Infor LN Sales User Guide for Sales Orders

Publication Information

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About this document

This document provides an introduction to <u>sales orders</u> and explains the sales order procedure and functions.

Objectives

This document describes the <u>sales order</u> procedure in Sales.

Assumed knowledge

Although you need no detailed knowledge of the LN software to read this guide, general knowledge of the Infor LN functionality will help you understand this guide.

Document summary

This table shows the chapters of this guide:

Chapter number	Chapter title	Content
Chapter 1	Introduction	Introduction to sales orders
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References

Use this guide as the primary reference for sales orders. Use the current editions of these related references to research information that is not covered in this guide:

- ***User Guide for Sales Master Data U9839 US***
  Use this guide to understand the setup of sales master data.
- ***User Guide for Sales Quotations U9841 US***
  Use this guide to understand the sales quotation procedure.
- ***User Guide for Sales Contracts U9844 US***
  Use this guide to understand the sales contract procedure.
- ***User Guide for Purchase and Sales Schedules U9541 US***
  Use this guide to understand the sales schedule procedure.
- ***User Guide for Margin Control U9842 US***
  Use this guide to understand the margin control procedure.
- ***User Guide for Retrobilling U9840 US***
  Use this guide to understand the retrobilling procedure.

- **User Guide for Commissions and Rebates U9843 US**
  Use this guide to understand the commissions and rebates procedure.

- **User Guide for Vendor Managed Inventory U9501 US**
  Use this guide to understand the vendor managed inventory functionality, including the use of consigned inventory.

- **User Guide for Statistics U9816 US**
  Use this guide to understand the statistics procedure.

- **User Guide for Kit Handling U9540 US**
  Use this guide to understand the component handling functionality.

- **User Guide for CRM U9653 US**
  Use this guide to understand the Customer Relations Management functionality.

- **User Guide for Subcontracting U9361 US**
  Use this guide to understand the subcontracting functionality.

- **User Guide for Terms and Conditions U9499 US**
  Use this guide to understand the sales terms and conditions functionality.

- **User Guide for Project Pegging U9777 US**
  Use this guide to understand the project pegging functionality.

- **User Guide for Demand Pegging U9500 US**
  Use this guide to understand the demand pegging functionality.

- **User Guide for Pricing U9179 US**
  Use this guide to understand the pricing functionality.

- **User Guide for Material Pricing U9865 US**
  Use this guide to understand the material pricing functionality.

How to read this document

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

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

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 the document.

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Chapter 1
Introduction

1

Overview of sales order handling

Sales orders are used to sell and deliver items or services to a sold-to business partner under certain terms and conditions. Sales orders can result from a variety of sources, such as **Contracts**, **Quotations**, **EDI**, and **Planning**. In Sales, you can create and modify orders.

After approval, a sales order is a legal obligation to deliver items according to the agreed terms and conditions, including specific prices and discounts.

Sales master data

Before you can carry out the sales order procedure, you must define the sales order parameters in the Sales Order Parameters (tdsls0100s400) session and specify the sales order master data.

For more information, refer to *User Guide for Sales Master Data U9839 US*.

Sales order additional processes

A number of processes do not always occur in the sales order procedure, but can be applicable in specific situations.

For more information, refer to the *Additional processes* chapter.

Chapter 2
Procedure

2

Sales order procedure

The sales order procedure covers the complete administrative procedure for selling <u>standard</u>, <u>customized</u>, and <u>generic</u> items.

The procedure includes these steps:

Step 1: Creating sales orders

Sales orders can be created as follows in the Sales Order - Lines (tdsls4100m900) session:

- Automatically, from a variety of sources, such as **Contracts**, **Quotations**, and **EDI**
- Based on a template or a catalog
- Copied from an existing order in the Copy Sales Order (tdsls4201s000) session
- Manually

Step 2: Approving sales orders

After sales orders are created, sales order approval is a mandatory step in the sales order procedure. The execution of the order procedure activities can start when a user approves the order, either in the Approve Sales Orders (tdsls4211m000) session, or by clicking **Approve** on the <u>appropriate</u> menu of the Sales Orders (tdsls4100m000) or Sales Order (tdsls4100m900) sessions.

If the **Use Confirmation** check box is selected in the Order Terms and Conditions (tctrm1130m000) session or the Sold-to Business Partner (tccom4110s000) session, the goods must be confirmed by the customer before the sales order can be approved.

Step 3: Printing sales order acknowledgements

After the order is registered and approved, you can print the sales order and send it to the sold-to business partner as an <u>order acknowledgment</u>. The Print Sales Order Acknowledgements/RMAs (tdsls4401m000) session is an optional session in the sales order procedure. After the sales order is printed, you can still modify the sales order.

Step 4: Releasing sales orders to Warehousing

After the sold-to business partner is informed about the sales order and the order is approved, you can release the sales order to Warehousing in the Release Sales Orders to Warehousing (tdsls4246m000) session. As a result, the warehousing department is informed about the goods that must be shipped.

When sales orders are released to the warehouse, several activities are triggered in Warehouse Orders, starting with warehouse order creation in the Warehousing Orders (whinh2100m000) session. The activities in Warehouse Orders depend on the warehouse order type that is linked to the sales order type.

To link a warehousing order type to a sales order type:

1. Link activities to a <u>warehousing procedure</u> in the Activities by Procedure (whinh0106m000) session.
2. Link a warehousing procedure to a warehousing order type in the Warehousing Order Types (whinh0110m000) session.
3. Link the warehousing order type in the Sales Order Types (tdsls0594m000) session.

It is not mandatory to release sales orders for cost and service items to Warehousing. This depends on the setting of the **Release to Warehouse** check box in the Items - Sales (tdisa0501m000) session. Direct deliveries are never released to warehousing.

Step 5: Delivering the sold goods

You can record the deliveries of sold items in Warehousing or Sales.

- **Warehousing**
  If the sales order is released to Warehousing, the delivery procedure is covered by the outbound procedure and the shipment procedure in Inventory Handling (INH).
  When shipments are confirmed in Warehousing, the delivery/shipment data is reported back to Sales. You can view this data in these sessions:
  - Sales Order Lines - Monitor (tdsls4510m000)
  - Sales Order Actual Delivery Lines (tdsls4106m000)
- **Sales**
  For noninventory items that are not released to Warehousing, you can record the deliveries in the Sales Deliveries (tdsls4101m200) session.

You can indicate whether the goods must be <u>customer approved</u> after the goods are delivered.

When the goods are delivered, the prices and discounts of the goods may be changed. Use the Change Prices and Discounts after Delivery (tdsls4122m000) session to maintain prices and discounts.

Step 6: Invoicing the sold goods

Use the following sessions to invoice the sold items:

1. You can view, enter and maintain sales order invoice lines and release them to Invoicing in the Sales Order Invoice Lines (tdsls4106m100) session.

2. If you want to check the invoice data before it is sent to the invoice-to business partner or released to Invoicing, you can print a draft invoice in the Print Sales Draft Invoices (tdsls4447m000) session. If required, you can change the invoice data.

3. You can release the order data for invoicing in the Release Sales Orders/Schedules to Invoicing (tdsls4247m000) session.
   After release to Invoicing:

   - The status of the invoicing data is **Confirmed** in Invoicing.
   - The status of the invoice line is **Released** in Sales.

4. Create a billing request in the Billing Requests (cisli2100m000) session. Only the lines of the selected invoicing data that have the **Confirmed** status will be processed.

5. Process billing requests in a billing request set in the Compose/Print/Post Invoices (cisli2200m000) session.
   After invoices are posted:

   - The status of the invoicing data is **Posted** in Invoicing.
   - The status of the invoice line is **Invoiced** in Sales.

You can use the Change Prices and Discounts after Delivery (tdsls4122m000) session to change the prices and discounts for sales order lines that are released to Invoicing and for which the sales invoice status is **Confirmed**, or **On Hold**.

Step 7: Processing sales orders

At the end of the sales order procedure, all sales orders must be processed in the Process Delivered Sales Orders (tdsls4223m000) session. The processed sales orders are transferred from the regular database to the history database.

Sales order and schedule history

You can use sales order/schedule history to track the creation and modification of sales orders, installment orders, and sales schedules. You can keep certain information after the original order/schedule is completed.

To register the history of orders and schedules that are created, canceled, or processed, select these check boxes:

- **Sales orders**
  Log Order History, **Log EDI Order History** and **Log Actual Order Delivery History** check boxes in the Sales Order Parameters (tdsls0100s400) session

- **Sales order installments**
  Log Order History and **Log EDI Order History** check boxes in the Sales Order Parameters (tdsls0100s400) session

- **Sales schedules**
  Log Schedule History and **Log Actual Schedule Delivery History** check boxes in the Sales Contract Parameters (tdsls0100s300) session

Contents of history files

The order/schedule history files include:

- All created order/schedule (line) transactions. These order/schedule (line)s have not been processed.
- All invoiced order/schedule (line)s. These are the processed order/schedule (line)s. When an order is invoiced, the history also includes the gross profit of the order line.

The history files are of these record types:

- **Intake**
  The order/schedule line was added, changed, or deleted.
- **Cancellation**
  The order/schedule line was canceled.
- **Turnover**
  The order line was processed in the Process Delivered Sales Orders (tdsls4223m000) session, or the schedule line was processed in the Process Delivered Sales Schedules (tdsls3223m000) session.

The fields in this table determine if, when, and how the order/schedule history files are updated

Sales orders

Field	Retrieved from session
Log Order History	Sales Orders (tdsls4100m000)
Log EDI Order History	Sales Orders (tdsls4100m000)
Start Logging History at	Sales Orders (tdsls4100m000)
Level of Intake Logging	Sales Order Parameters (tdsls0100s400)
Log Actual Order Delivery History	Sales Order Parameters (tdsls0100s400)
Log Component History	Sales Order Parameters (tdsls0100s400)

Sales order installments

Field	Retrieved from session
Log Order History	Sales Order Parameters (tdsls0100s400)
Log EDI Order History	Sales Order Parameters (tdsls0100s400)

Start Logging History at	Sales Order Parameters (tdsls0100s400)
Level of Intake Logging	Sales Order Parameters (tdsls0100s400)

Sales schedules	
Field	**Retrieved from session**
Log Schedule History	Sales Schedules (tdsls3111m000)
Level of Intake Logging	Sales Contract Parameters (tdsls0100s300)
Log Actual Schedule Delivery History	Sales Contract Parameters (tdsls0100s300)

Note

- For sales schedules, history logging always starts during approval.
- If planned warehouse orders are used for sales schedules, sales schedule line history is based on the planned warehouse order information.

Deleting history files

You can restrict the total amount of history data with the Archive/Delete Sales Order/Schedule History (tdsls5201m000) session.

History files are the basis for statistics. Before you delete the history files, verify that the statistics are fully updated. If the history files are deleted before the update, you cannot fully update the statistics.

Note

You cannot modify the history data. It is only used for information purposes.

Chapter 3
Rush orders

<div style="text-align: right">**3**</div>

Every company deals with rush requests from customers. These requests usually require special terms of payment and delivery. To determine whether a rush request is reasonable and to inform the business partner about the delivery date of an order, standard rush order conditions must be specified for a company.

The following rush situations are available:

- The customer asks for a rush delivery during order entry
- The customer asks you to rush an already issued order

Master data

Before you can specify a <u>rush order</u>:

1. Specify rush <u>delivery terms</u> and rush <u>payment terms</u> in the **Rush Delivery Terms** and **Rush Payment Terms** fields of the Sales Order Parameters (tdsls0100s400) session. These default terms can still be changed on the rush order header or rush order line.

2. Because the <u>availability type</u> affects the lead time, specify the **Availability Type** field in the Sales Order Parameters (tdsls0100s400) session.

3. If the **Mandatory Entry of Change Codes** check box is selected in the Sales Order Parameters (tdsls0100s400) session, specify a <u>change type</u> for rush orders in the Change Types (tdsls0198m000) session, and a <u>change reason</u> for rush orders in the Change Reasons (tdsls0197m000) session to clarify why the sales order changed.

Rush order creation

To create a rush order, or to convert an existing normal order into a rush order, click:

- **Rush Order** in the Sales Orders (tdsls4100m000), or Sales Order (tdsls4100m900) sessions. As a result, LN selects the **Rush Order** check box in these sessions. When an order is rushed, all linked sales order (delivery) lines are rushed as well.
- **Rush Order Line** in the Sales Order Lines (tdsls4101m000) session. As a result, LN selects the **Rush Order Line** check box in this session.
- **Rush Delivery Line** in the Sales Order Planned Delivery Lines (tdsls4101m100) session. As a result, LN selects the **Rush Delivery Line** check box in this session.
- **Rush Component** in the Sales Order Line Components (tdsls4163m000) session. As a result, LN selects the **Rush Component** check box in this session.

If a sales order is defined as a rush order, the **Order Priority** is one (1).

Note

- If you want to automate the processing of a rush order, you must specify automatic activities for the order type. For more information, refer to Flexible sales order processing.
- You can convert an existing sales order into a rush order as long as you can change the linked warehousing order.
- The setting of the **Rush Order** check box on the sales order header is defaulted to the relevant check box of the linked sales order lines and/or delivery lines. However, you can change the setting of this check box on the sales order (delivery) line. As a result, you can define a separate order line, or delivery line as a rush line.

Restrictions

You cannot rush:

- Return orders, collect orders, retrobilled orders, and consignment invoicing orders
- Sales order lines that are not released to Warehousing
- Backorder lines

Rush orders and Warehousing

After the rush order is released to Warehousing:

- The **Rush Order** check box is selected in the Outbound Order Lines (whinh2120m000) session. These outbound order lines have the highest priority when generating and processing the outbound advice.

- If the **Rush Orders only** check box is selected in the Generate Outbound Advice (whinh4201m000) session, a purchase order advice is generated for these lines first. To speed up the outbound process for rush orders, you can then click **Direct Outbound** in the Process Outbound Advice (whinh4200m000) session. As a result, all outbound process steps that usually take place before confirmation of the shipment, are skipped. In other words, LN creates a shipment line after processing the outbound advice.

Chapter 4
Direct deliveries

<div style="text-align: right">**4**</div>

On a sales order or service order, you can indicate whether you want the sold goods to be <u>directly delivered</u>. In case of a direct delivery, a sales order or service order results in a purchase order. Because the buy-from business partner delivers the goods directly to the sold-to business partner, Warehousing is not involved.

Direct delivery sales orders

To generate and process <u>directly delivery</u> sales orders:

Step 1: Delivery Type

To create a direct delivery sales order:

- The **Allow Purchase Orders** check box must be selected for the sales order type in the Sales Order Types (tdsls0594m000) session.
- The **Delivery Type** field must be **Direct Delivery** in the Sales Order Lines (tdsls4101m000) session or the Sales Order Planned Delivery Lines (tdsls4101m100) session.
  The **Direct Delivery** delivery type can be selected as follows in these sessions:
  - Automatically, if the ordered quantity is equal to or greater than the quantity defined in the **Direct Delivery from Quantity** field of the Items - Sales (tdisa0501m000) session
  - Manually, by selecting **Direct Delivery**
  - By selecting **Generate Direct Delivery Order** from the Inventory Shortage Menu (tdsls4830s000) session that appears if an inventory shortage exists for the item

Step 2: Create a purchase order advice

After the sales order line is approved and the Generate Purchase Order Advice for Sales Order (tdsls4240m000) session is linked as an activity to the order type in the Sales Order Type (tdsls0694m000) session, a <u>purchase order advice</u> is or must be generated for the sales order line in the Generate Purchase Order Advice for Sales Order (tdsls4240m000) session.

This step is not applicable if the Generate Purchase Orders (tdsls4241m000) session is linked as an activity to the order type instead of the Generate Purchase Order Advice for Sales Order (tdsls4240m000) session.

Step 3: Create a direct delivery purchase order

A purchase order must be generated for the direct delivery sales order. How the purchase order is generated, depends on whether a purchase order advice already exists for the sales order line.

- **No purchase order advice**
  You can generate purchase orders for direct delivery sales orders in the Generate Purchase Orders (tdsls4241m000) session. Select the **Direct Delivery** check box and specify the fields in the **Direct Delivery** group box.
- **Existing purchase order advice**
  If you want LN to convert the generated purchase order advice automatically to a purchase order, you must select the **Convert Purchase Advice automatically to Purchase Order** check box in the Sales Order Parameters (tdsls0100s400) session. If this check box is cleared, you must manually confirm and transfer the purchase order advice to a purchase order in the Confirm Purchase Order Advice (whina3211m000) session and the Transfer Purchase Order Advice (whina3212m000) session.

LN uses these fields from the Purchase Order Parameters (tdpur0100m400) session to generate direct delivery purchase orders:

Order Series for Direct Delivery	**Order Series for Direct Delivery**
Order Type for Direct Delivery	**Order Type for Direct Delivery**

After a purchase order is generated, the status of the originating sales order line is Awaiting direct delivery in the Sales Order Lines Monitor (tdsls4510m100) session.

Step 4: Receive a direct delivery order

If you use advance shipping notices and you click **Receive Direct Delivery Lines** in the Shipment Notices (whinh3100m000) session, receipts for items that are purchased for a direct delivery sales order, are inserted in the Purchase Receipts (tdpur4106m000) session. If you do not use advance shipment notices, you must manually specify the receipts for direct delivery sales orders in the Purchase Receipts (tdpur4106m000) session.

You cannot *confirm* receipts in the Purchase Receipts (tdpur4106m000) session before the lot and serial set, if lots and serials must be registered, is complete.

Step 5: Communicate the deliveries to Sales

Run the Update Sales / Service Order with Delivery Information (tdpur4222m000) session to communicate the item, quantity, lot and serial information back to Sales for final receipts.

For each purchase order receipt line that is registered in the Purchase Receipts (tdpur4106m000) session, a sales order delivery line is created in the Sales Order Line (tdsls4101m900) and the Sales Order Actual Delivery Lines (tdsls4106m000) sessions.

Step 6: Send the sales invoice to the sold-to business partner

After receipts are booked in Procurement and communicated to Sales through the Update Sales / Service Order with Delivery Information (tdpur4222m000) session, you can release the sales order data for invoicing in the Release Sales Orders/Schedules to Invoicing (tdsls4247m000) session.

Step 7: Process a direct delivery order

Process the purchase order in the Process Delivered Purchase Orders (tdpur4223m000) session and the sales order in the Process Delivered Sales Orders (tdsls4223m000) session.

Direct delivery and return orders

If you want to return items that are received for the direct delivery sales order, you must manually enter a direct delivery sales return order in the Sales Order (tdsls4100m900) session.

A direct delivery purchase return order can be generated based on the **Return Order Type for Direct Deliveries** field in the Purchase Order Parameters (tdpur0100m400) session.

Next, the normal procedure for the purchase order type applies.

Direct delivery and freight orders

If you want to use Freight to manage and plan your direct deliveries, you can generate freight orders for direct deliveries.

For more information, refer to *Generating freight orders for direct delivery sales orders (p. 34)*.

Direct delivery and backorders

After deliveries are communicated to Sales and less is received than ordered, a confirmed backorder is generated automatically in Procurement, irrespective of the setting of the **Confirm Back Orders automatically** check box in the Purchase Order Parameters (tdpur0100m400) session. Whether or not you must first manually confirm the backorder in Sales, depends on the setting of the **Confirm Back Orders automatically** check box in the Sales Order Parameters (tdsls0100s400) session.

Note

- You can change the backorder quantity in Sales until receipts are executed.
- You can also generate a freight order for a direct delivery backorder.
- You cannot cancel a direct delivery backorder in Procurement.

- You can only delete a direct delivery backorder in Procurement. However, the deletion is not communicated to Sales.

Chapter 5
Cross-docking and splitting deliveries

To fulfill an existing sales order for which no inventory is available, inbound goods can be immediately taken from the receipt location to the staging location for issue. This process is called cross-docking.

Cross-docking types

- **Static cross-docking**
  Static cross-docking means that you cannot maintain the cross-docking order or order lines in Warehousing.
- For static cross-docking, the **Planned Receipt Date** of the purchase order is calculated as follows: **Planned Delivery Date** in the Sales Orders (tdsls4100m000) session + **Cross-dock Lead Time** in the Warehouse - Item (whwmd2110s000) session.
- **Dynamic cross-docking**
  With dynamic cross-docking, you can:
  - Create cross-docking orders and order lines in Warehousing.
  - Change or cancel the cross-docking order and order lines at several moments during the cross-docking process in Warehousing.
  - Let LN automatically create cross-docking orders and/or cross-docking order lines in Warehousing.

Dynamic cross-docking is not further discussed in this topic.

Cross-docking orders

To generate cross-docking orders:

Step 1: Create a cross-docking sales order

- Set the **Delivery Type** field to **Cross-docking** in the Sales Order Lines (tdsls4101m000), Sales Order Planned Delivery Lines (tdsls4101m100), or Sales Order Line Components (tdsls4163m000) session.
  The **Cross-docking** delivery type can be specified as follows in these sessions:
  - Manually, by selecting **Cross-docking**
  - By selecting **Generate Cross-dock Order** from the Inventory Shortage Menu (tdsls4830s000) session that appears when an inventory shortage exists for the item
  - After you run the Generate Purchase Order Advice for Sales Order (tdsls4240m000) session with the **Warehouse** check box selected for sales order lines that have the **Delivery Type** field set to **Warehouse**

The **Allow Purchase Orders** check box must be selected for the sales order type in the Sales Order Types (tdsls0594m000) session.

Step 2: Create a purchase order advice

After the sales order line is approved and if the Generate Purchase Order Advice for Sales Order (tdsls4240m000) session is linked as an activity to the order type in the Sales Order Type (tdsls0694m000) session, a purchase order advice must be generated for the sales order line in the Generate Purchase Order Advice for Sales Order (tdsls4240m000) session.

This step is not applicable if the Generate Purchase Orders (tdsls4241m000) session is linked as an activity to the order type instead of the Generate Purchase Order Advice for Sales Order (tdsls4240m000) session.

Step 3: Create a cross-docking purchase order

A purchase order must be generated from the sales order. How the purchase order is generated, depends on whether a purchase order advice already exists for the sales order line.

- **No purchase order advice**
  You can generate cross-docking orders in the Generate Purchase Orders (tdsls4241m000) session. Select the **Cross-docking** check box and specify the fields in the **Purchase Order** group box.
- **Existing purchase order advice**
  To automatically convert the generated purchase order advice to a purchase order, select the **Convert Purchase Advice automatically to Purchase Order** check box in the Sales Order Parameters (tdsls0100s400) session. If this check box is cleared, you must manually confirm and transfer the purchase order advice to a purchase order in the Confirm Purchase Order Advice (whina3211m000) and Transfer Purchase Order Advice (whina3212m000) sessions.

Step 4: Release the cross-docking order to Warehousing

Release the purchase order to Warehousing in the Release Purchase Orders to Warehousing (tdpur4246m000) session.

Release the sales order to Warehousing in the Release Sales Orders to Warehousing (tdsls4246m000) session.

Splitting deliveries

Splitting deliveries is in fact splitting order lines. When purchase order lines or sales order lines are generated, you can split the order lines into several delivery lines. Consequently, multiple deliveries take place on one order line.

To split deliveries, click:

- **Planned Deliveries** on the <u>appropriate</u> menu of the Sales Order Lines (tdsls4101m000) session. The Sales Order Line (tdsls4101m900) session starts in which you can enter your data.
- **Order Line Details** on the <u>appropriate</u> menu of the Purchase Order Lines (tdpur4101m000) session. The Purchase Order Line Details (tdpur4101m200) session starts in which you can enter your data.

Splitting deliveries for cross-docking orders

If a cross-docking order exists and a split delivery is required, you can further split a delivery line into several deliveries by clicking:

- **Split Delivery Line** in the Sales Order Planned Delivery Lines (tdsls4101m100) session
- **Split** in the Purchase Order Line Details (tdpur4101m200) session

As a result, the Split Line (tdpur4000s000) session starts in which you can split the delivery line into several deliveries. Consequently, the link between Procurement and Sales is kept.

Important!

You must make a distinction between splitting and adding a delivery line. When you add a delivery line to increase the order quantity in the Sales Order Line (tdsls4101m900), or the Purchase Order Line Details (tdpur4101m200) session, the link between the sales order and the purchase order is not kept. When you split a delivery line into several deliveries in the Split Line (tdpur4000s000) session, the link between the sales order and the purchase order is kept.

For a cross-docking order, several purchase order line details can be linked to one sales order line, or several sales order delivery lines can be linked to one purchase order line. Therefore, if you make changes to the sales order (delivery) line, the link with the purchase order line (detail)(s) can be broken. LN breaks the link with the purchase order line (detail)(s) if you change these fields in the Sales Order Lines (tdsls4101m000) or Sales Order Planned Delivery Lines (tdsls4101m100) session:

- **Item**
- **Engineering Item Revision**
- **Lot**

- **Lot Selection**
- **Warehouse**
- **Effectivity Unit**, provided the old and the new effectivity unit are not interchangeable.

Example

If two sales order delivery lines are linked to a purchase order line and, on the first sales order deliver line, you change one of the above mentioned fields, the link between the first sales order delivery line and the purchase order line is broken. The link between the second sales order delivery line and the purchase order line still exists. When the second sales order delivery line is also disconnected from the purchase order line, the link between the sales order and the purchase order is removed, which you can view in the Linked Order Line Data (tdsls4102s200) session.

Note

- When you change sales or purchase order lines that are linked, LN notifies you about the link between the sales order and the purchase order.
- When you cancel or delete sales or purchase order lines that are linked, the link is broken.
- When you cancel or delete a sales order line for which a purchase order advice exists, the purchase order advice is deleted.

Chapter 6
Sales orders and freight orders

6

Integration Sales and Freight

The Freight package can be used to handle transportation requirements. During sales order entry, you can identify and choose the appropriate means of transportation and generate a freight order from a sales order.

Integration between Freight Order Control and Sales

In Freight Order Control, these types of planning are available:

- Rough planning, which is used for long-term capacity planning.
- Load building, which is the actual execution time plan of the shipments and loads. To ship the goods, Freight Order Control must know the shipments that must be moved over a period of time. If a freight order is created from Sales, the progress of the shipment and loads can be exchanged and information can be shared between Freight Order Control and Sales.

For more information, refer to *Integration Freight Order Control and Sales (p. 32)*.

Integration between freight invoicing and sales invoicing

Based on the **Rate and Carrier/LSP Selection at Order Line** parameter in the Freight Rates and Costs Parameters (fmfrc0100m000) session, during sales order entry or sales quotation entry, a carrier is automatically or manually selected. Several factors, such as invoicing method, item, freight class, service level, transport type, and transport means group, determine the freight invoice amount, which is calculated in Pricing. The calculated invoice amount is printed on the order acknowledgement.

The freight invoice amount that you must pay to the carrier, is called freight costs. You can invoice your business partner for the freight costs, based on:

- **Freight Costs**
- **Freight Costs (Update Allowed)**
- **Client Rates**

For more information, refer to *Integration freight invoicing and sales invoicing (p. 36)*.

Integration Freight Order Control and Sales

To identify and choose the appropriate means of transportation, freight orders can be generated from sales orders that are manually created, generated, or that originate from a converted sales quotation.

If a freight order is created from a sales order, the progress of the shipment and loads can be exchanged and information can be shared between Freight Order Control and Sales.

Sales quotation settings

To enable the generation of freight orders from sales orders that originate from a converted sales quotation, and to provide the necessary freight related information when the quotation is converted to a sales order, specify these fields in the Sales Quotation Lines (tdsls1501m000) session:

- Select the **Gen. FreightOrders** check box
- Enter a service level in the **Freight Service Level** field if you want the same service level to be used in the freight order as in the sales order.
- Select the **CarrierBinding** check box if you want the same carrier to be used in the freight order as in the sales order.
- Enter a date in the **Planned Delivery Date** field. This date can be considered as the planned load date.
- Enter a date in the **Planned Receipt Date** field.

Note

After the **Planned Delivery Date** is specified on the sales quotation line, Freight determines if the transportation lead time is sufficient. A message is displayed if the goods cannot be delivered in time. You can either change the **Planned Receipt Date**, or select another carrier.

Freight orders cannot be generated from quotations, but only from sales orders. In the Sales Quotation Lines (tdsls1501m000) session, you specify all freight-related data to provide the necessary information when the confirmed quotation is converted to a sales order in the Process Sales Quotations (tdsls1200m000) session.

Sales order settings

To enable the generation of freight orders from sales orders, these settings must be applied in the Sales Order Lines (tdsls4101m000) or Sales Order Planned Delivery Lines (tdsls4101m100) session:

- Select the **Generate Freight Order from Sales** check box.
- Select the **Carrier Binding** check box if you want the same carrier to be used in the freight order as in the sales order.
- Enter a service level in the **Freight Service Level** field if you want the same service level to be used in the freight order as in the sales order.
- Enter a date in the **Planned Delivery Date** field. This date can be considered as the planned load date.

- Enter a date in the **Planned Receipt Date** field.

Note

Freight orders generated for sales orders are of the single-shipment type if:

- The sales order type of the sales order is associated with a warehousing order type for which the **Single Order per Shipment** check box is selected.
- The **Single Shipment Order** check box is selected for the freight order type associated with the sales order.
- The **Single Order per Shipment** check box is selected for the default warehousing order type of the sales order.

Generating freight orders from sales orders

If the **Generate Freight Order from Sales** check box is selected in the Items - Sales Business Partner (tdisa0510m000) session and a sales order is generated for the item – sales business partner combination, after approval, LN checks whether Generate Freight Orders (tdsls4222m000) is linked as an activity to the order type in the Sales Order Type - Activities (tdsls0560m000) session to determine the freight order generation method. The freight order can be manually or automatically generated for the sales order.

After a freight order is generated from a sales order (delivery) line, the status of the freight order is **Expected**. The information that goes to the freight order includes only shipping related data, such as customer-requested date, addresses, shipping constraints, carrier, route, delivery terms, and planning responsibility. The original sales order number, position, and sequence number can be referenced in the freight order line. The calculated freight costs can be returned to the sales order (delivery) line.

When a load plan is created for the freight order, the status of the freight order is **Planned**. The load plan can be made actual only in Freight and the status of the freight order can be **Actual** after the sales order (delivery) line is released to Warehousing. On the appropriate menu of the Sales Order Lines (tdsls4101m000) or Sales Order Planned Delivery Lines (tdsls4101m100) session, you can click:

- **Freight Details**, to start the Freight Details (fmlbd3552m000) session, or the Freight Details (fmfoc3501m000) session. Which of these sessions is started, depends on the status of the freight order and whether the freight order belongs to a load plan or a cluster. In these sessions, you can view freight details, such as information about shipments and loads, the used carrier, the dates on which the shipments will be executed, and the quantities to be shipped.
- **Linked Information**, to start the Linked Order Line Data (tdsls4102s200) session, in which you can view linked freight orders.

Note

- You cannot create freight orders for retrobilled orders, or cost orders as these order types require no shipment.
- If you want to modify, block, delete, or cancel a sales order and linked freight order, the status of the corresponding freight order must be **Expected**, **Planned**, or **Actual**.

Due to the type of transport, or the availability of the carrier, the **Planned Receipt Date** can differ from the date as specified on the sales order (delivery) line. In the Sales Orders (tdsls4100m000) session, you can click Printing and then *Orders with Deviation in the Shipment Dates* to start the Print Orders with Deviating Shipment Dates (fmlbd3450m000) session. With this session, you can generate a difference report listing all orders for which the original dates differ from those in the load plan of Freight.

Generating freight orders for direct delivery sales orders

On a sales order or sales quotation, you can indicate whether you want the sold goods to be <u>directly delivered</u>. By means of a purchase order that is linked to a sales order, the buy-from business partner delivers the goods directly to the sold-to business partner. A direct delivery by-passes your warehouse.

You can use Freight to manage and plan your direct deliveries.

Direct delivery orders

If you want to generate <u>freight orders</u> for direct deliveries, the following applies:

- The freight order must be generated from the purchase order and not from the sales order. Therefore, if the **Delivery Type** field is **Direct Delivery** in the Sales Order Lines (tdsls4101m000) session:
    - The activity Generate Freight Orders (tdsls4222m000) is no longer linked to the sales order.
    - The **Generate Freight Order from Sales** check box is renamed into the **Generate Freight Order from Purchase** check box. Whether this check box must be selected, is defaulted from the **Generate Freight Orders from Purchase** check box in the Items - Purchase Business Partner (tdipu0110m000) session.
- If, in the Sales Order Lines (tdsls4101m000) session, the **Delivery Type** field is set to **Direct Delivery** after a freight order was generated, the freight order is deleted.
- Either the **Invoice for Freight** check box can be selected in the Sales Order Lines (tdsls4101m000) session, or the **Invoice External BP** check box can be selected in the Purchase Orders (tdpur4100m000) session. You cannot select both check boxes.
- Sales order fields, such as **Carrier/LSP**, **Route**, and **Freight Service Level**, are leading. Therefore, these fields must be specified on the sales order and not on the purchase order. The purchase order data is unavailable.
- To calculate the freight invoice amount for the direct delivery, click **Freight Amount** in the Sales Order Lines (tdsls4101m000) session. The purchase office that is linked to the buy-from business is used for this calculation. LN displays the calculated freight invoice amount in the **Freight Amount** field of the Sales Order Lines (tdsls4101m000) session.

Note

After the **Planned Delivery Date** is entered on the sales order line, LN determines whether the transportation lead time is sufficient to deliver the goods in time. To calculate the transportation time,

the ship-from business partner's ship-from address and the ship-to business partner's ship-to address are used. If the goods cannot be delivered in time, you must change the **Planned Receipt Date** or select another carrier on the order line.

If a freight order is linked to a direct delivery order, the date fields have different names in the various modules. See this table:

-	Sales	Purchase	Freight	ASN
Moment of shipment of the goods from the supplier.	planned delivery date	load date	load date	shipping date
Moment of receipt of the goods by the sold-to business partner.	planned receipt date	planned receipt date	unload date	planned delivery date

Freight orders

■ After a direct delivery purchase order is generated for the sales order, a freight order can be generated for the direct delivery order in the Generate Freight Orders (tdpur4220m000) session. For details on creating a direct delivery sales order, refer to *Direct delivery sales orders (p. 23)*.

■ The purchase order number as well as the sales order number are displayed on the freight order.

■ When the freight order is generated, it is linked to the sales order line in the Linked Order Line Data (tdsls4102s200) session and to the purchase order line in the Purchase Order Line - Linked Information (tdpur4502s000) session.

■ When the purchase order is received in the Purchase Receipts (tdpur4106m000) session, freight-related fields must be specified in this session, such as the carrier that is used for freight cost calculation. After final receipt, you must communicate the direct delivery information to the sales order by means of the Update Sales / Service Order with Delivery Information (tdpur4222m000) session.

Procedure

The procedure for direct delivery orders with linked freight orders is explained in this diagram:
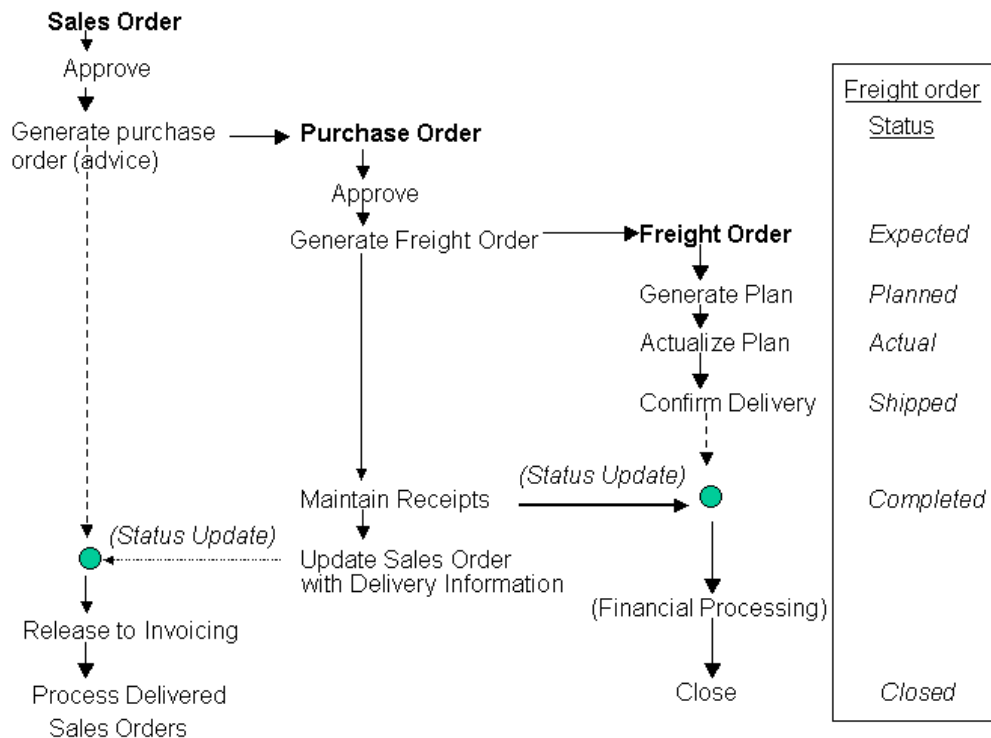
Note

The freight order that is linked to a direct delivery purchase order is deleted if any of these actions are performed for the direct delivery purchase order:

- Updated by Sales. You must generate a new freight order, if required.
- Deleted in Procurement.
- Canceled by Sales.

Integration freight invoicing and sales invoicing

If a sales company is responsible for the transportation of goods and hires a carrier to transport the goods, after transportation, the carrier sends an invoice to the sales company. The freight rate that a company must pay to the carrier is called freight costs. You can invoice your business partner, for whom you arranged transportation services, for freight.

Master data

If you want to invoice your business partner for freight, specify the following master data:

- **Items - Sales Business Partner (tdisa0510m000)**
  Select the **Invoice for Freight** check box. The value of this check box is defaulted to the **Invoice for Freight** check box in the Sales Order Lines (tdsls4101m000) session, Sales Order Planned Delivery Lines (tdsls4101m100) session, and Sales Quotation Lines (tdsls1501m000) session.

- **Sold-to Business Partner (tccom4110s000)**
  Select the **Invoice Business Partner for Freight** check box. The value of this check box is defaulted to the **Freight Costs to be Invoiced** check box in the Sales Orders (tdsls4100m000) session, or the **Invoice forFreight** check box in the Sales Quotations (tdsls1500m000) session.

- **Invoice-to Business Partner (tccom4112s000)**
  Set the **Invoice for Freight Based On** field to one of the following:

  - **Freight Costs**
    If you want the freight costs for an order, shipment, or load to be based on the best information currently available. The freight invoice amount is based on a <u>carrier rate book</u> in Pricing. These costs are also known as estimated freight costs.

  - **Freight Costs (Update Allowed)**
    If you want the freight costs to be invoiced after matching the carrier invoice to a certain load or shipment. Initially, the freight invoice amount is based on a carrier rate book in Pricing. These costs are also known as actual freight costs.

  - **Client Rates**
    If you want the freight invoice amount to be based on a <u>client rate book</u> in Pricing. This rate book stores freight service rates for a specific business partner.

Cost plus invoice

If the **Invoice for Freight Based On** field is **Freight Costs** or **Freight Costs (Update Allowed)**, and if you want to add a cost plus amount or a cost plus percentage to the invoice, specify these fields in the Invoice-to Business Partner (tccom4112s000) session:

- **Additional Percentage**
  The percentage with which the freight invoice amount must be increased

- **Additional Amount**
  The amount with which the freight invoice amount must be increased

Invoicing methods

A company can invoice freight rates to the external business partner, based on:

- **Freight Costs**
- **Freight Costs (Update Allowed)**
- **Client Rates**

Freight Costs

The freight invoice amount is calculated based on the best information currently available (estimated freight costs). These freight costs are retrieved from a carrier rate book in Pricing and are updated each time a change is made to an order, shipment, or load. When the sales invoice is released to Invoicing, with the calculated amount on the sales order (delivery) line, the freight invoice is also released to Invoicing. In Invoicing, the order invoice is merged with the freight invoice and sent as one invoice.

If the freight invoice is released to Invoicing before the sales invoice is released, one invoice is sent for goods sold and one for goods transported.

Freight Costs (Update Allowed)

The freight amount for the order (delivery) line, or quotation line is prorated based on the entire load in Freight. First, the freight costs (estimated freight costs) are determined, based on the carrier rate books in Pricing. In a later stage, after the carrier invoice is received and matched in Accounts Payable, you can specify the actual costs. After the sales invoice is released to Invoicing, with the prorated amount on the sales order (delivery) line, which are the freight costs, the freight invoice is also released to Invoicing.

If the freight invoice is released to Invoicing before the sales invoice is released, one invoice is sent for goods sold and one for goods transported.

If the sales order (delivery) line is invoiced with the freight costs before the actual costs are received from the carrier, you can invoice the customer with the difference between the estimated freight costs and the actual costs.

> **Note**
>
> If you want to invoice your business partner with the difference, an additional invoice can be generated. The invoice is based on the data you specify in the **If amount greater than** or **If greater than** fields of the Freight Invoicing Parameters (fmfri0100m000) session.

Client Rates

If the invoicing method is **Client Rates**, the freight invoice amount is based on fixed agreements with customers about the freight rates that can be charged to them in order to be compensated for the freight costs that a company must pay to the carrier.

Freight (invoice) amount calculation

To calculate a freight invoice amount, carriers and corresponding freight rates are selected based on the **Rate and Carrier/LSP Selection at Order Line** parameter in the Freight Rates and Costs Parameters (fmfrc0100m000) session, which can be **Interactive**, **Cheapest**, or **Prioritized**.

Interactive

During sales order entry or sales quotation entry, you can zoom to Freight to select the most suitable carrier. Based on several factors, such as invoicing method, item, freight class, service level, transport type, and transport means group, the freight invoice amount is retrieved from a rate book in Pricing.

To retrieve a carrier, in the Sales Quotation Lines (tdsls1501m000), Sales Order Lines (tdsls4101m000), or Sales Order Planned Delivery Lines (tdsls4101m100) sessions:

1. Select the **Invoice forFreight** check box.

2. Click the Freight Amount button behind the **Freight Amount** field. The Freight Rates (fmfrc0530m000) session starts.

3. Select the most suitable carrier and service level combination, and click OK.

After you made your selection from the Freight Rates (fmfrc0530m000) session, the following fields are automatically specified in the Sales Quotation Lines (tdsls1501m000), Sales Order Lines (tdsls4101m000) session, or Sales Order Planned Delivery Lines (tdsls4101m100) sessions:

- **Carrier/LSP**
- **Freight Service Level**
- **Freight Amount**

Cheapest or Prioritized

During sales order/quotation entry or update, the carrier with the lowest rates or with the highest priority is automatically selected. The freight invoice amount is automatically calculated or recalculated.

Note

- If the **Freight Amount Binding** check box is selected in the Sales Quotation Lines (tdsls1501m000), Sales Order Lines (tdsls4101m000), or Sales Order Planned Delivery Lines (tdsls4101m100) session, the **Freight Amount** is recalculated only if the ordered quantity changes. Other changes do not affect the freight amount.

- During confirmation of a final shipment, the freight amount is left unchanged. During confirmation of a nonfinal shipment, the freight amount is divided pro rata across the delivery lines.

- The freight amount is based on the ordered quantity and ordered amount, not the delivered quantity.

If the **Show Calculation Log** check box is selected in the Sales Quotation Lines (tdsls1501m000), Sales Order Lines (tdsls4101m000), or Sales Order Planned Delivery Lines (tdsls4101m100) session, you can view how the freight amount is calculated in a freight amount calculation log.

Chapter 7
Backorders

7

Backorder handling for sales orders

If a final delivery is made for a sales order (delivery) line and only a part of the goods or none of the goods are shipped, a backorder is created.

A backorder can be created in Sales or in Warehousing.

Sales

In Sales, a backorder can be created as follows:

- You manually enter a hold back quantity.
- The direct delivery purchase order that is created for the sales order is not completely delivered.

Hold back quantity

In the Sales Order Lines (tdsls4101m000) and Sales Order Planned Delivery Lines (tdsls4101m100) sessions, you can manually hold back a part of the ordered quantity. Holding back a part of the ordered quantity always results into a backorder.

A hold back quantity allows you to identify up front what the expected backorder will be. In this way, you can assign limited stock to several business partners instead of to only one business partner. When you release a sales order line to Warehousing, the **Ordered Quantity** minus the **Hold Back Quantity** is released.

After a sales order line is released to Warehousing for which you specified a hold back quantity in the Sales Order Lines (tdsls4101m000) or Sales Order Planned Delivery Lines (tdsls4101m100) session:

1. A backorder is generated in the Maintain and Confirm Back Orders (tdsls4125m000) session when a final delivery is executed for the sales order (delivery) line. The **Hold Back Quantity** is not filled yet in the Maintain and Confirm Back Orders (tdsls4125m000) session.

2. The **Back Order Quantity** field is updated with the remaining quantity in the Maintain and Confirm Back Orders (tdsls4125m000) and the Sales Order Lines (tdsls4101m000), or Sales Order Planned Delivery Lines (tdsls4101m100) session. The remaining backorder quantity is calculated as follows: **Ordered Quantity- Delivered Quantityin Order Unit**.

3. You must confirm the backorder (sequence) line manually in the Maintain and Confirm Back Orders (tdsls4125m000) session, or the backorder is automatically confirmed if the **Confirm Back Orders automatically** check box is selected in the Sales Order Parameters (tdsls0100s400) session.

4. After the backorder is confirmed:

    ▪ A new (delivery) line is generated with a new sequence number and the **Back Order Quantity** check box selected in the Sales Order Lines (tdsls4101m000) or Sales Order Planned Delivery Lines (tdsls4101m100) session. These lines can be processed as regular sales order lines and are also displayed in the Maintain and Confirm Back Orders (tdsls4125m000) session.

    ▪ The **Hold Back Quantity** of the parent sales order line is deleted in the Sales Order Lines (tdsls4101m000) or in the Sales Order Planned Delivery Lines (tdsls4101m100) session.

5. If, required, you can specify a **Hold Back Quantity** for the newly created backorder line. Consequently, the previous steps are repeated when you release a sales order (delivery) line to Warehousing.

You cannot specify a **Hold Back Quantity** for:

- Items with a commitment policy
- Order (lines) with shipping constraints
- Cost items
- Service items
- List items
- Subcontracted items
- Equipment items
- Generic items
- Collect orders
- Return order lines
- Total order lines, which have linked delivery lines
- Order lines with an order quantity of zero

Note

- If you select the **Confirm Back Orders automatically** check box in the Sales Order Parameters (tdsls0100s400) session, the backorder is automatically confirmed.
- If you select the **Release Back Orders automatically to Warehousing** check box in the Sales Order Parameters (tdsls0100s400) session, the confirmed backorder is automatically released to Warehousing.

Direct delivery orders

If a direct delivery purchase order is generated for a sales order, you can report deliveries back from Procurement to Sales with the Update Sales / Service Order with Delivery Information (tdpur4222m000) session.

If less is received than ordered, the following are applicable:

1. The **Back Order Quantity** field is filled in the Maintain and Confirm Back Orders (tdsls4125m000) session and the Sales Order Lines (tdsls4101m000) session or Sales Order Planned Delivery Lines (tdsls4101m100) session. The backorder quantity is calculated as follows: **Ordered Quantity- Delivered Quantityin Order Unit**.

2. You must manually confirm the backorder (sequence) line in the Maintain and Confirm Back Orders (tdsls4125m000) session, or the backorder is automatically confirmed if the **Confirm Back Orders automatically** check box is selected in the Sales Order Parameters (tdsls0100s400) session. Consequently, a new line is generated with a new sequence number and the **Back Order Quantity** check box selected in the Sales Order Lines (tdsls4101m000) or Sales Order Planned Delivery Lines (tdsls4101m100) session. This line is also displayed in the Maintain and Confirm Back Orders (tdsls4125m000) session with the same position number and another sequence number.

3. A confirmed backorder is automatically generated in Procurement, which is linked to the backorder in Sales. You can view the backorder in the Purchase Order Line Details (tdpur4101m200) and the Confirmed Purchase Back Orders (tdpur4101m800) sessions.

Warehousing

A backorder can be created by Warehousing, if, for example, the goods are damaged in the warehouse or the truck that must pick up the goods has insufficient loading capacity.

In such cases, the quantity of the shipment created from the sales order must be decreased. The quantity can be decreased before confirmation of the outbound advice and before confirmation of the shipment.

When the modified shipment receives the **Confirmed** status:

1. A backorder is generated and displayed in the Maintain and Confirm Back Orders (tdsls4125m000) session with the **Back Order Quantity** field filled.

2. You must manually confirm the backorder (sequence) line in the Maintain and Confirm Back Orders (tdsls4125m000) session, or the backorder is automatically confirmed if the **Confirm Back Orders automatically** check box is selected in the Sales Order Parameters (tdsls0100s400) session.

3. After confirmation, a new (delivery) line is generated with a new sequence number and the **Back Order Quantity** check box selected in the Sales Order Lines (tdsls4101m000) or Sales Order Planned Delivery Lines (tdsls4101m100) session. The line can be processed as a regular sales order line and is also displayed in the Maintain and Confirm Back Orders (tdsls4125m000) session.

Deliveries are displayed in the Sales Order Lines - Monitor (tdsls4510m000) and Sales Order Actual Delivery Lines / Sales Order Invoice Line (tdsls4106m000) sessions.

Warehousing cannot create backorders for:
- Order (lines) with shipping constraints
- Collect orders
- Return order lines

- Order lines with linked delivery lines
- Order lines with an order quantity of zero

Example

Order	Position	Sequence	Ordered	Delivered	Backorder
102	10	0	25	15	10
102	10	1	10	7	3
102	10	2	3	3	0

The backorder quantity of the parent line always determines the ordered quantity of the next line.

Note

For a processed sales order line, you cannot maintain or delete linked backorder lines if these lines are unconfirmed. Therefore, before processing a sales order line, make sure no unconfirmed backorder lines are available.

After confirmation, the backorder can be deleted as follows:

1. Cancel the line on the **Back Orders** tab of the Sales Order (tdsls4100m900) session or in the Maintain and Confirm Back Orders (tdsls4125m000) session.
2. Delete the canceled backorder line in the Sales Order Line (tdsls4101m900) or from the Sales Order (tdsls4100m900) session.

If a sales order contains component lines, backorders are created for component lines instead of for order lines. For more information, refer to Component handling - component lines.

Chapter 8
Sales order installments

8

Installments

Installment invoicing enables you to generate invoices for partial amounts or percentages of the total net amount before or after the ordered goods are delivered for a sales order. To indicate the installments, you must add installment lines to the sales order.

Installment types

The installment type determines when an installment line is placed on an invoice.

- **Advance installments**
  An **Advance Invoice** must be paid for by the sold-to business partner before goods can be delivered. The invoice is a legal document.

- An **Advance Payment Request** is a request to a sold-to business partner to pay a certain amount or percentage in advance before goods can be delivered. No tax is calculated and the invoice is not a legal document.

- **Normal installments**
  Normal installments are invoiced before or at the delivery of goods.

- **Guarantee installments**
  Guarantee installments can only be invoiced after all goods are delivered and the nonguarantee installments are invoiced.

Installment master data and procedure

To specify, maintain, and view installments:

1. Specify the installment parameters on the **Installments** tab of the Sales Order Parameters (tdsls0100s400) session.

2. Enter a sales order and specify **Direct Settlement** or **Indirect Settlement** in the **Installments** field of the Sales Order (tdsls4100m900) session.

3. Add the sales order lines and click **Sales Order - Installments** on the appropriate menu of the Sales Order (tdsls4100m900) session.

4. In the Sales Order - Installments (tdsls4600m100) session, specify an installment schedule for the sales order.

5. After the goods are delivered and all nonguarantee installments are invoiced, close installments in the Sales Order - Installments (tdsls4600m100) session. Next, invoices can be created for guarantee installments.

6. Process installments in the Process Delivered Sales Orders (tdsls4223m000) session.

Note

- You can create default installment schedules in the Installment Schedule (tcmcs2640m000) session. You can copy these schedules to sales order installments.

- In the Update Paid Amounts on Advance Installments (tdsls4200m000) session, the paid amounts for advance installments are updated. After all advance installments for a sales order are fully paid, the sales order procedure can continue.

Installment settlements

Invoiced installments are settled (subtracted from the goods amount) if the *goods* are delivered and the goods invoice is printed. Settled amounts indicate the amount of the goods invoice that is covered by the installment.

Settlement types

The following types of settlement exist:

- **Direct Settlement**
  Delivered goods can be invoiced although not all installments are invoiced yet. When the goods are invoiced, the invoiced amounts on the installment lines are subtracted from the goods amount on the invoice.
  With direct settlement, the following are immediately visible:
  - Revenue from the sale of goods in Invoicing
  - Turnover of the goods in the Sales Order Actual Delivery Line History (tdsls4556m000) session.

- **Indirect Settlement**
  Delivered goods cannot be invoiced before the sales order installment is closed. When the order is closed, the invoiced amounts on the installment lines are subtracted from the goods amount on the invoice.
  The following are applicable for indirect settlement:
  - The revenue from the sale of goods is visible in Invoicing after the sales order installment is closed.
  - Turnover of the goods is logged in the Sales Order Actual Delivery Line History (tdsls4556m000) session after the sales order installment is closed. If the sales order installment is not closed yet, in the Sales Order Line History (tdsls4551m000) session, turnover is temporarily booked on the **Item for Advance Payment Installments**, **Item for Normal Installments**, or **Item for Guarantee Installments**, as specified in the Sales Order Parameters (tdsls0100s400) session.

You can view the settlements for an installment in the Installment - Settlements (tdsls4513s000) session. After the goods invoice is printed in Invoicing, the settlements for the invoiced installments are displayed in this session.

Note

- Guarantee installments are settled before they are invoiced, because they are always invoiced after the goods invoice is sent.
- When invoicing a (+) sales order line, the (-) installments are first settled up to the total installment amount.
- When invoicing a (-) sales order line, the (+) installments are first settled up to the total installment amount.

Installment corrections

Settled amounts, which indicate the amount of the goods invoice that is covered by the installment, are the basis for calculating the installment corrections. The correction amount, which is calculated when a sales order installment is closed, is the difference between the total invoiced installment amount and the settled goods invoice amount. It is calculated as follows:

```
Goods amount to be invoiced - installment amount to be settled.
```

A correction installment is created only if the goods amount to be invoiced is less than the installment amount to be settled. In this case, the amount for which the customer is invoiced is too high and a reverse **Correction - Advance Invoice**, **Correction - Advance Payment Request**, **Correction - Normal**, or **Correction - Guarantee** is created.

Correction advance installments or **Correction - Normal** installments can be specified only after the original installments are composed or invoiced. In this way, Invoicing can always retrieve the correct currency information. **Correction - Guarantee** installments can be *specified* before the original installment is released to Invoicing, because guarantee installments are handled after the goods are shipped and the sales order installment is closed. The **Correction - Guarantee** installment line cannot be *released* to Invoicing before the original **Guarantee** installment is released to Invoicing. In this way, when composing the invoice for the correction guarantee, the correct invoice information can be retrieved from the original guarantee.

Manually specified correction installments are settled against the goods invoice.

Installment example

Line	Installment type	Installment amounts
1	Normal	200
2	Normal	400
3	Normal	-50
4	Guarantee	300
Total sales order installment		850

Line	Sales order amounts
1	150
2	500
3	80
4	-10
Total sales order	720

Direct settlement is applicable.

The correction process:

1. Installment line one is invoiced. Invoice amount = 200.
2. Installment line two is invoiced. Invoice amount = 400.
3. Sales order line one is invoiced. The goods amount of 150 is settled against the invoiced installment line one.
   - Remaining goods amount to be settled = 150 - (150) = 0.
   - Invoice amount = 0.
4. Installment line three is invoiced. Invoice amount = -50.

5. The sales order installment is closed.
   - Goods amount to be invoiced = 500 + 80 - 10 = 570.
   - Installment amount to be settled = 50 + 400 - 50 + 300 = 700.
   - Correction amount = 570 - 700 = -130.
6. The correction installment is invoiced. Invoice amount = -130.
7. Correction installment line five is manually created for the guarantee installment. Correction amount = -300.
8. Correction installment line six is manually created and is of the normal installment type. Correction amount = 170.
9. Installment line four is invoiced. Invoice amount = 300.
10. Sales order line two is invoiced. The goods amount of 500 is settled against the invoiced installments as follows:
    a. Against installment line three for an amount of -50. Remaining goods amount to be settled = 500 - (-50) = 550.
    b. Against installment line five for an amount of -300. Remaining goods amount to be settled = 550 - (-300) = 850.
    c. Against installment line one for an amount of 50. Remaining goods amount to be settled = 850 - (50) = 800.
    d. Against installment line two for an amount of 400. Remaining goods amount to be settled = 800 - (400) = 400.
    e. Against installment line four for an amount of 300. Remaining goods amount to be settled = 400 - (300) = 100.
    f. Against installment line six for an amount of 100. Remaining goods amount to be settled = 100 - (100) = 0.
    Invoice amount = 0.
11. Sales order line three is invoiced. The goods amount of 80 is settled against the manually inserted installment line six.
    - Remaining goods amount to be settled = 80 - (70) = 10.
    - Invoice amount = 10.
12. Sales order line four is invoiced. All installments are settled. Invoice amount = -10 + 10 = 0.

Chapter 9
Return orders

9

Sales return orders

If goods must be returned on a sales order, a <u>return order</u> can be created. A return order can include only negative amounts.

Master data

Before you can use return orders:

Step 1: Specify a sales order type for return orders

Specify a <u>sales order type</u> for return orders in the Sales Order Types (tdsls0594m000) session.

In the **Return Order** field, specify one of the following:

- ■ **Return Inventory**
  An order type that is used for returning inventory.

- ■ **Return Rejects**
  An order type that is used for returning rejects, which applies if you reject goods that are delivered on a sales order. You can select this value only if the **Customer Approval** check box is selected in the Implemented Software Components (tccom0100s000) session. Sales orders of the **Return Rejects** order type are always automatically generated.

Step 2: Link a warehousing order type to the sales order type

Link a <u>warehousing order type</u> to the return order type in the **Warehousing Order Type** field of the Sales Order Types (tdsls0594m000) session. You must select a warehousing order type for which the **Inventory Transaction Type** is **Receipt** in the Warehousing Order Types (whinh0110m000) session.

Step 3: Link activities to the return order type

Link activities to the order type in the Sales Order Type - Activities (tdsls0560m000) session.

The following mandatory activities are automatically linked to the return order type:

- Release Sales Orders to Warehousing (tdsls4246m000)
- Sales Deliveries (tdsls4101m200)
- Release Sales Orders/Schedules to Invoicing (tdsls4247m000), if the order type is a return order of the type **Return Inventory**.
- Process Delivered Sales Orders (tdsls4223m000)

Procedure

Step 1: Sales Orders (tdsls4100m000)

1. Create a sales order header with a sales order type for return orders.
2. Specify the **Original Document Type** field.
3. Specify the **Original Document No** field.
4. Specify the return reason for the return order in the **Return Reason** field.
5. After you created a link between a return order and an original document number, you can click Copy from Original Document on the appropriate menu. A session is started from which you can copy lines to the return order. The lines that are added to the sales order have a negative quantity and a negative amount. If desired, you can change these lines.

Step 2: Release Sales Orders to Warehousing (tdsls4246m000)

After the sales return order is approved, release the order to Warehousing. As a result, the sales order status is **In Process** and the activity status is *Awaiting Receipt*.

Step 3: Release Sales Orders/Schedules to Invoicing (tdsls4247m000)

After the receipt procedure is executed by Warehousing, the sales order status is **In Process**, but the activity status is *Release Sales Orders/Schedules to Invoicing* in the Sales Order Line Status (tdsls4534s000) session. You must release the sales return order to invoicing in the Release Sales Orders/Schedules to Invoicing (tdsls4247m000) session.

Step 4: Process Delivered Sales Orders (tdsls4223m000)

After the sales return order is invoiced, you must process the return order in the Process Delivered Sales Orders (tdsls4223m000) session.

Note

- If the return order includes a serialized item, an installation group is automatically linked to the return order when the delivery information is updated on the order through the Warehouse Receipt (whinh3512m000), or Update Sales / Service Order with Delivery Information (tdpur4222m000) session.

However, an installation group is not automatically linked if:

- The serialized items on the sales return order line are linked to different installation groups in Service.

- The item is an anonymous item, or the items are serialized in Service only.

If required, you can link an item to an installation group and/or link an installation group to the sales return order line in the Sales Order Lines (tdsls4101m000) session.

- If goods are returned on a <u>direct delivery</u> order, the steps related to the direct delivery procedure apply. For more information, refer to Direct delivery.

- If a <u>specification</u> is linked to the sales order line and the **Return Order** is of the **Return Rejects** type, this specification is not copied to the return order line.

Chapter 10
Additional processes

<div style="text-align: right;">**10**</div>

Product variants in Sales

In Sales, you can generate <u>product variants</u> for <u>configurable items</u>, which are items that have the **Configurable** check box selected in the Items - General (tcibd0501m000) session.

In the Items - General (tcibd0501m000) session, **Manufactured** items with the **Default Supply Source** set to **Assembly** and **Generic** items, are always configurable.

> **Note**
>
> For items with the <u>default supply source</u> set to **Assembly** in the Items - General (tcibd0501m000) session, the following are applicable:
>
> - If the **Sell Multiples of Same Configuration** check box is cleared in the Assembly Planning Parameters (tiapl0500m000) session, the order quantity is limited to one on a sales order line. Only if the **Sell Multiples of Same Configuration** check box is selected in the Assembly Planning Parameters (tiapl0500m000) session, you can enter an item with an order quantity greater than one and sell multiples of the same assembly product variant, which results in several assembly orders linked to one sales order line. To identify the product variant, the various assembly orders and the sales order line have the same <u>specification</u>. These items are also called <u>assembly items</u>. For more information, refer to To sell multiples of product variants for assembly and Assembly items.
> - The **Configurator** check box in the Assembly Planning Parameters (tiapl0500m000) session determines whether you must configure the item in Product Configuration or whether LN automatically generates a product variant for the item in the Product Variants - Inventory (Assembly) (tiapl3600m000) session.

Linking product variants

If the item is a configurable item, you can choose to immediately configure the item at line entry in the Sales Order Lines (tdsls4101m000) and Sales Quotation Lines (tdsls1501m000) sessions. If you want to configure the product variant after the sales line is saved, on the <u>appropriate menu</u>, click **Configurator** to configure the product variant from the Product Configurator (tipcf5120m000) session.

You can also choose to link an existing product variant in the **Product Variant** field of the Sales Order Lines (tdsls4101m000) and Sales Quotation Lines (tdsls1501m000) sessions.

Product variants can be configured or selected here:

Default Supply Source	Item on sales order/quotation	Configure by PCF parameter	Configure product variant	Select product variant from session:
Shop Floor	Generic	Not applicable	Product Configurator (tipcf5120m000)	Product Variants (tipcf5501m000)
Assembly	Generic	Selected	Product Configurator (tipcf5120m000)	Product Variants - Inventory (Assembly) (tiapl3600m000)
Assembly	Generic	Cleared	Not applicable	Product Variants - Inventory (Assembly) (tiapl3600m000)
Assembly	Manufactured	Selected	Product Configurator (tipcf5120m000)	Product Variants - Inventory (Assembly) (tiapl3600m000)
Assembly	Manufactured	Cleared	Not applicable	Product Variants - Inventory (Assembly) (tiapl3600m000)

Note

If LN is integrated with the Product Configuration Management configurator, the product variant is configured in PCM Configurator and not in the Product Configurator (tipcf5120m000) session. For more information, refer to PCM Configurator set up.

Reusing product variants

On different sales order/quotation lines of the same sales order or quotation, a specific product variant can be used multiple times.

This functionality can only be used if the following settings are applicable:

- The **Identifying Item Code** check box is selected in the Product Configuration Parameters (tipcf0100m000) session.
- The **Equate Project (PCS) with Sales Order** check box is selected when generating a project structure for the configured item in the Generate (Project PCS) Structure for Sales Orders (tdsls4244m000) session.
- The **Allow re-use of Configurations** check box is selected in the Product Configuration Parameters (tipcf0100m000) session.

Example

Generic item	Feature	Options
100: Chair X	Color	1: Red
		2: Blue
	Height	1: A
		2: B

Sales order/quotation after the configuration is saved:

Order	Position	Item	Description	Variant	Options chosen
123	5	Text	Classroom 1a	-	-
	10	100	Chair X	10	Color Red, Height A
	15	100	Chair X	11	Color Red, Height B
	20	Text	Classroom 1b	-	-
	25	100	Chair X	10	Color Red, Height A
	30	100	Chair X	11	Color Red, Height B

Sales order/quotation after the project structure is generated in the Generate (Project PCS) Structure for Sales Orders (tdsls4244m000) session:

Order	Position	Item	Description	Variant	Options chosen
	5	Text	Classroom 1a	-	-
123	10	100-1-A	Chair X, Color Red, Height A	10	Color Red, Height A
	15	100-1-B	Chair X, Color Red, Height B	11	Color Red, Height B
	20	Text	Classroom 1b	-	-
	25	100-1-A	Chair X, Color Red, Height A	10	Color Red, Height A
	30	100-1-B	Chair X, Color Red, Height B	11	Color Red, Height B

Checks applied in the example

- After configuration of order line 15, the same item is found on line 10. The new item code of position 10 (123/100-1-A) and the item code of line 15 (123/100-1-B) are different. Therefore, order line 15 is accepted.
- After configuration of order line 25, the same item with the same options is found on line 10. The new item code of position 10 and the item code of line 25 are the same: 123/100-1-A. Order line 25 can only be accepted if the **Allow re-use of Configurations** check box is selected.

The item code of position 10 and 25 are the same. In the Items - General (tcibd0501m000) session, the **Product Variant** for item 123/100-1-A is 10.

Important

The Generic Item - Settings for Data Generation (tipcf3101m000) session affects the expected result:

- In the example, the settings from this session are used: the selected options are part of the generated item code. If you select another option, a different customized item code is generated.
- If the settings for data generation are not specified in the Generic Item - Settings for Data Generation (tipcf3101m000) session, the customized item code is based on order number – item code, that is 123-100. In this case, position 15 would have resulted in an error message: the customized item code is the same as position 10 but the options are different.

Updating sales order lines and sales quotation lines

When you insert an existing product variant on the sales order/quotation line, these fields are updated on the sales order/quotation line:

Effectivity Unit	For items with the **Default Supply Source** set to **Assembly** and an effectivity unit linked to the product variant in Assembly Planning (APL).
Warehouse	For **Manufactured** items with the **Default Supply Source** set to **Assembly**.
Work Center	For **Generic** items with the **Default Supply Source** set to **Assembly**.
Sales Price	-
Serial Number	Is updated when the linked <u>assembly order</u> is sequenced. The sales order cannot be released to Warehousing without this number.
Cost Price	Is updated after you do one of the following: ■ Click **Calculate Cost Prices** in the Product Variants (Assembly) (tiapl3500m000) session. ■ Freeze the assembly order.

Note

For **Manufactured** items with the **Default Supply Source** set to **Assembly** and the **Sell Multiples of Same Configuration** check box selected in the Assembly Planning Parameters (tiapl0500m000) session, multiple assembly orders can be linked to one sales order line, which means the sales order line cannot be updated with a serial number. Therefore, Warehousing enters serial numbers in a <u>lot and serial set</u>, which you can view by clicking the **Lot and Serial Set** button in the Sales Order Actual Delivery Lines (tdsls4106m000) session. Using this set, multiple serials are linked to the delivery line.

Updating product variants

When you change the **Planned Delivery Date** or the **Order Date**/ **Quotation Date** on the sales order/quotation line, the following fields are updated on the linked product variant:

Changed field on sales order/ quotation line	Updated field on product variant	Update restrictions

Planned Delivery Date	Requested Offline Date	None
Planned Delivery Date	Planned Offline Date	- Product variant status is **Open**. - No assembly orders exist.
Planned Delivery Date	Product Configuration Date	- Product variant status is **Open**. - No assembly orders exist. - The **Configuration Date (PCS)** is set to **Delivery Date** in the Sales Parameters (tdsls0100s000) session. - The product variant is not configured by Product Configuration.
Order Date/ Quotation Date	Product Configuration Date	- Product variant status is **Open**. - No assembly orders exist. - The **Configuration Date (PCS)** is set to **Order Date** in the Sales Parameters (tdsls0100s000) session. - The product variant is not configured by Product Configuration.

Note

For **Manufactured** items with the **Default Supply Source** set to **Assembly** and the **Sell Multiples of Same Configuration** check box selected in the Assembly Planning Parameters (tiapl0500m000) session, multiple assembly orders can be linked to one sales order line, and therefore multiple planned delivery dates can be applicable for a sales order line. As a result, date changes are not updated to the product variant.

Unlinking product variants

On the sales order/quotation line, you can unlink a product variant.

Unlinking does not remove the product variant, but removes only the reference to the sales order or quotation on the product variant and on the assembly order, if applicable. In the Product Variants

(Assembly) (tiapl3500m000) and Product Variants (tipcf5501m000) sessions, the **Reference Type** remains **Sales Order**, **Sales Quotation**, or **Standard Variant**.

The unlinked product variant can be reused by another sales order/quotation.

> **Note**
>
> For items with the **Default Supply Source** set to **Assembly**, the following are applicable:
>
> - In the Assembly Planning Parameters (tiapl0100s000) session, the **Allow Assembly Orders for unsold Product Variants** check box determines when you can unlink product variants.
> - If a **Manufactured** item is rejected during warehouse inspection, the product variant status changes to **Canceled**. You can then cancel the linked sales order line or remove the product variant from the sales order line. If required, you can link another product variant.

Handling ATP/CTP

The ATP functionality is part of a more extensive order promising technique, called capable-to-promise (CTP).

You can check the ATP/CTP for plan items during the ATP/CTP horizon as specified in the Items - Planning (cprpd1100m000) session. Before you can specify a plan item in the Items - Planning (cprpd1100m000) session, you must set the **Order System** field to **Planned** in the Item - Ordering (tcibd2100s000) session.

To check an item's ATP/CTP at sales order entry:

1. Select the **CTP Check for Sales** check box in the Planning Parameters (cprpd0100m000) session. If this check box is selected, a capable-to-promise (CTP) check is performed when a sales order for an item is closed. If this check box is cleared, LN does not carry out any CTP check, regardless of the values of CTP-related parameters in the Items - Planning (cprpd1100m000) session.

2. Indicate the types of ATP and CTP checks that must be applied and specify the settings for the checks in the Items - Planning (cprpd1100m000) session.

If the free available inventory (ATP) and additional critical components and capacities (CTP) are insufficient to fulfill the order, various possibilities are presented to handle the shortage. One way to handle the shortage for a sales order is to propose a delivery schedule, which you can specify in the ATP Handling (cprrp4800m000) session.

You can also use the ATP Handling (cprrp4800m000) session to perform offline ATP/CTP checks. For instance, you can collect multiple orders in written form and then use the ATP Handling (cprrp4800m000) session to carry out ATP/CTP checks.

For more information, refer to Types of ATP and CTP checks.

Order blocking

In Sales, you can block sales orders or sales order (component) lines.

Blocking occurs for one or more of the following reasons:

- The open order balance exceeds the customer's credit limit.
- The invoice to business partner has overdue invoices.
- The invoice to business partner is a doubtful customer.
- The sales order is entered by an inexperienced operator.
- The invoice to business partner's credit review period is overdue.
- The sales order has an invalid or doubtful zip code.
- The sales margin of one of the order lines is exceeded.
- The gross margin of the order is exceeded.
- The sales order is received through electronic data interchange (EDI).
- A user-defined general reason.

Blocking only gives a rough indication of the situation at that particular moment. A customer's overdue invoices during the order entry procedure may have been paid by the time the deliveries are specified.

Procedure for order blocking

Step 1: Hold Reasons (tdsls0190m000)

Specify the reasons for blocking a sales order or sales order (component) line and the reason categories in the Hold Reasons (tdsls0190m000) session.

Step 2: Sales Order Parameters (tdsls0100s400)

Specify when orders must be blocked and the reasons for blocking. If an order must be blocked for one of these reasons, the order is automatically blocked when it is created.

Step 3: Sales Order Types (tdsls0594m000)

Specify the step at which the procedure is interrupted in the **Block As of Activity** field. When an order (component) line is blocked, the procedure for this order can only be partially carried out. If a blocking step is not specified in this session, the order procedure is not interrupted.

Sales orders and sales order (component) lines can also be manually blocked in these sessions:
- Sales Order (tdsls4100m900)
- Sales Orders (tdsls4100m000)
- Sales Order Lines (tdsls4101m000)
- Sales Order Line Components (tdsls4163m000)

Step 4: Blocked Sales Order (Lines) (tdsls4520m000)

Blocked orders and (component) lines must be manually released in the Blocked Sales Order (Lines) (tdsls4520m000) session.

In the Sales User Profiles (tdsls0139m000) session, you can specify whether a user is authorized to unblock orders based on the type of hold placed on the order. You can specify whether a user:

- **Can Release Credit Held Orders**
- **Can Release Margin Held Orders**
- **Can Release Promotion Check Held Orders**
- **Can Release Generally Held Orders**

An order (component) line can be released in two ways:

- **Soft Release**
  If the order (component) line is blocked due to a credit check and you select the soft type of releasing, the order is blocked again at the next phase if the criteria for that reason still apply to the sales order or order (component) line. If the order is blocked for another reason, you can only use this option to release the order.

- **Firm Release**
  If a sales order (component) line is firm released, the order (component) line is released and is not blocked again for the same reason.

Note

- A sales order (component) line can be blocked for several reasons during order entry. However, if an order is blocked due to a credit check, you can specify various phases for blocking an order in the Credit Ratings (tcmcs0564m000) session. As a result, the difference between the firm and soft type of releasing only applies to credit checking. For the other blocking reasons, these types of releasing give the same results.

- You can display all blocked orders, and select a range of orders to be displayed in the Blocked Sales Order (Lines) (tdsls4520m000) session. The selection criteria for a range of blocked order (lines) is specified in the Select Blocked Sales Order (Lines) (tdsls4220m000) session.

- Use the Print Blocked Sales Order (Lines) (tdsls4420m000) session to print a range of blocked order (lines). Use the Print Released Sales Order (Lines) (tdsls0492m000) session to print a range of released order (lines).

- In the Blocked Sales Order (Line) History (tdsls0592m000) and Order (Line) Blocking History (tdsls0192s000) sessions, information is displayed about sales orders and (component) lines that were previously blocked and released.

Credit rating

The continuation of a sales order can also depend on the credit checking of the business partner.

You are asked to change the credit rating of the invoice-to business partner if the following are applicable:

- The **Hold Reason Category** is **Credit Check** in the Hold Reasons (tdsls0190m000) session.

- The credit rating of the invoice-to business partner differs from the **Pre-Defined Credit Rating Code** in the Sales Order Parameters (tdsls0100s400) session.
- The **Change Customer's Credit Rating** field is **Interactive** in the Sales Order Parameters (tdsls0100s400) session.

Note

If the **Hold Reason Category** is **Credit Check** and the order (line) is **Firm Released**, the released amount (which is the total net amount of the sales order) is recorded in a blocking history record.

Margin control

If the **Margin Control** check box is selected in the Sales Order Parameters (tdsls0100s400) session, LN checks whether the sales price of an item on an order line or quotation line differs too much from the target price.

You can determine the action to be taken (blocking, signaling, or logging) in the Margin Control Parameters (tdsls0120m000) session. The target price is determined by the **Target Price for Margin Control** field in the Sales Order Parameters (tdsls0100s400) session.

Note

For margin control, the allowed deviation from the target price by upper and lower margins can be specified in the Items - Sales (tdisa0501m000) session.

Order priority (simulations)

You can use order priority simulations to calculate the priority sequence in which inventory is allocated to orders. For example, if insufficient inventory is available, you can use a priority simulation to sort sales orders according to the order delivery priority.

In the **Order Priority Method** field of the Sales Order Parameters (tdsls0100s400) session, you can specify the method that is used to determine the order priority.

- **Simulation**
  Simulated order priorities are defined in simulation codes. The simulation code includes a sort sequence and a sort mode. You can select six fields for each code to sort sales orders. Default fields are retrieved from the sales order lines, but you can also use fields from sales orders and business partners.
- **Delivery Date**
  The order priority is determined by the planned delivery date and the simulations are not used.

Example

Simulation code AA includes the following sort sequences:

- 1 = Planned receipt date

■   2 = Sold-to business partner

If, for both sort sequences, the **Sort Mode** field is Ascending in the Priority Simulation (tdsls4124s000) session, sales orders with the oldest planned receipt date are delivered first. If orders exist with the same planned receipt date, the sales orders with a sold-to business partner that appears first in the alphabet are next executed, and so on.

Specifying and using order priority (simulations)

Complete these steps:

1. Specify priority simulation codes in the Priority Simulations (tdsls4524m000) session.
2. Generate delivery priorities for sales orders in the Generate Sales Order Priority Simulations (tdsls4229s000) session.
3. In the Sales Order Priority - Simulations (tdsls4126m000) session, you can change priority simulations for sales orders of a simulation code and item combination.
4. Process the simulated order priorities to actual sales orders in the Process / Delete Sales Order Priority Simulations (tdsls4226s000) session. You can also delete the generated simulations.
5. Optionally, change the order priority of actual deliveries in the Sales Order Priorities (tdsls4129m000) session.

Copy templates

You can use copy templates when copying sales orders (lines). A copy template specifies how order (line) data is copied and includes a standard set of copy exceptions.

Copy templates can be used when you do the following:

■   Copy existing orders to target orders in the Copy Sales Order (tdsls4201s000) session
■   Copy existing sales order lines to target order lines
■   Copy an original document's sales order lines to target order lines in the return order process

Copy exceptions can be sales order header or sales order line fields. If a field is not specified as a copy exception, it is automatically copied from the source order (line) to the target order (line).

Sales order header

For sales order header fields, specify these copying actions:

■   **Prompt**
      The selected field can be manually specified in the Copy Sales Orders - Prompts (tdsls4201s100) session. The default comes from the source order.
■   **Retrieve Default**
      A default value is retrieved based on standard defaulting logic.

Additional processes

- **Copy From...**
  Only for date fields. Select which date must be copied to the target sales order.

Sales order line

For sales order line fields, specify the following copying actions:

- **Retrieve Default**
  A default value is retrieved.
- **Copy From...**
  Only for the **Ordered Quantity** field. Select which quantity must be copied to the target sales order line.

Using copy templates

Complete these steps:

Step 1: Sales Order Parameters (tdsls0100s400)

In the Sales Order Parameters (tdsls0100s400) session, select the **Prompt for Copy Templates** check box.

Step 2: Sales Order Copy Template - Exceptions (tdsls4690m000)

In the Sales Order Copy Template - Exceptions (tdsls4690m000) session:

1. Specify a template header. Specify the template code and the effectivity period for the copy template.
2. After you specified the template header, click **Save**. Several sales order header and sales order line copy exceptions are automatically linked.
3. On the Header Exceptions tab, specify the copy exceptions, which refer to the Header Exceptions (tdsls4191m000) session.
4. On the Line Exceptions tab, specify the copy exceptions, which refer to the Line Exceptions (tdsls4192m000) session.

Step 3: Sales User Profiles (tdsls0139m000)/ Sales Order Parameters (tdsls0100s400)

In the **Copy Template for Sales Orders** and **Copy Template for Sales Return Orders** fields of the Sales User Profiles (tdsls0139m000) and Sales Order Parameters (tdsls0100s400) sessions, link a default copy template for sales orders and return orders.

Step 4: Copy Sales Order (tdsls4201s000)

In the Copy Sales Order (tdsls4201s000) session, specify a **Copy Template**.

Step 5: Copy Sales Orders - Prompts (tdsls4201s100)

After you click **Copy** in the Copy Sales Order (tdsls4201s000) session, the Copy Sales Orders - Prompts (tdsls4201s100) session is automatically started if you use a copy template that has **Prompt** as **Copy Action** for linked copy exceptions. The Copy Sales Orders - Prompts (tdsls4201s100) session is started only if the target sales order is a new sales order. If you copy to an existing target sales order, the prompts are not shown.

Pay attention to the values you specify in the fields, because the session does not run copying checks before you click **Copy**.

Important!

You can also copy sales orders and their lines in the Copy Sales Order (tdsls4201s000) session without using copy templates. A standard set of copy exceptions is then used based on which order data is copied. These are the default copy exceptions linked to a template header when you specify and save the header. See also step 2.

Note

You can print sales order copy templates with their copy exceptions and copy actions in the Print Sales Order Copy Templates (tdsls4490m000) session.

Changing sales data after release to Invoicing

In some cases, you can update sales invoice data after the sales data is released to Invoicing.

Depending on the invoice status, you can change:

- Sales order data in the Change Prices and Discounts after Delivery (tdsls4122m000) and Change Prices and Discounts of Sales Invoice Lines (tdsls4132m000) sessions
- Installment data in the Sales Order Installments (tdsls4110m000) session
- Rebate data in the Rebates Calculated by Order (tdcms2550m000) and Rebates Calculated by Relation (tdcms3550m000) sessions

When the sales invoice data is changed, LN automatically updates:

- The invoice data in Invoicing. As a result, the sales invoice status is **Confirmed**.
- The business partner order balance.

Changing sales order data

For sales order lines that are released to Invoicing and for which the sales invoice status is **Confirmed** or **On Hold**, you can use these sessions to change the prices and discounts:

- **Change Prices and Discounts after Delivery (tdsls4122m000)**
  For sales orders lines of the **Order Line** type, which are also known as total lines.

- **Change Prices and Discounts of Sales Invoice Lines (tdsls4132m000)**
  For sales orders lines of the **Order/Delivery Line** and **Back Order** types.

The sales invoice status is related to the **Price Changes Allowed after Delivery** check box, which is displayed in the Sales Order Lines Monitor (tdsls4510m100) and Sales Order Actual Delivery Lines (tdsls4106m000) sessions. See the following table for details on this check box:

Activity	Price Changes Allowed after Delivery	Sales invoice status
Enter sales order line in Sales	No	Not applicable
Confirm shipment in Warehousing, or maintain deliveries in Sales	Yes	Not applicable
Release to invoicing in Sales	Yes	Confirmed
Change sales (invoice) data in Sales	Yes	Confirmed
Compose invoice in Invoicing	No	Composed
Decompose invoice in Invoicing	Yes	On Hold
Change sales (invoice) data in Sales	Yes	Confirmed
Compose invoice in Invoicing	No	Composed
Print and post invoice in Invoicing	No	Posted

You can change these fields in the Change Prices and Discounts after Delivery (tdsls4122m000) and Change Prices and Discounts of Sales Invoice Lines (tdsls4132m000) sessions:

- **Price**
- **Discount %/ Line Discount**
- **Discount Amount**
- **Discount Code**
- **Amount**

Changing installment data

You can use the Sales Order Installments (tdsls4110m000) session to change data for <u>installments</u> that are released to Invoicing and for which the invoice status is **Confirmed**, or **On Hold**.

You can change these fields in the Sales Order Installments (tdsls4110m000) session:

- **Description**
- **Amount**
- **Percentage**
- **Payment Terms**
- **Late Payment Surcharge**
- **Payment Method**

Note

When the invoice is composed in Invoicing, a sequence number is stored on the settled installment line. When the invoice is printed, the invoice number is stored on the installment line. This number is the invoice number of the goods.

Changing rebate data

You can use the Rebates Calculated by Order (tdcms2550m000) and Rebates Calculated by Relation (tdcms3550m000) sessions to change data for <u>rebates</u> that are released to Invoicing and for which the invoice status is **Confirmed**, or **On Hold**.

You can change the **Rebate Amount** field in the Rebates Calculated by Order (tdcms2550m000) and Rebates Calculated by Relation (tdcms3550m000) sessions. When you update this field, the **Rebate %** and **Growing %** fields are automatically changed to zero in the Rebates Calculated by Order (tdcms2550m000) and Rebates Calculated by Relation (tdcms3550m000) sessions.

Note

You can also check the invoice data before it is released to Invoicing. In this case, you are not restricted by the invoice status in Invoicing when making updates.

To check the invoice data before it is released to Invoicing, you can print a draft invoice:

- For sales (installment) orders in the Print Sales Draft Invoices (tdsls4447m000) session.
- For rebates in the Print Draft Invoices for Rebates (tdcms2401m000) session.

Appendix A
Glossary

A

advance shipping notice

A form of preinvoicing. 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. 71)*

assembly item

An item with default supply source **Assembly**. The production of assembly items is controlled by an assembly order. Assembly orders are executed on an assembly line.

> **Note**
> An assembly item can have item type **Generic**, **Manufactured**, or **Engineering Module**.

assembly order

An order to assemble a product on one or more assembly lines.

ATP/CTP horizon

The date until which LN performs ATP and CTP checks.

The ATP horizon is expressed as a number of working days during which LN can carry out ATP and CTP checks. Beyond the ATP/CTP horizon, LN does not check ATP or CTP: all customer orders are accepted.

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.

backorder

An unfilled customer order, or partial delivery at a later date. A demand for an item whose inventory is insufficient to satisfy demand.

billing request

Selects the order types and orders to be invoiced. If you process a billing request, LN selects the invoicing data and generates the invoices for the order types and orders selected through the billing request.

billing request set

A set of one or more billing requests set up for recurring processing. If you process a billing request set, LN selects the invoicing data according to the billing requests.

business partner

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

The business partner definition includes:

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

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

capable-to-promise

The combination of techniques used to determine the quantity of an item that you can promise to a customer on a specific date.

Capable-to-promise (CTP) involves an extension of the standard available-to-promise (ATP) functionality. CTP goes beyond ATP in that it also considers the possibility of producing more than was initially planned, when an item's ATP is insufficient.

In addition to the standard ATP functionality, CTP comprises the following techniques:

- Channel ATP: restricted availability for a certain sales channel.
- Product family CTP: order promising on the basis of availability on product family level rather than on item level.
- Component CTP: check if there are enough components available to produce an extra quantity of an item.
- Capacity CTP: check if there is enough capacity available to produce an extra quantity of an item.

Abbreviation: CTP

carrier

An organization that provides transport services. To use a carrier for load building, freight order clustering, transport cost calculation, and invoicing, you must define the carrier both as a carrier and a buy-from business partner in Common. A carrier is also referred to as a forwarding agent.

Synonym: Logistics Service Provider (LSP)

carrier

An organization that provides transport services. You can link a default carrier to both ship-to and ship-from business partners. In addition, you can print sales and purchase orders on a packing list, sorted by carrier.

For ordering and invoicing, you must define a carrier as a business partner.

Synonym: forwarding agent, Logistics Service Provider (LSP)

carrier

The company responsible for the transportation of goods to the ship-to business partner.

carrier rate book

A freight rate book where you can maintain freight agreements with carriers.

change reason

The reason that can be assigned to a changed purchase document (line) or sales document (line).

change type

The indicator of the type of change of a changed purchase order (line) or sales order (line).

client rate book

A freight rate book where you can maintain freight agreements with business partners.

component

An item that is sold, and invoiced in combination with other items as part of a kit.

configurable item

An item that has features and options and must be configured before any activities can be performed on it. If the configurable item is generic, a new item is created after configuration. If the item is manufactured or purchased, the configuration is identified by item code and option list ID.

Manufactured items with the default supply source set to **Assembly** and **Generic** items are always configurable. **Purchased** items with a purchase schedule in use can be configurable. Configurable **Purchased** items can be used within Assembly Control only.

copy exception

A field that is not automatically copied from the source order to the target order and for which you must define a copy action.

credit limit

The maximum financial risk that you accept or are insured against concerning an invoice-to business partner, or that an invoice-from business partner accepts concerning you.

When you create orders, LN continually checks that the total amount of created and invoiced orders does not exceed the credit limit. When you exceed the limit, LN gives a warning message.

credit rating

A system of classifying customers and possible future customers according to their financial strength and the degree of trust that a supplier can place in them.

The credit rating is linked to an invoice-to business partner and defines a number of details such as, the action to be taken when a sales order is processed, and when the credit check must be repeated.

credit review period

Within this period the invoice-to business partner must pay his invoices. This can be seen as a so-called overdue invoice period.

cross-docking

The process by which inbound goods are immediately taken from the receipt location to the staging location for issue. For example, this process is used to fulfill an existing sales order for which no inventory is available.

LN distinguishes the following three types of cross-docking:

- **Static**
  To initiate this type of cross-docking, you must generate a purchase order from a sales order in Sales.
- **Dynamic**
  This type of cross-docking, available in Warehousing, can be:
  - Based on inventory shortages.
  - Defined explicitly during receipt of goods.
  - Created on an ad hoc basis.
- **Direct Material Supply**
  You can use this type of cross-docking, available in Warehousing, to meet demand in a cluster of warehouses, and is based on:
  - Receipts
  - Inventory on hand

Note

You can maintain cross-dock orders that originate from Sales in the same way as cross-dock orders created in Warehousing, with the exception of the sales order/purchase order link, which you cannot change.

See: direct material supply

CTP

See: *capable-to-promise (p. 73)*

customer approval

A business regulation according to which the goods that are delivered on a sales order must be approved by the customer before you can invoice the goods. The ownership of the goods changes from supplier to sold-to business partner when the delivered goods are approved.

customized item

An item produced on a customer specification for a specific project. A customized item can have a customized BOM and/or a customized routing and is normally not available as a standard item. A customized item can, however, be derived from a standard item or a generic item.

default supply source

The source that supplies an item by default. An item can be supplied by using purchase orders, production orders, assembly orders, or warehousing orders.

The default supply source determines what type of order is used to supply the item, but in general, you can override the default and specify an alternate source.

delivery terms

The agreements with the business partner, concerning the way the goods are delivered. Relevant information is printed on various order documents.

direct delivery

The process in which a seller orders goods from a buy-from business partner, who must also deliver the goods directly to the sold-to business partner. By means of a purchase order that is linked to a sales order or a service order, the buy-from business partner delivers the goods directly to the sold-to business partner. The goods are not delivered from your own warehouse, so Warehousing is not involved.

In a Vendor Managed Inventory (VMI) setup, a direct delivery is achieved by creating a purchase order for the customer warehouse.

A seller can decide for a direct delivery because:

- There is a shortage of available stock.
- The ordered quantity cannot be delivered in time.
- The ordered quantity cannot be transported by your company.
- Costs and time are saved.

electronic data interchange (EDI)

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

forwarding agent

See: *carrier (p. 73)*

freight order

A commission to transport a particular number of goods. A freight order includes an order header and one or more order lines.

A freight order header includes some general information, such as the delivery date and the name and address of the customer who is to receive the goods listed on the freight order.

A freight order line includes an item to be transported and some details about the item, such as the quantity and the dimensions.

generic item

An item that exists in multiple product variants. Before any manufacturing activities are performed on a generic item, the item must be configured to determine the desired product variant.

Example

Generic item: electric drill

Options:

- 3 power sources (batteries, 12 V or 220 V)
- 2 colors (blue, gray).

A total of 6 product variants can be produced with these options.

gross margin

The sales revenue minus all manufacturing costs, both fixed and variable.

installation group

A set of serialized items that have the same location and are owned by the same business partner. Grouping serialized items into an Installation group enables you to maintain them collectively.

installment

An incremental payment method used to spread invoice payments over a period of time. Installments enable you to send invoices for a sales order before or after the ordered goods are actually delivered.

Logistics Service Provider (LSP)

See: *carrier (p. 73)*

Logistics Service Provider (LSP)

See: *carrier (p. 73)*

lot and serial set

A list of the lot codes and/or serial numbers of an item on a sales order line. The lot and serial set can be used in invoicing or after-sales service.

order acknowledgment

The document that confirms the sale of goods to a sold-to business partner according to the listed delivery terms.

order balance

The balance of outstanding orders.

order priority simulations

A simulated activity that enables you to calculate the priority sequence in which inventory is allocated to orders.

overdue invoice

The invoice that has been left unpaid too long.

payment terms

Agreements about the way in which invoices are paid.

The payment terms include:
- The period within which invoices must be paid.
- The discount granted if an invoice is paid within a given period

The payment terms allow you to calculate:
- The date on which the payment is due
- The date on which the discount periods expire
- The discount amount

PCM Configurator

PCM Configurator is an application, integrated with LN to configure an item. The integration can be used only as part of the web user interface.

See: Product Configuration Management

plan item

An item with the order system **Planned**.

The production, distribution, or purchase of these items is planned in Enterprise Planning based on the forecast or the actual demand.

You can plan these items by means of the following:

- Master-based planning, which is similar to master production scheduling techniques.
- Order-based planning, which is similar to material-requirements planning techniques.
- A combination of master-based planning and order-based planning.

Plan items can be one of the following:

- An actual manufactured or purchased item.
- A product family.
- A basic model, that is, a defined product variant of a generic item.

A group of similar plan items or families is called a product family. The items are aggregated to give a more general plan than the one devised for individual items. A code displayed by the item code's cluster segment shows that the plan item is a clustered item that is used for distribution planning.

Planned load date

The date and time loading is planned at the ship-from location.

planned warehouse order

An order created in Sales that forms the basis for most schedule-related processes. Planned warehouse orders, which are created during sales schedule approval, decouple schedule updates and revisions from warehouse orders. They serve as the interface between Sales on one hand and Warehousing and Invoicing on the other hand.

product variant

A unique configuration of a configurable item. The variant results from the configuration process and includes information such as feature options, components, and operations.

Example

Configurable item: electric drill

Options:

- 3 power sources (batteries, 12 V or 220 V)
- 2 colors (blue, gray).

A total of 6 product variants can be produced with these options.

purchase order advice

A recommendation based on the economic stock and the reorder point of an item. Purchase order advices must be confirmed and transferred to convert them into actual purchase orders.

purchase order type

The order type determines which sessions are part of the order procedure and how and in which sequence this procedure is executed.

quotation lines

The lines used to record the items offered, as well as the associated price agreements and quantities. A sales quotation includes one or more quotation lines.

rebate

The amount of money to be paid to a sold-to business partner as a kind of discount for closing a sales order.

return order

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

rush order

An order that must be executed as soon as possible and that usually requires special payment and delivery terms.

sales order

An agreement that is used to sell items or services to a business partner according to certain terms and conditions. A sales order consists of a header and one or more order lines.

The general order data such as business partner data, payment terms, and delivery terms are stored in the header. The data about the actual items to be supplied, such as price agreements and delivery dates, is entered on the order lines.

sales order installment

An order that is not paid for immediately but in partial amounts or percentages of the total net amount.

You can send invoices for a percentage of the total net amount on the sales order, before or after the ordered goods are actually delivered. In this case, a number of installment lines is added to the sales order. An installment line consists of an amount and a number of additional details.

Billed installments are settled (subtracted from the goods amount) when the goods are delivered and invoiced.

sales order lines

A sales order contains items that are delivered to a customer, according to certain terms and conditions. The lines of a sale order are used to record the items ordered, as well as the associated price agreements and delivery dates.

sales order type

The order type, which determines the sessions that are part of the order procedure and how and in which sequence this procedure is executed.

sales price

The price for which an item is sold.

sales quotations

A statement of price, the terms of sale, and a description of goods or services offered by a supplier to a prospective purchaser; a bid. The customer data, payment terms, and delivery terms are contained in the header; the data about the actual items is entered on the quotation lines. When given in response to a request for quotation, a bid is usually considered an offer to sell.

serialized item

A physical occurrence of a standard item that is given a unique lifetime serial number. This enables tracking of the individual item throughout its lifetime, for example, through the design, production, testing, installation, and maintenance phases. A serialized item can consist of other serialized components.

Examples of serialized items are cars (Vehicle Identification Number), airplanes (tail numbers), PCs, and other electronic equipment (serial numbers).

specification

A collection of item-related data, for example, the business partner to which 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 purchase order or production order
- a particular quantity of an item stored in a warehouse
- a requirement for a particular quantity of an item, for example a sales order

specification

A collection of item-related data, for example, the business partner to which 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 item

A purchased item, material, subassembly, or finished product that is normally available.

All items that are not built according to customer specification for a specific project are defined as standard items. Opposite term is customized item.

A standard item can have the following order policies:

- **Anonymous**
- **To Order**

target price

The price that forms the basis for margin control calculations.

A target price can be one of the following prices:

- The sales price
- The recommended retail price
- The cost price of the item
- The selling price found after a search in Pricing

The target price and the sales price are evaluated in relation to the margin limits registered in the item file.

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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