the material included in this publication is accurate and complete, Infor cannot warrant that the information contained in this publication is complete, does not contain typographical or other errors, or will meet your specific requirements. As such, Infor does not assume and hereby disclaims all liability, consequential or otherwise, for any loss or damage to any person or entity which is caused by or relates to errors or omissions in this publication (including any supplementary information), whether such errors or omissions result from negligence, accident or any other cause.

Without limitation, U.S. export control laws and other applicable export and import laws govern your use of this material and you will neither export or re-export, directly or indirectly, this material nor any related materials or supplemental information in violation of such laws, or use such materials for any purpose prohibited by such laws.

Trademark Acknowledgements

The word and design marks set forth herein are trademarks and/or registered trademarks of Infor and/or related affiliates and subsidiaries. All rights reserved. All other company, product, trade or service names referenced may be registered trademarks or trademarks of their respective owners.

Publication Information

Document code	crossdpegug (U9500)
Release	10.6 (10.6)
Publication date	August 5, 2024

Table of Contents

About this document

Chapter 1 Demand pegging.....	7
Demand pegging overview.....	7
Using demand pegging.....	7
Handling insufficient inventory.....	8
Inventory allocation levels.....	8
Changing inventory allocations.....	8
Chapter 2 Demand pegging master data.....	11
Setting up demand pegging.....	11
Relation between Demand Pegging Type and specification.....	12
Chapter 3 Demand pegged supply orders.....	13
Demand pegged supply orders.....	13
Demand peg supply orders in Procurement and Sales.....	13
Demand peg supply orders in Warehousing.....	14
Demand peg supply purchase orders and schedules.....	15
Chapter 4 Allocation buffers.....	17
Allocation buffers.....	17
Calculating available unallocated inventory.....	17
Creating allocation buffers.....	18
Creating allocation buffers in Enterprise Planning.....	19
Creating allocation buffers at sales order line entry.....	19
Consumption of allocation buffers.....	20
Chapter 5 Inventory allocation levels.....	21
Inventory allocation levels.....	21
Allocation levels.....	21
Handling unit setup for allocations.....	22

Chapter 6 Demand pegging example.....	23
Demand pegging example.....	23
Appendix A Glossary.....	29
Index	

About this document

This document describes the process to assign a quantity of supply to a specific demand. The demand pegging setup, the handling of demand pegged supply orders or schedules across LN, and the use of allocation buffers and inventory allocation levels, are also described.

Intended audience

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

References

Use this guide as the primary reference for demand pegging. Use the current editions of these documents for information that is not covered in this guide:

- *User Guide for Sales Orders U9845 US*
- *User Guide for Purchase and Sales Schedules U9541 US*
- *User Guide for Order Planning U8732 US*
- *User Guide for Manufacturing U9711 US*
- *User Guide for Purchase Orders U9824 US*
- *User Guide for the Outbound and Shipment Goods Flows U9794 US*
- *User Guide for the Inbound Goods Flow U9788 US*
- *User Guide for Handling Units U8938 US*
- *User Guide for Terms and Conditions U9499 US*
- *User Guide for Subcontracting U9361 US*
- *User Guide for Vendor Managed Inventory U9501 US*

How to read this document

This document is assembled from online Help topics.

Text in italics followed by a page number represents a hyperlink to another section in this document.

Underlined terms indicate a link to a glossary definition. If you view this document online, clicking the underlined term takes you to the glossary definition at the end of this document.

Comments?

We continually review and improve our documentation. Any remarks/requests for information concerning this document or topic are appreciated. Please e-mail your comments to documentation@infor.com.

In your e-mail, refer to the document number and title. More specific information will enable us to process feedback efficiently.

Contacting Infor

If you have questions about Infor products, go to Infor Concierge at <https://concierge.infor.com/> and create a support incident.

If we update this document after the product release, we will post the new version on the Infor Support Portal. To access documentation, select **Search Browse Documentation**. We recommend that you check this portal periodically for updated documentation.

If you have comments about Infor documentation, contact documentation@infor.com.

Demand pegging overview

Demand pegging is used to designate a quantity of supply to a specific demand.

With demand pegging, you can do the following:

- Promise a customer a particular quantity of an item. The allocated inventory cannot be shipped to other customers and serves as a reservation.
- Link an identifiable quantity of an item to a particular demand. In this way, this quantity cannot be interchanged with another quantity of the same item. For example, you use this to keep components and subassemblies together.

To do this, LN links supply orders or inventory to demand orders using specifications.

If supply is pegged to a specific demand, numerous processes are involved, such as:

- Order planning
- Issue and receive materials
- Outbound and ship goods

Using demand pegging

When a demand order is created, LN:

- Links a specification to the demand order
- Allocates inventory to the demand order
- Updates the quantity of the **Inventory Allocated** field in the Inventory by Specification (whwmd2519m000) session with the quantity of the demand order, even if insufficient inventory is available to fulfill the demand order.

Note

- If the demand order is created manually or from independent demand, specifications are created based on the demand pegging data for the item or the linked terms and conditions agreement.

- If the demand order is created from dependent demand, the demand order can receive a specification only from the origin that created the order. To see how a specification is transferred between business objects, refer to *Demand pegging example (p. 23)*.
- To use demand pegging, you must set up the master data. For more information, refer to *Setting up demand pegging (p. 11)*.

Handling insufficient inventory

If insufficient inventory is available to fulfil a demand order, you can create supply orders or allocate inventory.

If insufficient allocated or unallocated inventory is present to fulfil the demand order, supply orders are generated or manually created. If a supply order is generated for the demand order, a specification is also generated for the supply order. This specification has the same characteristics as the specification of the demand order. For more information, refer to *Demand pegged supply orders (p. 13)*.

If insufficient allocated but sufficient unallocated inventory is present, inventory is allocated using allocation buffers. The inventory included in an allocation buffer is linked to a specification. Therefore, the buffered inventory is available for demand orders with matching specification criteria. For more information, refer to *Allocation buffers (p. 17)*.

Note

- You can also allocate inventory to demand orders without specifications. Allocating inventory without specifications is available if the allocations and hard pegging functionality is not implemented. See Inventory commitment.
- If insufficient inventory with a particular specification is available in the warehouse, you can create outbound advice for unallocated inventory or inventory from a different specification to make up for the missing quantity. Whether this is allowed is determined by the **Advise Unallocated Inventory** and **Demand Peg of Outbound Line is Binding** check boxes in the Warehousing Settings by Site (whwmd2101m000) session. See Allocated or unallocated inventory in the outbound process.

Inventory allocation levels

Inventory allocation levels determine whether allocated-to inventory is identifiable and traceable in the warehouse through handling units or merely registered as allocated-to inventory. You can define allocation levels for warehouse - item combinations in the Item Data by Warehouse (whwmd2510m000) session and the Item - Warehousing (whwmd4600m000) session.

For more information, refer to *Inventory allocation levels (p. 21)*.

Changing inventory allocations

Changing an inventory allocation is required, for example, if the order for which the inventory is allocated is canceled. To change an allocation, use an allocation change order.

Allocation change orders are generated based on a number group and series defined in the Inventory Handling Parameters (whinh0100m000) session. You can view and maintain allocation change orders in the Allocation Change Orders (whinh1120m000) and Allocation Change Order Lines (whinh1130m000) sessions.

Setting up demand pegging

1. In the Implemented Software Components (tccom0500m000) details session, select the **Demand Pegging** check box.
2. In the Items (tcibd0501m000) session, select the **Demand Pegged** check box for an item.
3. In the **Demand Peg Search Path Level** fields of the Item Base Data Parameters (tcibd9199m000) session, specify the search levels for retrieving demand pegging master data.
4. Depending on the selected search levels, specify demand pegging master data in the Demand Pegging Terms and Conditions (tctrm1165m000) session and/or Items (tcibd0501m000) session.
Specify these fields:
 - Select the **Demand Pegged** check box for the item in the Items (tcibd0501m000) session.
 - Select the **Use Unallocated Inventory** check box to allow using both allocated and unallocated inventory. This check box affects the allocation of inventory to demand orders during order planning runs in Enterprise Planning or at sales order entry in Sales Control.
The **Advise Unallocated Inventory** check box in the Warehousing Settings by Site (whwmd2101m000) session for the item and site combination, this determines whether you can advise unallocated inventory for a demand-pegged outbound order.
 - Select a value in the **Demand Pegging Type** field to determine the specification attributes that are used for demand and supply matching for the item and site combination. Among other things, the **Demand Pegging Type** thus determines the content of the specification.
5. In the Warehousing Settings by Site (whwmd2101m000) session, select the site, then select the:
 - **Advise Unallocated Inventory** check box to allow advising unallocated inventory for a demand-pegged outbound order.
 - **Demand Peg of Outbound Line is Binding** check box to prevent allocated inventory from being advised for an outbound order with a different specification.

Relation between **Demand Pegging Type** and specification

The following table shows the relation between the demand pegging type and the specification:

Demand Pegging Type	Allocates inventory and demand pegs	Specified in specification:
Customer Based	Business partner	Sold-to business partner
Order Based	Demand order	Sold-to business partner Order/position/sequence
Customer Reference Based	Customer reference	Sold-to business partner Reference
Customer Location Based	Customer location	Sold-to business partner Ship-to business partner
Internal Reference Based	Internal reference	Reference

Demand pegged supply orders

If insufficient inventory is available, supply orders can be generated and demand pegged to the demand order requesting allocated inventory. This means the supply order receives the same specification as the demand order. Allocated planned inventory transactions, containing the specifications, are created for the supply orders.

Supply orders for demand orders are generated or manually created from these origins:

- Order planning runs in Enterprise Planning. For more information, refer to Order planning, an overview.
- Sales (demand) orders or schedules in Sales.

Demand peg supply orders in Procurement and Sales

The following supply orders can be generated:

- Purchase orders in the Generate Purchase Orders (tdsls4241m000) session.
- Production orders in the Generate Production Orders (tdsls4243m000) session.
- Transfer orders in the Transfer Order for Sales Order (tdsls4242s000) session.

Supply orders can be created as follows from the Sales Order Lines (tdsls4101m000) session, or the Sales Order Planned Delivery Lines (tdsls4101m100) session:

- **Manually from the stock shortage menu**
When an inventory shortage occurs on the order line, the Inventory Shortage Menu (tdsls4830s000) session starts. Select **Generate Purchase Order**, **Generate Production Order**, or **Generate Transfer Order** to create a supply order in the relevant session.
- **Manually from the appropriate menu**
When an inventory shortage occurs on the order line, you can click **Generate Purchase Order**, **Generate Production Order**, or **Generate Transfer Order** from the appropriate menu to create a supply order in the relevant session.

- **Automatically at sales order line entry**

When an inventory shortage occurs, a supply order is automatically generated if the relevant session is linked as an automatic activity to the order type in the Sales Order Type (tdsls0694m000) session.

Note

- The Inventory Shortage Menu (tdsls4830s000) session, which can appear for a manually entered sales order, is started only if the total quantity of the allocated inventory and/or demand pegged supply orders is less than the sales order line's ordered quantity.
- During BOM explosion of the production order, LN can propagate the demand peg to orders for components depending on the **Inherit Demand Peg** field in the Bill of Material (tibom1110m000) session.

Demand peg supply orders in Warehousing

Supply orders are generated or manually created if insufficient allocated or unallocated inventory is present to fulfil the demand order. If a supply order is generated for the demand order, a specification is also generated for the supply order. This specification has the same characteristics as the specification of the demand order.

When outbound order lines, outbound advice lines, shipment lines, and so on, are created for the demand order during warehouse processing, specifications are generated for these lines. These specifications obtain the specification characteristics of the demand order.

Likewise, the specification characteristics of the supply order are passed on to the specifications generated for the inbound order lines, receipt lines, inspection lines, or handling units.

Warehousing parameter settings determine whether:

- Items received by supply orders become identifiable in inventory through handling units generated for the receipt line of the supply order when the receipt is confirmed. These handling units obtain specifications with characteristics identical to those of the supply order.
- Specific handling units or anonymous allocated inventory is issued when generating an outbound advice for the demand order. See *Inventory allocation levels (p. 21)*. LN issues inventory for which the specification characteristics match those of the outbound order lines of the demand order.
- You can advise unallocated inventory or inventory from a different specification to make up for the missing quantity if insufficient inventory for a particular specification is available to be issued from the warehouse. Whether this is allowed is determined by the **Advise Unallocated Inventory** and the **Demand Peg of Outbound Line is Binding** check box in the Warehousing Settings by Site (whwmd2101m000) session. See Allocated or unallocated inventory in the outbound process.

Demand peg supply purchase orders and schedules

A purchase order/schedule is a source of supply for items. Purchased items can be demand pegged to an allocated demand by a specification. During receipt of the item, the characteristics of the specification are copied to the inventory record, which allocates this inventory to the specific demand.

Purchase orders

A purchase order line can be demand pegged if it is generated from the following origins:

- **EDI**
The purchase order line and related specification information is communicated through electronic data interchange (EDI) if the **Supply Planning by Supplier** check box is selected in the Planning Terms and Conditions (tctrm1135m000) session. As a result, the **Demand Pegging Type** in the Demand Pegging Terms and Conditions (tctrm1165m000) session determines the specification's appearance on the purchase order line.
- **Sales**
The purchase order is generated in the Generate Purchase Orders (tdsls4241m000) session. If a specification is linked to the sales order and the **Supply Planning by Supplier** check box is cleared in the Planning Terms and Conditions (tctrm1135m000) session, the specification of the sales order is copied to the purchase order line.
- **EP**
The purchase order is generated from the Transfer Order Planning (cppat1210m000) session. If a specification is linked to the planned order and the **Supply Planning by Supplier** check box is cleared in the Planning Terms and Conditions (tctrm1135m000) session, the specification of the planned order is copied to the purchase order line.
- **Warehousing**
The purchase order is generated from the Generate Orders (TPOP) (whinh2201m000) session. If a specification is linked to the planned inventory transaction and the **Supply Planning by Supplier** check box is cleared in the Planning Terms and Conditions (tctrm1135m000) session, the specification of the planned inventory transaction is copied to the purchase order line.
- **Warehousing Receipt**
The purchase order line is generated automatically for an unexpected warehouse receipt. The specification is copied from the receipt in Warehousing.
- **Job Shop Control**
The (subcontracting) purchase order line is created from the Generate Subcontracting Purchase Documents (tisfc2250m000) session for a subcontracted operation on a production order. The specification is copied from the Estimated Materials (ticst0101m000) session in Manufacturing to the Purchase Order Material Supply Lines (tdpur4116m000) session in Procurement.
- **Subcontracting Purchase Order**
The (subcontracting) purchase order line is created from the Generate Supply Orders for Subcontracting (tdpur4216m000) session for an order controlled/single system. The specification from the Purchase Order Material Supply Lines (tdpur4116m000) session is copied to the purchase order line.

- **Manual**

For manually entered purchase orders, you can only create a specification in a specific vendor managed inventory (VMI) scenario and a specific subcontracting scenario.

Before you can manually enter a purchase order for these scenarios, the following check boxes must be selected:

- **Supply Planning by Supplier** in the Planning Terms and Conditions (tctrm1135m000) session.
- **Demand Pegging Required** in the Demand Pegging Terms and Conditions (tctrm1165m000) session.

Both scenarios also require specific settings before you can manually enter purchase orders:

- **VMI scenario**
On the purchase order line, the **Payment** field must be **Pay on Receipt** or **Pay on Use**.
- In the Planning Terms and Conditions (tctrm1135m000) session, the **Send Reference to Supplier** check box must be selected.
- In the Demand Pegging Terms and Conditions (tctrm1165m000) session, the **Demand Pegging Type** must be **Internal Reference Based**.
- **Subcontracting scenario**
On the purchase order line, the **Payment** field must be **No Payment**.
- In the Demand Pegging Terms and Conditions (tctrm1165m000) session, the **Demand Pegging Type** must be **Customer Based** or **Customer Reference Based**.

Note

If the purchase order line is a return order line, the specification of the original purchase order line is copied to the return order line.

Purchase schedules

A purchase schedule line can be demand pegged if it is generated from:

- **Warehousing**
The purchase schedule is generated from the Generate Orders (TPOP) (whinh2201m000) session. If a specification is linked to the planned inventory transaction and the **Supply Planning by Supplier** check box is cleared in the Planning Terms and Conditions (tctrm1135m000) session, the specification of the planned inventory transaction is copied to the purchase schedule line.
- **Subcontracting Purchase Order**
The (subcontracting) purchase schedule line is created from the Generate Supply Orders for Subcontracting (tdpur4216m000) session for an order controlled/single system. The specification from the Purchase Order Material Supply Lines (tdpur4116m000) session is copied to the purchase schedule line.

Note

For push schedules, specifications are not used.

Allocation buffers

You can use allocation buffers to allocate free, (unallocated) inventory if insufficient inventory is present.

When you create an allocation buffer, free on hand inventory for a warehouse, item and, if present, an effectivity unit, is allocated to a specification. The inventory is then consumable for outbound order lines whose specification characteristics match those of the allocation buffer. Outbound order lines, advice lines, shipment lines, and so on, created in the outbound and shipment procedures obtain the specification characteristics of the demand order from which they originate.

You can only create allocation buffers if the following applies:

- The **Use Unallocated Inventory** check box is selected in the Demand Pegging Terms and Conditions (tctrm1165m000) session.
- Unallocated inventory is available.

Calculating available unallocated inventory

LN calculates the available unallocated inventory as follows:

$$\{A - (B + C + D)\} + E = F$$

If $F > G$, $G = \text{unallocated available inventory}$

$$H - I = G$$

Symbol	Value of field in Inventory by Warehouse, Item and Effectivity Unit (wh-wmd2516m000) session:
A	Inventory on Hand
B	Blocked
C	Committed
D	Location Allocated
E	Inventory Committed in Process
F	Intermediate result
H	Inventory on Hand field of the Inventory by Warehouse, Item and Effectivity Unit (wh-wmd2516m000) session
I	Inventory On Hand field in the Inventory by Specification (whwmd2519m000) session

Note

Allocation buffers are generated based on a number group and series defined in the Inventory Planning Parameters (whinp0100m000) session.

The committed inventory C and the location allocated inventory D can overlap, because if outbound advice is created for committed inventory, this advised committed inventory is listed as both committed and location allocated inventory. If C and D were subtracted from A to calculate F, the calculated free inventory F would be lower than the actual free inventory. Therefore, the inventory committed in process E is added to balance the result.

If F is more than the difference between the **Inventory on Hand** field of the Inventory by Warehouse, Item and Effectivity Unit (whwmd2516m000) session and the **Inventory On Hand** field in the Inventory by Specification (whwmd2519m000) session, the result is adjusted to this difference.

Creating allocation buffers

Allocation buffers are created:

- During an order planning run in Enterprise Planning. For more information, refer to Creating allocation buffers in Enterprise Planning.
- At sales order line entry (the sales order line being the demand order). The allocation buffer is created for the warehouse, item, effectivity unit, and specification of the sales order line. For more information, refer to Creating allocation buffers at sales order line entry.

- Manually in the Inventory Commitments (whinp2100m000) session.

You can view allocation buffers in the Inventory Commitments (whinp2100m000) session.

Creating allocation buffers in Enterprise Planning

During an order planning run, Enterprise Planning can create allocation buffers to allocate inventory to a demand order.

To allocate inventory:

1. LN checks whether unallocated inventory is available for the item, warehouse, and specification of the demand order.
2. If no, no allocation takes place.
3. If yes, LN looks for allocation buffers without outbound advice whose specification characteristics match those of the demand order.
4. If found, the quantity of the existing allocation buffer is increased with the quantity required for the demand order and the quantity of the unallocated inventory is reduced by the demand order quantity.
5. If not found, LN creates a new allocation buffer with a specification whose characteristics are identical to those of the demand order. The quantity of the new allocation buffer matches the demand order quantity.

In the Inventory by Specification (whwmd2519m000) session, the following fields are increased with the new allocation buffer quantity:

- **Inventory in Allocation Buffer**
- **Inventory On Hand**

Creating allocation buffers at sales order line entry

Allocation buffers can be created as follows from the Sales Order Lines (tdsls4101m000) session, or the Sales Order Planned Delivery Lines (tdsls4101m100) session:

- **Manually from the stock shortage menu**
When an inventory shortage occurs on the order line, the Inventory Shortage Menu (tdsls4830s000) session is started. Select **Create Allocation Buffer** to create an allocation buffer in the Create Allocation Buffers (tdsls4813s000) session. The allocation buffer is created when the sales order line is saved.
- **Manually in Warehousing**
You can allocate unallocated inventory in the Inventory Commitments (whinp2100m000) session. On the appropriate menu, click **Allocation Buffers** to start this session and enter your data.
- **Automatically at sales order line entry**
When an inventory shortage occurs, an allocation buffer is automatically created at sales order line entry if the **Automatic Inventory Shortage Handling** field is set to **Create Allocation Buffer** for the relevant item in the Sales Order Types (tdsls0594m000) session.

Consumption of allocation buffers

If outbound advice is created for an outbound order line with a specification, LN first advises the allocated-to inventory that was received by means of supply orders with matching specification characteristics, thus increasing the quantity in the **Inventory Location Allocated** field of the Inventory by Specification (whwmd2519m000) session.

If this inventory is insufficient, LN advises inventory from allocation buffers with specification characteristics that match those of the outbound order line, thus increasing the quantity in the **Inventory Location Allocated** field and the **Inventory in Allocation Buffer** field of the Inventory by Specification (whwmd2519m000) session.

Note

If insufficient inventory for a particular specification is available to be issued from the warehouse, you can advise unallocated inventory or inventory from a different specification to make up for the missing quantity. Whether this is allowed is determined by the **Advise Unallocated Inventory** and the **Demand Peg of Outbound Line is Binding** check box in the Warehousing Settings by Site (whwmd2101m000) session. See Allocated or unallocated inventory in the outbound process.

Likewise, if outbound advice is released for an outbound order line with a specification, LN first releases the allocated-to inventory that was received by means of orders with matching specification characteristics. If the corresponding shipment lines are confirmed, the quantity in the **Inventory Location Allocated** field of the Inventory by Specification (whwmd2519m000) session is decreased.

If this inventory is insufficient, LN releases inventory from allocation buffers with specification characteristics that match those of the outbound order line. If the corresponding shipment lines are confirmed, the quantity in the **Inventory Location Allocated** field of the Inventory by Specification (whwmd2519m000) session is decreased.

Inventory allocation levels

Inventory allocation levels determine whether allocated-to inventory is identifiable and traceable in the warehouse by means of handling units or merely registered as allocated-to inventory. You can define allocation levels for warehouse - item combinations in the Item Data by Warehouse (whwmd2510m000) session and the Item - Warehousing (whwmd4600m000) session.

Allocation levels

The following inventory allocation levels are available:

- **Warehouse**
If receipt lines of supply orders with specifications are confirmed, or allocation buffers are created, the received items and the buffered items become allocated-to inventory. No handling units are generated for these items, therefore, they are not traceable in the warehouse.
- **Physical Item**
If receipt lines of supply orders with specifications are confirmed, the received items become allocated inventory. LN generates handling units for the received items, and the handling units obtain specifications with characteristics identical to those of the supply order. The allocated items are identifiable and traceable in the warehouse by means of the handling units and the handling unit specifications.

In all warehousing procedures, including shipment, inbound and outbound inspections, adjustments and cycle counts, handling units with specifications are used. For example, if outbound advice is created for a demand order, LN advises specific handling units whose specification characteristics match those of the outbound order lines of the demand order.

Note

- Using the **Physical Item** allocation level requires various parameter settings. For more information, refer to Handling unit setup for allocations.
- Unlike supply orders, for the allocated inventory included in an allocation buffer, no handling units are generated if the inventory allocation level is **Physical Item**.

Handling unit setup for allocations

To use allocation level **Physical Item**, the following setup is required:

- In the Implemented Software Components (tccom0500m000) details session, select the **Demand Pegging** check box.
- In the Warehouse Master Data Parameters (whwmd0100s000) details session, select the **Handling Units in Use** check box.
- In the Item - Warehousing Defaults (whwmd4101s000) session and the Item - Warehousing (whwmd4600m000) session, select the **Handling Units in Use** check box.
- In the Item Data by Warehouse (whwmd2510m000) session:
 - To enable the use of handling units in all warehousing processes, select the following check boxes:
 - **Handling Units in Use**
 - **Receipts**
 - **Inbound Inspections**
 - **Inventory**
 - **Outbound Inspections**
 - **Shipments**
 - To automatically generate handling units during the following warehousing processes, select **Always** or **For Ownership/Specification** in the following fields:
 - **Generate Handling Units Automatically from ASNs**
 - **Confirm Receipts**
 - **Process Adjustments Orders**
 - **Process Cycle Counting Orders**
 - To generate handling units when outbound advice is released, in the **Confirm Picking** field, select **Yes**.

If not all of the above automatic handling unit generation options are selected, when one of the warehouse processes is carried out, the user is prompted to manually create handling units.

Note

Allocated inventory is listed by item, warehouse and specification in the Inventory by Specification (whwmd2519m000) session. In the Handling Units (whwmd5130m000) session, you can view handling units and handling unit specifications.

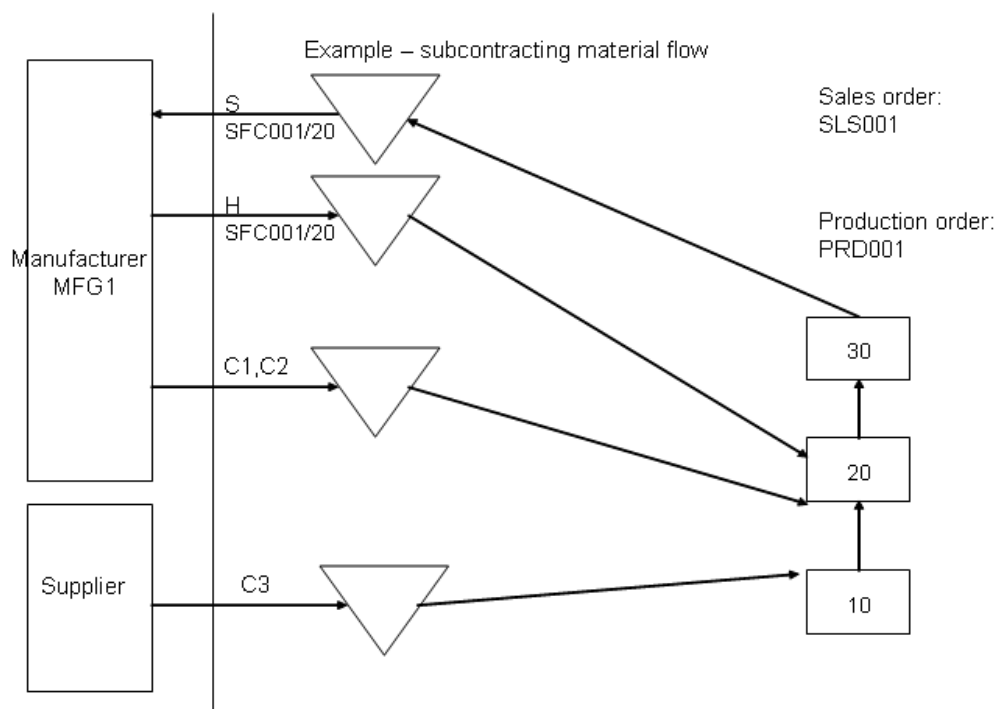
Chapter 6

Demand pegging example

6

Demand pegging example

This topic gives an example of how a specification is transferred between business objects in the subcontracting process at the subcontractor's location.



Item S

The subcontractor starts by creating a subcontracting sales order for item S for which inventory must be allocated. For the sales order, a production order is planned in Enterprise Planning and created in Job Shop Control. The sales order has a specification that is propagated to the production order.

Items H, C1, C2, and C3 are in the bill of material for item S. The **Inherit Demand Peg** field in the Bill of Material (tibom1110m000) session determines if and how the specification is further propagated from the production order to the production order estimated material lines.

The manufacturer is identified as sold-to business partner MFG1 in the subcontractor's system.

Item H

Item H is a subassembly item of the manufacturer and therefore delivered by the manufacturer.

The **Inherit Demand Peg** field in the Bill of Material (tibom1110m000) session is set to **Obsolete**. This means that for item H, LN checks the terms and conditions agreement to determine which specification attributes must be propagated.

Item H is planned by the manufacturer on an order basis. To uniquely identify H, the subcontractor receives the reference "SFC0001/20" from the manufacturer. For item S, this reference is stored in the **Reference** field on the sales order.

The specification on the purchase order also contains the reference "SFC0001/20" for item H.

Components C1 and C2

Items C1 and C2 are components that are planned and delivered by the manufacturer.

The **Inherit Demand Peg** field in the Bill of Material (tibom1110m000) session is set to **Obsolete** for items C1 and C2. This means that LN checks the terms and conditions agreement to determine which specification attributes must be propagated to the estimated material lines for the items.

C1 and C2 are supplied by the manufacturer on a bulk basis. The purchase orders for C1 and C2 have a specification that contains the business partner MFG1. C1 and C2 are allocated to this manufacturer.

Component C3

Item C3 is a component that is planned by the subcontractor.

The **Inherit Demand Peg** field in the Bill of Material (tibom1110m000) session is set to **Yes** for item C3. This means that the specification from the production order is propagated one-to-one to the estimated material line for C3.

In an order planning run in Enterprise Planning, a purchase order is created by the subcontractor. The specification is propagated from the sales order to the purchase order.

Demand pegging data

H, C1, C2, and C3 must be issued to the production order PRD001. This is only possible if the specifications on the estimated material lines equal the specifications in inventory. In other words, the specifications on the supply side must equal the specifications on the demand side.

The following tables display the specification data for the production order, sales order, and purchase orders. The warehouse orders and planning orders are not mentioned, but the specifications on the warehouse orders are derived from the originating orders.

Sales and Procurement

Item	S	H	C1	C2	C3
Demand Pegging Type	Customer Reference Based	Customer Reference Based	Business Partner Based	Business Partner Based	Not Applicable
Order Type	Sales order	Purchase order	Purchase order	Purchase order	Purchase order
Order Number	SLS001	PUR001	PUR001	PUR002	PUR003
Specification					
Allocated to Business Partner	MFG1	MFG1	MFG1	MFG1	MFG1
Allocated to Reference	SFC0001/20	SFC0001/20	Not Applicable	Not Applicable	SFC0001/20

Job Shop

Item	S	H	C1	C2	C3
Demand Pegging Type	Not Applicable	Customer Reference Based	Business Partner Based	Business Partner Based	Not Applicable
Demand Peg Propagation	Not Applicable	Read terms and conditions	Read terms and conditions	Read terms and conditions	Propagate
Order Type	Production order	Production order material	Production order material	Production order material	Production order material
Order Number	PRD001	PRD001/10	PRD001/20	PRD001/30	PRD001/40
Specification					
Allocated to Business Partner	MFG1	MFG1	MFG1	MFG1	MFG1

Allocated to Reference	SFC0001/20	SFC0001/20	Not Applicable	Not Applicable	SFC0001/20
-----------------------------------	------------	------------	----------------	----------------	------------

Appendix A

Glossary

A

allocation

The reservation of inventory against a demand prior to the outbound process.

You can allocate a quantity of inventory to a business partner or a particular demand order.

Note

The documentation sometimes states that a particular demand object, such as a sales order, is *allocated to* a business partner, order, or reference. That phrase actually means that LN must fill the demand object with *supply that was allocated to* that particular business partner, order or reference.

allocation buffer

Inventory that is allocated to a specification. This inventory is not allocated to a specific order, but can be consumed by any order line with a specification whose characteristics match the characteristics of the specification of the allocation buffer.

allocation change order

A commission to change the allocation of inventory.

appropriate menu

Commands are distributed across the **Views**, **References**, and **Actions** menus, or displayed as buttons. In previous LN and Web UI releases, these commands are located in the *Specific* menu.

demand order

An order, usually a sales order or sales schedule, fulfilling the demand of a customer.

dependent demand

A demand related to a demand for another item.

Two basic types of dependent demand exist:

- Demand for components that are used to manufacture an item.
- Demand that originates from another warehouse location or a related company.

With master planning, the dependent demand is equal to the sum of the following fields:

- dependent material demand
- dependent scheduled demand
- dependent distribution demand

LN explodes the ATP and the dependent demand of a main item to plan items that have the same planning cluster as the warehouse you specified on the bill of critical materials of the main item.

electronic data interchange (EDI)

The computer-to-computer transmission of a standard business document in a standard format. Internal EDI refers to the transmission of data between companies on the same internal company network (also referred to as multicompany). External EDI refers to the transmission of data between your company and external business partners.

handling unit

A uniquely identifiable physical unit that consists of packaging and contents. A handling unit can contain items. A handling unit has a structure of packaging materials used to pack items, or is a part of such a structure.

A handling unit includes the following attributes:

- Identification code
- Packaging item (optional)
- Quantity of packaging items (optional)

If you link an item to a handling unit, the item is packed by means of the handling unit. The packaging item refers to the type of container or other packing material of which the handling unit consists. For example, by defining a packaging item such as Wooden Crate for a handling unit, you specify that the handling unit is a wooden crate.

See: handling unit structure

independent demand

A demand that is unrelated to demand for other items.

Examples of independent demand:

- Demand for finished goods.
- Demand for components required for destructive testing.
- Service part requirements.

order-based planning

A planning concept in which planning data is handled in the form of orders.

In order planning, supply is planned in the form of planned orders. LN takes into account the start and finish dates of individual planned orders. For production planning, this method considers all material and capacity requirements, as recorded in an item's BOM and routing.

Note

In Enterprise Planning, you can maintain a master plan for an item, even if you plan all supply with order planning.

order controlled/single

A demand-pull system that regulates the supply of items to shop floor warehouses.

In this supply system, a specific production order for a specific product pulls the required items from a supply warehouse to the shop floor warehouse. A direct link is established between the production order for which the items are required, and the warehousing order that regulates the supply of the required items to the shop floor warehouse.

planned inventory transactions

The expected changes in the inventory levels due to planned orders for items.

planned order

A supply order in Enterprise Planning that is created for planning purposes, but which is not an actual order yet.

Enterprise Planning works with planned orders of the following types:

- planned production order
- planned purchase order
- planned distribution order

Planned orders are generated in the context of a particular scenario. The planned orders of the actual scenario can be transferred to the execution level, where they become actual supply orders.

push schedule

A list of time-phased requirements, generated by a central planning system, such as Enterprise Planning or Project, that are sent to the supplier. Push schedules contain both a forecast for the longer term and actual orders for the short term.

A push schedule can use one of the following release types:

- **Material Release:** only material releases are sent. Shipping is performed based on the **Firm** and **Immediate** requirements in the material release.
- **Shipping Schedule:** both material releases and shipping schedules are sent. Shipping is carried out based on the **Firm** and **Immediate** requirements in the shipping schedule. The material release only sends forecasting data.
- **Shipping Schedule Only:** only shipping schedules are sent. Shipping is carried out based on the **Firm** and **Immediate** requirements in the shipping schedule. No forecasting data is sent to the supplier.

return order

A purchase or sales order on which returned shipments are reported. A return order can only contain negative amounts.

specification

A collection of item-related data, for example, the business partner to whom the item is allocated or ownership details.

LN uses the specification to match supply and demand.

A specification can belong to one or more of the following:

- An anticipated supply of a quantity of an item, such as a sales order or production order
- A particular quantity of an item stored in a handling unit
- A requirement for a particular quantity of an item, for example a sales order

subassembly

An intermediary product in a production process that is not stored or sold as an end product, but that is passed on to the next operation.

For subcontracting purposes, a manufacturer can send a subassembly to a subcontractor to carry out work on the subassembly. This subassembly has its own item code defined in the Item Base Data.

After work is finished, the subcontractor sends the subassembly back to the manufacturer. Also this reworked subassembly has its own item code defined in the Item Base Data.

subcontracting

Allowing another company (the subcontractor) to carry out work on an item. This work can concern the entire production process, or only one or more operations in the production process.

supply order

An order, usually a production order or a purchase order, that contains a quantity of a particular item needed to fulfill a demand order.

terms and conditions agreement

An agreement between business partners about the sale, purchase, or transfer of goods, in which you can define detailed terms and conditions about orders, schedules, planning, logistics, invoicing, and demand pegging, and define the search mechanism to retrieve the correct terms and conditions.

The agreement includes the following:

- A header with the type of agreement and the business partner(s).
- Search levels with a search priority and a selection of search attributes (fields) and linked terms and conditions groups.
- One or more lines with the values for the search levels' search attributes.
- Terms and conditions groups with detailed terms and conditions about orders, schedules, planning, logistics, invoicing, and demand pegging for the lines.

vendor managed inventory (VMI)

An inventory management method according to which the supplier usually manages the inventory of his customer or subcontractor. Sometimes, the supplier manages the supply planning as well. Alternatively, the customer manages the inventory but the supplier is responsible for supply planning. Inventory management or inventory planning can also be subcontracted to a logistics service provider (LSP).

The supplier or the customer may own the inventory delivered by the supplier. Often, the ownership of the inventory changes from the supplier to the customer when the customer consumes the inventory, but other ownership transfer moments occur, which are laid down by contract.

Vendor-managed inventory reduces internal costs associated with planning and procuring materials and enables the vendor to better manage his inventory through higher visibility to the supply chain.

Index

- allocation**, 29
 - Allocation and hard pegging**, 17, 21
 - allocation buffer**, 29
 - Allocation buffer**, 17
 - consumption of, 20
 - in Enterprise Planning, 19
 - allocation change order**, 29
 - Allocation**
 - allocation level, 21
 - inventory, 17
 - appropriate menu**, 29
 - demand order**, 29
 - Demand pegging example**, 23
 - demand pegging**
 - Overview, 7
 - Setting Up, 11
 - Demand Pegging**
 - overview, 7
 - Demand pegging**
 - example, 23
 - setting up, 11
 - supply order, 13
 - dependent demand**, 30
 - electronic data interchange (EDI)**, 30
 - handling unit**, 30
 - independent demand**, 31
 - Inventory**
 - allocation, 17
 - order-based planning**, 31
 - order controlled/single**, 31
 - planned inventory transactions**, 31
 - planned order**, 31
 - push schedule**, 32
 - return order**, 32
 - specification**, 32
 - Specification**
 - example, 23
 - subassembly**, 32
 - subcontracting**, 32
 - supply order**, 33
 - Supply order**
 - demand pegging, 13
 - terms and conditions agreement**, 33
 - vendor managed inventory (VMI)**, 33
-

