Infor LN Warehousing User Guide for Inbound Goods Flow

Important Notices

Trademark Acknowledgements

Publication Information

Document code	whinbug (U9788)
Release	10.4 (10.4)
Publication date	June 20, 2022

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About this document

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

Objectives

The objectives of this book are to describe the purpose of inbound and inspection orders, what you can accomplish using them, and how to set up and use them.

Intended Audience

This book is intended for those who want to learn how to use inbound, receipts and inspection orders 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 headstart.

Document summary

The first chapter, *Introduction*, describes the purpose and the general characteristics of inbound, receipts and inspections.

The following chapters deal with master data and parameter setup, describe how inbound advices are created and linked to receipts and inspections.

This book describes procedures that users carry out using inbound process and provide some information on the underlying processes that LN carries out. The most important session windows and fields involved are discussed, but a full description of all software components is outside the scope of this book. For details, refer to the online Help.

How to read this document

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

Please refer to the Table of Contents to locate the referred section.

Underlined terms indicate a link to a glossary definition. If you view this document online and you click on underlined text, you jump to the glossary definition at the end of this document. Non-underlined references do not represent a link to glossary definitions or other elements.

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Chapter 1
Introduction

1

The inbound module is used to perform the inbound process which includes these activities:

- Receiving the 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.

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. For further information, see How to modify warehousing procedures.

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. For information on how to define a warehousing procedure and specifying whether the activities of the procedure are carried out manually or automatically, see How to define a warehousing procedure.

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. For information on how to define warehousing procedures, see *To define warehousing procedures (p. 10)* 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 (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. 15)*.

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.

LN does not use the following steps for non-location controlled warehouses:

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

The following are some of the scenarios for receipt and inspection procedures:

- Full scenario

- Only mandatory steps including inspection
- Non-location controlled including inspections
- Full scenario without inspections

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. 10)* 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)

Note

Note that of the mandatory activities, Generate Inbound Advice (whinh3201m000) and Put Away Inbound Advice (whinh3203m000) are only available for location-controlled warehouses. This also applies to the optional activities Generate Storage List (whinh3415m000) and 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**. For further details, see steps 2 and 6 below. 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.

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 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. 19)*.

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. 19)*.

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. 31)*.

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. 31)*.

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 must maintain inspection data in the Warehouse Inspections (whinh3122m000) session and the Warehouse Inspection (whinh3622m000) session.

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 (whwmd2171m000) session, you can handle quarantined items.

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

Chapter 4
Receipts

4

How to receive goods

This topic describes how to create receipts and link various types of records to the receipts. After creating receipts, you must confirm the receipts before you can store the goods in the warehouse. How to confirm receipts is described in *Confirming receipts and receipt lines (p. 22)*. For a general overview of receipt procedures, see *Overview of receipt and inbound inspection procedures (p. 13)*.

You can perform the receipt of goods in the Warehouse Receipt (whinh3512m000) session. In this session, you can receive goods listed on the following types of records:

- Advance shipment notices (ASNs)
- ASN lines
- Inbound order lines
- Expected orders
- Expected order lines
- Handling units
- Loads and shipments from the Planned Loads/Shipments (whinh4180m000) session and the Shipments (whinh4130m000) session.

Expected orders are inbound warehousing orders that are expected to be received in (one of) your warehouses. Expected orders are displayed in the Expected Orders (whinh3822m000) session. Expected order lines are inbound warehousing order lines that are expected to be received in (one of) your warehouses. Expected order lines are displayed in the Expected Order Lines (whinh3820m000) session.

In this session, you can also record unexpected goods, that is, goods for which no expected order (line) exists yet.

Note

To receive goods based on handling units, see To receive handling units.

How to create a receipt

To create a new receipt record, proceed as follows:

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

   Note that the **Select Receipt Series** check box and the **Receipts** field in the Warehouse Receipt (whinh3512m000) session determine wheter the **Receipt** field is in read-only or entry mode.
3. If the **Warehouse** field is in entry mode, select a warehouse.

   Note that the **Warehouse** field in the Warehouse Receipt (whinh3512m000) session determine wheter the **Warehouse** field is in read-only or entry mode.
4. If required, specify the ship-from business partner and also specify the **Packing Slip** and the **Receipt Date** in the **Delivery** group box. The **Packing Slip** provides the ID of the party that delivers the goods to be received and the **Receipt Date** provides the date on which the receipt header is created.

   Note that default values for these fields are filled from the receipt lines after you have linked inbound-order lines, advance shipment notices, or handling units to the receipt.

How to link order lines, ASNs, loads, shipments, or handling units to a receipt

After you create a receipt, you must link inbound order lines, advance shipment notices, shipments, loads, or handling units to the receipt. As a result, LN creates receipt lines for the linked inbound order lines and the inbound order lines on which the linked handling units, shipments, loads, or ASN lines are based.

The following options are available to link these types of records to a receipt:

Option	Available for record type	Refer to
Receive	Inbound order lines, ASN lines, ASN line reference, handling units, loads and shipments	Receive (Easy Entry)
Receipt Lines	Inbound order lines	**High Volume Entry**
Expected Orders	Inbound order lines	To link expected order lines
Receipt Filter	Inbound order lines, ASN lines, handling units, planned loads and shipments	Receipt Filter
Expected Shipments	ASN lines	To link expected shipment lines to receipts

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 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.

Automatic receipts

LN automatically carries out receipts and update the normal (non-administrative)warehouse with the inventory received in the "real" VMI warehouse. Automatic receipts are used to limit the receipt administration but not to update the administrative warehouses. Automatic receipts are based on purchase orders, contractual inventory levels, or demand forecast. While the automatic receipts are booked into the administrative warehouse, the goods listed on them are actually received in the "real" VMI warehouse managed by the supplier.

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

After receipt

After you have performed the receipt of goods, the receipt must be confirmed. After confirming the goods, the next step of the applicable warehousing procedure can be carried out.

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 Receipt Headers (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 Receipt Headers (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, and 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 (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 (whinh3122m000) session if you select **Enhanced Receipt Lines** in the **Receipts Satellites** group box of the 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. 24)*.

Various parameters determine how LN creates automatic receipts. For more information, refer to *Setting up automatic receipts (p. 27)*.

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 Warehouse - Item (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. 27)*.
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. 27)*.
  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. 24)*.

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. 24)*.

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.

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. 13)*.

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
Project Cost Peg Distribution

6

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 (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 (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.