Infor LN Warehousing User Guide for the Inbound Goods Flow

Important Notices

Trademark Acknowledgements

Publication Information

Document code	whinbug (U9788)
Release	10.6 (10.6)
Publication date	March 26, 2018

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About this document

This guide describes the setup and the processes of the inbound goods flow.

Intended Audience

This book is intended for those who want to learn how to receive goods and to set up the inbound functionality in the way that best serves their purposes. Both end users and users on administrator level will find the information they require.

Assumed Knowledge

Familiarity with the business processes involved in handling inbound goods in the warehouse, and general knowledge of the LN functionality will help you understand this book. In addition, Warehousing training courses are available to give you a head start.

References

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

- *User Guide for Warehousing Procedures*
- *User Guide for Warehousing Orders*
- *User Guide for Warehouses*
- *User Guide for the Outbound and Shipments Goods Flows U9794 US*
- *User Guide for Warehousing Inspections U9875 US*
- *User Guide for Warehousing Quarantine Handling U9876 US*
- *User Guide for Handling Units U8938 US*

How to read this document

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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.

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Chapter 1
Introduction

1

The inbound goods flow

The inbound goods flow includes these activities:

- Receive goods
- Generate inbound advice
- Put away inbound advice
- Generate storage list
- Confirm storage list

The inbound process is used to receive and store goods in a warehouse. To receive and store goods in a warehouse, you can process the inbound order lines on which the goods are listed, or you can process the handling units used to pack the goods. Both inbound order lines and handling units are processed according to user-defined warehousing procedures. If you use handling units to process goods, the order lines related to the handling units are updated in the background.

For more information about:

- Warehousing procedures, see *LN Warehousing User Guide for Warehousing Procedures*
- Handling units, see *LN Warehousing User Guide for Handling Units (U8938)*.

Inspection and quarantine handling

In LN, you can add warehousing inspection and quarantine handling functionality to both the inbound and outbound goods flows. Although briefly referred to in this guide, for more information please refer to *LN Warehousing User Guide for Warehousing Inspections (U9875)* and *User Guide for Quarantine Handling (U9876)*.

Chapter 2
Setup

2

To define warehousing order types

Warehousing order types determine how warehousing orders are handled. Warehousing order types are classified by inventory transaction type. The inventory transaction type that you add to a warehousing order type determines the type of warehousing procedure that you can link to the warehousing order type. The activities that must be carried out in order to handle warehousing orders are, by default, determined by the warehousing procedures that are linked to the warehousing order types.

Warehousing order types are linked to warehousing orders when warehousing orders are generated from other packages or when you manually create a warehousing order in the Warehousing Orders (whinh2100m000) session.

Define warehousing order types

In the Warehousing Order Types (whinh0110m000) session, you can specify warehousing order types for the following inventory-transaction types:

- **Receipt**
  Use a warehousing order type of inventory transaction type **Receipt** to receive goods in a warehouse. You can link a **Receipt Procedure** and, optionally, an **Inspection Procedure** to a warehousing order type of inventory transaction type **Receipt**.
- **Issue**
  Use a warehousing order type of inventory transaction type **Issue** to issue goods from a warehouse. You can link a **Outbound Procedure** and a **Shipment Procedure** to a warehousing order type of inventory transaction type **Issue** **Note**: LN allows you to modify the outbound order line data based on the value the **Allow Updating Outbound Order Lines upto and including** field is set to in the Warehousing Order Types (whinh0110m000) session.
- **Transfer**
  Use a warehousing order type of inventory transaction type **Transfer** to transfer goods between warehouses, locations, business partners, projects, or work centers.
  You must link these procedures to a warehousing order type of inventory transaction type **Transfer**:
  - **Receipt Procedure**

- **Inspection Procedure**
- **Outbound Procedure**
- **Shipment Procedure**

A transfer involves either one or two warehouses. If items are transferred between two different warehouses, all activities of the warehousing procedures must be carried out. However, if a transfer takes place between two locations within the same warehouse, the receipt activities are not carried out. You can use transfer orders to define a replenishment system within a single warehouse. This system controls replenishment from bulk locations to pick locations.
Note: LN allows you to modify the outbound order line data based on the value the **Allow Updating Outbound Order Lines upto and including** field is set to in the Warehousing Order Types (whinh0110m000) session.

- Inspections in LN Quality are possible for warehouse orders having order origin **Transfer (Manual)** only if the QM Implemented parameter is selected for the order type **Warehouse Transfer** in the Quality Management Parameters (qmptc0100m000) session.
- **WIP Transfer**
  Use a warehousing order type of inventory transaction type **WIP Transfer** to transfer work from one costing work center to another.

To define warehousing procedures

To model the inbound, storage, and outbound goods flows in your warehouse, you can define warehousing procedures in LN. A warehousing procedure includes various steps called activities that control the way warehousing orders and/or handling units are processed. An activity is performed using a particular LN session.

Link warehousing procedures to inbound and outbound goods

Initially, you define a warehousing procedure and link this procedure to a particular warehousing order type. As a result, the warehousing procedure is the default procedure for the warehousing orders to which the order type is allocated, and the goods are processed according to the procedure of the order on which the goods are listed.

If you use handling units to process goods into and/or out of the warehouse, the goods are processed according to the warehousing procedure of the warehousing orders that list the goods contained in the handling units.

You can adjust the default procedure for individual warehousing orders and warehousing order lines of this warehousing order type. If you adjust the default procedure for an individual warehousing order of this order type, the adjusted procedure applies to the inbound and/or outbound order lines of the warehousing order. You can also adjust the warehousing procedure for an individual inbound or outbound order line.

Automatic or manual execution of activities

You can specify whether an activity of a warehousing procedure must be carried out manually or automatically. Manually means that the user must perform the activity using the session related to the activity. Automatic means that the activity is carried out automatically after the preceding activity is finished. If the first activity is automatic for warehousing orders generated from orders originating from other packages, this activity is carried out the moment the warehousing order is generated.

However, to trigger warehouse processing for warehousing orders whose first activity is set to automatic processing and that are manually created or generated from Project, you must click Process.

The Process command is available in the following sessions:

- Warehousing Orders (whinh2100m000)
- Warehousing Order (whinh2100m100)
- Warehouse Manager Dashboard (whinh2300m000)
- Warehousing Assembly Orders (whinh2101m000)
- Inbound Order Lines (whinh2110m000)
- Outbound Order Lines (whinh2120m000)

Chapter 3
Inbound

3

Overview of receipt and inbound inspection procedures

The receipt and inspection procedures comprise the activities that you must perform in LN to receive and, if required, inspect goods that you want to store in the warehouse. Some of the activities are mandatory, and some only apply to location-controlled warehouses. You are not required to include non-mandatory activities in your warehousing procedures.

In addition, you can also specify whether an activity must be performed manually or automatically. See *To define warehousing procedures (p. 12)* and Automatic or manual execution of activities.

The following table provides an overview of the receipt and inspection procedures. The outer left column shows the order of the steps in the receipt and inspection procedures. The second column indicates whether a step is mandatory.

Step	Mandatory	Activity	Status/Description
1	No	Print Goods Received Note (whinh3412m100)	**Planned** or **Open**
2	Yes	Warehouse Receipt (whinh3512m000)	Create receipt: **Receipt Open** Confirm receipt: **Received** or, for non-location controlled warehouses, **Put Away** or **To be Inspected** if inspections are included in the inbound procedure.
3	Yes for location-controlled warehouses	Generate Inbound Advice (whinh3201m000)	**Advised**

3	No	Inbound Advice (whinh3525m000)	**Advised**. Maintain inbound advice.
4	No	Generate Storage List (whinh3415m000)	**Advised**
5	No	Storage List (whinh3525m100)	**Advised**. Maintain storage list and put away inbound advice. If you use storage lists, the Storage List (whinh3525m100) step is used to put away storage lists. In he background, the corresponding inbound advice is put away.
6	Yes for location-controlled warehouses	Put Away Inbound Advice (whinh3203m000)	**Put Away**
7	No	Warehouse Inspections Overview (whinh3122m000)	After inbound advice is put away: **To be Inspected** After inspection is completed: **Inspected**.

For further information about each step, refer to *Receipt and inbound inspection procedures - in detail (p. 17)*.

If an optional step is not included in the receipt and inspection procedures, LN skips this step and carries out the next step defined in the warehousing procedure. The affected inbound order lines then obtain the status of that step.

If the receipt or inspection procedure is carried out for a non-location controlled warehouse, LN skips the steps that are not applicable for non-location controlled warehouses. The affected inbound order lines then obtain the status of the next applicable step.

These steps are unavailable for non-location controlled warehouses:

- Generate Inbound Advice (whinh3201m000)
- Inbound Advice (whinh3525m000)
- Generate Storage List (whinh3415m000)
- Storage List (whinh3525m100)
- Put Away Inbound Advice (whinh3203m000)

Some scenarios for receipt and inspection procedures:

- *Full scenario (p. 20)*

- *Only mandatory steps including inspection (p. 22)*
- *Non-location controlled including inspections (p. 23)*
- *Full scenario without inspections (p. 22)*

Receipt and inbound inspection procedures - in detail

The receipt and inspection procedures comprise the activities that you must perform in LN to receive and, if required, inspect goods that you want to store in the warehouse. This topic describes all steps, also called activities, of the inbound and inspection procedures and shows how you can perform these steps.

Some of the activities are mandatory, and some only apply to location-controlled warehouses. You are not required to include non-mandatory activities in your warehousing procedures. In addition, you can specify whether an activity must be performed manually or automatically. For information on how to define warehousing procedures, see *To define warehousing procedures (p. 12)* and Automatic or manual execution of activities.

The receipt and inspection procedures include the following mandatory activities:

- Warehouse Receipt (whinh3512m000)
- Generate Inbound Advice (whinh3201m000)
- Put Away Inbound Advice (whinh3203m000)

These activities are only available for location-controlled warehouses:

- Generate Inbound Advice (whinh3201m000)
- Put Away Inbound Advice (whinh3203m000)
- Generate Storage List (whinh3415m000)
- Storage List (whinh3525m100)

If the warehouse is not location-controlled, LN skips these activities and automatically stores the goods in the warehouse after the receipt is confirmed. The status of the inbound order line then changes from **Receipt Open** to **Put Away**.

The receipt and inspection procedures include the following steps:

Step 1: Print goods received note (optional)

The first step of the receipt procedure is to print a goods received note for the inbound order lines that you want to receive. The initial status of an inbound order line is either **Planned** or **Open**. For more information, refer to Print Goods Received Note (whinh3412m100) and Planned status for warehousing orders and order lines.

Step 2: Receive goods

The **Receipt** activity is a mandatory step of the inbound procedure.

When inbound goods arrive at the warehouse, the goods are counted and the receipt of the goods is confirmed. Many warehouses use scanning devices to receive goods, in which case they scan the serial numbers or the labels of the handling units of the goods.

To receive goods in LN, you must create a receipt record and link the inbound-order lines, advance shipment notices, or handling units, which list the goods, to the receipt record. As a result, LN creates receipt lines for the linked inbound order lines, handling units, or ASN lines. For more information, refer to *How to receive goods (p. 27)*.

If the ownership for the received goods is other than company owned, LN creates an ownership record when a receipt is linked to an inbound order line. If the ownership is consigned, LN creates a consumption record in the Consigned Receipts (whwmd2550m000) session. If the ownership is customer owned, LN generates a consumption record in the Customer Owned Receipts (whwmd2550m100) session only when the consigned inventory is used/ issued from a warehouse. For more information, refer to Inventory ownership in Warehouse Management.

You can create receipt records in the Warehouse Receipt (whinh3512m000) session.

Alternatively, you can create a receipt for inbound order lines as follows:

1. In the Inbound Order Lines (whinh2110m000) session or the Inbound Line Status Overview (whinh2119m000) session, select the appropriate menu.
2. On the appropriate menu, click **Receive**.

After you create a receipt record for an inbound order line, the status of the inbound order line changes to **Receipt Open**.

After you create a receipt and link order lines, handling units, or ASNs, you must confirm the receipt. After the receipt is confirmed, the status of the inbound order line changes to **Received** and LN creates an inventory record for the received items.

Note that for non-location controlled warehouses, when you confirm the receipt for an inbound order line, the status changes from **Receipt Open** to **Put Away**. The reason is that for non location controlled warehouses, the inbound advise and put away activities are not available. After confirming the receipt, the goods are automatically put away. If an inspection procedure is included in the warehousing procedure, the status of the inbound order line changes from **Receipt Open** to **To be Inspected**, which is described in step 7.

To confirm a receipt, in the Warehouse Receipt (whinh3512m000) session; go to appropriate menu --> Confirm --> **Receipt**. For more information, refer to *How to receive goods (p. 27)*.

If this activity is performed automatically, LN both creates and confirms the receipt record.

Step 3: Advise goods

Inbound advice comprise instructions to move received and/or inspected goods to particular storage locations in a warehouse.

After a receipt is confirmed, you can generate inbound advice that show the pick or bulk locations to which the goods must be moved.

If the warehouse procedure defined for the inbound order line includes an inspection procedure, the inbound advice shows the inspection location to which the goods must be moved. For more information, refer to the description of the Inspect Goods, step 7 in this topic.

To generate inbound advice, in the Generate Inbound Advice (whinh3201m000) session, select the inbound order lines that list the goods that you want to advise and click **Advise**. You can maintain inbound advice data in the Inbound Advice (whinh3525m000) session. Alternatively, you can generate inbound advice for individual order lines in the Inbound Line Status Overview (whinh2119m000) session. For more information, refer to *To generate and put away inbound advice (p. 53)*.

After the inbound advice is generated, the status of the inbound order lines that list the goods selected in the outbound advice changes to **Advised**.

Step 4: Generate storage list

A storage list is a document that shows the locations where received or inspected goods must be stored. It provides more detailed instructions than the inbound advice. You can generate storage lists after the inbound advice is generated. The storage list activity is only available for location-controlled warehouses. After you generate a storage list for an inbound order line, the status of the order line remains **Advised**.

You can generate storage lists in the Generate Storage List (whinh3415m000) session.

Alternatively, you can generate storage lists for individual inbound order lines in the Inbound Line Status Overview (whinh2119m000) session.

Step 5: Storage list

In the Storage List (whinh3525m100) session, you can maintain storage list data and put away the goods listed on the storage list. If you put away the goods in the Storage List (whinh3525m100) session, you do not have to use the Put Away Inbound Advice (whinh3203m000) session. After you put away the goods listed on a storage list, the status of the related order lines changes from **Advised** to **Put Away**.

If the warehouse procedure defined for the inbound order line includes an inspection procedure, LN creates an inspection record after the inbound advice is put away, and the inbound order line obtains the **To be Inspected** status.

Step 6: Put away goods

After the receipt is confirmed and the inbound advice is generated for the inbound order line or the handling unit, you can store the goods in the warehouse.

You can put away goods using the following sessions:

- Put Away Inbound Advice (whinh3203m000)
- Inbound Advice (whinh3525m000)
- Inbound Line Status Overview (whinh2119m000)
- Storage List (whinh3525m100)

After the inbound order line is put away, the order line obtains the **Put Away** status. For more information, refer to *To generate and put away inbound advice (p. 53)*.

If the warehouse procedure defined for the inbound order line includes an inspection procedure, LN creates an inspection record after the inbound advice is put away, and the inbound order line obtains the **To be Inspected** status.

Step 7: Inspect inbound goods

The inbound inspection procedure is one of the main warehousing procedures in LN. You can add the inspection procedure to a warehousing procedure if the setup for the warehouse, supplier, or item requires item inspection.

For location-controlled warehouses, LN moves the inbound goods to the inspection location specified for the warehouse after the receipt is confirmed and the inbound advice is put away. Inbound order lines that are put away to the inspection location obtain the **To be Inspected** status.

To enhance efficiency, you can consider setting the inbound advice to the inspection location to automatic.

For non location-controlled warehouses, the status of an inbound order line changes to **To be Inspected** after the receipt is confirmed.

For the inbound order lines with status **To be Inspected**, LN creates inspections and inspection lines. You can maintain inspection data in the Warehouse Inspections (whinh2631m100), Warehouse Inspections Overview (whinh3122m000), and Warehouse Inspection (whinh3622m000) sessions.

For the approved and processed quantity of an inspected order line, you must again generate the inbound advice and put away the inspected goods if the warehouse is location-controlled. To generate and put away inbound advice for inspected goods, proceed in the same way as described in the previous steps. The status for inbound order lines for which inbound advice is generated after inspection is **Advised**. The status for inbound order lines that are put away after inspection is **Put Away**.

For non-location controlled warehouses, the status of the approved and processed quantity of an inbound order line changes to **Put Away** after the inspection is processed. This is because the Generate Inbound Advice (whinh3201m000), Generate Storage List (whinh3415m000), Storage List (whinh3525m100), and the Put Away Inbound Advice (whinh3203m000) activities are unavailable for warehouses without locations.

Depending on the setup, rejected item quantities are removed from inventory or sent to the quarantine warehouse or quarantine location without inbound advice. In the Quarantine Inventory Overview (whwmd2171m000) session, you can handle quarantined items.

Destroyed item quantities are removed from inventory through an adjustment order.

Full scenario

The full scenario includes all steps of the receipt and inspection procedures.

Step	Activity	Status
1	Print Goods Received Note (whinh3412m100)	**Planned** or **Open**
2	Warehouse Receipt (whinh3512m000)	Create receipt: **Receipt Open** Confirm receipt: **Received**
3	Generate Inbound Advice (whinh3201m000)	**Advised**
4	Inbound Advice (whinh3525m000)	**Advised**
5	Generate Storage List (whinh3415m000)	**Advised**
6	Storage List (whinh3525m100)	**Advised**
7	Put Away Inbound Advice (whinh3203m000)	**Put Away**
8	Warehouse Inspections Overview (whinh3122m000)	After inbound advice is put away: **To be Inspected** After inspection is completed: **Inspected**
9	Generate Inbound Advice (whinh3201m000) after inspection	**Advised**
10	Inbound Advice (whinh3525m000) after inspection	**Advised**
11	Generate Storage List (whinh3415m000) after inspection	**Advised**
12	Storage List (whinh3525m100) after inspection	**Advised**
13	Put Away Inbound Advice	**Put Away**

	(whinh3203m000) after inspection	

Note

In practice, the use of storage lists, steps 5 and 6 in the table, may not always be required to send goods to the inspection location.

Full scenario without inspections

The full scenario without inspections includes all steps of the receipt procedure.

Step	Activity	Status
1	Print Goods Received Note (whinh3412m100)	**Planned** or **Open**
2	Warehouse Receipt (whinh3512m000)	Create receipt: **Receipt Open** Confirm receipt: **Received**
3	Generate Inbound Advice (whinh3201m000)	**Advised**
4	Inbound Advice (whinh3525m000)	**Advised**
5	Generate Storage List (whinh3415m000)	**Advised**
6	Storage List (whinh3525m100)	**Advised**
7	Put Away Inbound Advice (whinh3203m000)	**Put Away**

Only mandatory steps including inspection

The following scenario includes the mandatory steps of the receipt procedure and the inspection procedure. This scenario applies to location-controlled warehouses.

Step	Activity	Status
1		The initial status for an inbound order line is **Planned** or **Open**
2	Warehouse Receipt (whinh3512m000)	After receipt is created for **Open** inbound order line: **Receipt Open** Confirm receipt: **Received**
3	Generate Inbound Advice (whinh3201m000)	**Advised**
4	Put Away Inbound Advice (whinh3203m000)	**Put Away**
5	Warehouse Inspections Overview (whinh3122m000)	After inbound advice is put away: **To be Inspected** After inspection is completed: **Inspected**
6	Generate Inbound Advice (whinh3201m000) after inspection	**Advised**
7	Put Away Inbound Advice (whinh3203m000) after inspection	**Put Away**

Non-location controlled including inspections

The following scenario includes the mandatory steps of the receipt and inspection procedures for non-location controlled warehouses.

Step	Activity	Status
1		The initial status for an inbound order line is **Planned** or **Open**
2	Warehouse Receipt (whinh3512m000)	After receipt is created for **Open** inbound order line: **Receipt Open** Confirm receipt: **To be Inspected**
5	Warehouse Inspections Overview (whinh3122m000)	After receipt is confirmed: **To be Inspected** After inspection is completed for inbound order line: **Put Away**

Lineside labeling

When the receipt of end items from production is confirmed, various fields related to the originating demand order can be printed on handling unit labels. The purpose is to reduce mislabeling by attaching container labels during production or receipt rather than at the shipping dock.

The originating demand order is the sales schedule and related sales contract for which the production order for the end item was initiated.

The fields related to the originating demand order include, for example:

- **Sold-to Business Partner**
- **Ship-to Business Partner**
- The sold-to and ship-to address fields of the sales contract
- **Business Partner Item**
- **Business Partner Item Description**
- **Business Partner Item Revision**

The **Business Partner Item** and the **Business Partner Item Description** are retrieved from the item code system related to the received item and the allocated-to business partner. The **Business Partner Item Revision** number is retrieved via the business partner item code.

See Label layouts for lineside labeling for the complete list of demand order fields available for label printing.

How LN retrieves the demand order fields

To retrieve the demand order fields during receipt, demand pegging must be implemented for the item. The specification of the received handling unit, if present, or the receipt line of the production order is

used to retrieve the fields of the originating demand order, which are to be printed on the handling unit labels.

Retrieval of the demand order fields is supported for the demand pegging types **Customer Based** and **Customer Location Based**.

Note

If more than one sales contract or sales schedule is present for the item, the information printed on the labels is incomplete because LN is unable to determine which of these contracts or schedules is the relevant contract or schedule.

Demand pegging setup

1. Select the **Demand Pegging** check box in the Implemented Software Components (tccom0100s000) session.
2. In the Items (tcibd0501m000) session, for the relevant items select the **Demand Pegged** check box and specify **Customer Based** or **Customer Location Based** in the **Demand Pegging Type** field.

Note

If handling units must be used during receipt, specify **Physical Item** in the **Allocation Level** field of the Item Data by Warehouse (whwmd2510m000) session. Consequently, the handling unit obtains the specification of the demand order.

Business partner item code system and item setup

1. Specify the item code systems and business-partner item codes for the sold-to business partners in the Item Code System - Items (tcibd0104m000) session.
2. Specify the business partner item revisions in the Business Partner Item - Revisions (tcibd0114m000) session.

Label printing setup

Define label layouts for the fields to be printed on the labels in either of these sessions:

- Label Layouts (whwmd5520m000)
- Label Layout by Activities (whwmd5121m000)

Chapter 4
Receipts

4

How to receive goods

To receive goods, create a new receipt and link the inbound order lines, handling units, shipments or ASN lines, which list the goods to be received, to the new receipt. As a result, LN creates receipt lines for the linked inbound order lines and the inbound order lines associated with the linked handling units, shipments, or ASN lines.

Step 1: Create receipt

1. In the Warehouse Receipt (whinh3512m000) session, click 🗋, or from the appropriate menu, select **New**.
2. If the **Receipt** field is available, select a receipt series or use the default series.

   The **Receipt** field is available if the **Select Receipt Series** check box is selected and the **Receipts** field is specified in the Warehousing User Profiles (whwmd1140s000) session.
3. If the **Warehouse** field is available, select a warehouse.

   The **Warehouse** field is unavailable if the **Warehouse** field is specified in the Warehousing User Profiles (whwmd1140s000) session.
4. Optionally, specify the ship-from business partner.
5. If required, specify the packing slip and the **Receipt Date** in the **Delivery** group box.

   Note: Values for these fields are defaulted from the receipt lines after you link inbound-order lines, advance shipment notices, or handling units to the receipt.

Step 2: Link order lines, ASNs, loads, shipments, or handling units to the receipt record

In the Warehouse Receipt (whinh3512m000) session, you can use these options to link various types of business objects to a receipt:

- Receive
- *High volume entry (p. 30)*
- **Expected Orders** See *To link expected order lines (p. 30)*

- *Receipt filter (p. 31)*
- **Expected Shipments** See *To link expected shipment lines to receipts (p. 31)*

Step 3: Confirm receipt

You must confirm the receipt you created Warehouse Receipt (whinh3512m000) session. After confirming the goods, the next step of the applicable warehousing procedure can be carried out. See *Confirming receipts and receipt lines (p. 42)*.

Note

- Alternatively, you can use the Warehouse Receipts (whinh2610m100) workbench session to view, maintain, and process the receipt of inbound order lines that are past due, due on the current date, or due in the future.
- To receive inbound order lines originating from purchase orders or purchase schedules sent by ship-from business partners for whom the **Business Partner sends ASN** check box is selected in the Ship-from Business Partners (tccom4521m000) session, the receipts must be created from the ASNs.
- You can use the Unlink All Order Lines and Undo Link Order Lines to Receipt options on the appropriate menu of the Warehouse Receipt (whinh3512m000) session to unlink inbound order lines from a receipt.
- If the **Check on Duplicate Receipts** check box is selected in the Inventory Handling Parameters (whinh0100m000) session, while creating the receipt, LN checks whether an identical receipt exists.

  If a duplicate exists, the creation of the receipt line is blocked and a message with a blocking reason is displayed, indicating the receipt line for which the blocked receipt line is a duplicate.
- To receive goods based on handling units, see *To receive handling units (p. 37)*.

Receipt options

Receive - easy entry

The **Receive** option in the Warehouse Receipt (whinh3512m000) session is used to link the following types of records to a receipt:

- Advance shipment notices (ASNs)
- Shipment notice references
- Expected orders
- Expected order lines
- Handling units
- Planned loads and shipments

If you select a record of any of the previous types, the order lines associated with the record are linked to the receipt.

To use the **Receive** option, look up the records that you want to link to a receipt in these fields:

- **Name**
- **Number (Line)**
- **Line**

It depends on how you personalize the Warehouse Receipt (whinh3512m000) session whether the easy entry fields are available in the Warehouse Receipt (whinh3512m000) session or in the Warehouse Receipt (whinh3224m000) session.

You can access the Warehouse Receipt (whinh3224m000) session from the toolbar or the appropriate menu of the Warehouse Receipt (whinh3512m000) session. For more information, refer to *How to personalize the easy entry fields (p. 34)*.

Easy entry fields shown in the Warehouse Receipt (whinh3512m000) session

To link records to a receipt, you can use either the **Name** field or the **Number** and the **Line** field:

- In the **Name** field, enter the ID number of the item or the ship-from business partner associated with the records that you want to link to the receipt.

  In the **Name** field, you can also zoom to the Items (tcibd0501m000) session or the Ship-from Business Partners (tccom4521m000) session to select a record. To select a record using the zoom function, proceed as follows:

  a. Click the zoom function (the triangle next to the **Name** field).

  b. In the zoom dialog box that appears, select the required session and click **OK**.

  c. In the session that appears, select the record whose associated order lines you want to link to the receipt and click **OK**.

- In the **Number** field, enter the ID number of the record that you want to link to the receipt.

  In the **Number** field, you can also zoom to the applicable session to select a record. To select a record, proceed as follows:

  a. Click the zoom function (the triangle next to the **Number** field).

  b. In the zoom dialog box that appears, select the required session and click **OK**.

  c. In the session that appears, select the record whose associated order lines you want to link to the receipt and click **OK**.

  d. Optionally, enter the required line number in the **Line** field to link a specific order line to the receipt.

- After you enter or select a record in the **Name** field, the **Number** field, or the **Line** field, click  , or on the Receive menu, select **Receive**.

  As a result, inbound order lines to be received that are associated with the records entered or selected are linked to the receipt.

  If you entered a line number in the **Line** field, order lines belonging to orders associated with the ID number entered in the **Number** field and whose line number matches the line number

entered in the **Line** field will be linked to the receipt. If you do not enter a line number, all associated order lines are linked to the receipt.

Easy entry fields in the Warehouse Receipt (whinh3224m000) session

To link records to a receipt, proceed as follows:

1. In the Warehouse Receipt (whinh3512m000) session, click  , or select **Receive** on the appropriate menu.
2. In the Warehouse Receipt (whinh3224m000) session that appears, use the **Name** field, the **Number** field and/or the **Line** field to link records to the receipt as described previously.

High volume entry

The **Receipt Lines** option in the Warehouse Receipt (whinh3512m000) session is used to quickly link large numbers of inbound order lines to a receipt.

To quickly link large numbers of inbound order lines to a receipt, in the appropriate menu of the Warehouse Receipt (whinh3512m000) session, click **Receipt** and select **Receipt Lines** to start the Receipt Lines (whinh3512m400) session.

To link expected order lines

The **Expected Orders** option is used to link inbound order lines to a receipt.

To link inbound order lines to a receipt, take the following steps:

1. From the appropriate menu in the Warehouse Receipt (whinh3512m000) session, select Receipt --> **Expected Orders** to start the Expected Orders (whinh3822m000) session.
2. Select one or more inbound order lines in the Expected Orders (whinh3822m000) session. You can search for an inbound order line based on **Ship-from Business Partner**, **Shipment**, **Order**, and **Item**.
3. In the Expected Orders (whinh3822m000) session, choose **Add to Receipt** to add the inbound order line(s) to the receipt.

Alternatively, you can take the following steps:

1. In the Lines tab of the lines section in the Warehouse Receipt (whinh3512m000) session, select the appropriate menu.
2. In the appropriate menu, click **Receipt Line**--> **New** to start the Expected Order Lines (whinh3820m000) session.
3. Select one or more expected order lines in the Expected Order Lines (whinh3820m000) session.
4. In the Expected Order Lines (whinh3820m000) session, choose **Link Order Lines** to add the expected order lines to the receipt.

Note

If you select an expected order or order line to receive goods and an ASN or ASN line is available for this order or order line, LN asks if you want to receive these goods based on its ASN or ASN line.

To link expected shipment lines to receipts

The **Expected Shipments** option is used to link ASN lines to a receipt:

To link ASN lines to a receipt, take the following steps:

1. In the Warehouse Receipt (whinh3512m000) session, go to **Actions**--> Receipt --> **Expected Shipments** to start the Expected Shipments (whinh3821m000) session.
2. Select one or more ASN lines in the Expected Shipments (whinh3821m000) session. You can search for an ASN line based on **Ship-from Business Partner**, **Shipment**, **Order**, and **Item**.
3. In the Expected Shipments (whinh3821m000) session, select **Add to Receipt** to add the ASN line(s) to the receipt.

Receipt filter

The **Receipt Filter** is used to look up inbound orders, inbound order lines and ASN lines and link them to a receipt or to look up receipt lines and unlink them from the receipt. The **Receipt Filter** has more search criteria than the **Receive** option or the **Receipt Lines** option.

It depends on how you customize the Warehouse Receipt (whinh3512m000) session whether the **Receipt Filter** is available as a session or as a tab. For more information, refer to *Receipt filter session or tab (p. 32)*.

Receipt Filter tab

To look up ASNs or inbound orders in the **Receipt Filter** tab and link them to the receipt, or to look up receipt lines and unlink them from the receipt, proceed as follows:

1. Open the **Receipt Filter** tab.
2. Fill in the search criteria fields for the ASNs or inbound orders or order lines that you want to link to the receipt, or for receipt lines that you want to unlink from the receipt. For more information, refer to *Receipt filter search criteria (p. 33)*.
3. To link the retrieved order lines or ASN lines to the receipt, the following options are available:
   - **View Filter Result**
     To view the filter results before you link the results to the receipt, proceed as follows:
     a. Click  on the toolbar or on the appropriate menu, select **Filter Selection**--> **View Filter Result**.
     b. In the Receipt Filter Result (whinh3540m000) session that appears, click **Link and Close**, **Link Order Lines**, or **Link All Lines** to link the selected ASN lines or order lines to the receipt.

- **Link Filter Result**

  To link the filter results to the receipt without viewing them first, click  on the toolbar or on the appropriate menu, select **Filter Selection**--> **Link Filter Result**.

  As a result, order lines or ASN lines are linked to the receipt and the receipt lines generated for the linked order lines or ASN lines are displayed in the details section of the Warehouse Receipt (whinh3512m000) session.

- **Unlink Filter Result**

  To unlink the filter results from the receipt, click  on the toolbar or on the appropriate menu, select **Filter Selection**--> **Unlink Filter Result**.

The Receipts Filter (whinh3226m000) session

On the toolbar or on the appropriate menu of the Warehouse Receipt (whinh3512m000) session, the following options are available to start the Receipts Filter (whinh3226m000) session:

- **View Filter Result** 
- **Link Filter Result** 
- **Unlink Filter Result** 

These options determine how the search results are processed after you fill the search criteria fields and click **OK** in the Receipts Filter (whinh3226m000) session.

- **View Filter Result**
  The search results are displayed in the Receipt Filter Result (whinh3540m000) session, from which you can select the order lines or ASN lines that you want to link to the receipt.
- **Link Filter Result**
  The search results are linked to the receipt without being displayed first.
- **Unlink Filter Result**
  The search results are unlinked from the receipt without being displayed first.

Receipt filter session or tab

It depends on how you customize the Warehouse Receipt (whinh3512m000) session whether the **Receipt Filter** is available as a session or a tab. You can customize the Warehouse Receipt (whinh3512m000) session in the Warehousing User Profiles (whwmd1140s000) session.

In the Warehousing User Profiles (whwmd1140s000) session:

- Select the **Show All Form Pages** option to show the **Receipt Filter** tab in the Warehouse Receipt (whinh3512m000) session.
- Select the **Use Single Form Page** option to activate the Receipts Filter (whinh3226m000) session that you can access from the toolbar or the appropriate menu of the Warehouse Receipt (whinh3512m000) session.

Receipt filter search criteria

The receipt filter search fields are used to look up inbound orders, order lines, or ASNs that you want to link to the receipt, or to look up receipt lines that you want to unlink from the receipt.

You can perform a search based on the following fields:

- **Item**
- **Item Identification**
- **Components Issue Lines**
- **Receipt Date Range**
- **Carrier**
- **Reference**
- **Location**
- **Ship-from Code**
- **Packing Slip**
- **Order Origin**
- **Load**
- **Handling Unit**
- **Shipment**
- **Order**
- To search for expected orders with a planned receipt date that is equal to the current date, select the **Expected Today** check box.

To link a specific order line to the receipt, fill the following fields:

- **Order**
- **Order Origin**
- **Line**
- **Quantity**
- **Unit**

In the **Quantity** field, enter the quantity that is received for the order line. The quantity that you enter can differ from the quantity on the order line, for example, if not all the goods listed on the order line are received. This quantity is filled on the receipt line that LN generates for the order line.

Optionally, you can fill the **Order Origin** field to narrow down the search and fill the **Packing Slip** field; the packing slip will be displayed on the receipt line.

To link a specific ASN line to the receipt, fill the following fields:

- **Line**
- **Quantity**
- **Unit**

In the **Quantity** field, enter the quantity that is received for the ASN line. The quantity that you enter can differ from the quantity on the ASN line, for example, if not all the goods listed on the ASN line are received. This quantity is filled on the receipt line that LN generates for the ASN line.

Optionally, you can fill the **Ship-from Code** field to narrow down the search and fill the **Packing Slip** field; the packing slip will be displayed on the receipt line.

How to personalize the easy entry fields

You can personalize the Warehouse Receipt (whinh3512m000) session in the Warehousing User Profiles (whwmd1140s000) session.

In the Warehousing User Profiles (whwmd1140s000) session:

- Select the **Show All Form Pages** option to show the easy entry fields, **Name** and **Number**, in the **Receipt** tab of the Warehouse Receipt (whinh3512m000) session. This is the default setting.
- Select the **Use Single Form Page** option to hide the easy entry fields in the Warehouse Receipt (whinh3512m000) session and to the Warehouse Receipt (whinh3224m000) session that you can access from the toolbar or the appropriate menu of the Warehouse Receipt (whinh3512m000) session.

Receive ASNs based on packing slip

Packing slips can be used as search criteria for ASNs (advance shipping notices) to be received.

Receipt header

The packing slip specified in the **Packing Slip** field of the Warehouse Receipt (whinh3512m000) session is used as a search criterion for ASNs when linking blanket warehousing orders originating from purchase schedules to the receipt header.

If the packing slip specified for a receipt header matches the packing slips of one or more ASNs based on purchase schedules, you are asked to receive or ignore these ASNs.

If you do not receive any of the ASNs with matching packing slips, but other ASNs are found based on the other search criteria, you can either receive (one or more of) these ASNs or receive the order lines.

Easy entry

For the *Receive - easy entry (p. 28)* options, the packing slip specified in the Warehouse Receipt (whinh3512m000) session is also used as a search criterion.

Receipt filter

The packing slip specified in the *Receipt filter (p. 31)* tab or session is used as a search criterion for ASNs and order lines of all origins.

Unexpected goods

To receive unexpected goods

When an item arrives for which no expected order (line) is present, you can use the **Add Unexpected Receipt Line** command in the Warehouse Receipt Lines (whinh3512m100) session to create a temporary receipt line in which you can enter receipt details.

To confirm and process the unexpected receipt line, an order line must be available for the unexpected receipt line. The order line must be released to warehousing. If the order line is released to warehousing, you can link the resulting warehousing order line to the unexpected receipt by means of the **Link Order to Unexpected Receipt Line** command in the Warehouse Receipt (whinh3512m000) session.

Purchase schedules

Purchase schedule receipts

Warehousing transfers data to Purchase Control when you:

- Receive or change an ASN for a purchase schedule.
- Confirm or change a receipt for a purchase schedule.
- Approve or reject items that are received for a purchase schedule.

ASNs

When an advance shipment notice is created for a purchase schedule, LN updates this data in the Purchase Schedule Lines (tdpur3111m000) and Shipped Cumulatives (tdpur3131m000) sessions:

- **Shipped Quantity**
- **Planned Shipment Date**
- **Last Supplier's ASN**

If you change the shipping date or the supplier's ASN number in the Shipment Notice (whinh3600m000) session, or if you change the shipped quantity in the Shipment Notice Lines (whinh3101m000) session, LN updates this data in the Purchase Schedule Lines (tdpur3111m000) and Shipped Cumulatives (tdpur3131m000) sessions for the related purchase schedule line.

Note

You can view the ASN information for schedule lines in the ASN Details (tdpur3113m000) session.

Receipts

When you confirm a receipt for a purchase schedule in the Warehouse Receipt (whinh3512m000) session, LN:

- Updates the **Received Quantity**, **Received Amount**, **Last Shipment ID** (if the receipt is based on an ASN), **Receipt**, and **Receipt Date** in the Purchase Schedule Lines (tdpur3111m000) session.
- Enters a record with the receipt data in the Purchase Schedule - Receipts (tdpur3115m200) session.
- Enters a record with, amongst others, the purchase schedule line's **Received CUM** in the Received Cumulatives (tdpur3132m000) session.
- Defaults the purchase schedule line's **Schedule Quantity** as the purchase schedule line's **Required Quantity** in the Required Cumulatives (tdpur3130m000) session.

Note

To receive goods based on an ASN, click Receive on the appropriate menu of the Shipment Notices (whinh3100m000) session. You can confirm the receipt in the Warehouse Receipt (whinh3512m000) session.

When you confirm a receipt for a pull call-off schedule line that originates from Assembly Control, Warehousing communicates to Assembly Control that the goods called-off are received. The data that is updated depends on the supply system that is used to call off the goods:

- If the goods are called off using the order-controlled/SILS supply system, LN updates the **Quantity Received** and the **Status** in the Assembly Part Supply Transfer (SILS) (tiasc8520m000) session. If the **Quantity Received** is less than the **Quantity Called Off**, the **Status** is set to **Partially Received**. If the **Quantity Received** is equal to or more than the **Quantity Called Off**, the **Status** is set to **Received**.
- If the goods are called off using the order-controlled/batch supply system, LN updates the **Quantity Received** and the **Status** in the Assembly Part Supply Transfer (SILS) (tiasc8520m000) session. If the **Quantity Received** is less than the **Transfer Quantity**, the **Status** is set to **Partially Received**. If the **Quantity Received** is equal to or more than the **Transfer Quantity**, the **Status** is set to **Received**.

Receipt correction

If you modify the received quantity in the Receipt Correction (whinh3121s000) session, LN updates the received quantity in these sessions:

- Purchase Schedule Lines (tdpur3111m000)
- Purchase Schedule - Receipts (tdpur3115m200)
- Received Cumulatives (tdpur3132m000)

If in the Receipt Correction (whinh3121s000) session:

- You select the **Final Receipt** check box, the purchase schedule line's status changes to **Final Receipt**.

- You clear the **Final Receipt** check box, the purchase schedule line's status changes to **Partial Receipt**.

Inspection

If, as a result of inspection of items that are received for a purchase schedule, you approve or reject items in the Warehouse Inspections Overview (whinh3122m000) session, LN updates the **Approved Quantity** and the **Received Quantity** in these sessions:

- Purchase Schedule Lines (tdpur3111m000)
- Purchase Schedule - Receipts (tdpur3115m200)

Handling units

To receive handling units

You can use handling units to receive goods into a warehouse. Handling units help speed up the receipt of goods. To receive goods based on handling units, you must generate handling units for the shipment notices or order lines that list these goods.

Shipment notices and handling units

A ship-from business partner can use an advance shipment notice (ASN) to send information about the goods, and the handling units used to pack these goods, that are on the way. If available, the ship-from business partner's handling unit identification codes are stored in the **External Handling Unit** field in the Shipment Notices (whinh3100m000) session.

You can use a shipment notice to generate handling units and a handling unit structure based on the shipment notice, shipment-notice lines, and the item load structure.

The shipment notice's handling unit is the top handling unit in the handling unit structure. The shipment-notice lines' handling units are the child handling units of the shipment notice's handling unit. The item-load structure's handling units are the child handling units of the shipment-notice lines' handling units.

However, if a package definition with a handling unit template is related to the items on the shipment lines, the handling unit structure is generated as defined in the handling unit template. For further information, see The use of package definitions and Package definitions.

In addition, various settings for automatic generation of handling units from ASNs are available in LN. For further information, see To set up automatic generation of handling units from ASNs.

Shipment notice lines and handling units

If a handling unit is generated for the shipment notice, handling units are also generated for the shipment-notice lines. You can also generate handling units for individual shipment lines.

Handling unit identification codes

The identification codes of the newly generated handling units are stored in the following sessions:

- Handling Units (whwmd5130m000)
- Shipment Notices (whinh3100m000)
- Shipment Notice Lines (whinh3101m000)

If the supplier provides the ASN with handling unit codes, these codes are copied to create LN handling unit codes.

However, if identical handling unit codes exist in LN before the arrival of the ASN, this would result in duplicate records. In such cases, LN generates new unique internal handling unit codes using the mask functionality.

Inbound order lines and handling units

You can generate handling units for inbound order lines. If a package definition is entered on the order lines, the handling unit structure is generated as defined in the handling unit template of the package definition. For further information, see The use of package definitions.

How to receive handling units - procedure

You can receive goods based on handling units as follows:

- In the warehouse, scan the handling unit's label. After scanning, the handling units are automatically set to **Received** in LN. This method is available if the supplier provides handling unit codes in an ASN announcing the arrival of the goods.
- Manually receive the handling unit in LN

To manually receive the handling unit in LN, proceed as follows:

1. Start the Handling Units (whwmd5130m000) session.
2. Look up the handling unit that you want to receive. To be available for receipt, a handling unit must have the **Open** status or the **In Transit** status. For further information, see Handling Unit Status.
3. On the appropriate menu, select the **Execute Inbound** submenu.
4. From the **Execute Inbound** submenu, click **Receive**.

   As a result, a receipt record is created for the handling unit. If the handling unit includes child records, a receipt line is created for each child handling unit. The status of the handling unit and any related child handling units is set to **Receipt Open**.
5. To confirm the receipt of the handling unit, select **Confirm** from the **Execute Inbound** submenu or click the **Confirm** button on the toolbar. The handling unit is received in the warehouse and the status of the handling unit is set to **Received**.

Goods received notes

If your warehousing procedure includes goods received notes, before you complete step 4, proceed as follows:

- From the **Execute Inbound** sub-menu, click **Goods Received Notes** to access the Print Goods Received Note (whinh3412m100) session.
- In the Print Goods Received Note (whinh3412m100) session, specify the required settings and print the **Goods Received Notes** list for the handling unit.
- On the appropriate menu, select the **Execute Inbound** sub-menu.
- Continue with step 4 of the previous procedure.

Receipts and handling units

To receive a handling unit, the handling unit **Status** must be **Open**. To receive warehousing orders with **Transfer** or **Transfer (Manual)** origins, the handling unit must have the **In Transit** status.

When a handling unit is received, the status of this handling unit and the status of any related child handling units obtain the **Receipt Open** status.

When the receipt is confirmed, the handling units are automatically updated with the manual changes on the receipt lines and obtain the **Received** status.

If you confirm the receipt of a handling unit, you actually receive inventory for the warehousing order line to which the handling unit is related. The confirmed receipt triggers logistical and financial transactions and actually registers inventory in stock.

Receipt lines and handling units

When you carry out the receipt of a handling unit in the Handling Units (whwmd5130m000) session, a separate receipt line is created for the handling units with the lowest levels in the handling unit structure. Therefore, a receipt line is created for each child handling unit if a parent handling unit is received in the Warehouse Receipt (whinh3512m000) session.

If a receipt is performed for a transfer order for which handling units were used during shipment, but the receiving warehouse uses no handling units, the receipt lines are created based on the shipment stock point details.

To receive sequenced shipments with handling units and references

The receipt of sequenced shipments by means of handling units is carried out in the same way as handling units for non-sequenced shipments, as described previously, except that the ASN that is sent by the ship-from business partner has a reference to the relevant purchase schedule.

When a handling unit is generated for the ASN, the reference is also linked to the handling unit. If handling units with references are received, the references are also linked to the receipt lines created.

When the receipt (line) is confirmed, the reference is, together with other receipt information, passed on to the Purchase Control module. The Purchase Control module passes on the reference to the Assembly Control module to inform that the sequenced shipment has arrived.

Delivery lines

To receive direct delivery lines

Some ASNs are notifications of the delivery of direct deliveries. This type of ASN consists of a header and direct delivery lines. In the Shipment Notices (whinh3100m000) session, you can receive direct deliveries.

To receive a direct delivery ASN, select the relevant ASN and, on the appropriate menu of the Shipment Notices (whinh3100m000) session, select **Receive Direct Delivery Lines**.

Before you receive the ASN containing direct delivery lines, you can check, and, if required, modify the quantity and other details of individual direct delivery lines.

To check direct delivery lines

1. In the Shipment Notices (whinh3100m000) session, select the relevant ASN and, on the appropriate menu, select **Shipment Notice Lines**.
2. In the Shipment Notice Lines (whinh3101m000) session that appears, double-click the relevant ASN line.

The direct delivery procedure

Direct delivery means that you sell goods to a customer, but because you do not supply these goods yourself, you must buy the goods from an external supplier before you can sell them. The supplier then delivers the goods directly to the customer without the goods having to go through your warehouse.

If you use the direct delivery procedure to sell goods to a customer, you first create a sales order. From the sales order, LN generates a direct delivery purchase order that is sent to the supplier. When the supplier has delivered the goods at your customer's, he notifies you of the delivery by means of an ASN or otherwise.

After you receive a direct delivery line, the receipt of the direct delivery purchase order is confirmed in the Purchase Orders - Receipt Overview (tdpur4531m000) session and the sales order that initiated the direct delivery purchase order is updated. After you receive the last delivery line of a direct delivery ASN, LN tags the receipt as final. If the received quantity is lower than the quantity of the sales order, LN can create a back order.

After the receipt of the direct delivery lines of the ASN, the sales order that initiated the purchase order is updated and you can send an invoice to the customer to pay for the goods.

Note

If the supplier does not use EDI to inform you about deliveries, you must manually update direct delivery receipts in the Purchase Orders - Receipt Overview (tdpur4531m000) session.

Example

Your organization offers to sell a product that includes some optional accessories. However, you are not in the business of producing the accessories. To offer a complete service to your customer, you sell both. Your supplier, through this arrangement, delivers the accessories directly to your customer.

To receive project delivery lines

Some ASNs are notifications of the delivery of project deliveries. This type of ASN consists of a header and project delivery lines. In the Shipment Notices (whinh3100m000) session, you can receive project deliveries.

To receive a project delivery ASN, select the relevant ASN and, from the appropriate menu of the Shipment Notices (whinh3100m000) session, select **Receive Direct Delivery Lines**.

Before you receive the ASN containing project delivery lines, you can check, and, if required, modify the quantity and other details of individual project delivery lines.

To check project delivery lines

1. In the Shipment Notices (whinh3100m000) session, select the relevant ASN and, from the appropriate menu, select **Shipment Notice Lines**.
2. In the Shipment Notice Lines (whinh3101m000) that appears, double-click the relevant ASN line.

The project delivery procedure

Project delivery means that, if you buy goods for a project for which no warehouse is defined, the supplier, or a carrier hired by the supplier, delivers the goods directly to the project location without the goods having to go trough your warehouse first. When the supplier has delivered the goods at your customer's, he sends an ASN notifying you of the delivery.

After you receive a project delivery line, the receipt of the project delivery purchase order is confirmed in the Purchase Orders - Receipt Overview (tdpur4531m000) session. After you receive the last delivery line of a project delivery ASN, LN tags the receipt as final. If the received quantity is lower than the quantity of the sales order, LN can create a back order.

Note

If the supplier does not use EDI to inform you about deliveries, you must manually update project delivery receipts in the Purchase Orders - Receipt Overview (tdpur4531m000) session.

Example

Your project is constructing an offshore oil platform. You bought various subassembled parts for this construction project and instructed the supplier to ship these parts directly to the offshore location. Your supplier, through this arrangement, delivers the parts directly to the offshore location and sends an ASN to notify you of the delivery.

Confirming receipts and receipt lines

After you create receipts, you must confirm the receipts. When you confirm a receipt, you can either confirm the entire receipt, or confirm individual receipt lines of the receipt.

To confirm a receipt

To confirm an entire receipt, proceed as follows:

1. On the appropriate menu, select the **Confirm** submenu.
2. From the **Confirm** submenu, select **Receipt**.

You can also confirm the receipt using the **Confirm** option from the Confirm Receipt menu in the Warehouse Receipt (whinh3512m000) session.

You can also confirm various receipts at the same time. In the Warehouse Receipt (whinh3512m000) session, from the Confirm Receipt menu; select **Confirm Receipts** to start the Confirm Receipts (whinh3212m000) session in which you can select a range of receipts and confirm the range.

To look up a receipt

To confirm a receipt, you may have to look up the receipt first. To look up a receipt:

Receipt number known

If you know the receipt number, take the following steps:

1. press Ctrl-F.
2. In the dialog box that appears, enter or browse for the receipt number of the receipt you want to confirm and click OK.

Receipt number unknown

If you do not know the receipt number, take the following steps:

1. On the appropriate menu, select the **Confirm** submenu, and from the **Confirm** submenu, select **Switch to Receipt**.
2. In the Warehouse Receipts Overview (whinh3110m000) session that appears, select the required receipt. If required, click **Filter by Status** and select one of the options to narrow

down the number of receipts displayed in the Warehouse Receipts Overview (whinh3110m000) session.

To confirm a receipt line

To confirm the receipt of a receipt line, proceed as follows:

1. Select the receipt line or receipt lines that you want to confirm.
2. In the Lines tab, select the receipt line; click **Confirm**.

LN actions triggered by confirming receipts or receipt lines

After you confirm a receipt or receipt line, LN:

- Updates the item's inventory in the receiving warehouse in the Warehouse - Item Inventory (whwmd2515m000) session. The packing structure data and reusable packaging items inventory is updated as well.
- Balances the negative inventory with the received quantity.
- Updates the LN package from which the receipt originated, with the receipt line information.

  For example, if a receipt for an order of origin **ASC Production** is confirmed, this order obtains the **Completed** status, unless inbound inspection is required. In that case, the **Completed** status is obtained after the inspection is completed.
- Sends a discrepancy notice to the supplier if the received quantity is not equal to the shipment-notice line quantity. LN only sends a discrepancy notice if shipment notices are used.
- Carries out logistic transactions and financial transactions.
- Creates an approval line in the Warehouse Inspections Overview (whinh3122m000) session if the received items must be inspected.
- Automatically generates inbound advice for the receipt (line) if the Generate Inbound Advice (whinh3201m000) session is not an automatic activity in the applicable receipt procedure.
- Logs the result of the receipt process in the Receipt Message Log (whinh3530m000) session. LN logs error messages and information messages. Note that the information of the Receipt Message Log (whinh3530m000) session is displayed in the Message Log tab of the lines pane in the Warehouse Inspections Overview (whinh3122m000) session if you select **Enhanced Receipt Lines** in the **Receipts Satellites** group box of the Warehousing User Profiles (whwmd1140s000) session.

Automatic receipts

Automatic receipts update the normal (non-administrative) warehouses with the inventory received in the "real" VMI warehouse. Automatic receipts are used to restrict receipt processing.

The customer's administrative warehouse

For automatic receipts into the customer's administrative warehouse, you can generate automatic receipt records in the Initiate Automatic Receipts (whinh3223m000) session.

The generated receipt records are displayed in the Automatic Receipts (whinh3523m000) session. These records include data such as the warehouses in which the receipts are to take place, the item quantities, and the dates on which the automatic receipts are to take place. When the automatic receipt date is due, LN performs the automatic receipts in the administrative warehouse.

Automatic receipts are based on purchase orders, contractual inventory levels, or demand forecast.

If the supplier performs supply planning for the customer, an automatic receipt can be based on the quantities listed in the demand forecast that the customer sends to the supplier, or the confirmed supply based on the demand forecast that the supplier sends to the customer.

For more detailed information about the automatic receipt creation process, see *The automatic receipt process (p. 44)*.

Various parameters determine how LN creates automatic receipts. For more information, refer to *Setting up automatic receipts (p. 47)*.

The supplier's administrative warehouse

In this situation, the supplier plans replenishment and replenishes the warehouse, which is managed by the customer, where the warehouse is a real/ physical warehouse. The warehouse is defined as an administrative warehouse in the supplier's system. The supplier assumes that the quantities that he shipped equal the quantities received by the customer.

The supplier's administrative warehouse is updated by means of transfer orders. When the supplier issues goods to replenish the "real" warehouse, he creates a transfer order that is received into the administrative warehouse. When he confirms the shipments of the transfer order, LN creates a receipt based on the transfer order and automatically confirms the receipt. The receipt quantities are equal to the confirmed quantities of the shipments.

The automatic receipt process

Creating automatic receipt records

To create automatic receipts into the customer's administrative warehouse, LN:

1. Creates combinations of buy-from business partners, warehouses, and items based on the selections specified in the Initiate Automatic Receipts (whinh3223m000) session. LN retrieves this data from the Item Data by Warehouse (whwmd2110s000) session and the Items - Purchase Business Partner (tdipu0110m000) session.
2. Checks the automatic receipt settings in the terms and conditions for these combinations. For more information, refer to *Setting up automatic receipts (p. 47)*.

3. Creates the automatic receipt records in the Automatic Receipts (whinh3523m000) session for these combinations.

   The initial status of an automatic receipt record is **Open**.

Receipt record basis

How LN creates the automatic receipt records, and which data they include depends on the type of data the automatic receipt records are based on. If based on:

- **Purchase orders**
  LN:
  a. Calculates the automatic receipt dates as described in *Setting up automatic receipts (p. 47)*.
  b. Stores these in the automatic receipt records.
  c. Adds the receipt quantities to the automatic receipt records when actually performing the receipt on the automatic receipt date, see Performing automatic receipts.
- **Forecast demand**
  LN:
  a. Retrieves the planned receipt quantities from the Enterprise Planning package.
  b. Stores these in the following fields of the Automatic Receipts (whinh3523m000) session:
     - **Planned Receipt Quantity in Receipt Unit**
     - **Planned Receipt Quantity in Inventory Unit**
  c. Retrieves the automatic receipt dates from Enterprise Planning or the receiving interval from the terms and conditions.
- **Contractual inventory levels**
  LN:
  a. Calculates the automatic receipt dates from the delivery moments defined in the terms and conditions.
  b. Retrieves the planned inventory level for the automatic receipt dates from the terms and conditions.
  c. Stores the automatic receipt dates and planned inventory levels in the **Automatic Receipt Date** field and the **Planned Inventory Level** field, respectively, of the Automatic Receipts (whinh3523m000) session.

Performing automatic receipts

On the automatic receipt date, LN performs receipts for the automatic receipt records as follows:

1. Create warehousing receipt lines for the automatic receipt records.
2. Link the receipt lines to the purchase orders present for the business partners, warehouses, items, and date ranges specified by the user in the Initiate Automatic Receipts (whinh3223m000) session.

3. If no purchase orders are present, create purchase orders according to the **Receipt Triggered Order** field in the Order Terms and Conditions (tctrm1130m000) session. If the value in this field is **Not Allowed**, an error message appears and the automatic receipt is not performed for the automatic receipt record.

   Purchase orders are not present if the automatic receipts are based on forecast demand or contractual inventory levels. For more information, refer to Purchase orders, forecast demand, or inventory levels.

4. Generate low volume lot or serial numbers if not present.
5. Generate High volume scenario lot or serial numbers according to the lot and serial registration templates. For more information, refer to Lot and serial registration templates.
6. Confirm the automatic receipt record.
7. In the Automatic Receipts (whinh3523m000) session, set the status of the automatic receipt record and show the received quantities.
8. Within the date range specified in the Initiate Automatic Receipts (whinh3223m000) session, LN looks for automatic receipt dates. If an automatic receipt date is due, the automatic receipts for that date are performed. The process lies dormant until an automatic receipt date is due, or if the date range is expired.

Purchase orders, forecast demand, or inventory levels

How LN retrieves the quantities to be received depends on the type of data the automatic receipt records are based on. If based on:

- **Purchase orders**
  LN:
  a. Checks the purchase orders retrieved for the receipt records.
  b. Receives the purchase order quantities as described in Receipt record basis.
- **Forecast demand**
  LN:
  a. Creates receipt triggered purchase orders for the automatic receipt records.
  b. Receives these into the warehouse. The quantities to be received are taken from the **Planned Receipt Quantity in Receipt Unit** field and the **Planned Receipt Quantity in Inventory Unit** field of the Automatic Receipts (whinh3523m000) session. For more information, refer to Receipt record basis.
- **Contractual inventory levels**
  LN:
  a. Creates receipt triggered purchase orders for the automatic receipt records.
  b. Receives these into the warehouse.
  c. Determines the quantities to be received by comparing the planned inventory level from the **Planned Inventory Level** field in the Automatic Receipts (whinh3523m000) session to the inventory on hand from the receiving warehouse. If on the automatic receipt date the inventory level is within the contractual inventory levels, LN performs no receipt.

Setting up automatic receipts

Creating automatic receipts into the customer's administrative warehouse requires the following settings in the Terms and Conditions module of the Common package:

- Terms and conditions must be linked to an active purchase contract.
- The terms and conditions are not expired.

  Multiple valid sets of terms and conditions can be present for the selection ranges that the user specifies in the Initiate Automatic Receipts (whinh3223m000) session. Terms and conditions have effective and expiry dates. If terms and conditions overlap, that is, range effective-expiry dates overlap, LN selects the terms and conditions with most recent effective date.
- In the Logistics Terms and Conditions (tctrm1140m000) session:
  - The value in field **Method of Inventory Update** is either of the following:
    - **Receipts and Consumptions**
    - **Receipts, Consumptions and Inv. Balance**
  - The value in field **Receiving Process** is **Automatic (Delivery Moments)**.
  - The **Delivery Moments** field determines whether creation of automatic receipts is based on purchase orders, demand forecast, or inventory levels. If the value is:
    - **Orders and Schedules**, creation of receipt records is based on purchase orders.
    - **Forecast or Inventory Levels**, creation of receipt records is based on demand forecast or inventory levels.
- In the Items - Purchase Business Partner (tdipu0110m000) session, the **Generate Order for Unexpected Warehouse Receipt** check box is selected.
- In the Order Terms and Conditions (tctrm1130m000) session, the **Receipt Triggered Order** field value is **Purchase Order** or **Purchase (Manual) Order**.

Automatic receipts based on purchase orders

In the Order Terms and Conditions (tctrm1130m000) session:

- If the **Use Confirmation** check box is selected, only confirmed purchase orders are used to create automatic receipts. If this check box is cleared, both confirmed and unconfirmed purchase orders are used.
- If you define a receiving interval in the **Receiving Interval** field of the Logistics Terms and Conditions (tctrm1140m000) session, LN uses this interval to determine the automatic receipt dates. The automatic receipt date is the date on which LN performs an automatic receipt.

  Note that purchase orders created between receipt intervals are not taken into account until the next automatic receipt date.

  If no receipt interval is defined, the planned receipt dates of the purchase orders are used to determine the automatic receipt dates. For more information, refer to *The automatic receipt process (p. 44)*.

Automatic receipts based on demand forecast

In the Planning Terms and Conditions (tctrm1135m000) session, do the following if automatic receipts must be based on demand forecast:

- Select the **Supply Planning by Supplier** check box.
- Select the **Use Confirmed Supply** check box if automatic receipts must only be based on confirmed supply.
- In the **Replenishment Based On** field, do not select **Manual** or **Inventory Level**.
- If you define a receiving interval in the **Receiving Interval** field of the Logistics Terms and Conditions (tctrm1140m000) session, LN uses this interval to determine the automatic receipt dates. The automatic receipt date is the date on which LN performs an automatic receipt.

  If no receipt interval is defined, the planned receipt dates Enterprise Planning are used to determine the automatic receipt dates. For more information, refer to *The automatic receipt process (p. 44)*.

Automatic receipts based on inventory levels

In the Planning Terms and Conditions (tctrm1135m000) session, do the following if automatic receipts must be based on contractual inventory levels:

- Select the **Supply Planning by Supplier** check box.
- Select the **Send Forecast to Supplier** check box.
- In the **Replenishment Based On** field, select **Manual** or **Inventory Level**.
- Select a pattern code in the **Delivery Moments** field.
- Define minimum and/or maximum levels in the fields of the **Inventory Levels** tab.

Advance Shipment Notice

Length of ASN number

LN allows you to limit the length of generated shipment and load numbers and, therefore, the length of the ASN number. This feature makes it possible to satisfy requirements and standards of specific branches of industry, such as the VDA standard which limits the length of the ASN number to a maximum of 8 characters. VDA (Verband der Automobilindustry) is a German organization which serves the interests of the automobile industry.

Example

The example below illustrates how a load or shipment number is generated.

Length Series = 3	
Series = AAA	
First Free Number = 23	
Load Length / Shipment Length = 9	Number = AAA000023
Load Length / Shipment Length = 8	Number = AAA00023
Load Length / Shipment Length = 6	Number = AAA023

When LN creates loads and shipments in Freight, LN applies the **Load Length** and **Shipment Length** defined in the Inventory Handling Parameters (whinh0100m000) session of Warehousing.

Note

When Freight is implemented and no Warehousing parameters are defined, LN uses the actual length of the load and shipment fields.

Searching for ASN error messages

The supplier's ASN number is the most frequently used number if you use Advanced Shipment Notices (ASNs) to support the process of receiving goods in the warehouse. You can create receipt of goods from a supplier's ASN number using the **Receive (Easy Entry)** group box in the Warehouse Receipt (whinh3512m000) session. You can specify a supplier's ASN number in the **Number (Line)** field in the Warehouse Receipt (whinh3512m000) session to create receipt of goods.

When an EDI message is received, an ASN is created. Sometimes an EDI message is received in the LN Electronic Commerce package, but the ASN/shipment notice is not created in the Warehousing because of an error when processing the EDI messages. The EDI message may result in an error when the message is received electronically from the supplier. In this scenario, when LN cannot find the supplier's ASN number in the Warehousing at the time of receipt, LN does the following:

- Checks for the EDI warning/error messages and display these messages to the user.
- Lists the EDI warning/error messages in the Receipt Message Log (whinh3530m000) session.

  If LN finds an ASN, a receipt line is created.

  If LN cannot find the supplier's ASN number in the Warehousing at the time of receipt, but error/warning messages exist for the received EDI message, LN logs the receipt messages

in the Receipt Message Log (whinh3530m000) session with the value of the **Line** field set to zero.

Note

When you delete the receipt header from the Shipment Notices (whinh3100m000) session, the receipt messages for which the value of the **Line** field is zero are deleted from the Receipt Message Log (whinh3530m000) session.

Using the Warehouse Receipts workbench

The Warehouse Receipts (whinh2610m100) session is used to view, maintain, and process the receipt of inbound order lines in a warehouse. This workbench provides an overview of the day-to-day operations, details of the goods receipts, and the status of the inbound order lines.

Note

Inbound order lines with status **Received** and beyond are excluded from this session.

Filters

You can use the filters in these group boxes to view inbound order lines:

- **General**
  The selected business partner or warehouse determine the inbound order lines to be displayed in the graph and on the **Inbound Lines** tab in this session. If no selection criteria are specified, all inbound order lines present for the current company are displayed.
- **Workload**
  Select one or more of these filters to view the corresponding number of inbound order lines on the **Inbound Lines** tab and the **Workload** graph.
- **Planned Receipt Date**
  Select one or more of these filters to view the corresponding number of inbound order lines on the **Inbound Lines** tab. These options do not affect the number of inbound order lines displayed in the **Workload** graph.
- **Exceptions**
  Select either of these filters to view the corresponding number of inbound order lines on the **Inbound Lines** tab. These options do not affect the number of inbound order lines displayed in the **Workload** graph.

Graph

The graph displays the data based on the options you select in the **General** and **Workload** group boxes.

The filtered inbound order lines are categorized by:

- **Past Due**
  The planned receipt date for the receipt of the inbound order lines is before the current date.
- **Due Today**
  The planned receipt date is identical to the current date.
- **Due 1 - 7 Days**
  The planned receipt date for the receipt of the inbound order lines is between one and seven days after the current date.
- **Due Beyond 7 Days**
  The planned receipt date for the receipt of the inbound order lines is more than a week after the current date.

The number of inbound order lines displayed in the graph can be expressed by the number of lines or a unit expressing the aggregated item quantity, volume, or weight of the inbound order lines using the **Show Number of Lines** check box and the **Unit** field.

Inbound Lines

The inbound order lines are sorted by urgency. The line with the oldest planned receipt date is displayed first in the list.

In the appropriate menu of the **Inbound Lines** tab, various options are available to receive inbound order lines and to handle inspections related to the inbound order lines.

When you open a line, the details of the line are displayed in the Inbound Order Lines (whinh2110m000) session.

Chapter 5
Inbound Advice

5

To generate and put away inbound advice

Inbound advice are instructions to move received items into a warehouse. Therefore, an individual inbound advice line might read as follows: Take 10 pieces of item A from location Receipt 3 and put them in location Bulk 5.

Inbound advice is normally generated according to the warehousing procedure defined for the warehousing order lines related to the receipt lines, inspection lines, or handling units for which inbound advice must be created, but you can also manually create inbound advice in the Inbound Advice (whinh3525m000) session.

Note that for non-location controlled warehouses, LN skips the inbound advice step.

Generate inbound advice

When inbound advice is generated or entered, no inventory transactions have yet taken place. If the items are physically taken from one location and put away in the new location, LN updates inventory. The inventory is updated by means of the Put away command, which is discussed later in this topic.

You can generate inbound advice in one of the following ways:

- If Generate Inbound Advice (whinh3201m000) is not a step in the receipt procedure, inbound advice is generated as soon as you confirm a receipt. If Generate Inbound Advice (whinh3201m000) is not a step in the inspection procedure, inbound advice is generated as soon as an inspection line is approved.
- To generate inbound advice for any confirmed receipt, select the **Generate Advice** option from the appropriate menu in the Warehouse Receipt (whinh3512m000) session.
- You can generate inbound advice for a range of orders in the Generate Inbound Advice (whinh3201m000) session.

When you create an inbound advice line, the following changes take place:

- The allocated inventory level of the source location increases.

- The on-order quantity of the destination location increases.

Run numbers

Runs are a useful way to group inbound advice lines. Instead of putting away or removing individual advice lines, you can specify a run number and process the advice lines that you allocate to that run number.

Detailed report

Generating inbound advice is a process that draws heavily on the system's capacity. Therefore, LN enables you to choose between the following types of reports:

- The standard report, which keeps network traffic low and transaction speeds high.
- The detailed report, which is a slower, more detailed query with greater feedback as to the chosen location.

Maintain inbound advice

You can change the destination location and/or the quantity on any inbound advice line. You can also insert new advice lines, if required.

Put away inbound advice

The following methods are available to put away inbound advice:

- You can use the **Put Away** command in the Inbound Advice (whinh3525m000) session to put away an individual advice line.
- In the Put Away Inbound Advice (whinh3203m000) session, you can put away a range of advice lines.
- If the advice line is associated with a storage list, confirming that storage list puts away the advice line. You can view and put away the storage list in the Storage List (whinh3525m100) session.

If an inbound advice line is put away, LN reflects the physical movement of items, which results in the following changes:

- The inventory on hand at the source location is decreased and the available capacity of the source location is increased.
- The inventory on hand at the destination location is increased and the available capacity is decreased.
- The allocated inventory at the source location is decreased.
- The inventory on-order at the destination location is decreased.

Note

For non-location controlled warehouses, LN automatically puts away goods after their receipt is confirmed. For more information, refer to *Overview of receipt and inbound inspection procedures (p. 15)*.

Storage lists

The bulk/ pick (destination) locations listed on inbound advice can be anywhere in the warehouse, which might result in an inefficient put away sequence. The storage list is used to make this sequence more efficient by, for example, including all items that must go to a specific location on one list. By confirming a storage list, you put away each advice line associated with the storage list. You can put away storage lists in the Storage List (whinh3525m100) session.

Chapter 6
Delivery and Receipt Dates

6

Calculate planned receipt and delivery dates

In the Warehousing Orders (whinh2100m000) and Shipment (whinh4630m000) sessions, you can use the **Calculate Delivery Date** and **Calculate Receipt Date** commands to calculate the delivery and receipt dates for a warehousing order or a shipment.

Calculate planned delivery dates

If LN determines the planned delivery date and the lead times are expressed in hours, LN takes into account all the time that is available on a day according to the actual calendar. However, if the lead times are expressed in days, LN considers a day as a whole day if the actual calendar indicates that time is available on that day.

Example 1

System date/time (= order creation date/time): Wednesday 7:00:00.

Outbound lead time: two hours.

The actual calendar is available from Monday through Friday each week, and has an 8:00:00 start time and an 18:00:00 end time.

According to the actual calendar, a calendar correction must be added: the actual time to which the outbound lead time will be added is Wednesday 8:00:00. Consequently, the default planned delivery date is Wednesday 10:00:00.

Example 2

System date/time (= order creation date/time): Wednesday 17:45:00.

Outbound lead time: one day.

The actual calendar is available from Monday through Friday each week, and has an 8:00:00 start time and an 18:00:00 end time.

According to the actual calendar, no calendar correction is added. If, according to the actual calendar, some time is available on a day, the day is considered as a whole day. Consequently, Wednesday is considered a whole day because 15 minutes are left. The default planned delivery date is the start time of (in this example) the next day, Thursday 8:00:00.

Note

Select **Calculate** to get a planned delivery date that is based on the planned receipt date. You can, for example, use this option if you only know the planned receipt date.

Calculate planned receipt dates

The default planned receipt date is calculated as follows:

```
planned receipt date = PDD + TT + CC
```

Legend

PDD Planned delivery date
TT Transport time
CC Calendar correction (ship-to)

LN does not take into account the transport time if the warehousing order originates from a production order.

If LN determines the planned receipt date and the lead times are expressed in hours, LN takes into account all the time that is available on a day according to the actual calendar. However, if the lead times are expressed in days, LN considers a day as a whole day if the actual calendar indicates that time is available on that day.

Example 1: lead times in hours

Planned delivery date: Wednesday 10:00:00

Transport time: eight hours

The carrier's actual calendar has a 7:00:00 start time and a 17:00:00 end time. The ship-to's actual calendar has an 8:30:00 start time and an 18:00:00 end time. Both actual calendars are available from Monday through Friday each week.

The carrier will carry the goods for seven hours on Wednesday (from 10:00:00 until 17:00:00) and for 1 hour on Thursday (from 7:00:00 till 8:00:00). Therefore, according to the carrier's calendar, the planned receipt date is Thursday 8:00:00. However, if you also take into account the ship-to's actual calendar, the default planned receipt date is Thursday 8:30:00.

Example 2: lead times in days

Planned delivery date: Wednesday 16:00:00

Transport time: two days

The carrier's actual calendar has a 7:00:00 start time and a 17:00:00 end time. The ship-to's actual calendar has an 8:30:00 start time and an 18:00:00 end time. Both actual calendars are available from Monday through Friday each week.

If the actual calendar indicates that time is available on a day, the day is considered a whole day. Consequently, Wednesday is considered a whole day according to the carrier's actual calendar because one hour remains. The transport will thus take place on Wednesday and Thursday. The default planned receipt date is Friday 7:00:00 according to the carrier's actual calendar. However, also taking into account the ship-to's actual calendar, the default planned receipt date is Friday 8:30:00.

Note

- Choose **Calculate** to get a planned receipt date that is based on the planned delivery date. You can, for example, use this option if you only know the planned delivery date.
- For transfer orders, you can change the planned receipt date until the moment a receipt line is created for an inbound order line of the transfer order. The changed planned receipt date is also displayed on the inbound and outbound order lines of the transfer order, with the exception of shipped outbound order lines.

Freight Management

If Freight is implemented, the Freight load building engine uses the route plans, standard routes, and address lead times defined for the loading and unloading addresses to calculate the loading and unloading dates.

Determination of lead time

When LN determines the default planned delivery date in the Warehousing Orders (whinh2100m000) session, LN also takes into account the lead time. The lead time is determined as follows:

- If the **Ship-from Code** is a business partner and the item is specified, LN retrieves the business partner's internal lead time from the **Supply Time** field and the lead time unit from the **Unit for Supply Time** field of the Items - Purchase (tdipu0101m000) session.
- In all other cases, LN retrieves default lead times from the Item Data by Warehouse (whwmd2510m000) session, and lead times for items-by-warehouse from the Warehouses (whwmd2500m000) session.

Determination of transport time

If you enter a warehousing order in the Warehousing Orders (whinh2100m000) session, LN takes into account the transport time required to:

- Determine the default planned receipt date.
- Calculate the planned delivery date based on the planned receipt date.
- Calculate the planned receipt date based on the planned delivery date.

LN determines the transport time between the ship-from's address and the ship-to's address, based on a relevant distance table (if available) in the Distance Table by City (tccom4137s000) session or in the Distance Table by ZIP Code/Postal Code (tccom4138s000) session. From which of these two sessions the transport time is retrieved depends on the value of the **Usage Distance Tables** field in the COM Parameters (tccom0000s000) session.

When LN determines the transport time, LN also takes into account the calendar of the carrier that is specified for the current warehousing order. The calendar of the carrier is the calendar of the buy-from business partner that is linked to the carrier in the Carriers/LSP (tcmcs0580m000) session.

LN determines the calendar correction for the transport time based on the start time and end time of the carrier's actual calendar.

Note

If Freight is implemented, Freight calculates the transport time.

Determination of calendar correction

When LN determines the planned delivery date and the planned receipt date in the Warehousing Orders (whinh2100m000) session, LN takes into account the calendars of the ship-from data and the ship-to data to determine the required calendar correction. LN determines the calendar correction for ship-from data and ship-to data in the same way. The calendar correction determination only differs in the following way:

- If the calendar correction must be determined for the ship-from data, LN uses the **Ship-from Code**.
- If the calendar correction must be determined for the ship-to data, LN uses the **Ship-to Code**.

To be able to add a calendar correction, LN searches for a calendar as follows:

1. If the **Ship-from Code** or the **Ship-to Code** is a warehouse, LN searches for a calendar in the following sequence: the address' calendar, then the warehouse's calendar, and then the company's calendar. In all other cases, LN uses the address' calendar. If LN cannot find any calendar, a calendar correction does not take place.
2. If a calendar is found, LN searches for the actual calendar based on:
   - The found calendar.

- The availability type.
- The calendar's start date and end date.

3. LN determines the calendar correction based on the actual calendar's start time and end time.

Note

- You can view the actual calendar in the Calendar Working Hours (tcccp0120m000) session.
- You can define the availability type in the Warehouse Master Data Parameters (whwmd0100s000) session.

Chapter 7
Project Cost Peg Distribution

7

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. Instead, 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 can be created, consisting of only one peg line.

Warehouse receipts

- **Receipt line peg distribution**
  When confirming a receipt line, LN creates a peg distribution under the receipt line. In addition, peg distribution receipt data is recorded for future auditability in the Receipt Line Peg Distribution Audit (whinh3579m000) session if the **Project Peg Receipt Transactions** check box is selected in the Project Pegging Parameters (tcpeg0100m000) session.

  The sequence of assigning received items to pegs is based on the earliest required dates and required quantities retrieved from Enterprise Planning.

  If 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 as specified in Enterprise Planning. 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, 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 proportionally distributed to the peg lines based on the ratio of ordered quantities.

- **Updating 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 to which pegs 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 proportionally assigned to the pegs.
  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 a 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 proportionally assigned to the pegs.
  Decreasing the already received quantity leads to a negative receipt correction.
  When the received quantity is decreased, the change in received quantity is distributed across the received pegs as follows:
  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 Overview (whinh3122m000) session does not have a 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 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 or destroyed quantities are assigned first to the peg lines having the latest required dates. In case of excess quantities, the excess quantities must be utilized first. The rejected or 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 order line peg distribution.

Outbound procedure - inspection

The Warehouse Inspections Overview (whinh3122m000) session does not have a 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 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 Inspectedin Inventory Unit** field in the Outbound Order Line Peg Distribution (whinh2190m000) session includes 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 Inspectedin Inventory Unit** 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 Inspectedin Inventory Unit**, the remainder of the released quantity is assigned to the **To be Inspectedin Inventory Unit** 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 Inspectedin Inventory Unit** of the pegs is blocked for inspection.
- While processing an inspection record, any approved or rejected quantity is apportioned only to the pegs that have a **To be Inspectedin Inventory Unit**. This **To be Inspectedin Inventory Unit** is consumed by the approved and rejected quantities assigned to the peg. Effectively, the blocked quantity is decreased for the quantity processed.

Appendix A Glossary

A

activity

A step in a warehousing procedure. An activity corresponds with a session of the Warehousing package. For example, the inbound activity Generate Inbound Advice is performed using the Generate Inbound Advice (whinh3201m000) session.

advance shipment notice

A notification that a shipment has been sent. Advanced shipment notices are sent and received by means of EDI. You can receive advance shipment notices from your supplier informing you that goods are to arrive at your warehouse, and/or you can send advance shipment notices to your customers that the goods they ordered are about to be delivered.

Synonym: shipment notice

Abbreviation: ASN

advance shipping notice

A form of pre-invoicing. The customer receives an advance notification of details of a shipment that is on its way to the customer.

Acronym: ASN

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.

ASN

See: *advance shipping notice (p. 67)*

ASN

See: *advance shipment notice (p. 67)*

availability type

An indication of the type of activity for which a resource is available. With availability types, you can define multiple sets of working times for a single calendar.

For example, if a work center is available for production on Monday through Friday and available for service activities on Saturdays, you can define two availability types, one for production and one for service activities and link these availability types to the calendar for that work center.

blanket warehousing order

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

- A position number and sequence number of zero.
- An item as defined on the purchase schedule or production schedule.
- An order quantity equal to the quantity as defined on the purchase contract line. If based on a production schedule, the order quantity of the blanket order is based on the quantity specified in the **Transfer Quantity** field of the Work List (tirpt4602m000) session.
- An empty planned delivery date and planned receipt 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's status determines if you can carry out transactions. The transactions type (sales orders, invoices, payments, shipments) is defined by the business partner's role.

company

A working environment in which you can carry out logistic or financial transactions. All the transaction data is stored in the company's database.

Depending on the type of data that the company controls, the company is:

- A logistic company.
- A financial company.
- A logistic and a financial company.

In a multicompany structure, some of the database tables can be unique for the company and the company can share other database tables with other companies.

company owned

Goods owned by your organization. A type of ownership behavior pertaining to goods in inventory or on order, which is set for standard business processes based on standard attributes such as delivery terms and point of title passage. After your customer receives or stores the goods, the customer will take ownership of the goods. If you purchase goods from your supplier, you become the owner after receipt or storage of the goods.

See also: ownership

consigned

A type of ownership behavior pertaining to goods in inventory or on order.

If you are a customer, consigned goods are goods delivered by the supplier that you do not own and for which you have not paid. You become the owner, and payment is due, when you use or sell the goods, or after a given number of days after you receive the goods.

If you are a supplier, consigned goods are goods that you delivered to your customer, but the customer will not take ownership or pay until he uses or sells the goods, or until a given period of time after receipt of the goods has passed.

The period of time between the receipt of the goods and the date on which the customer becomes the owner, and payment is due, is laid down in the contract drawn up between the supplier and the customer.

See also: ownership

Synonym: Pay on Use

customer owned

A type of ownership behavior pertaining to goods in inventory or on order. Customer owned goods are goods whose ownership will not change during any of the inbound or outbound warehousing processes.

For example, a customer sent you some components that you, as a subcontractor, will use to manufacture a product for this customer. The customer owns the components while they are stored in your warehouse and throughout all the logistic and production processes involved in manufacturing and delivering the product to the customer.

See also: ownership

demand forecast

The item quantity that is forecast to be required in a plan period. A demand forecast can be generated based on seasonal patterns or historical demand data.

The demand forecast is part of the demand plan for a plan item or channel.

goods received note

A document that lists expected items and their quantities. Dock personnel can use goods received notes to compare against receiving documents provided by the supplier.

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

handling unit structure

A description of the way items are packaged by means of handling units.

A handling unit structure includes any of the following elements:

- **Top**
  Handling unit that includes the entire structure, such as a pallet.
- **Parent**
  Handling unit that includes one or more children, such as a crate on a pallet.
- **Child**
  Handling unit that is linked to a parent, such as boxes that are packed in a crate.

inbound-order line

A warehousing-order line used for the inbound of goods. An inbound-order line gives detailed information about planned receipts and actual receipts.

For example:

- Item data
- Ordered quantity
- Warehouse and location of receipt

inventory level

The inventory quantity that can be available in a warehouse. In VMI or subcontracting scenarios, warehouse supply can be based on inventory levels laid down in contracts between suppliers and customers.

inventory transaction type

A classification that is used to indicate the type of inventory movement.

The following inventory transaction types are available:

- **Issue**
  From warehouse to other entity than warehouse.
- **Receipt**
  From other entity than warehouse to warehouse.
- **Transfer**
  From one warehouse to another.
- **WIP Transfer**
  From one costing work center to another.

item code system

An external, alternate way of coding items. Coding systems can be general standard systems (such as EAN) or systems that are dependent on a specific business partner.

label

A printed piece of paper with information about items, quantities, packaging items and so on. A label often contains bar codes to enable scanning.

load building

The freight planning engine of Freight. The load building engine groups goods that require transportation into shipments and loads.

order controlled/Batch

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

In this supply system, items that are required at a particular line station of the assembly line are called off at an earlier line station, called the trigger-from station. The number of items that is called off depends on what is needed on the assembly line in a specified time fence, called the maximum time interval.

In general, the items that are supplied to the shop floor warehouse by batch, are fast movers and are processed in high volumes. There is no direct link between these items and the assembly orders they are used for. In addition, one warehouse order set can be used to supply the goods needed by several assembly orders.

order controlled/SILS

A demand-pull system that regulates the supply of items to shop floor warehouses in the sequence in which they are needed.

In this supply system, items that are required for a specific assembly order, and at a particular line station of the assembly line, are called off at an earlier line station, called the trigger-from station. The number of items that is called off depends on what is needed for specific assembly orders in a specified time fence, called the maximum time interval.

In general, the items that are supplied to the shop floor warehouse by SILS, are fast movers and are processed in high volumes. There is a direct link between these items and the assembly orders they are used for. In addition, one warehouse order set can only supply the goods needed by one assembly order.

package definition

A particular configuration of items and their packaging. A package definition for an item can, for example, be the following: a pallet contains 12 boxes and each box contains 4 pieces.

See: general-level package definition, item-level package definition

packing slip

An order document that shows in detail the contents of a particular package for shipment. The details include a description of the items, the shippers or customers item number, the quantity shipped, and the inventory unit of the shipped items.

Pay on Use

See: *consigned (p. 69)*

planned receipt date

The date on which the goods are expected to arrive in the destination warehouse.

purchase contract

Purchase contracts are used to register specific agreements with a buy-from business partner that concern the delivery of specific goods.

A contract is comprised of:

- A purchase contract header with general business partner data, and optionally, a linked terms and conditions agreement.
- One or more purchase contract lines with (central) price agreements, logistic agreements, and quantity information that apply to an item or price group.
- Purchase contract line details with logistic agreements and quantity information that apply to an item or price group for a specific location (warehouse) of a multicompany corporation. Contract line details can exist only for corporate purchase contracts.

purchase order

An agreement that indicates which items are delivered by a buy-from business partner according to certain terms and conditions.

A purchase order contains:

- A header with general order data, buy-from business partner data, payment terms, and delivery terms
- One or more order lines with more detailed information about the actual items to be delivered

purchase schedule

A timetable of planned supply of materials. Purchase schedules support long-term purchasing with frequent deliveries and are usually backed by a purchase contract. All requirements for the same item, buy-from business partner, ship-from business partner, purchase office, and warehouse are stored in one schedule.

receipt

The physical acceptance of an item into a warehouse. A receipt registers: received quantity, receipt date, packing-slip data, inspection data, and so on.

route plan

A network of loading and unloading addresses, one of which is a pooling point. A route plan is usually defined for routes that involve multi-modal transport. A route plan consists of one or more legs. Each leg, or part of the route, can be handled differently depending on the specified transport category and transport means group.

series

A group of order numbers or document numbers starting with the same series code.

Series identify orders with certain characteristics. For example, all sales orders handled by the large accounts department start with LA (LA0000001, LA0000002, LA0000003, and so on).

ship-from business partner

The business partner who ships the ordered goods to your organization. This usually represents a supplier's distribution center or warehouse. The definition includes the default warehouse at which you want to receive the goods and if you want to inspect the goods, the carrier that takes care of the transport, and the related buy-from business partner.

Synonym: ship-from supplier

ship-from supplier

See: *ship-from business partner (p. 74)*

shipment

All goods that are transported to a specific address on a specific date and time by using a specific route. An identifiable part of a load.

shipment notice

See: *advance shipment notice (p. 67)*

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

standard route

A standard route is a fixed route that is traveled with a particular frequency, such as a truck that visits delivery and/or loading addresses according to a fixed schedule, a rail service, or a boat service. Usually, transportation via standard routes costs less than travel via non-fixed routes. For example, you can define a route like Amsterdam via Rotterdam to Antwerp that is run once a day.

stock point details

The lot number, serial number, inventory date, and/or effectivity unit of an item.

storage list

The document that states the warehouse or locations where goods are to be stored. A storage list is used by warehouse personnel to place the received items in the right location within the warehouse.

transfer order

A type of warehousing order that is created to register inventory transactions from an issuing warehouse to a destination warehouse, or between two locations in a warehouse. A transfer order can be created manually or be generated by other packages or modules in LN. A transfer order has transaction type **Transfer**.

Synonym: warehouse transfer, warehousing transfer order

warehouse

A place for storing goods. For each warehouse, you can enter address data and data relating to its type.

warehouse order

See: *warehousing order (p. 76)*

warehouse transfer, warehousing transfer order

See: *transfer order (p. 75)*

warehousing order

An order for handling goods in the warehouse.

A warehouse order can be of the following inventory-transaction types:

- **Receipt**
- **Issue**
- **Transfer**
- **WIP Transfer**

Each order has an origin and contains all the information required for warehouse handling. Depending on the item (lot or non-lot) and warehouse (with or without locations), lots and/or locations can be assigned. The order follows a predefined warehousing procedure.

Note
In Manufacturing a warehousing order is often called a warehouse order.

Synonym: warehouse order

warehousing order type

A code that identifies the type of a warehousing order. The default warehousing procedure that you link to a warehousing order type determines how the warehousing orders to which the order type is allocated are processed in the warehouse, although you can modify the default procedure for individual warehousing orders or order lines.

warehousing procedure

A procedure to handle warehousing orders and handling units. A warehousing procedure comprises various steps, also called activities, that a warehousing order or a handling unit must take to be received, stored, inspected, or issued. A warehousing procedure is linked to a warehousing order type, which in turn is allocated to warehousing orders.

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